

Organization Theory and Design

TENTH EDITION

Richard L. Daft

VANDERBILT UNIVERSITY





Organization Theory and Design, Tenth Edition Richard L. Daft

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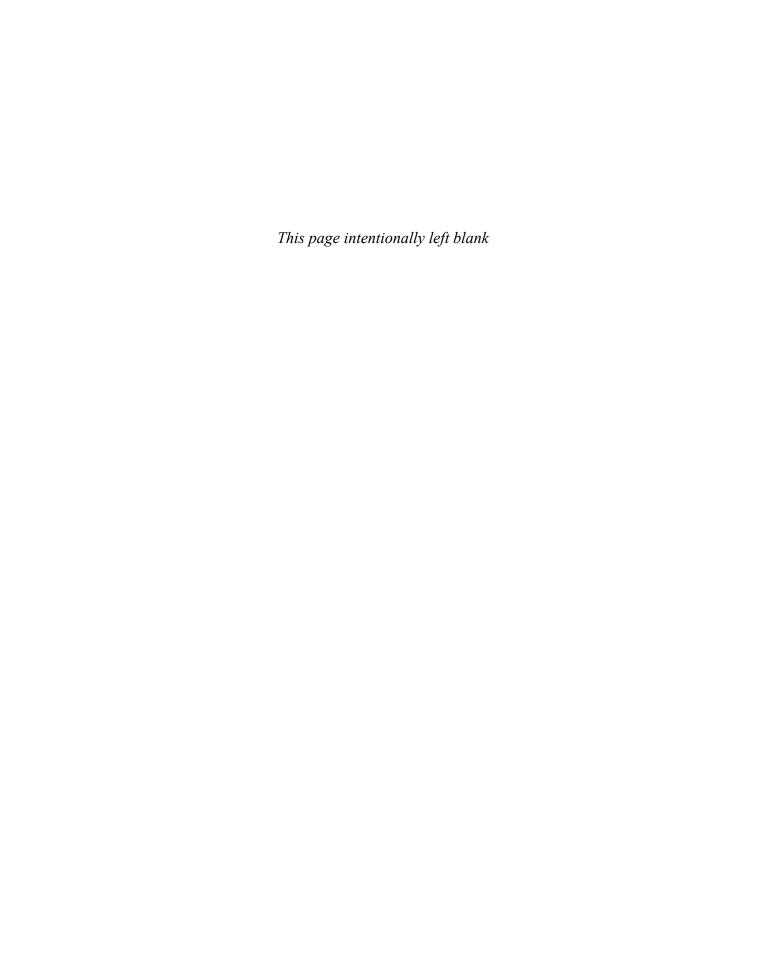


About the Author

Richard L. Daft, Ph.D., is the Brownlee O. Currey, Jr., Professor of Management in the Owen Graduate School of Management at Vanderbilt University. Professor Daft specializes in the study of organization theory and leadership. Professor Daft is a Fellow of the Academy of Management and has served on the editorial boards of Academy of Management Journal, Administrative Science Quarterly, and Journal of Management Education. He was the Associate Editor-in-Chief of Organization Science and served for three years as associate editor of Administrative Science Quarterly.

Professor Daft has authored or co-authored twelve books, including Management (Cengage/South-Western, 2010), The Leadership Experience (Cengage/South-Western, 2008), and What to Study: Generating and Developing Research Questions (Sage, 1982). He also published Fusion Leadership: Unlocking the Subtle Forces That Change People and Organizations (Berrett-Koehler, 2000, with Robert Lengel). He has authored dozens of scholarly articles, papers, and chapters. His work has been published in Administrative Science Quarterly, Academy of Management Journal, Academy of Management Review, Organizational Dynamics, Strategic Management Journal, Journal of Management, Accounting Organizations and Society, Management Science, MIS Quarterly, California Management Review, and Organizational Behavior Teaching Review. Professor Daft has been awarded several government research grants to pursue studies of organization design, organizational innovation and change, strategy implementation, and organizational information processing.

Professor Daft is also an active teacher and consultant. He has taught management, leadership, organizational change, organizational theory, and organizational behavior. He has been involved in management development and consulting for many companies and government organizations, including Allstate Insurance, American Banking Association, Bell Canada, Bridgestone, National Transportation Research Board, NL Baroid, Nortel, TVA, Pratt & Whitney, State Farm Insurance, Tenneco, Tennessee Emergency Pediatric Services, the United States Air Force, the United States Army, J. C. Bradford & Co., Central Parking System, USAA, United Methodist Church, Entergy Sales and Service, Bristol-Myers Squibb, First American National Bank, and the Vanderbilt University Medical Center.





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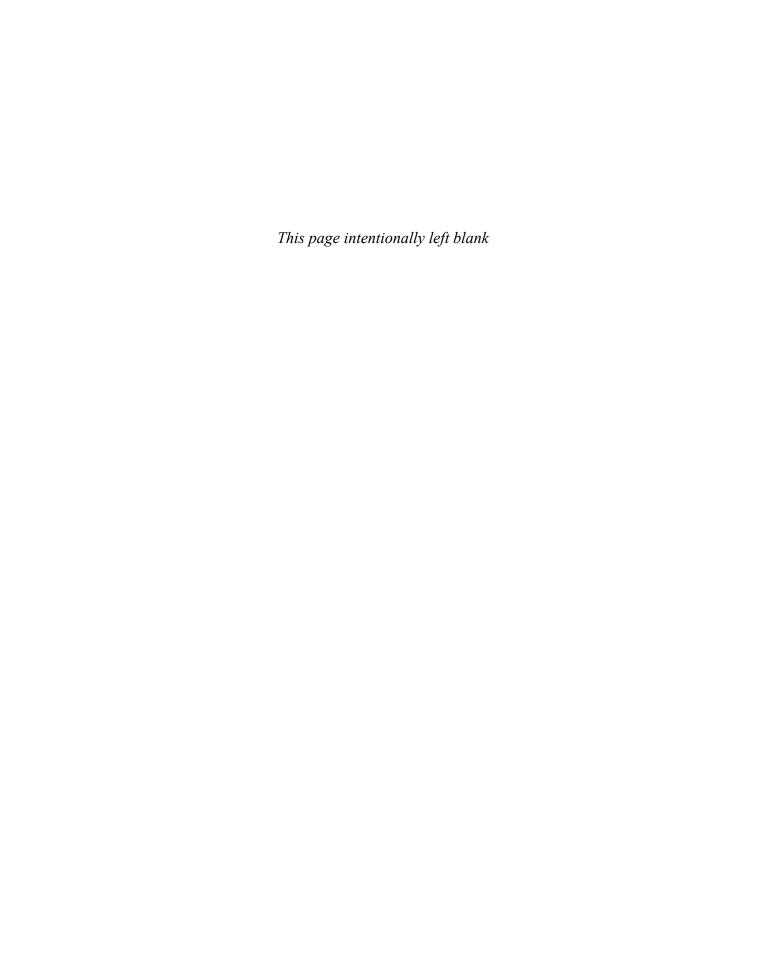
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My vision for the Tenth Edition of *Organization Theory and Design* is to integrate contemporary problems about organization design with classic ideas and theories in a way that is engaging and enjoyable for students. Significant changes in this edition include two new features—"Managing by Design Questions" and "How Do You Fit the Design?"—along with updates to every chapter that incorporate the most recent ideas, new case examples, new book reviews, and new end-of-book integrative cases. The research and theories in the field of organization studies are rich and insightful and will help students and managers understand their organizational world and solve real-life problems. My mission is to combine the concepts and models from organizational theory with changing events in the real world to provide the most up-to-date view of organization design available.

DISTINGUISHING FEATURES OF THE TENTH EDITION

Many students in a typical organization theory course do not have extensive work experience, especially at the middle and upper levels, where organization theory is most applicable. Moreover, word from the field is that many students today often do not read the chapter opening examples or boxed examples, preferring instead to focus on chapter content. To engage students in the world of organizations, the Tenth Edition adds two significant features. First, "Managing by Design Questions" start each chapter to engage students in thinking and expressing their beliefs and opinions about organization design concepts. Second, a new in-chapter feature, "How Do You Fit the Design?" engages students in how their personal style and approach will fit into an organization. Other student experiential activities that engage students in applying chapter concepts are new "Book Marks," new "In Practice" examples, and new integrative cases for student analysis. The total set of features substantially expands and improves the book's content and accessibility. These multiple pedagogical devices are used to enhance student involvement in text materials.

How Do You Fit the Design? The "How Do You Fit the Design?" feature presents a short questionnaire in each chapter about the student's own style and preferences to quickly provide feedback about how they fit particular organizations or situations. For example, questionnaire topics include: "What Size Organization for You?" "Are You Ready to Fill an International Role?" "The Pleasure/Pain of Working on a Team," "How Innovative Are You?" and "How Do You Make

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Important Decisions?" These short feedback questionnaires connect the student's personal preferences to chapter material to heighten interest and show relevance of the concepts.

Managing by Design Questions Each chapter now opens with three short opinion questions that engage students in clarifying their thoughts about upcoming material and concepts. These questions are based on the idea that when students express their opinions first, they are more open to and interested in receiving material relevant to the questions. Example questions, which ask students to agree or disagree, include:

The primary role of managers in business organizations is to achieve maximum efficiency.

Managers should use the most objective, rational process possible when making a decision

If management practices and coordination techniques work well for a company in its home country, they probably will be successful in the company's international divisions as well.

A certain amount of conflict is good for an organization.

As a follow-up to the three "Managing by Design" questions, each chapter contains three "Assess Your Answer" inserts that allow students to compare their original opinions with the "correct" or most appropriate answers based on chapter concepts. Students learn whether their mental models and beliefs about organizations align with the world of organizations.

Book Marks "Book Marks," a unique feature of this text, are book reviews that reflect current issues of concern for managers working in real-life organizations. These reviews describe the varied ways companies are dealing with the challenges of today's changing environment. New "Book Marks" in the Tenth Edition include Five Key Principles of Corporate Performance Management; The World Is Flat: A Brief History of the Twenty-First Century; The Strategy Paradox: Why Committing to Success Leads to Failure (And What to Do About It); The Future of Management; Small Giants: Companies That Choose to Be Great Instead of Big; and Innovation: The Five Disciplines for Creating What Customers Want.

In Practice This edition contains many new "In Practice" examples that illustrate theoretical concepts in organizational settings. Many examples are international, and all are based on real organizations. New "In Practice" cases used within chapters include Samsung Electronics, eBay, the Salvation Army, Axiom Global, Univision, Google, Semco, AT&T, the World Bank, Threadless, Carilion Health System, Apple, Matsushita Electric, Herman Miller, and Great Ormand Street Hospital for Children.

Manager's Briefcase Located in the chapter margins, this feature tells students how to use concepts to analyze cases and manage organizations.

Text Exhibits Frequent exhibits are used to help students visualize organizational relationships, and the artwork has been redone to communicate concepts more clearly.

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Design Essentials This summary and interpretation section tells students how the essential chapter points are important in the broader context of organization theory.

Case for Analysis These cases are tailored to chapter concepts and provide a vehicle for student analysis and discussion.

Integrative Cases The integrative cases at the end of the text have been expanded and positioned to encourage student discussion and involvement. The new cases include Rondell Data Corporation; The Plaza Inn; and Hartland Memorial Hospital (A): An Inbox Exercise. Previous cases that have been retained include Royce Consulting; Custom Chip Inc.; W. L. Gore & Associates; Empire Plastics; and Littleton Manufacturing.

NEW CONCEPTS

Many concepts have been added or expanded in this edition. New material has been added on organizational configuration and Mintzberg's organization forms; strategic intent, core competence and competitive advantage; Porter's competitive forces and strategies; using the balanced scorecard to measure effectiveness; using strategy maps; the trend toward outsourcing; supply chain management; intelligence teams; collaborative versus operations management roles; applying Web 2.0 tools for internal and external coordination; behavior versus outcome control; executive dashboards; interpreting and shaping culture through organization structures, control systems, and power systems; corporate social responsibility; values-based leadership; collaborative teams for innovation; prospect theory; groupthink; overcoming cognitive biases in decision making; and the power of empowerment. Many ideas are aimed at helping students learn to design organizations for an environment characterized by uncertainty; a renewed emphasis on innovation; public demands for stronger ethics and social responsibility; and the need for a speedy response to change, crises, or shifting customer expectations. In addition, coping with the complexity of today's global environment is explored thoroughly in Chapter 6.

CHAPTER ORGANIZATION

Each chapter is highly focused and is organized into a logical framework. Many organization theory textbooks treat material in sequential fashion, such as "Here's View A, Here's View B, Here's View C," and so on. *Organization Theory and Design* shows how they apply in organizations. Moreover, each chapter sticks to the essential point. Students are not introduced to extraneous material or confusing methodological squabbles that occur among organizational researchers. The body of research in most areas points to a major trend, which is reported here. Several chapters develop a framework that organizes major ideas into an overall scheme.

This book has been extensively tested on students. Feedback from students and faculty members has been used in the revision. The combination of organization theory concepts, book reviews, examples of leading organizations, self-insight questionnaires, case illustrations, experiential exercises, and other teaching devices is designed to meet student learning needs, and students have responded favorably.

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SUPPLEMENTS

Instructor's Resource Guide (ISBN: 0-324-59912-9) The Instructor's Resource Guide includes an Instructor's Manual and Test Bank. The Instructor's Manual contains chapter overviews, chapter outlines, lecture enhancements, discussion questions, discussion of workbook activities, discussion of chapter cases, and case notes for integrative cases. The Test Bank consists of multiple choice, true/false, and essay questions.

PowerPoint Lecture Presentation Available on the Instructor's Resource CD-ROM and the Web site, the PowerPoint Lecture Presentation enables instructors to customize their own multimedia classroom presentations. Prepared in conjunction with the text and instructor's resource guide, the package contains approximately 150 slides. It includes figures and tables from the text, as well as outside materials to supplement chapter concepts. Material is organized by chapter and can be modified or expanded for individual classroom use. PowerPoint presentations are also easily printed to create customized transparency masters.

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Experiential Exercises in Organization Theory and Design, Second Edition By H. Eugene Baker III and Steven K. Paulson of the University of North Florida.

Preface xix

Tailored to the table of contents in Daft's Organization Theory and Design, Tenth Edition, the core purpose of Experiential Exercises in Organization Theory and Design is to provide courses in organizational theory with a set of classroom exercises that will help students better understand and internalize the basic principles of the course. The chapters of the book cover the most basic and widely covered concepts in the field. Each chapter focuses on a central topic, such as organizational power, production technology, or organizational culture, and provides all necessary materials to fully participate in three different exercises. Some exercises are intended to be completed by individuals, others in groups, and still others can be used either way. The exercises range from instrumentation-based and assessment questionnaires to actual creative production activities.

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xx Preface

Among my professional colleagues, I am grateful to my friends and colleagues at Vanderbilt's Owen School—Bruce Barry, Ray Friedman, Neta Moye, Rich Oliver, David Owens, Ranga Ramanujam, and Bart Victor—for their intellectual stimulation and feedback. I also owe a special debt to Dean Jim Bradford and Associate Deans Bill Christie and Dawn Iocabucci for providing the time and resources for me to stay current on the organization design literature and develop the revisions for the text.

I want to extend special thanks to my editorial associate, Pat Lane. She skill-fully wrote materials on a variety of topics and special features, found resources, and did an outstanding job with the copyedited manuscript and page proofs. Pat's personal enthusiasm and care for the content of this text enabled the Tenth Edition to continue its high level of excellence.

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Richard L. Daft Nashville, Tennessee March 2009



Part 1

Introduction to Organizations

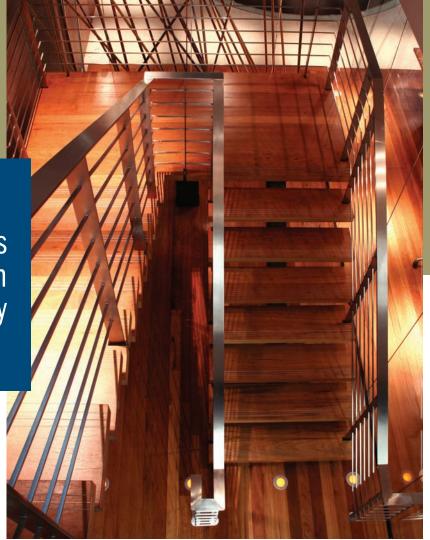
Chapter 1

Organizations and Organization Theory

ris Ho - www chrishonet



Organizations and Organization Theory



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Organization Theory in Action

Topics · Current Challenges · Purpose of This Chapter

What Is an Organization?

Definition • From Multinationals to Nonprofits • Importance of Organizations

Dimensions of Organization Design

Structural Dimensions \cdot Contextual Dimensions \cdot Performance and Effectiveness Outcomes

The Evolution of Organization Theory and Design

Historical Perspectives · Don't Forget the Environment

Organizational Configuration

Mintzberg's Organizational Types · Contemporary Design Ideas

Efficient Performance versus the Learning Organization

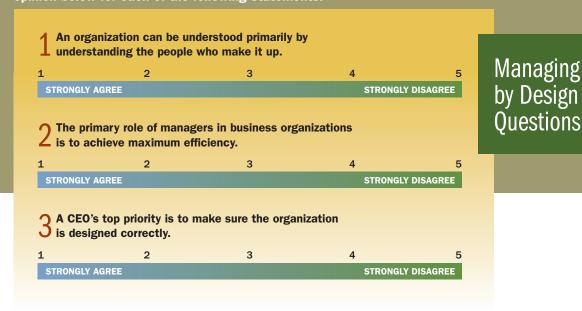
From Vertical to Horizontal Structure • From Routine Tasks to Empowered Roles • From Formal Control Systems to Shared Information • From Competitive to Collaborative Strategy • From Rigid to Adaptive Culture

Framework for the Book

Levels of Analysis · Plan of the Book · Plan of Each Chapter

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



A LOOK INSIDE

XEROX CORPORATION

On the eve of the twenty-first century, Xerox Corporation seemed on top of the world, with fast-rising earnings, a soaring stock price, and a new line of computerized copier-printers that were technologically superior to rival products. Less than two years later, many considered Xerox a has-been, destined to fade into history. Consider the following events:

- Sales and earnings plummeted as rivals caught up with Xerox's high-end digital machines, offering comparable products at lower prices.
- Xerox's losses for the opening year of the twenty-first century totaled \$384 million, and the company continued to bleed red ink. Debt mounted to \$18 billion.
- The stock fell from a high of \$64 to less than \$4, amid fears that the company would file for federal bankruptcy protection. Over an 18-month period, Xerox lost \$38 billion in shareholder wealth.
- Twenty-two thousand Xerox workers lost their jobs, further weakening the morale and loyalty of remaining employees. Major customers were alienated, too, by a restructuring that threw salespeople into unfamiliar territories and tied billing up in knots, leading to mass confusion and billing errors.
- The company was fined a whopping \$10 million by the Securities and Exchange Commission (SEC) for accounting irregularities and alleged accounting fraud.

What went wrong at Xerox? The company's deterioration is a classic story of organizational decline. Although Xerox appeared to fall almost overnight, the organization's problems were connected to a series of organizational blunders over a period of many years.

BACKGROUND

Xerox was founded in 1906 as the Haloid Company, a photographic supply house that developed the world's first xero-graphic copier, introduced in 1959. Without a doubt, the 914 copier was a money-making machine. By the time it was retired in the early 1970s, the 914 was the best-selling industrial product of all time, and the new name of the company, Xerox, was listed in the dictionary as a synonym for photocopying.





A LOOK INSIDE (continued)

Joseph C. Wilson, Haloid's longtime chairman and president, created a positive, people-oriented culture continued by his successor, David Kearns, who steered Xerox until 1990. The Xerox culture and its dedicated employees (sometimes called "Xeroids") were the envy of the corporate world. In addition to values of fairness and respect, Xerox's culture emphasized risk taking and employee involvement. Wilson wrote the following for early recruiting materials: "We seek people who are willing to accept risk, willing to try new ideas and have ideas of their own...who are not afraid to change what they are doing from one day to the next, and from one year to the next..." Xerox continued to use these words in its recruiting efforts, but the culture the words epitomize had eroded.

"BUROX" TAKES HOLD

Like many profitable organizations, Xerox became a victim of its own success. Leaders no doubt knew that the company needed to move beyond copiers to sustain its growth, but they found it difficult to look beyond the 70 percent gross profit margins of the 914 copier.

Xerox's Palo Alto Research Center (PARC), established in 1970, became known around the world for innovation—many of the most revolutionary technologies in the computer industry, including the personal computer, graphical user interface, Ethernet, and laser printer, were invented at PARC. But the copier bureaucracy, or *Burox* as it came to be known, blinded Xerox leaders to the enormous potential of these innovations. While Xerox was plodding along selling copy machines, younger, smaller, and hungrier companies were developing PARC technologies into tremendous moneymaking products and services.

The dangers of Burox became dramatically clear when the company's xerography patents began expiring. Suddenly, Japanese rivals such as Canon and Ricoh were selling copiers at the cost it took Xerox to make them. Market share declined from 95 percent to 13 percent by 1982. And with no new products to make up the difference, the company had to fight hard to cut costs and reclaim market share by committing to Japanese-style techniques and total quality management. Through the strength of his leadership, CEO Kearns was able to rally the troops and rejuvenate the company by 1990. However, he also set Xerox on a path to future disaster. Seeing a need to diversify, Kearns moved the company into insurance and financial services on a large scale. When he turned leadership over to Paul Allaire in 1990, Xerox's balance sheet was crippled by billions of dollars in insurance liabilities.

ENTERING THE DIGITAL AGE

Allaire wisely began a methodical, step-by-step plan for extricating Xerox from the insurance and financial services business. At the same time, he initiated a mixed strategy of cost cutting and new-product introductions to get the stodgy company moving again. Xerox had success with a line of digital presses and new high-speed digital copiers, but it fumbled again by underestimating the threat of the inkjet printer. By the time Xerox introduced its own line of desktop printers, the game was already over.

Desktop printers, combined with increasing use of the Internet and e-mail, cut heavily into Xerox's sales of copiers. People didn't need to make as many photocopies, but there was a huge increase in the number of documents being created and shared. Rebranding Xerox as "The Document Company," Allaire pushed into the digital era, hoping to remake Xerox in the image of the rejuvenated IBM, offering not just "boxes (machines)" but complete document management solutions.

As part of that strategy, Allaire picked Richard Thoman, who was then serving as Louis Gerstner's right-hand man at IBM, as his successor. Thoman came to Xerox as president, chief operating officer, and eventually CEO, amid high hopes that the company could regain the stature of its glory years. Only 13 months later, as revenues and the stock price continued to slide, he was fired by Allaire, who had remained as Xerox chairman.

PLAYING POLITICS

Allaire and Thoman blamed each other for the failure to successfully implement the digital strategy. Outsiders, however, believe the failure had much more to do with Xerox's dysfunctional culture. The culture was already slow to adapt, and some say that under Allaire it became almost totally paralyzed by politics. Thoman was brought in to shake things up, but when he tried, the old guard rebelled. A management struggle developed, with the outsider Thoman and a few allies on one side lined up against Allaire and his group of insiders who were accustomed to doing things the Xeroid way. Recognized for his knowledge, business experience, and intensity, Thoman was also considered to be somewhat haughty





and unapproachable. He was never able to exert substantial influence with key managers and employees, nor to gain the support of board members, who continued to rally behind Allaire.

The failed CEO succession illustrates the massive challenge of reinventing a century-old company. By the time Thoman arrived, Xerox had been going through various rounds of restructuring, cost cutting, rejuvenating, and reinventing for nearly two decades, but little had really changed. Many believe Thoman tried to do too much too soon. He saw the urgency for change but was unable to convey that urgency to others within the company and inspire them to take the difficult journey real transformation requires.

Others doubted that anyone could fix Xerox, because the culture had become too dysfunctional and politicized. "There was always an in-crowd and an out-crowd," says one former executive. "They change the branches, but when you look closely, the same old monkeys are sitting in the trees."

THE INSIDER'S INSIDER

Enter Anne Mulcahy, the consummate insider. In August 2001, Allaire turned over the CEO reins to the popular twenty-four-year veteran, who had started at Xerox as a copier saleswoman and worked her way up the hierarchy. Despite her insider status, Mulcahy proved that she was more than willing to challenge the status quo at Xerox. Since she took over, Mulcahy has surprised skeptical analysts, stockholders, and employees by engineering one of the most extraordinary business turnarounds in recent history.

How did she do it? One key success factor was giving people vision and hope. Mulcahy wrote a fictitious *Wall Street Journal* article describing Xerox five years in the future, outlining the things Xerox wanted to accomplish as if they had already been achieved and presenting the company as a thriving, forward-thinking organization. And although few people thought Mulcahy would take the tough actions Xerox needed to survive, she turned out to be a strong decision maker. She quickly launched a turnaround plan that included massive cost cutting and closing of several money-losing operations, including the division she had previously headed. She was brutally honest about "the good, the bad, and the ugly" of the company's situation, as one employee put it, but she also showed that she cared about what happened to employees. After major layoffs, she walked the halls to tell people she was sorry and let them vent their anger. She personally negotiated the settlement of a long investigation into fraudulent accounting practices, insisting that her personal involvement was necessary to signal a new commitment to ethical business practices and corporate social responsibility. She appealed directly to creditors begging them not to pull the plug until a new management team could make needed changes.

Mulcahy transferred much of production to outside contractors and refocused Xerox on innovation and service. Two areas she refused to cut were research and development and customer contact. Since 2005, Xerox has introduced more than 100 new products and moved into high-growth areas such as document management services, IT consulting, and digital press technology. A series of acquisitions enabled the company to enter new markets and expand its base of small- and medium-sized business customers. Sales in 2007 rose to more than \$17 billion, and in November of that year, Xerox announced its first quarterly cash dividend in six years. Mulcahy has also responded to global stakeholders with a firm commitment to human rights and sustainable business practices. "By doing the right thing for our stakeholders and the global community, we're also doing what is right for our business," she said.

Mulcahy was belittled in the press when she took over as CEO, but she has proved the pundits wrong and regularly shows up on various "best manager" lists. In 2008, she became the first woman CEO selected by her peers to receive *Chief Executive* magazines's "CEO of the Year" award, which she promptly declared to "represent the impressive accomplishments of Xerox people around the world." But Mulcahy knows Xerox can't afford to rest on its laurels. The technology industry is tough, and she has to keep her management team focused on growth while also maintaining the cost controls that stabilized the company.

Eight years after this American icon almost fell, Xerox is once again admired in the corporate world. Has the "perfect storm" of troubles been replaced with a "perfect dawn"? Mulcahy and her top management team believe Xerox is positioned to be resilient in the face of the current economic slowdown, but in the rapidly changing world of organizations, nothing is ever certain.¹



Welcome to the real world of organization theory. The shifting fortunes of Xerox illustrate organization theory in action. Xerox managers were deeply involved in organization theory each day of their working lives—but many never realized it. Company managers didn't fully understand how the organization related to the environment or how it should function internally. Organization theory concepts have helped Anne Mulcahy and her management team analyze and diagnose what is happening and the changes needed to keep the company competitive. Organization theory gives us the tools to explain the decline of Xerox and understand Mulcahy's turnaround.

Similar problems have challenged numerous organizations. Consider the dramatic organizational missteps illustrated by the 2008 crises in the mortgage industry and finance sector in the United States, Lehman Brothers Holdings, a pillar in the investment banking industry for more than 150 years, filed for Chapter 11 bankruptcy, unable to weather the storm sweeping through the industry. American International Group (AIG) sought a bailout from the U.S. government. And another icon, Merrill Lynch, was saved by becoming part of Bank of America, which had already snapped up struggling mortgage lender Countrywide Financial Corporation. The Merrill Lynch acquisition gave Bank of America a vast reach into nearly every part of the finance industry, from credit cards and auto loans to stock underwriting, wealth management, and merger advice. Power in the industry took a decided shift away from huge investment firms back toward the basic business of commercial banking, making companies such as Bank of America and Wells Fargo & Company in the United States, Germany's Deutsche Bank AG, and Banco Santander SA of Spain key players in a new financial landscape.² The 2008 crisis in the U.S. financial sector represented change and uncertainty on an unprecedented scale, and it would, to some extent, affect managers in all types of organizations and industries around the world.

ORGANIZATION THEORY IN ACTION

Organization theory gives us the tools to analyze and understand how a huge, powerful firm like Lehman Brothers can die and a company like Bank of America can emerge almost overnight as a giant in the industry. It enables us to comprehend how a band like the Rolling Stones, which operates like a highly sophisticated global business organization, can enjoy phenomenal success for nearly half a century, while some musical groups with equal or superior talent don't survive past a couple of hit songs. Organization theory helps us explain what happened in the past, as well as what may happen in the future, so that we can manage organizations more effectively.

Topics

Each of the topics to be covered in this book is illustrated in the Xerox case. Indeed, managers at companies such as Xerox, Lehman Brothers, Bank of America, and even the Rolling Stones are continually faced with a number of challenges. For example:

- How can the organization adapt to or control such external elements as competitors, customers, government, and creditors in a fast-paced environment?
- What strategic and structural changes are needed to help the organization attain effectiveness?

- 7
- (How can the organization avoid management ethical lapses that could threaten its viability?)
- How can managers cope with the problems of large size and bureaucracy?
- What is the appropriate use of power and politics among managers?
- How should internal conflict be managed?
- What kind of corporate culture is needed to enhance rather than stifle innovation and change, and how can that culture be shaped by managers?

These are the topics with which organization theory is concerned. Organization theory concepts apply to all types of organizations in all industries. Managers at Burger King revitalized the once-floundering fast-food chain by revising its menu and marketing approach based on customer analysis. Nokia underwent a major reorganization to improve the organization's flexibility and adaptability. Hewlett-Packard acquired Electronic Data Systems Corporation to move H-P more aggressively into the technology services industry. All of these companies are using concepts based in organization theory. Organization theory also applies to nonprofit organizations such as the United Way, the American Humane Association, local arts organizations, colleges and universities, and the Make-A-Wish Foundation, which grants wishes to terminally ill children.

Organization theory draws lessons from organizations such as Xerox, Bank of America, and United Way and makes those lessons available to students and managers. As our opening example of Xerox shows, even large, successful organizations are vulnerable, lessons are not learned automatically, and organizations are only as strong as their decision makers. Organizations are not static; they continuously adapt to shifts in the external environment. Today, many companies are facing the need to transform themselves into dramatically different organizations because of new challenges in the environment.

Current Challenges

Research into hundreds of organizations provides the knowledge base to make Xerox and other organizations more effective. For example, challenges facing organizations today are different from those of the past, and thus the concept of organizations and organization theory is evolving. The world is changing more rapidly than ever before, and managers are responsible for positioning their organizations to adapt to new needs. Some specific challenges today's managers and organizations face are globalization, intense competition, rigorous ethical scrutiny, the need for rapid response, the digital workplace, and increasing diversity.

Globalization. The cliché that the world is getting smaller is dramatically true for today's organizations. With rapid advances in technology and communications, the time it takes to exert influence around the world from even the most remote locations has been reduced from years to only seconds. Markets, technologies, and organizations are becoming increasingly interconnected.⁴ Today's successful organizations feel "at home" anywhere in the world. Companies can locate different parts of the organization wherever it makes the most business sense: top leadership in one country, technical brainpower and production in other locales.

Related trends are global *outsourcing*, or contracting out some functions to organizations in other countries, and *strategic partnering* with foreign firms to gain a global advantage. In Bain & Company's 2007 survey of managers, nearly

Briefcase

As an organization manager, keep these guidelines in mind:

Do not ignore the external environment or protect the organization from it. Because the environment is unpredictable, do not expect to achieve complete order and rationality within the organization. Strive for a balance between order and flexibility.



50 percent said they saw cross-border acquisitions as crucial to their future competitiveness. Moreover, U.S. managers believe developing relationships in India and China will be vital to business success.⁵ Already, numerous companies from all over the world, including Home Depot, CNA Life, and Sony, use India's Wipro Ltd. to develop sophisticated software applications, design semiconductors, and manage back-office solutions.⁶ Other companies turn to China, which is the world's largest maker of consumer electronics and is rapidly and expertly moving into biotechnology, computer manufacturing, and semiconductors.⁷

Intense Competition. This growing global interdependence creates new advantages, but it also means that the environment for companies is becoming extremely competitive. Customers want low prices for goods and services. Outsourcing firms in low-wage countries can often do work for 50 to 60 percent less than companies based in the United States, for instance, so U.S. firms that provide similar services have to search for new ways to compete or go into new lines of business. In recent years, though, rising fuel costs cut into the cost advantage many manufacturers enjoyed from what has been called the "China price." The higher cost of shipping goods from China or other low-wage countries counteracted the lower cost of production, leaving U.S. manufacturers searching for ways to make up the difference without exorbitant price increases.

Companies in all industries are feeling pressure to drive down costs and keep prices low, yet at the same time they are compelled to invest in research and development or get left behind in the global drive for innovation. In the United States, high oil prices, the housing slump, mortgage meltdown, crisis in the financial sector, and the soaring costs of materials and supplies created a tough environment for companies in all industries. Consider McDonald's. Even as managers were seeking ways to expand the menu and draw in new customers, McDonald's labs were testing how to cut the cost of making basic items on the Dollar Menu. With the price of ingredients such as cheese, beef, and buns going up, McDonald's had to cut internal costs or lose money on its dollar-menu items. 10 Auto insurers searched for new ways to compete as drivers faced with steep gas prices looked for ways to cut their transportation costs.¹¹ Casual restaurant chains battled to draw in customers as people cut back on eating out. Grocers, too, felt the sting. Managers at Supervalu, the second largest supermarket company in the United States, quickly learned that they couldn't just pass on their higher costs to shoppers. Sales and profits plunged in early 2008 before managers adjusted their strategy to promote cheaper store brands, work with manufacturers to design innovative promotions and coupons, and introduce new lines of products at lower prices.¹²

Ethics and Social Responsibility. Today's managers face tremendous pressure from the government and the public to hold their organizations and employees to high ethical and professional standards. Following widespread moral lapses and corporate financial scandals, organizations are under scrutiny as never before. The pervasiveness of ethical lapses in the early 2000s was astounding. Once-respected firms such as Enron, Arthur Andersen, Tyco, and HealthSouth became synonymous with greed, deceit, and financial chicanery. No wonder a public poll found that 79 percent of respondents in the United States believe questionable business practices are widespread. Fewer than one-third said they think most CEOs are honest. The sentiment is echoed in other countries. Recent investigations of dozens of top executives in Germany for tax evasion, bribery, and other forms of corruption have destroyed the high level of public trust business leaders there once enjoyed, with just



15 percent of respondents in Germany now saying they consider business leaders trustworthy.¹⁴

The climate of suspicion has spread to nonprofit organizations and colleges and universities as well. For example, the student loan industry has come under close scrutiny after an investigation found that Student Loan Xpress paid financial aid directors at three universities a total of \$160,000 in consulting fees, personal tuition reimbursement, and other payments as a gateway to being placed on the universities' preferred lenders lists. Investigators are seeking to determine whether lenders are being recommended to students because of the hidden payments university officials are receiving rather than the fact that they offer the best lending terms to students.¹⁵

Speed and Responsiveness. A third significant challenge for organizations is to respond quickly and decisively to environmental changes, organizational crises, or shifting customer expectations. For much of the twentieth century, organizations operated in a relatively stable environment, so managers could focus on designing structures and systems that kept the organization running smoothly and efficiently. There was little need to search for new ways to cope with increased competition, volatile environmental shifts, or changing customer demands. Today, globalization and advancing technology have accelerated the pace at which organizations in all industries must roll out new products and services to stay competitive. Today's customers want products and services tailored to their exact needs, and they want them now. Manufacturing firms that relied on mass production and distribution techniques must be prepared with new computer-aided systems that can produce one-of-a-kind variations and streamlined distribution systems that deliver products directly from the manufacturer to the consumer. Service firms, as well, are searching for new ways to provide value. Allstate Insurance, for example, enhanced responsiveness to customers with its Your Choice Auto program, which gives drivers the opportunity to choose the insurance perks they want. Allstate managers recognize that what appeals to drivers can change quickly as gasoline prices shift.¹⁶

Considering the turmoil and flux inherent in today's world, the mindset needed by organizational leaders is to expect the unexpected and be prepared for rapid change and potential crises. Crisis management has moved to the forefront in light of devastating natural disasters and terrorist attacks all over the world; a tough economy, rocky stock market, growing unemployment, and weakening consumer confidence; widespread ethical scandals; and, in general, an environment that may shift dramatically at a moment's notice.

The Digital Workplace. Many traditional managers feel particularly awkward in today's technology-driven workplace. Organizations have been engulfed by information technology that affects how they are designed and managed. In today's workplace, many employees perform much of their work on computers and may work in virtual teams, connected electronically to colleagues around the world. In addition, rather than competing as independent entities, organizations are becoming enmeshed in electronic networks. More and more of today's business takes place by digital processes over a computer network rather than in physical space. Some companies have taken e-business to very high levels to achieve amazing performance. The use of end-to-end digital supply-chain networks to keep in touch with customers, take orders, buy components from suppliers, coordinate with manufacturing partners, and ship customized products directly to consumers has spread to all industries. These advances mean that organizational leaders not only need to be technologically

savvy but are also responsible for managing a web of relationships that reaches far beyond the boundaries of the physical organization, building flexible e-links between a company and its employees, suppliers, contract partners, and customers.¹⁸

Diversity. As organizations increasingly operate on a global playing field, the workforce—as well as the customer base—grows increasingly diverse. Many of today's leading organizations have an international face. Look at the makeup of consulting firm McKinsey & Company. In the 1970s, most consultants were American, but by the turn of the century, McKinsey's chief partner was a foreign national (Rajat Gupta from India), only 40 percent of consultants were American, and the firm's foreign-born consultants came from forty different countries.¹⁹

In addition to coping with global diversity, managers in the United States realize the nation's domestic population is changing dramatically. The minority population of the United States is now more than 100 million, making about one in three U.S. residents a minority. Roughly 32 million people speak Spanish at home, and nearly half of these people say they don't speak English very well.²⁰ Today's average employee is older, and many more women, people of color, and immigrants are seeking job and advancement opportunities. By 2050, it is estimated that 85 percent of entrants into the workforce will be women and people of color. Already, white males, the majority of workers in the past, represent less than half of the workforce.²¹ This growing diversity brings a variety of challenges, such as maintaining a strong corporate culture while supporting diversity, balancing work and family concerns, and coping with the conflict brought about by varying cultural styles.

Purpose of This Chapter

The purpose of this chapter is to explore the nature of organizations and organization theory today. Organization theory has developed from the systematic study of organizations by scholars. Concepts are obtained from living, ongoing organizations. Organization theory has a practical application, as illustrated by the Xerox case. It helps managers understand, diagnose, and respond to emerging organizational needs and problems.

The next section begins with a formal definition of organization and then explores introductory concepts for describing and analyzing organizations. Next, the scope and nature of organization theory are discussed more fully. Succeeding sections examine the history of organization theory and design, a framework for understanding organizational forms, the development of new organizational forms in response to changes in the environment, and how organization theory can help people manage complex organizations in a rapidly changing world. The chapter closes with a brief overview of the themes to be covered in this book.

WHAT IS AN ORGANIZATION?

Organizations are hard to see. We see outcroppings, such as a tall building, a computer workstation, or a friendly employee, but the whole organization is vague and abstract and may be scattered among several locations, even around the world. We know organizations are there because they touch us every day. Indeed, they are so common that we take them for granted. We hardly notice that we are born in a

hospital, have our birth records registered in a government agency, are educated in schools and universities, are raised on food produced on corporate farms, are treated by doctors engaged in a joint practice, buy a house built by a construction company and sold by a real estate agency, borrow money from a bank, turn to police and fire departments when trouble erupts, use moving companies to change residences, and receive an array of benefits from various government agencies.²² Most of us spend many of our waking hours working in an organization of one type or another.

Definition

Organizations as diverse as a bank, a corporate farm, a government agency, and Xerox Corporation have characteristics in common. The definition used in this book to describe organizations is as follows: **organizations** are (1) social entities that (2) are goal-directed, (3) are designed as deliberately structured and coordinated activity systems, and (4) are linked to the external environment.

The key element of an organization is not a building or a set of policies and procedures; organizations are made up of people and their relationships with one another. An organization exists when people interact with one another to perform essential functions that help attain goals. Recent trends in management recognize the importance of human resources, with most new approaches designed to empower employees with greater opportunities to learn and contribute as they work together toward common goals.

Managers deliberately structure and coordinate organizational resources to achieve the organization's purpose. However, even though work may be structured into separate departments or sets of activities, most organizations today are striving for greater horizontal coordination of work activities, often using teams of employees from different functional areas to work together on projects. Boundaries between departments, as well as those between organizations, are becoming more flexible and diffuse as companies face the need to respond to changes in the external environment more rapidly. An organization cannot exist without interacting with customers, suppliers, competitors, and other elements of the external environment. Today, some companies are even cooperating with their competitors, sharing information and technology to their mutual advantage.

From Multinationals to Nonprofits

Some organizations are large, multinational corporations, others are small, family-owned businesses, and still others are nonprofit organizations or governmental agencies. Some manufacture products such as automobiles, flat-panel televisions, or lightbulbs, whereas others provide services such as legal representation, Internet and telecommunications services, mental health resources, or car repair. Later in this text, Chapter 7 will look at the distinctions between manufacturing and service technologies. Chapter 9 discusses size and life cycle and describes some differences between small and large organizations.

Another important distinction is between for-profit businesses and *nonprofit organizations*. All of the topics in this text apply to nonprofit organizations such as the Salvation Army, the World Wildlife Fund, the Save the Children Foundation, and Chicago's La Rabida Hospital, which is dedicated to serving the poor, just as they do to such businesses as Xerox, Sirius XM Radio, Dunkin' Donuts, and Nintendo. However, there are some important dissimilarities to keep in mind. The primary difference is that managers in businesses direct their activities toward earning money for the company,

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whereas managers in nonprofits direct their efforts toward generating some kind of social impact. The unique characteristics and needs of nonprofit organizations created by this distinction present unique challenges for organizational leaders.²³

Financial resources for nonprofits typically come from government appropriations, grants, and donations rather than from the sale of products or services to customers. In businesses, managers focus on improving the organization's products and services to increase sales revenues. In nonprofits, however, services are typically provided to nonpaying clients, and a major problem for many organizations is securing a steady stream of funds to continue operating. Nonprofit managers, committed to serving clients with limited funds, must focus on keeping organizational costs as low as possible and demonstrating a highly efficient use of resources. Another problem is that, since nonprofit organizations do not have a conventional "bottom line," managers often struggle with the question of what constitutes organizational effectiveness. It is easy to measure dollars and cents, but nonprofits have to measure intangible goals such as "improve public health," "make a difference in the lives of the disenfranchised," or "enhance appreciation of the arts."

Managers in nonprofit organizations also deal with many diverse stakeholders and must market their services to attract not only clients (customers) but also volunteers and donors. This can sometimes create conflict and power struggles among organizations, as illustrated by the Make-A-Wish Foundation, which is butting heads with small, local wish-granting groups as it expands to cities across the United States. The more kids a group can count as helping, the easier it is to raise funds. Local groups don't want Make-A-Wish invading their turf, particularly at a time when charitable donations in general are declining with the slowing economy. Small groups are charging that Make-A-Wish is abusing the power of its national presence to overwhelm or absorb the smaller organizations. "We should not have to compete for children and money," says the director of the Indiana Children's Wish Fund. "They [Make-A-Wish] use all their muscle and money to get what they want." 25

Thus, the organization design concepts discussed throughout this book, such as dealing with issues of power and conflict, setting goals and measuring effectiveness, coping with environmental uncertainty, implementing effective control mechanisms, and satisfying multiple stakeholders, apply to nonprofit organizations such as the Indiana Children's Wish Fund just as they do to businesses such as Xerox. These concepts and theories are adapted and revised as needed to fit the unique needs and problems of various small, large, profit, or nonprofit organizations.

Importance of Organizations

It may seem hard to believe today, but organizations as we know them are relatively recent in the history of humankind. Even in the late nineteenth century there were few organizations of any size or importance—no labor unions, no trade associations, and few large businesses, nonprofit organizations, or governmental agencies. What a change has occurred since then! The development of large organizations transformed all of society, and, indeed, the modern corporation may be the most significant innovation of the past 100 years.²⁶ This chapter's Book Mark examines the rise of the corporation and its significance in our society.

Organizations are all around us and shape our lives in many ways. But what contributions do organizations make? Why are they important? Exhibit 1.1 lists seven reasons organizations are important to you and to society. First, organizations bring together resources to accomplish specific goals. Consider Northrup



Consider the needs and interests of all

stakeholders when

designing the orga-

nization to achieve

effectiveness.

setting goals and

BookMark 1.0 (HAVE YOU READ THIS BOOK?)

The Company: A Short History of a Revolutionary Idea By John Micklethwait and Adrian Wooldridge

cost to consumers for almost any product we know today

"The limited liability corporation is the greatest single discovery of modern times," is one conclusion of the concise and readable book The Company: A Short History of a Revolutionary Idea by John Micklethwait and Adrian Wooldridge. Companies are so ubiquitous today that we take them for granted, so it may come as a surprise that the company as we know it is a relatively recent innovation. Although people have joined together in groups for commercial purposes since ancient Greek and Roman times, the modern company has its roots in the late nineteenth century. The idea of a limited liability company that was legally an "artificial person" began with the Joint Stock Companies Act, enacted by the London Board of Trade in 1856. Today the company is seen as "the most important organization in the world." Here are a few reasons why:

- The corporation was the first autonomous legal and social institution that was within society yet independent of the central government.
- The concept of a limited liability company unleashed entrepreneurs to raise money because investors could lose only what they invested. Increasing the pool of entrepreneurial capital spurred innovation and generally enriched the societies in which companies operated.
- The company is the most efficient creator of goods and services that the world has ever known. Without a company to harness resources and organize activities, the

- would be impossible to afford.
- Historically, the corporation has been a force for civilized behavior and provided people with worthwhile activities. identity, and community, as well as a paycheck.
- The Virginia Company, a forerunner of the limited liability corporation, helped introduce the revolutionary concept of democracy to the American colonies.
- The modern multinational corporation began in Britain in the third guarter of the 1800s with the railroads, which built rail networks throughout Europe by shipping into each country the managers, materials, equipment, and labor needed.

During the past few years, it seems that large corporations have been increasingly in conflict with societies' interests. Yet large companies have been reviled throughout modern history—consider the robber barons at the beginning of the twentieth century-and the authors suggest that recent abuses are relatively mild compared to some incidents from history. Everyone knows that corporations can be scoundrels, but overall, Micklethwait and Wooldridge argue, their force has been overwhelmingly for the cumulative social and economic good.

The Company: A Short History of a Revolutionary Idea, by John Micklethwait and Adrian Wooldridge, is published by The Modern Library.

Grumman Newport News (formerly Newport News Shipbuilding), which builds nuclear-powered, Nimitz-class aircraft carriers. Putting together an aircraft carrier is an incredibly complex job involving 47,000 tons of precision-welded steel, more than 1 million distinct parts, 900 miles of wire and cable, and more than seven years of hard work by 17,800 employees.²⁷ How could such a job be accomplished without an organization to acquire and coordinate these varied resources?

Organizations also produce goods and services that customers want at competitive prices. Bill Gates, who built Microsoft into a global powerhouse, asserts that the modern organization "is one of the most effective means to allocate resources we've ever seen. It transforms great ideas into customer benefits on an unimaginably large scale."28 Companies look for innovative ways to produce and distribute desirable goods and services more efficiently. Two ways are through e-business and through the use of computer-based manufacturing technologies. Redesigning organizational structures and management practices can also contribute to increased efficiency. Organizations create a drive for innovation rather than a reliance on standard products and outmoded approaches to management and organization design.

Burkhart ä



EXHIBIT 1.1 Importance of Organizations

Organizations exist to do the following:

- 1. Bring together resources to achieve desired goals and outcomes
- 2. Produce goods and services efficiently
- 3. Facilitate innovation
- 4. Use modern manufacturing and information technologies
- 5. Adapt to and influence a changing environment
- 6. Create value for owners, customers, and employees
- 7. Accommodate ongoing challenges of diversity, ethics, and the motivation and coordination of employees

Organizations adapt to and influence a rapidly changing environment. Consider Google, provider of the Internet's most popular search engine, which continues to adapt and evolve along with the evolving Internet. Rather than being a rigid service, Google is continually adding technological features that create a better service by accretion. At any time, Google's site features several technologies in development so that engineers can get ideas and feedback from users.²⁹ Some large businesses have entire departments charged with monitoring the external environment and finding ways to adapt to or influence that environment.

Through all of these activities, organizations create value for their owners, customers, and employees. Managers analyze which parts of the operation create value and which parts do not; a company can be profitable only when the value it creates is greater than the cost of resources. Vizio Inc., a growing force in the flat-panel television industry, for example, creates value by using existing LCD technology and developing an equity partnership with a contract manufacturer rather than producing televisions in-house. By keeping its costs low, the California-based company has been able to sell flat-panel TVs at about half the cost of those sold by major electronics manufacturers.³⁰

Finally, organizations have to cope with and accommodate today's challenges of workforce diversity and growing concerns over ethics and social responsibility, as well as find effective ways to motivate employees to work together to accomplish organizational goals.

DIMENSIONS OF ORGANIZATION DESIGN

Organizations shape our lives, and well-informed managers can shape organizations. The first step for understanding organizations is to look at dimensions that describe specific organizational design traits. These dimensions describe organizations in much the same way that personality and physical traits describe people.

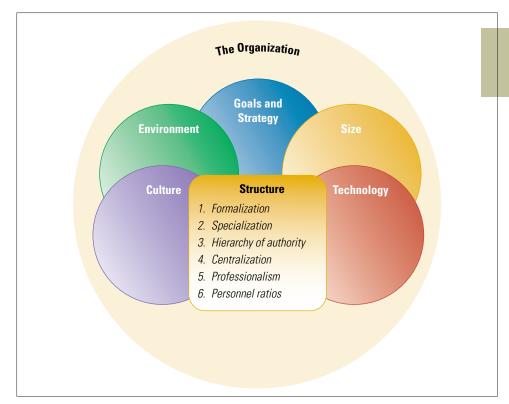


EXHIBIT 1.2
Interacting Contextual and Structural Dimensions of Organization Design

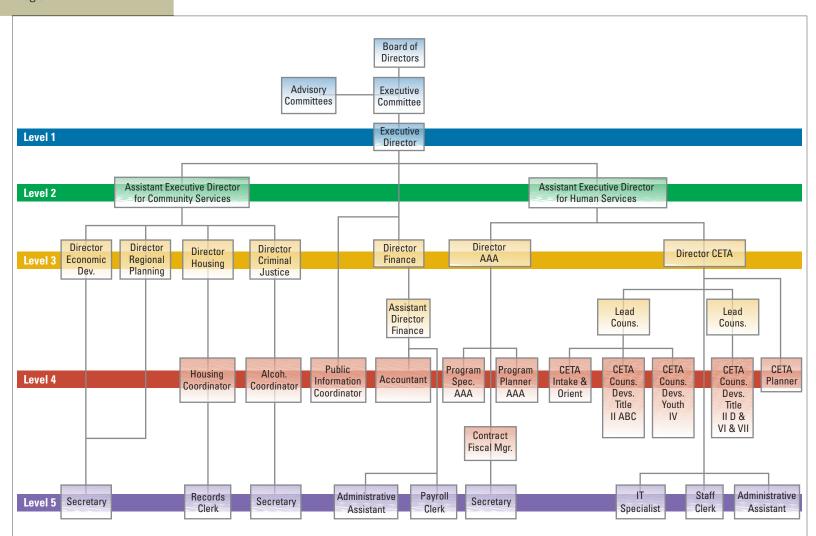
Organizational dimensions fall into two types: structural and contextual, as illustrated in Exhibit 1.2. **Structural dimensions** provide labels to describe the internal characteristics of an organization. They create a basis for measuring and comparing organizations. **Contextual dimensions** characterize the whole organization, including its size, technology, environment, and goals. They describe the organizational setting that influences and shapes the structural dimensions. **Contextual dimensions** can be confusing because they represent both the organization and the environment. Contextual dimensions can be envisioned as a set of overlapping elements that underlie an organization's structure and work processes. To understand and evaluate organizations, one must examine both structural and contextual dimensions.³¹ These dimensions of organization design interact with one another and can be adjusted to accomplish the purposes listed earlier in Exhibit 1.1.

Structural Dimensions

1. Formalization pertains to the amount of written documentation in the organization. Documentation includes procedures, job descriptions, regulations, and policy manuals. These written documents describe behavior and activities. Formalization is often measured by simply counting the number of pages of documentation within the organization. Large state universities, for example, tend to be high on formalization because they have several volumes of written rules for such things as registration, dropping and adding classes, student associations, dormitory governance, and financial assistance. A small, family-owned business, in contrast, may have almost no written rules and would be considered informal.

EXHIBIT 1.3

Organization Chart Illustrating the Hierarchy of Authority for a Community Job Training Program



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- 2. *Specialization* is the degree to which organizational tasks are <u>subdivided into</u> <u>separate jobs</u>. If specialization is extensive, each employee performs only a narrow range of tasks. If specialization is low, employees perform a wide range of tasks in their jobs. Specialization is sometimes referred to as the *division of labor*.
- 3. Hierarchy of authority describes who reports to whom and the span of control for each manager. The hierarchy is depicted by the vertical lines on an organization chart, as illustrated in Exhibit 1.3. The hierarchy is related to span of control (the number of employees reporting to a supervisor). When spans of control are narrow, the hierarchy tends to be tall. When spans of control are wide, the hierarchy of authority will be shorter.
- 4. *Centralization* refers to the hierarchical level that has authority to make a decision. When decision making is kept at the top level, the organization is centralized. When decisions are delegated to lower organizational levels, it is decentralized. Examples of organizational decisions that might be centralized or decentralized include purchasing equipment, establishing goals, choosing suppliers, setting prices, hiring employees, and deciding marketing territories.
- 5. *Professionalism* is the level of formal education and training of employees. Professionalism is considered high when employees require long periods of training to hold jobs in the organization. Professionalism is generally measured as the average number of years of education of employees, which could be as high as twenty in a medical practice and less than ten in a construction company.
- 6. *Personnel ratios* refer to the deployment of people to various functions and departments. Personnel ratios include the administrative ratio, the clerical ratio, the professional staff ratio, and the ratio of indirect to direct labor employees. A personnel ratio is measured by dividing the number of employees in a classification by the total number of organizational employees.

Contextual Dimensions

- 1. Size can be measured for the organization as a whole or for specific components, such as a plant or division. Because organizations are social systems, size is typically measured by the number of employees. Other measures such as total sales or total assets also reflect magnitude, but they do not indicate the size of the human part of the system.
- 2. Organizational technology refers to the tools, techniques, and actions used to transform inputs into outputs. It concerns how the organization actually produces the products and services it provides for customers and includes such things as flexible manufacturing, advanced information systems, and the Internet. An automobile assembly line, a college classroom, and an overnight package delivery system are technologies, although they differ from one another.
- 3. The *environment* includes all elements outside the boundary of the organization. Key elements include the industry, government, customers, suppliers, and the financial community. The environmental elements that affect an organization the most are often other organizations.
- 4. The organization's *goals and strategy* define the purpose and competitive techniques that set it apart from other organizations. Goals are often written down as an enduring statement of company intent. A strategy is the plan of action that describes resource allocation and activities for dealing with the environment and for reaching the organization's goals. Goals and strategies define the scope of operations and the relationship with employees, customers, and competitors.

Briefcase

As an organization manager, keep these guidelines in mind:

Think of the organization as an entity distinct from the individuals who work in it. Describe the organization according to its size, formalization, decentralization, specialization, professionalism, personnel ratios, and the like. Use these characteristics to analyze the organization and to compare it with other organizations.

5. An organization's *culture* is the underlying set of key values, beliefs, understandings, and norms shared by employees. These underlying values and norms may pertain to ethical behavior, commitment to employees, efficiency, or customer service, and they provide the glue to hold organization members together. An organization's culture is unwritten but can be observed in its stories, slogans, ceremonies, dress, and office layout.

The eleven contextual and structural dimensions discussed here are interdependent. For example, large organization size, a routine technology, and a stable environment all tend to create an organization that has greater formalization, specialization, and centralization. More detailed relationships among the dimensions are explored in later chapters of this book.

ASSESS YOUR ANSWER

An organization can be understood primarily by understanding the people who make it up.

ANSWER: *Disagree.* An organization has distinct characteristics that are independent of the nature of the people who make it up. All the people could be replaced over time while an organization's structural and contextual dimensions would remain similar.

These dimensions provide a basis for measuring and analyzing characteristics that cannot be seen by the casual observer, and they reveal significant information about an organization. Consider, for example, the dimensions of Ternary Software compared with those of Wal-Mart and a governmental agency.



Brian Robertson is one of the founders of Ternary Software and holds the title of CEO. But as for having the power and authority typically granted to a top executive, forget

Ternary Software Inc.

about it. Consider a recent strategy meeting where a programmer criticized Robertson's plan to replace the company's profit sharing program with an ad hoc bonus system based on performance. After much discussion, the CEO's plan was soundly rejected in favor of keeping the profit sharing program and using monthly bonus incentives.

At Ternary, a company that writes software on contract for other organizations, everyone has a voice in making important decisions. A seven-member policy-setting team that
includes two frontline workers elected by their peers consults with other teams throughout
the company, ultimately giving every employee a chance to participate in decision making.
Meetings are highly informal and people are invited to share feelings as well as business
ideas. Any time a new item on the agenda is brought up for discussion, each person is
asked for his or her gut reaction. Then, people get to state objections, offer alternative
ideas, rework proposals, and perhaps throw out management's suggestions and plans.

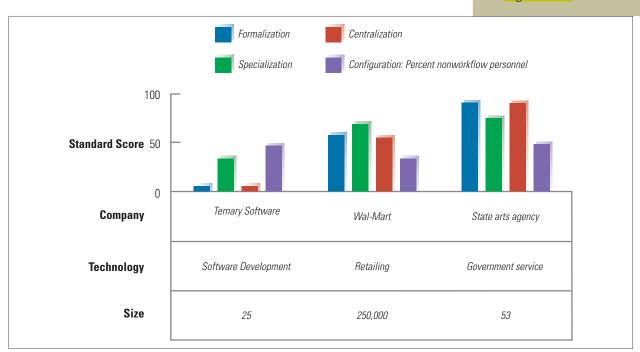
Contrast Ternary's approach to that of Wal-Mart, which achieves its competitive edge through internal cost efficiency. A standard formula is used to build each store, with uniform displays and merchandise. Wal-Mart's administrative expenses are the lowest of any chain. The distribution system is a marvel of efficiency. Goods can be delivered to any store in less than two days after an order is placed. Stores are controlled from the top, although store

managers have some freedom to adapt to local conditions. Employees follow standard procedures set by management and have little say in decision making. However, performance is typically high, and most employees consider that the company treats them fairly.

An even greater contrast is seen in many government agencies or nonprofit organizations that rely heavily on public funding. Most state humanities and arts agencies, for example, are staffed by a small number of highly trained employees, but workers are overwhelmed with rules and regulations and swamped by paperwork. Employees who have to implement rule changes often don't have time to read the continuous stream of memos and still keep up with their daily work. Employees must require extensive reporting from their clients in order to make regular reports to a variety of state and federal funding sources. Agency workers are frustrated and so are the community-based organizations they seek to serve.³²

Exhibit 1.4 illustrates several structural and contextual dimensions of Ternary Software, Wal-Mart, and the state arts agency. Ternary is a small organization that ranks very low with respect to formalization and centralization and has a medium degree of specialization. Professionalism is high, with a number of staff assigned to nonworkflow activities to do the R&D needed to stay abreast of changes in the software and information technology industries. Wal-Mart is much more formalized, specialized, and centralized. Efficiency is more important than new products, so most activities are guided by standard regulations. Professionalism is low, and the percentage of nonworkflow personnel is kept to a minimum. The arts agency, in contrast to the other organizations, reflects its status as a small part of a large government bureaucracy. The agency is overwhelmed with rules and standard procedures. Rules are dictated from the top. Most employees are assigned to workflow

EXHIBIT 1.4
Characteristics of Three
Organizations



activities, although in normal times a substantial number of people are devoted to administration and clerical support.

Structural and contextual dimensions can thus tell a lot about an organization and about differences among organizations. Organization design dimensions are examined in more detail in later chapters to determine the appropriate level of each dimension needed to perform effectively in each organizational setting.

Performance and Effectiveness Outcomes

The whole point of understanding structural and contextual dimensions is to design the organization in such a way as to achieve high performance and effectiveness. Managers adjust structural and contextual dimensions to most efficiently and effectively transform inputs into outputs and provide value. **Efficiency** refers to the amount of resources used to achieve the organization's goals. It is based on the quantity of raw materials, money, and employees necessary to produce a given level of output. **Effectiveness** is a broader term, meaning the degree to which an organization achieves its goals.

To be effective, organizations need clear, focused goals and appropriate strategies for achieving them. Strategy, goals, and approaches to measuring effectiveness will be discussed in detail in Chapter 2. Many organizations are using new technology to improve efficiency and effectiveness. For example, the health care industry is striving to increase efficiency by using information technology to reduce paperwork and streamline procedures. With new technology, one physician's office in Philadelphia says it can now handle more patients with three fewer office employees. Information technology also helps the staff locate information more quickly and reduce mistakes, leading to a higher quality of care and better customer service.³³

Achieving effectiveness is not always a simple matter because different people want different things from the organization. For customers, the primary concern is high-quality products and services at a reasonable price, whereas employees are mostly concerned with adequate pay, good working conditions, and job satisfaction. Managers carefully balance the needs and interests of various *stakeholders* in setting goals and striving for effectiveness. This is referred to as the **stakeholder approach**, which integrates diverse organizational activities by looking at various organizational stakeholders and what they want from the organization. A **stakeholder** is any group within or outside of the organization that has a stake in the organization's performance. The satisfaction level of each group can be assessed as an indication of the organization's performance and effectiveness.³⁴

ASSESS YOUR ANSWER

2 The primary role of managers in business organizations is to achieve maximum efficiency.

ANSWER: *Disagree.* Efficiency is important, but organizations must respond to a variety of stakeholders, who may want different things from the organization. Managers strive for both efficiency *and* effectiveness in trying to meet the needs and interests of stakeholders. Effectiveness is often considered more important than efficiency.

Exhibit 1.5 illustrates various stakeholders and what each group wants from the organization. Stakeholder interests sometimes conflict, and organizations often find it difficult to simultaneously satisfy the demands of all groups. A business might have high customer satisfaction, but the organization might have difficulties with creditors or supplier relationships might be poor. Consider Wal-Mart. Customers love its efficiency and low prices, but the low-cost emphasis has caused friction with suppliers. Some activist groups argue that Wal-Mart's tactics are unethical because they force suppliers to lay off workers, close factories, and outsource to manufacturers from low-wage countries. One supplier said clothing is being sold at Wal-Mart so cheaply that many U.S. companies couldn't compete even if they paid their workers nothing. The challenges of managing such a huge organization have also led to strains in relationships with employees and other stakeholder groups, as evidenced by recent gender discrimination suits and complaints about low wages and poor benefits.³⁵

Research has shown that the assessment of multiple stakeholder groups is an accurate reflection of organizational effectiveness, especially with respect to organizational adaptability.³⁶ Moreover, both profit and nonprofit organizations care about their reputations and attempt to shape stakeholders' perceptions of their performance.³⁷

In reality, it is unreasonable to assume that all stakeholders can be equally satisfied, but if an organization fails to meet the needs of several stakeholder groups, it is probably not meeting its effectiveness goals. Managers strive to at least minimally satisfy the interests of all stakeholders. When any one group becomes seriously dissatisfied, it may withdraw its support and hurt future organizational performance. Satisfying multiple stakeholders can be challenging, particularly as goals and priorities change, as illustrated by the following example.

EXHIBIT 1.5
Major Stakeholder
Groups and What They
Expect







IN PRACTICE

Few people deny that homeland security should be a top priority for the United States, and since the attacks of September 11, 2001, the Federal Bureau of Investigation

Federal Bureau of Investigation

(FBI) has channeled more and more resources into the domestic war on terrorism. Consider the seven-year investigation into the anthrax attacks that occurred weeks after September 11 and killed five people in the United States. The investigation culminated in mid-2008 by identifying the alleged culprit as an Army biological weapons scientist at Fort Detrick in Frederick, Maryland. The suspect committed suicide after being told he would be charged with murder.

Combatting terrorism sounds good, right? The only problem is, the agency's new priority means hundreds of agents have been pulled off their regular beats, where they investigated everything from drug smuggling to kidnapping to white collar crime. "Just about everyone here is involved in terror cases, one way or another," says agent Ron Buckley. "Everything else is on the back burner."

The FBI's new focus is putting a heavy burden on police departments and other law enforcement agencies around the country. These organizations don't have the personnel, investigative resources, or know-how to fight the kinds of crime FBI agents once handled. For example, even when local departments have adequate manpower, crimes often go unsolved because of lack of access to the FBI's high-tech forensic labs. Local communities are also distressed because they fear more drugs in their neighborhoods and more violent crime on their streets. Although the U.S. public is worried about terrorism, they also want their own little piece of the world protected from criminal activity.

Some FBI agents aren't particularly happy about the change either. An agent who has spent most of his 25-year career poring over financial statements investigating fraud, for example, has to make a huge mental shift to feel comfortable traveling around town in an unmarked car with submachine guns, stun grenades, body armor—and a toothbrush—prepared for the next long stakeout.³⁸ ■

This example provides a glimpse of how difficult it can be for managers to satisfy multiple stakeholders. In all organizations, managers have to evaluate stakeholder concerns and establish goals that can achieve at least minimal satisfaction for major stakeholder groups.

THE EVOLUTION OF ORGANIZATION THEORY AND DESIGN

Organization theory is not a collection of facts; it is a way of thinking about organizations. Organization theory is a way to see and analyze organizations more accurately and deeply than one otherwise could. The way to see and think about organizations is based on patterns and regularities in organizational design and behavior. Organization scholars search for these regularities, define them, measure them, and make them available to the rest of us. The facts from the research are not as important as the general patterns and insights into organizational functioning. Insights from organization design research can help managers improve organizational efficiency and effectiveness, as well as strengthen the quality of organizational life.³⁹ One area of insight is how organization design and management practices have varied over time in response to changes in the larger society.

Historical Perspectives

You may recall from an earlier management course that the modern era of management theory began with the classical management perspective in the late nineteenth and early twentieth century. The emergence of the factory system during the Industrial Revolution posed problems that earlier organizations had not encountered. As work was performed on a much larger scale by a larger number of workers, people began thinking about how to design and manage work in order to increase productivity and help organizations attain maximum efficiency. The classical perspective, which sought to make organizations run like efficient, well-oiled machines, is associated with the development of hierarchy and bureaucratic organizations and remains the basis of much of modern management theory and practice. In this section, we will examine the classical perspective, with its emphasis on efficiency and organization, as well as other perspectives that emerged to address new concerns, such as employee needs and the role of the environment. Elements of each perspective are still used in organization design, although they have been adapted and revised to meet changing needs. These different perspectives can also be associated with different ways in which managers think about and view the organization, called manager frame of reference. Complete the questionnaire in the "How Do You Fit the Design?" box on page 24 to understand your frame of reference.

Efficiency Is Everything. Pioneered by Frederick Winslow Taylor, **scientific management** emphasizes scientifically determined jobs and management practices as the way to improve efficiency and labor productivity. Taylor proposed that workers "could be retooled like machines, their physical and mental gears recalibrated for better productivity." He insisted that management itself would have to change and emphasized that decisions based on rules of thumb and tradition should be replaced with precise procedures developed after careful study of individual situations. To use this approach, managers develop precise, standard procedures for doing each job, select workers with appropriate abilities, train workers in the standard procedures, carefully plan work, and provide wage incentives to increase output.

Taylor's approach is illustrated by the unloading of iron from railcars and reloading finished steel for the Bethlehem Steel plant in 1898. Taylor calculated that with correct movements, tools, and sequencing, each man was capable of loading 47.5 tons per day instead of the typical 12.5 tons. He also worked out an incentive system that paid each man \$1.85 per day for meeting the new standard, an increase from the previous rate of \$1.15. Productivity at Bethlehem Steel shot up overnight. These insights helped to establish organizational assumptions that the role of management is to maintain stability and efficiency, with top managers doing the thinking and workers doing what they are told.

The ideas of creating a system for maximum efficiency and organizing work for maximum productivity are deeply embedded in our organizations. A recent *Harvard Business Review* article discussing innovations that shaped modern management put scientific management at the top of its list of twelve influential innovations.⁴²

How to Get Organized. Another subfield of the classical perspective took a broader look at the organization. Whereas scientific management focused primarily on the technical core—on work performed on the shop floor—administrative principles looked at the design and functioning of the organization as a whole. For example, Henri Fayol proposed fourteen principles of management, such as "each subordinate



How Do You Fit the Design? Evolution of Style

This questionnaire asks you to describe yourself. For each item, give the number "4" to the phrase that best describes you, "3" to the item that is next best, and on down to "1" for the item that is least like you.

- **1.** My strongest skills are:
 - a. Analytical skills
 - ___b. Interpersonal skills
 - c. Political skills
 - ___d. Flair for drama
- 2. The best way to describe me is:
 - ___a. Technical expert
 - ___b. Good listener
 - c. Skilled negotiator
 - ___d. Inspirational leader
- **3.** What has helped me the most to be successful is my ability to:
 - ___a. Make good decisions
 - ___b. Coach and develop people
 - ___c. Build strong alliances and a power base
 - d. Inspire and excite others
- **4.** What people are most likely to notice about me is my:
 - ___a. Attention to detail
 - ___b. Concern for people
 - ___c. Ability to succeed in the face of conflict and opposition
 - d. Charisma
- 5. My most important leadership trait is:
 - ___a. Clear, logical thinking
 - ____b. Caring and support for others
 - ___c. Toughness and aggressiveness
 - ___d. Imagination and creativity
- 6. I am best described as:
 - ___a. An analyst
 - ___**b.** A humanist
 - ___c. A politician
 - ___d. A visionary

Scoring: Compute your scores according to the following rater. The higher score represents your way of viewing the organization and will influence your management style.

Structure = 1a + 2a + 3a + 4a + 5a + 6a =Human Resource = 1b + 2b + 3b + 4b + 5b + 6b =

Political = 1c + 2c + 3c + 4c + 5c + 6c =______ Symbolic = 1d + 2d + 3d + 4d + 5d + 6d =_____

Interpretation: Organization managers typically view their world through one or more mental frames of reference. (1) The structural frame of reference sees the organization as a machine that can be economically efficient with vertical hierarchy and routine tasks that give a manager the formal authority to achieve goals. This manager way of thinking became strong during the era of scientific management when efficiency was everything. (2) The human resource frame sees the organization as its people, with manager emphasis given to support, empowerment, and belonging. This manager way of thinking gained importance after the Hawthorne studies. (3) The political frame sees the organization as a competition for scarce resources to achieve goals, with manager emphasis on building agreement among diverse groups. This frame of reference reflects the need for organizations to share information, have a collaborative strategy, and to have all parts working together. (4) The symbolic frame sees the organization as theater, with manager emphasis on symbols, vision, culture, and inspiration. This manager frame of reference is important for managing an adaptive culture in a learning organization.

Which frame reflects your way of viewing the world? The first two frames of reference—structural and human resource—are important for newer managers at the lower and middle levels of an organization. These two frames usually are mastered first. As managers gain experience and move up the organization, they should acquire political and collaborative skills (Chapter 13) and also learn to use symbols to shape cultural values (Chapter 10). It is important for managers not to be stuck in one way of viewing the organization because their progress may be limited.

Source: Roy G. Williams and Terrence E. Deal, When Opposites Dance: Balancing the Manage and Leader Within (Palo Alto, CA: Davies-Black, 2003), pp. 24–28. Reprinted with permission.



receives orders from only one superior" (unity of command) and "similar activities in an organization should be grouped together under one manager" (unity of direction). These principles formed the foundation for modern management practice and organization design.

The scientific management and administrative principles approaches were powerful and gave organizations fundamental new ideas for establishing high productivity and increasing prosperity. Administrative principles in particular contributed to the development of **bureaucratic organizations**, which emphasized designing and managing organizations on an impersonal, rational basis through such elements as clearly defined authority and responsibility, formal recordkeeping, and uniform application of standard rules. Although the term *bureaucracy* has taken on negative connotations in today's organizations, bureaucratic characteristics worked extremely well for the needs of the Industrial Age. One problem with the classical perspective, however, is that it failed to consider the social context and human needs.

What about People? Early work on industrial psychology and human relations received little attention because of the prominence of scientific management. However, a major breakthrough occurred with a series of experiments at a Chicago electric company, which came to be known as the Hawthorne Studies. Interpretations of these studies at the time concluded that positive treatment of employees improved their motivation and productivity. The publication of these findings led to a revolution in worker treatment and laid the groundwork for subsequent work examining treatment of workers, leadership, motivation, and human resource management. These human relations and behavioral approaches added new and important contributions to the study of management and organizations.

However, the hierarchical system and bureaucratic approaches that developed during the Industrial Revolution remained the primary approach to organization design and functioning well into the 1970s and early 1980s. In general, this approach worked well for most organizations until the past few decades. However, during the 1980s, it began to lead to problems. Increased competition, especially on a global scale, changed the playing field.⁴³ North American companies had to find a better way.

Can Bureaucracies Be Flexible? The 1980s produced new corporate cultures that valued lean staff, flexibility and learning, rapid response to the customer, engaged employees, and quality products. Organizations began experimenting with teams, flattened hierarchies, and participative management approaches. For example, in 1983, a DuPont plant in Martinsville, Virginia, cut management layers from eight to four and began using teams of production employees to solve problems and take over routine management tasks. The new design led to improved quality, decreased costs, and enhanced innovation, helping the plant be more competitive in a changed environment.⁴⁴ Rather than relying on strict rules and hierarchy, managers began looking at the entire organizational system, including the external environment.

Over the past twenty-five years organizations have undergone even more profound and far-reaching changes. More flexible approaches to organization design have become prevalent. Recent influences on the shifting of organization design include the Internet and other advances in communications and information technology; globalization and the increasing interconnection of organizations; the rising educational level of employees and their growing quality-of-life expectations; and the growth of knowledge- and information-based work as primary organizational activities. 45



Be cautious when applying something that works in one situation to another situation. All organizational systems are not the same. Use organization theory to identify the correct structure, goals, strategy, and management systems for each organization.

Don't Forget the Environment

Many problems occur when all organizations are treated as similar, which was the case with scientific management and administrative principles that attempted to design all organizations alike. The structures and systems that work in the retail division of a conglomerate will not be appropriate for the manufacturing division. The organization charts and financial procedures that are best for an entrepreneurial Internet firm like Google will not work for a large food processing plant at Kraft or Nabisco.

Contingency means that one thing depends on other things, and for organizations to be effective, there must be a "goodness of fit" between their structure and the conditions in their external environment. What works in one setting may not work in another setting. There is no "one best way." Contingency theory means it depends. For example, some organizations experience a certain environment, use a routine technology, and desire efficiency. In this situation, a management approach that uses bureaucratic control procedures, a hierarchical structure, and formal communication would be appropriate. Likewise, free-flowing management processes work best in an uncertain environment with a nonroutine technology. The correct management approach is contingent on the organization's situation.

Today, almost all organizations operate in highly uncertain environments. Thus, we are involved in a significant period of transition, in which concepts of organization theory and design are changing as dramatically as they did with the dawning of the Industrial Revolution.

ORGANIZATIONAL CONFIGURATION

Another important insight from organization design researchers is how organizations are configured—that is, what makes up an organization's parts and how do the various parts fit together?

Mintzberg's Organizational Types

One framework proposed by Henry Mintzberg suggests that every organization has five parts.⁴⁷ These parts, illustrated in Exhibit 1.6, include the technical core, top management, middle management, technical support, and administrative support.

Technical Core. The technical core includes people who do the basic work of the organization. This part actually produces the product and service outputs of the organization. This is where the primary transformation from inputs to outputs takes place. The technical core is the production department in a manufacturing firm, the teachers and classes in a university, and the medical activities in a hospital.



Technical Support. The technical support function helps the organization adapt to the environment. Technical support employees such as engineers, researchers, and information technology professionals scan the environment for problems, opportunities, and technological developments. Technical support is responsible for creating innovations in the technical core, helping the organization change and adapt.



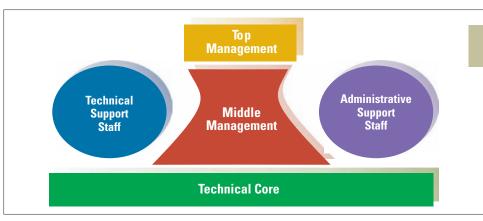


EXHIBIT 1.6Five Basic Parts of an Organization

Source: Based on Henry Mintzberg, *The Structuring of Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, 1979), 215–297; and Henry Mintzberg, "Organization Design: Fashion or Fit?" *Harvard Business Review* 59 (January-February 1981), 103–116.

Administrative Support. The administrative support function is responsible for the smooth operation and upkeep of the organization, including its physical and human elements. This includes human resource activities such as recruiting and hiring, establishing compensation and benefits, and employee training and development, as well as maintenance activities such as cleaning of buildings and service and repair of machines.



Management. Management is a distinct function, responsible for directing and coordinating other parts of the organization. Top management provides direction, planning, strategy, goals, and policies for the entire organization or major divisions. Middle management is responsible for implementation and coordination at the departmental level. In traditional organizations, middle managers are responsible for mediating between top management and the technical core, such as implementing rules and passing information up and down the hierarchy.

3 A CEO's top priority is to make sure the organization is designed correctly.

ANSWER: Agree. Top managers have many responsibilities, but one of the most important is making sure the organization is designed correctly. Organization design organizes and focuses people's work and shapes their response to customers and other stakeholders. Managers consider both structural and contextual dimensions as well as make sure the various parts of the organization work together to achieve important goals.

ASSESS YOUR ANSWER

In real-life organizations, the five parts are interrelated and often serve more than one function. For example, managers coordinate and direct parts of the organization, but they may also be involved in administrative and technical support.

Mintzberg proposed that the five parts could fit together in five basic types of organization, as illustrated in Exhibit 1.7. The five configurations are entrepreneurial structure, machine bureaucracy, professional bureaucracy, diversified form, and adhocracy. The five organizational parts vary in size and importance in each type.

a. Entrepreneurial Structure b. Machine Bureaucracy c. Professional Bureaucracy e. Adhocracy d. Diversified Form

Source: Mintzberg, Henry, Structuring of Organizations, 1st, @ 1979. Electronically reproduced by permission of Pearson Education, Inc., Upper Saddle River, New Jersey.

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This difference is related to the differences in size, goals, and other characteristics of the organization.



- 1. Entrepreneurial Structure. The organization with an entrepreneurial structure, as shown in Exhibit 1.7(a), is typically a new, small start-up company. It consists mainly of a top manager and workers in the technical core. The organization is managed and coordinated by direct supervision from the top rather than by middle managers or support departments. Top management is the key part of the structure. Few support staff are needed. The primary goal of the organization is to survive and become established in its industry. There is little formalization or specialization. This form is suited to a dynamic environment because the simplicity and flexibility enable it to maneuver quickly and compete successfully with larger, less adaptable organizations.
- 2. *Machine Bureaucracy*. The **machine bureaucracy** in Exhibit 1.7(b) is very large, typically mature, and the technical core is often oriented to mass production. It has fully elaborated technical and administrative departments, including engineers, market researchers, and financial analysts who scrutinize, routinize, and formalize work in the high-volume production center. The narrow middle management area reflects the tall hierarchy for control. This form reflects extensive formalization and specialization, with a primary goal of efficiency. This form is suited to a simple, stable environment. It would not do well in a dynamic environment because the bureaucracy is not adaptable.
- 3. Professional Bureaucracy. The distinguishing feature of the professional bureaucracy in Exhibit 1.7(c) is the size and power of the technical core, which is made up of highly skilled professionals, such as in hospitals, universities, law firms, and consulting firms. The technical support staff is small or nonexistent, because professionals make up the bulk of the organization. A large administrative support staff is needed to support the professionals and handle the organization's routine administrative activities. The primary goals are quality and effectiveness, and although there is some specialization and formalization, professionals in the technical core have autonomy. Professional organizations typically provide services rather than tangible goods, and they exist in complex environments.
- 4. Diversified Form. Organizations with a diversified form are mature firms that are extremely large and are subdivided into product or market groups, as shown in Exhibit 1.7(d). There is a relatively small top management and a small technical support group for the top level. There is a larger administrative support staff to handle paperwork to and from the divisions. In the exhibit, four independent divisions are shown below the headquarters, and the bulge across the middle indicates that middle management is key. Each of the independent divisions illustrates a machine bureaucracy with its own technical and administrative support staff, but on occasion a division may resemble the entrepreneurial structure, professional bureaucracy, or even adhocracy. The diversified form helps to solve the problem of inflexibility experienced by a too-large machine bureaucracy by dividing it into smaller parts.
- 5. Adhocracy. The **adhocracy** develops in a complex, rapidly changing environment. The design goal is frequent innovation and meeting continually changing needs, as in the aerospace and defense industries. Exhibit 1.7(e) shows the various parts (middle management, technical, and administrative support) merged together into an amorphous mass in the middle. The main structure consists of many overlapping teams rather than a vertical hierarchy. Adhocracies are

Briefcase

As an organization manager, keep these guidelines in mind:

When designing an organization, consider five basic parts—technical core, technical support, administrative support, top management, and middle management—and how they work together for maximum organizational effectiveness. Design the organization to fit one of Mintzberg's five organizational types.

usually young or middle-aged and can grow quite large. The organization has professional employees, and the technical and administrative support staff are part of the mix of ongoing innovation teams and projects rather than being placed in separate departments. Employees are engaged in the administration and support of their own teams. The production center, illustrated with dashed lines, is separate from the fluid and innovative core above it. If standardized production is done within the organization, it would occur in this operating core quite separate from the ongoing innovation in the professional center above it. In the professional center, the adhocracy is decentralized.

Contemporary Design Ideas

Each of the forms outlined by Mintzberg can be found among today's organizations. To some extent, organizations are still imprinted with the hierarchical, bureaucratic, formalized approach that arose in the nineteenth century. Yet the challenges presented by today's dynamic environment require greater flexibility and adaptability for most organizations. Thus, organizations and managers may be seen as shifting from a mindset based on rigid mechanical systems to one based on flexible natural systems.

For most of the twentieth century, Newtonian science, which suggests that the world functions as a well-ordered machine, continued to guide managers' thinking about organizations.⁴⁸ The environment was perceived as orderly and predictable and the role of managers was to maintain stability. This mindset worked quite well for the Industrial Age.⁴⁹ Growth was a primary criterion for organizational success.

Organizations became large and complex, and boundaries between functional departments and between organizations were distinct. Internal structures grew more complex, vertical, and bureaucratic. Leadership was based on solid management principles and tended to be autocratic; communication was primarily through formal memos, letters, and reports. Managers did all the planning and "thought work," while employees did the manual labor in exchange for wages and other compensation.

The environment for today's companies, however, is anything but stable. With the turbulence of recent years, managers can no longer maintain an illusion of order and predictability. The science of **chaos theory** suggests that relationships in complex, adaptive systems—including organizations—are nonlinear and made up of numerous interconnections and divergent choices that create unintended effects and render the whole unpredictable. The world is full of uncertainty, characterized by surprise, rapid change, and confusion. Managers can't measure, predict, or control in traditional ways the unfolding drama inside or outside the organization. However, chaos theory also recognizes that this randomness and disorder occurs within certain larger patterns of order. The ideas of chaos theory suggest that organizations should be viewed more as natural systems than as well-oiled, predictable machines.



EFFICIENT PERFORMANCE VERSUS THE LEARNING ORGANIZATION

The new mindset has spurred many organizations to shift from strict vertical hierarchies to flexible, decentralized structures that emphasize horizontal collaboration, widespread information sharing, and adaptability. This shift can clearly be seen in the U.S. Army, once considered the ultimate example of a rigid, top-down organization.

Today's army is fighting a new kind of war that demands a new approach to how it trains, equips, and uses soldiers. Fighting a fluid, fast-moving, and fast-changing terrorist network means that junior officers in the field who are experts on the local situation have to make quick decisions, learning through trial and error and sometimes departing from standard Army procedures.⁵¹

Although the stakes might not be as high, business and nonprofit organizations today also need greater fluidity and adaptability. Many managers are redesigning their companies toward something called the **learning organization**. The learning organization promotes communication and collaboration so that everyone is engaged in identifying and solving problems, enabling the organization to continuously experiment, improve, and increase its capability.

Exhibit 1.8 compares organizations designed for efficient performance with those designed for continuous learning by looking at five elements of organization design: structure, tasks, systems, culture, and strategy. As shown in the exhibit, all of these elements are interconnected and influence one another.

From Vertical to Horizontal Structure

Traditionally, the most common organizational structure has been one in which activities are grouped together by common work from the bottom to the top of the organization. Generally little collaboration occurs across functional departments, and the whole organization is coordinated and controlled through the vertical hierarchy, with decision-making authority residing with upper-level managers. This structure can be quite effective. It promotes efficient production and in-depth skill development, and the hierarchy of authority provides a sensible mechanism for supervision and control in large organizations. However, in a rapidly changing environment, the hierarchy becomes overloaded. Top executives are not able to respond rapidly enough to problems or opportunities.

In the learning organization, the vertical structure that creates distance between managers at the top of the organization and workers in the technical core is disbanded. Structure is created around horizontal workflows or processes rather than departmental functions. The vertical hierarchy is dramatically flattened, with perhaps only a few senior executives in traditional support functions such as finance or human resources. Self-directed teams are the fundamental work unit in the learning organization. Boundaries between functions are practically eliminated because teams include members from several functional areas.

From Routine Tasks to Empowered Roles

A **task** is a narrowly defined piece of work assigned to a person. In traditional organizations, tasks are broken down into specialized, separate parts, as in a machine. Knowledge and control of tasks are centralized at the top of the organization, and employees are expected to do as they are told. A **role**, in contrast, is a part in a dynamic social system. A role has discretion and responsibility, allowing the person to use his or her discretion and ability to achieve an outcome or meet a goal. In learning organizations, employees play a role in the team or department and roles may be continually redefined or adjusted. There are few rules or procedures, and knowledge and control of tasks are located with workers rather than with supervisors or top executives. Employees are encouraged to take care of problems by working with one another and with customers.

Briefcase

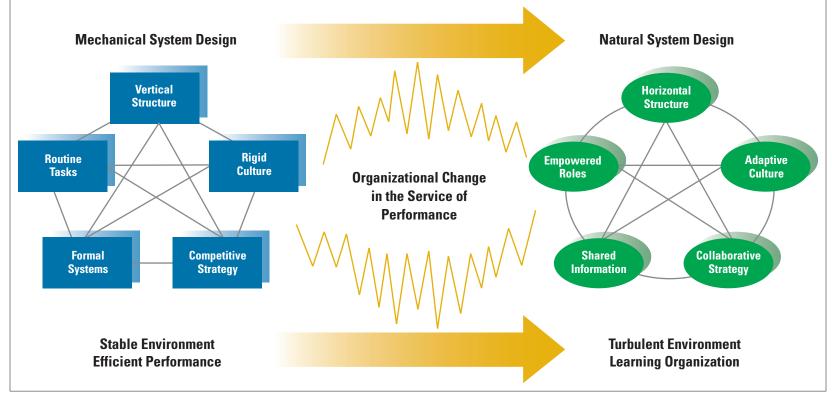
As an organization manager, keep these guidelines in mind:

When designing an organization for learning and adaptation in a turbulent environment, include elements such as horizontal structure, shared information, empowered roles, collaborative strategy, and adaptive culture. In stable environments, organizations can achieve efficient performance with a vertical structure, formal information and control systems, routine tasks, competitive strategy, and a stable culture.

EXHIBIT 1.8

Two Organization Design

Approaches



Source: Adapted from David K. Hurst, Crisis and Renewal: Meeting the Challenge of Organizational Change (Boston, Mass.: Harvard Business School Press, 1995).

From Formal Control Systems to Shared Information

In young, small organizations (Mintzberg's entrepreneurial structure), communication is generally informal and face-to-face. There are few formal control and information systems because the top leaders of the company usually work directly with employees in the day-to-day operation of the business. However, when organizations grow large and complex, the distance between top leaders and workers in the technical core increases. Formal systems are often implemented to manage the growing amount of complex information and to detect deviations from established standards and goals.⁵²

In learning organizations, information serves a very different purpose. The widespread sharing of information keeps the organization functioning at an optimum level. The learning organization strives to return to the condition of a small, entrepreneurial firm in which all employees have complete information about the company so they can act quickly. Ideas and information are shared throughout the organization. In addition, learning organizations maintain open lines of communication with customers, suppliers, and even competitors to enhance learning capability.

From Competitive to Collaborative Strategy

In traditional organizations designed for efficient performance, strategy is formulated by top managers and imposed on the organization. Top executives think about how the organization can best respond to competition, efficiently use resources, and cope with environmental changes. In the learning organization, in contrast, the accumulated actions of an informed and empowered workforce contribute to strategy development. Since all employees are in touch with customers, suppliers, and new technology, they help identify needs and solutions and participate in strategy making. In addition, strategy emerges from partnerships with suppliers, customers, and other firms. Consider IBM, where top managers used to do all the strategic planning. Now the company invites customers as well as people from nonprofit, business, government, and academic organizations to help, then makes the results public through conferences and reports.⁵³ Learning companies are willing to share their best ideas. Organizations become collaborators as well as competitors, experimenting to find the best way to learn and adapt. Boundaries between organizations become diffuse, with companies often forming partnerships to compete globally, sometimes joining in modular or virtual network organizations that are connected electronically.

From Rigid to Adaptive Culture

A danger for many organizations is that the corporate culture becomes fixed, as if set in concrete. Organizations that were highly successful in stable environments often become victims of their own success when the environment begins to change dramatically, as we saw illustrated in the opening case of Xerox Corporation. The cultural values, ideas, and practices that helped attain success can be detrimental to effective performance in a rapidly changing environment.

In a learning organization, the culture encourages openness, equality, continuous improvement, and change. People in the organization are aware of the whole system, how everything fits together, and how the various parts of the organization interact with one another and with the environment. This whole-system mindset

minimizes boundaries within the organization and with other companies. In addition, activities and symbols that create status differences, such as executive dining rooms or reserved parking spaces, are discarded. Each person is a valued contributor and the organization becomes a place for creating a web of relationships that allows people to develop and apply their full potential. Consider QuikTrip, a chain of convenience stores, where most of the top managers started out at the store level, and everyone is considered a vital part of the chain's success. "The purpose of QuikTrip," says CEO Chester Cadieux II, "is to give our employees the opportunity to grow and succeed." The emphasis on treating everyone with care and respect creates a climate in which people feel safe to experiment, take risks, and make mistakes, all of which encourage learning.

No company represents a perfect example of a learning organization, although many of today's most competitive organizations have shifted toward ideas and forms based on the concept of a living, dynamic system. As illustrated in Exhibit 1.8, today's managers are involved in a struggle as they attempt to change their companies into learning organizations. The challenge for managers is to maintain some level of stability as they actively promote change toward a new way of thinking, to navigate between order and chaos.

One organization that reflects many of the qualities of a learning organization is Mexico's Cementos Mexicanos (Cemex).



Cementos Mexicanos (Cemex), based in Monterrey, Mexico, has been making and delivering concrete for nearly a century. But the organization is on the cutting edge of

organization design, a model of what it takes to succeed in the complex environment of the twenty-first century.

Cemex specializes in delivering concrete in developing areas of the world, places where anything can, and usually does, go wrong. Even in Monterrey, Cemex copes with unpredictable weather and traffic conditions, spontaneous labor disruptions, building permit snafus, and arbitrary government inspections of construction sites. In addition, more than half of all orders are changed or canceled by customers, usually at the last minute. Considering that a load of concrete is never more than ninety minutes from spoiling, those chaotic conditions mean high costs, complex scheduling, and frustration for employees, managers, and customers.

To help the organization compete in this environment, managers looked for both technological and organizational innovations. Leaders call their new approach "living with chaos." Rather than trying to change the customers, Cemex resolved to do business on the customers' own terms and design a system in which last-minute changes and unexpected problems are routine.

A core element of this approach is a sophisticated information technology system, including a global positioning satellite system and onboard computers in all delivery trucks, which is fed with streams of day-to-day data on customer orders, production schedules, traffic problems, weather conditions, and so forth. Now Cemex trucks head out every morning to cruise the streets. When a customer order comes in, an employee checks the customer's credit status, locates a nearby truck, and relays directions for delivery. If the order is canceled, computers automatically direct the plant to scale back production.

Cemex also made managerial and organizational changes to support the new approach. The company enrolled all its drivers, who had an average of six years of formal schooling, in

Cementos Mexicanos

weekly secondary-education classes and began training them in delivering not just cement but quality service. In addition, many strict and demanding work rules were abolished so that workers had more discretion and responsibility for identifying and rapidly responding to problems and customer needs. As a result, each Cemex truck now operates as a self-organizing business unit, run by well-trained employees who think like businesspeople. According to Francisco Perez, operations manager at Cemex in Guadalajara, "They used to think of themselves as drivers. But anyone can deliver concrete. Now our people know that they're delivering a service that the competition cannot deliver." ⁵⁵

Like most organizations in the construction industry, Cemex has been devastated by the recent housing collapse and credit crisis. Yet the company is poised for adaptation to the changing environment due to the combination of extensive networking technology and a new management approach that taps into the mindpower of everyone in the company. People at Cemex are constantly learning—on the job, in training classes, and through visits to other organizations. As a result, the company has a startling capacity to anticipate customer needs, solve problems, and innovate quickly. In addition, Cemex freely shares what it knows with other organizations, even competitors, believing the widespread sharing of knowledge and information is the best way to keep the organization thriving in a world of complexity and rapid change.

FRAMEWORK FOR THE BOOK

How does a course in organization theory differ from a course in management or organizational behavior? The answer is related to the concept called *level of analysis*.

Levels of Analysis

Each organization is a system that is composed of subsystems. Organization systems are nested within systems, and one **level of analysis** has to be chosen as the primary focus. Four levels of analysis normally characterize organizations, as illustrated in Exhibit 1.9. The individual human being is the basic building block of organizations. The human being is to the organization what a cell is to a biological system. The next higher system level is the group or department. These are collections of individuals who work together to perform group tasks. The next level of analysis is the organization itself. An organization is a collection of groups or departments that combine into the total organization.

Organizations themselves can be grouped together into the next higher level of analysis, which is the interorganizational set and community. The interorganizational set is the group of organizations with which a single organization interacts. Other organizations in the community make up an important part of an organization's environment.

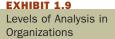
Organization theory focuses on the organizational level of analysis but with concern for groups and the environment. To explain the organization, one should look not only at its characteristics but also at the characteristics of the environment and of the departments and groups that make up the organization. The focus of this book is to help you understand organizations by examining their specific characteristics,

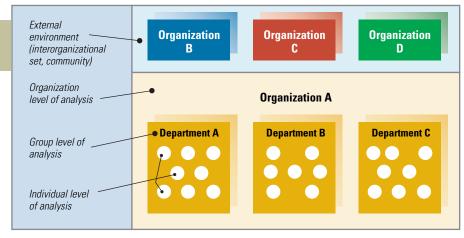
Briefcase

As an organization manager, keep this guideline in mind:

Make yourself a competent, influential manager by using the frameworks that organization theory provides to interpret and understand the organization around you.







Source: Based on Andrew H. Van De Ven and Diane L. Ferry, Measuring and Assessing Performance (New York: Wiley, 1980), 8; and Richard L. Daft and Richard M. Steers, Organizations: A Micro/Macro Approach (Glenview, III.: Scott, Foresman, 1986), 8.

the nature of and relationships among groups and departments that make up the organization, and the collection of organizations that make up the environment.

Are individuals included in organization theory? Organization theory does consider the behavior of individuals, but in the aggregate. People are important, but they are not the primary focus of analysis. Organization theory is distinct from organizational behavior.

Organizational behavior is the micro approach to organizations because it focuses on the individuals within organizations as the relevant units of analysis. Organizational behavior examines concepts such as motivation, leadership style, and personality and is concerned with cognitive and emotional differences among people within organizations.

Organization theory is a macro examination of organizations because it analyzes the whole organization as a unit. Organization theory is concerned with people aggregated into departments and organizations and with the differences in structure and behavior at the organization level of analysis. Organization theory might be considered the sociology of organizations, while organizational behavior is the psychology of organizations.

A new approach to organization studies is called *meso theory*. Most organizational research and many management courses specialize in either organizational behavior or organization theory. **Meso theory** (*meso* means "in between") concerns the integration of both micro and macro levels of analysis. Individuals and groups affect the organization, and the organization in return influences individuals and groups. To thrive in organizations, managers and employees need to understand multiple levels simultaneously. For example, research may show that employee diversity enhances innovation. To facilitate innovation, managers need to understand how structure and context (organization theory) are related to interactions among diverse employees (organizational behavior) to foster innovation, because both macro and micro variables account for innovations.⁵⁶

For its part, organization theory is directly relevant to top- and middlemanagement concerns and partly relevant to lower management. Top managers are responsible for the entire organization and must set goals, develop strategy, interpret the external environment, and decide organization structure and design. Middle management is concerned with major departments, such as marketing or research, and must decide how the department relates to the rest of the organization. Middle managers must design their departments to fit work-unit technology and deal with issues of power and politics, intergroup conflict, and information and control systems, each of which is part of organization theory. Organization theory is only partly concerned with lower management because this level of supervision is concerned with employees who operate machines, input data, teach classes, and sell goods. Organization theory is concerned with the big picture of the organization and its major departments.

Plan of the Book

The topics within the field of organization theory are interrelated. Chapters are presented so that major ideas unfold in logical sequence. The framework that guides the organization of the book is shown in Exhibit 1.10. Part 1 introduces the basic idea of organizations as social systems and the nature of organization theory. This discussion provides the groundwork for Part 2, which is about strategic management, goals and effectiveness, and the fundamentals of organization structure. Organizations are open systems that exist for a purpose. This section examines how managers help the organization achieve its purpose, including the design of an appropriate structure, such as a functional, divisional, matrix, or horizontal structure. Part 3 looks at the various open system elements that influence organization structure and design, including the external environment, interorganizational relationships, and the global environment.

Parts 4 and 5 look at processes inside the organization. Part 4 describes how organization design is related to such factors as manufacturing and service technology, organizational size and life cycle, and information and control systems. Part 5 shifts to dynamic processes that exist within and between major organizational departments and includes topics such as innovation and change, culture and ethical values, decision-making processes, managing intergroup conflict, and power and politics.

Plan of Each Chapter

Each chapter begins with opening questions to immediately engage the student in the chapter content. Theoretical concepts are introduced and explained in the body of the chapter. Several *In Practice* segments are included in each chapter to illustrate the concepts and show how they apply to real organizations. Each chapter also contains a *How Do You Fit the Design*? questionnaire that draws students more deeply into a particular topic and enables them to experience organization design issues in a personal way. A *Book Mark* is included in each chapter to present organizational issues that managers face right now. These short book reviews discuss current concepts and applications to deepen and enrich the student's understanding of organizations. The examples and book reviews illustrate the dramatic changes taking place in management thinking and practice. Key points for designing and managing organizations are highlighted in the *Briefcase* items throughout the chapter. Each chapter closes with a *Design Essentials* section that reviews and explains important theoretical concepts.



EXHIBIT 1.10

Framework for the Book

Part 1 Introduction to Organizations

CHAPTER 1

Organizations and Organization Theory



Part 2 Organizational Purpose and Structural Design

CHAPTER 2

Strategy, Organization Design, and Effectiveness

CHAPTER 3

Fundamentals of Organization Structure



Part 3 Open System Design Elements

CHAPTER 4

The External Environment

CHAPTER 5

Interorganizational Relationships

CHAPTER 6

Designing Organizations for the International Environment

Part 4 Internal Design Elements

CHAPTER 7

Manufacturing and Service Technologies

CHAPTER 8

Using IT for Coordination and Control

CHAPTER 9

Organizational Size, Life Cycle, and Decline



Part 5 Managing Dynamic Processes

CHAPTER 10

Organizational Culture and Ethical Values

CHAPTER 11

Innovation and Change

CHAPTER 12

Decision-Making Processes

CHAPTER 13

Conflict, Power, and Politics

DESIGN ESSENTIALS

- Turbulence and complexity have replaced stability and predictability as defining traits for today's organizations. Some of the specific challenges managers and organizations face include globalization, intense competition, rigorous ethical scrutiny, the need for rapid response, the digital workplace, and increasing diversity.
- Organizations are highly important, and managers are responsible for shaping organizations to perform well and meet the needs of society. The structural dimensions of formalization, specialization, hierarchy of authority, centralization, professionalism, and personnel ratios, and the contextual dimensions of size, organizational technology, environment, goals and strategy, and culture provide labels for measuring and analyzing organizations. These dimensions vary widely from organization to organization. Subsequent chapters provide frameworks for analyzing organizations with these concepts.
- Many types of organizations exist. One important distinction is between for-profit businesses, in which managers direct their activities toward earning money for the company, and nonprofit organizations, in which managers direct their efforts toward generating some kind of social impact. Managers strive to design organizations to achieve both efficiency and effectiveness. Effectiveness is complex because different stakeholders have different interests and needs that they want satisfied by the organization.
- Organization design perspectives have varied over time. Managers can understand organizations better by gaining a historical perspective and by understanding basic organizational configurations. Five parts of the organization are the technical core, top management, middle management, technical support, and administrative support. Different configurations of these parts result in five basic organization types: entrepreneurial structure, machine bureaucracy, professional bureaucracy, diversified form, and adhocracy.
- Challenges in today's environment are leading to changes in organization design and management practices. The trend is away from highly structured systems based on a mechanical model toward looser, more flexible systems based on a natural, biological model. Many managers are redesigning companies toward the learning organization, which is characterized by a horizontal structure, empowered employees, shared information, collaborative strategy, and an adaptive culture.
- Finally, most concepts in organization theory pertain to the top- and middle-management levels of the organization. This book is concerned more with the topics of those levels than with the operational-level topics of supervision and motivation of employees, which are discussed in courses on organizational behavior.

Key Concepts

adhocracy administrative principles bureaucratic organizations chaos theory contextual dimensions contingency diversified form effectiveness efficiency entrepreneurial structure Hawthorne Studies learning organization level of analysis machine bureaucracy meso theory organization theory organizational behavior organizations professional bureaucracy role scientific management stakeholder stakeholder approach structural dimensions task



Discussion Questions

- 1. What is the definition of *organization*? Briefly explain each part of the definition.
- 2. Explain how Mintzberg's five basic parts of the organization (Exhibit 1.6) fit together to perform needed functions. If an organization had to give up one of these five parts, such as during a severe downsizing, which one could it survive the longest without? Discuss.
- 3. A handful of companies on the *Fortune* 500 list are more than 100 years old, which is rare. What organizational characteristics do you think might explain 100-year longevity?
- 4. Based on what you know about the following organizations, how would you categorize them according to Mintzberg's Five Organizational Types (Exhibit 1.7): General Electric? Facebook? Toyota Motor Corporation? Your college or university? A local consulting firm?
- 5. What is the difference between formalization and specialization? Do you think an organization high on one dimension would also be high on the other? Discuss.
- 6. What does *contingency* mean? What are the implications of contingency theory for managers?

- 7. What are the primary differences between an organization designed for efficient performance and one designed for learning and change? Which type of organization do you think would be easier to manage? Discuss.
- 8. Why is shared information so important in a learning organization as compared to an efficient-performance organization? Discuss how an organization's approach to information sharing might be related to other elements of organization design, such as structure, tasks, strategy, and culture.
- 9. What are some differences one might expect among stakeholder expectations for a nonprofit organization versus a for-profit business? Do you think nonprofit managers have to pay more attention to stakeholders than do business managers? Discuss.
- 10. Early management theorists believed that organizations should strive to be logical and rational, with a place for everything and everything in its place. Discuss the pros and cons of this approach for today's organizations.

Chapter 1 Workbook: Measuring Dimensions of Organizations*

Analyze two organizations along the following dimensions. Indicate where you think each organization would fall on each of the scales. Use an X to indicate the first organization and an * to show the second.

You may choose any two organizations you are familiar with, such as your place of work, the university, a student organization, your church or synagogue, or your family.

	Formalization	
Many written rules	1 2 3 4 5 6 7 8 9 10	Few rules
	Specialization	
Separate tasks and roles	1 2 3 4 5 6 7 8 9 10	Overlapping tasks
	Hierarchy	
Tall hierarchy of authority	1 2 3 4 5 6 7 8 9 10	Flat hierarchy of authority
	Technology	
Product	1 2 3 4 5 6 7 8 9 10	Service
	External Environment	
Stable	1 2 3 4 5 6 7 8 9 10	Unstable
	Culture	
Clear norms and values	1 2 3 4 5 6 7 8 9 10	Ambiguous norms and values
	Professionalism	
High professional training	1 2 3 4 5 6 7 8 9 10	Low professional training

	Goals	
Well-defined goals	1 2 3 4 5 6 7 8 9 10	Goals not defined
	Size	
Small	1 2 3 4 5 6 7 8 9 10	Large
	Organizational Mindset	
Mechanical system	1 2 3 4 5 6 7 8 9 10	Biological system

Ouestions

- 1. What are the main differences between the two organizations you evaluated?
- *Copyright 1996 by Dorothy Marcic. All rights reserved.
- 2. Would you recommend that one or both of the organizations have different ratings on any of the scales? Why?

Case for Analysis: Perdue Farms Inc.: Responding to 21st Century Challenges*

Background and Company History

"I have a theory that you can tell the difference between those who have inherited a fortune and those who have made a fortune. Those who have made their own fortune forget not where they came from and are less likely to lose touch with the common man." (Bill Sterling, Just Browsin' column in Eastern Shore News, March 2, 1988)

The history of Perdue Farms is dominated by seven themes: quality, growth, geographic expansion, vertical integration, innovation, branding, and service. Arthur W. Perdue, a Railway Express agent and descendent of a French Huguenot family named Perdeaux, founded the company in 1920 when he left his job with Railway Express and entered the egg business full-time near the small town of Salisbury, Maryland. Salisbury is located in a region immortalized in James Michener's *Chesapeake* that is alternately known as "the Eastern Shore" or "the DelMarVa Peninsula." It includes parts of *Delaware*, *Maryland* and *Virginia*. Arthur Perdue's only child, Franklin Parsons Perdue, was born in 1920.

A quick look at Perdue Farms' mission statement (Exhibit 1.11) reveals the emphasis the company has always put on quality. In the 1920s, "Mr. Arthur," as he was called, bought leghorn breeding stock from Texas to improve the quality of his flock. He soon expanded his egg market and began shipments to New York. Practicing small economies such as mixing his own chicken feed and using leather from his old shoes to make hinges for his chicken coops, he stayed out of debt and prospered. He tried to add a new chicken coop every year.

By 1940, Perdue Farms was already known for quality products and fair dealing in a tough, highly competitive market. The company began offering chickens for sale when Mr. Arthur realized that the future lay in selling chickens, not eggs. In 1944, Mr. Arthur made his son Frank a full partner in A.W. Perdue & Son Inc.

In 1950, Frank took over leadership of the company, which employed forty people. By 1952, revenues were \$6 million from the sale of 2,600,000 broilers. During this period, the company began to vertically integrate, operating its own hatchery, starting to mix its own feed formulations, and operating its own feed mill. Also, in the 1950s, Perdue Farms began to contract with others to grow chickens for them. By furnishing the growers with peeps (baby chickens) and feed, the company was better able to control quality.

In the 1960s, Perdue Farms continued to vertically integrate by building its first grain receiving and storage facilities and Maryland's first soybean processing plant. By 1967, annual sales had increased to about \$35 million. But, it became clear to Frank that profits lay in processing chickens. Frank recalled in an interview for *Business Week* (September 15, 1972) "processors were paying us 10¢ a live pound for what cost us 14¢ to produce. Suddenly, processors were making as much as 7¢ a pound."

A cautious, conservative planner, Arthur Perdue had not been eager for expansion, and Frank Perdue was reluctant to enter poultry processing. But, economics forced his hand and, in 1968, the company bought its first processing plant, a Swift & Company operation in Salisbury.

From the first batch of chickens that it processed, Perdue's standards were higher than those of the federal government. The state grader on the first batch has often told the story of how he was worried that he had rejected too many chickens as not Grade A. As he finished his inspections for that first day, he saw Frank Perdue headed his way and he could tell that Frank was not happy. Frank started inspecting the birds and never argued over one that was rejected. Next, he saw Frank start to go through the



EXHIBIT 1.11
Perdue Mission 2000

Stand on Tradition

Perdue was built upon a foundation of quality, a tradition described in our Quality Policy...

Our Quality Policy

"We shall produce products and provide services at all times which meet or exceed the expectations of our customers."

"We shall not be content to be of equal quality to our competitors."

"Our commitment is to be increasingly superior."

"Contribution to quality is a responsibility shared by everyone in the Perdue organization."

Focus on Today

Our mission reminds us of the purpose we serve...

Our Mission

"Enhance the quality of life with great food and agricultural products."

While striving to fulfill our mission, we use our values to guide our decisions...

Our Values

- **Quality:** We value the needs of our customers. Our high standards require us to work safely, make safe food and uphold the Perdue name.
- Integrity: We do the right thing and live up to our commitments. We do not cut corners or make false promises.
- **Trust:** We trust each other and treat each other with mutual respect. Each individual's skill and talent are appreciated.
- **Teamwork:** We value a strong work ethic and ability to make each other successful. We care what others think and encourage their involvement, creating a sense of pride, loyalty, ownership and family.

Look to the Future

Our vision describes what we will become and the qualities that will enable us to succeed...

Our Vision

"To be the leading quality food company with \$20 billion in sales in 2020."

Perdue in the Year 2020

- To our customers: We will provide food solutions and indispensable services to meet anticipated customer needs.
- To our consumers: A portfolio of trusted food and agricultural products will be supported by multiple brands throughout the world.
- To our associates: Worldwide, our people and our workplace will reflect our quality reputation, placing Perdue among the best places to work.
- **To our communities:** We will be known in the community as a strong corporate citizen, trusted business partner and favorite employer.
- **To our shareholders:** Driven by innovation, our market leadership and our creative spirit will yield industry-leading profits.

ones that the state grader had passed and began to toss some of them over with the rejected birds. Finally, realizing that few met his standards, Frank put all of the birds in the reject pile. Soon, however, the facility was able to process 14,000 Grade A broilers per hour.

From the beginning, Frank Perdue refused to permit his broilers to be frozen for shipping, arguing that it resulted in unappetizing black bones and loss of flavor and moistness when cooked. Instead, Perdue chickens were (and some still are) shipped to market packed in ice, justifying the company's advertisements at that time that it sold only "fresh, young broilers." However, this policy also limited the company's market to those locations that could be serviced overnight from the Eastern Shore of Maryland. Thus, Perdue chose for its primary markets the densely populated towns and cities of the East Coast, particularly New York City, which consumes more Perdue chicken than all other brands combined.

Frank Perdue's drive for quality became legendary both inside and outside the poultry industry. In 1985, Frank and Perdue Farms were featured in the book, *A Passion for Excellence*, by Tom Peters and Nancy Austin.

In 1970, Perdue established its primary breeding and genetic research programs. Through selective breeding, Perdue developed a chicken with more white breast meat than the typical chicken. Selective breeding has been so successful that Perdue Farms chickens are desired by other processors. Rumors have even suggested that Perdue chickens have been stolen on occasion in an attempt to improve competitor flocks.

In 1971, Perdue Farms began an extensive marketing campaign featuring Frank Perdue. In his early advertisements, he became famous for saying things like "If you want to eat as good as my chickens, you'll just have to eat my chickens." He is often credited with being the first to brand what had been a commodity product. During the 1970s, Perdue Farms also expanded geographically to areas north of New York City such as Massachusetts, Rhode Island, and Connecticut.

In 1977, "Mr. Arthur" died at the age of 91, leaving behind a company with annual sales of nearly \$200 million, an average annual growth rate of 17 percent compared to an industry average of 1 percent a year, the potential for processing 78 thousand broilers per hour, and annual production of nearly 350 million pounds of poultry per year. Frank Perdue said of his father simply "I learned everything from him."

In 1981, Frank Perdue was in Boston for his induction into the Babson College Academy of Distinguished Entrepreneurs, an award established in 1978 to recognize the spirit of free enterprise and business leadership. Babson College President Ralph Z. Sorenson inducted Perdue into the academy, which, at that time, numbered eighteen men and women from four continents. Perdue had the following to say to the college students:

"There are none, nor will there ever be, easy steps for the entrepreneur. Nothing, absolutely nothing, replaces the willingness to work earnestly, intelligently towards a goal. You have to be willing to pay the price. You have to have an insatiable appetite for detail, have to be willing to accept constructive criticism, to ask questions, to be fiscally responsible, to surround yourself with good people and, most of all, to listen." (Frank Perdue, speech at Babson College, April 28, 1981)

The early 1980s saw Perdue Farms expand southward into Virginia, North Carolina, and Georgia. It also began to buy out other producers such as Carroll's Foods, Purvis Farms, Shenandoah Valley Poultry Company, and Shenandoah Farms. The latter two acquisitions diversified the company's markets to include turkey. New products included value-added items such as "Perdue Done It!," a line of fully cooked fresh chicken products.

James A. (Jim) Perdue, Frank's only son, joined the company as a management trainee in 1983 and became a plant manager. The late 1980s tested the mettle of the firm. Following a period of considerable expansion and product diversification, a consulting firm recommended that the company form several strategic business units, responsible for their own operations. In other words, the firm should decentralize. Soon after, the chicken market leveled off and then declined for a period. In 1988, the firm experienced its first year in the red. Unfortunately, the decentralization had created duplication and enormous administrative costs. The firm's rapid plunge into turkeys and other food processing, where it had little experience, contributed to the losses. Characteristically, the company refocused, concentrating on efficiency of operations, improving communications throughout the company, and paying close attention to detail.

On June 2, 1989, Frank celebrated fifty years with Perdue Farms. At a morning reception in downtown Salisbury, the governor of Maryland proclaimed it "Frank Perdue Day." The governors of Delaware and Virginia did the same. In 1991, Frank was named chairman of the Executive Committee and Jim Perdue became chairman of the board. Quieter, gentler, and more formally educated, Jim Perdue focused on operations, infusing the company with an even stronger devotion to quality control and a bigger commitment to strategic planning. Frank Perdue continued to do advertising and public relations. As Jim Perdue matured as the company leader, he took over the role of company spokesperson and began to appear in advertisements.

Under Jim Perdue's leadership, the 1990s were dominated by market expansion south into Florida and west to Michigan and Missouri. In 1992, the international business segment was formalized, serving customers in Puerto Rico, South America, Europe, Japan, and China. By fiscal year 1998, international sales were \$180 million per year. International markets are beneficial for the firm because U.S. customers prefer white meat, whereas customers in most other countries prefer dark meat.

Food-service sales to commercial customers has also become a major market. New retail product lines focus on value-added items, individually quick-frozen items, homemeal replacement items, and products for the delicatessen.



The "Fit & Easy" label continues as part of a nutrition campaign, using skinless, boneless chicken and turkey products.

The 1990s also saw the increased use of technology and the building of distribution centers to better serve the customer. For example, all over-the-road trucks were equipped with satellite two-way communications and geographic positioning, allowing real-time tracking, rerouting if needed, and accurately informing customers when to expect product arrival.

Currently, nearly 20,000 associates have increased revenues to more than \$2.5 billion.

Management and Organization

"From 1950 until 1991, Frank Perdue was the primary force behind Perdue Farms growth and success. During Frank's years as the company leader, the industry entered its high growth period. Industry executives had typically developed professionally during the industry's infancy. Many had little formal education and started their careers in the barnyard, building chicken coops and cleaning them out. They often spent their entire careers with one company, progressing from supervisor of grow-out facilities to management of processing plants to corporate executive positions. Perdue Farms was not unusual in that respect. An entrepreneur through and through, Frank lived up to his marketing image of "it takes a tough man to make a tender chicken." He mostly used a centralized management style that kept decision-making authority in his own hands or those of a few trusted, senior executives whom he had known for a lifetime. Workers were expected to do their jobs.

In later years, Frank increasingly emphasized employee (or "associates" as they are currently called) involvement in quality issues and operational decisions. This emphasis on employee participation undoubtedly eased the transfer of power in 1991 to his son, Jim, which appears to have been unusually smooth. Although Jim grew up in the family business, he spent almost fifteen years earning an undergraduate degree in biology from Wake Forest University, a master's degree in marine biology from the University of Massachusetts at Dartmouth, and a doctorate in fisheries from the University of Washington in Seattle. Returning to Perdue Farms in 1983, he earned an EMBA from Salisbury State University and was assigned positions as plant manager, divisional quality control manager, and vice president of Quality Improvement Process (QIP) prior to becoming chairman.

Jim has a people-first management style. Company goals center on the three Ps: People, Products, and Profitability. He believes that business success rests on satisfying customer needs with quality products. It is important to put associates first, he says, because "If [associates] come first, they will strive to assure superior product quality—and satisfied customers." This view has had a profound impact on the company culture, which is based on Tom Peters's view that "Nobody knows a person's 20 square feet better than the person who works there." The idea is to gather ideas and information from everyone in the

organization and maximize productivity by transmitting these ideas throughout the organization.

Key to accomplishing this "employees first" policy is workforce stability, a difficult task in an industry that employs a growing number of associates working in physically demanding and sometimes stressful conditions. A significant number of associates are Hispanic immigrants who may have a poor command of the English language, are sometimes undereducated, and often lack basic health care. In order to increase these associates' opportunity for advancement, Perdue Farms focuses on helping them overcome these disadvantages.

For example, the firm provides English-language classes to help non-English-speaking associates assimilate. Ultimately associates can earn the equivalent of a highschool diploma. To deal with physical stress, the company has an ergonomics committee in each plant that studies job requirements and seeks ways to redesign those jobs that put workers at the greatest risk. The company also has an impressive wellness program that currently includes clinics at ten plants. The clinics are staffed by professional medical people working for medical practice groups under contract to Perdue Farms. Associates have universal access to all Perdue-operated clinics and can visit a doctor for anything from a muscle strain to prenatal care to screening tests for a variety of diseases. Dependent care is available. While benefits to the employees are obvious, the company also benefits through a reduction in lost time for medical office visits, lower turnover, and a happier, healthier, more productive and stable work force.

Marketing

In the early days, chicken was sold to butcher shops and neighborhood groceries as a commodity; that is, producers sold it in bulk and butchers cut and wrapped it. The customer had no idea which firm grew or processed the chicken. Frank Perdue was convinced that higher profits could be made if the firm's products could be sold at a premium price. But, the only reason a product can command a premium price is if customers ask for it by name—and that means the product must be differentiated and "branded." Hence, the emphasis over the years on superior quality, broader-breasted chickens, and a healthy golden color (actually the result of adding marigold petals in the feed to enhance the natural yellow color that corn provided).

Today, branded chicken is ubiquitous. The new task for Perdue Farms is to create a unified theme to market a wide variety of products (e.g., both fresh meat and fully prepared and frozen products) to a wide variety of customers (e.g., retail, food service, and international). Industry experts believe that the market for fresh poultry has peaked while sales of value-added and frozen products continue to grow at a healthy rate. Although domestic retail sales accounted for about 60 percent of Perdue Farms' revenues

in the 2000 fiscal year, food service sales now account for 20 percent, international sales account for 5 percent, and grain and oilseed contribute the remaining 15 percent. The company expects food service, international, and grain and oilseed sales to continue to grow as a percentage of total revenues.

Domestic Retail

Today's retail grocery customer is increasingly looking for ease and speed of preparation; that is, value-added products. The move toward value-added products has significantly changed the meat department in the modern grocery store. There are now five distinct meat outlets for poultry:

- The fresh meat counter—traditional, fresh meat—includes whole chicken and parts
- 2. The delicatessen—processed turkey, rotisserie chicken
- 3. The frozen counter—individually quick-frozen items such as frozen whole chickens, turkeys, and Cornish hens
- 4. Home meal replacement—fully prepared entrees such as Perdue brand "Short Cuts" and Deluca brand entrees (the Deluca brand was acquired and is sold under its own name) that are sold along with salads and desserts so that you can assemble your own dinner
- 5. Shelf stable—canned products

Because Perdue Farms has always used the phrase "fresh young chicken" as the centerpiece of its marketing, valueadded products and the retail frozen counter create a possible conflict with past marketing themes. Are these products compatible with the company's marketing image, and, if so, how does the company express the notion of quality in this broader product environment? To answer that question, Perdue Farms has been studying what the term "fresh young chicken" means to customers who consistently demand quicker and easier preparation and who admit that they freeze most of their fresh meat purchases once they get home. One view is that the importance of the term "fresh young chicken" comes from the customer's perception that "quality" and "freshness" are closely associated. Thus, the real issue may be trust; that is, the customer must believe that the product, whether fresh or frozen, is the freshest, highest quality possible, and future marketing themes must develop that concept.

Operations

Two words sum up the Perdue approach to operations—quality and efficiency—with emphasis on the first over the latter. Perdue, more than most companies, represents the Total Quality Management (TQM) slogan, "Quality, a journey without end." Some of the key events in Perdue's quality improvement process are listed in Exhibit 1.12.

- 1924 Arthur Perdue bought leghorn roosters for \$25
- 1950 Adopted the company logo of a chick under a magnifying glass
- 1984 Frank Perdue attended Philip Crosby's Quality College
- 1985 Perdue recognized for its pursuit of quality in A Passion for Excellence
 - 200 Perdue managers attended Quality College
 - Adopted the Quality Improvement Process (QIP)
- 1986 Established Corrective Action Teams (CAT's)
- 1987 Established Quality Training for all associates
 - Implemented Error Cause Removal Process (ECR)
- 1988 Steering Committee formed
- 1989 First Annual Quality Conference held
 - Implemented Team Management
- 1990 Second Annual Quality Conference held
 - Codified Values and Corporate Mission
- 1991 Third Annual Quality Conference held
 - Customer Satisfaction defined
- 1992 Fourth Annual Quality Conference held
 - How to implement Customer Satisfaction explained to team leaders and Quality Improvement Teams (QIT)
 - Created Quality Index
 - Created Customer Satisfaction Index (CSI)
 - Created "Farm to Fork" quality program
- 1999 Launched Raw Material Quality Index
- 2000 Initiated High Performance Team Process

EXHIBIT 1.12

Milestones in the Quality Improvement Process at Perdue Farms Both quality and efficiency are improved through the management of details. Exhibit 1.13 depicts the structure and product flow of a generic, vertically integrated broiler company. A broiler company can choose which steps in the process it wants to accomplish in-house and which it wants suppliers to provide. For example, the broiler company could purchase all grain, oilseed, meal, and other feed products. Or it could contract with hatcheries to supply primary breeders and hatchery supply flocks.

Perdue Farms chose maximum vertical integration to control every detail. It breeds and hatches its own eggs (19 hatcheries), selects its contract growers, builds Perdueengineered chicken houses, formulates and manufactures its own feed (12 poultry feedmills, 1 specialty feedmill, 2 ingredient-blending operations), oversees the care and feeding of the chicks, operates its own processing plants (21 processing and further processing plants), distributes via its own trucking fleet, and markets the products (see Exhibit 1.13). Total process control formed the basis for Frank Perdue's early claims that Perdue Farms poultry is, indeed, higher quality than other poultry. When he stated in his early ads that "A chicken is what it eats... I store my own grain and mix my own feed...and give my Perdue chickens nothing but well water to drink...," he knew that his claim was honest and he could back it up.

Total process control also enables Perdue Farms to ensure that nothing goes to waste. Eight measurable items—hatchability, turnover, feed conversion, livability, yield, birds per man-hour, utilization, and grade—are tracked routinely.

Perdue Farms continues to ensure that nothing artificial is fed to or injected into the birds. No shortcuts are taken. A chemical-free and steroid-free diet is fed to the chickens. Young chickens are vaccinated against disease. Selective breeding is used to improve the quality of the chicken stock. Chickens are bred to yield more white breast meat because that is what the consumer wants.

To ensure that Perdue Farms poultry continues to lead the industry in quality, the company buys and analyzes competitors' products regularly. Inspection associates grade these products and share the information with the highest levels of management. In addition, the company's Quality Policy is displayed at all locations and taught to all associates in quality training (Exhibit 1.14).

Research and Development

Perdue is an acknowledged industry leader in the use of research and technology to provide quality products and service to its customers. The company spends more on research as a percent of revenues than any other poultry processor. This practice goes back to Frank Perdue's focus on finding ways to differentiate his products based on quality and value. It was research into selective breeding that resulted in the broader breast, an attribute of Perdue

Farms chicken that was the basis of his early advertising. Although other processors have also improved their stock, Perdue Farms believes that it still leads the industry. A list of some of Perdue Farms technological accomplishments is given in Exhibit 1.15.

As with every other aspect of the business, Perdue Farms tries to leave nothing to chance in R&D. The company employs specialists in avian science, microbiology, genetics, nutrition, and veterinary science. Because of its R&D capabilities, Perdue Farms is often involved in United States Drug Administration (USDA) field tests with pharmaceutical suppliers. Knowledge and experience gained from these tests can lead to a competitive advantage. For example, Perdue has the most extensive and expensive vaccination program in the industry. Currently, the company is working with and studying the practices of several European producers who use completely different methods.

The company has used research to significantly increase productivity. For example, in the 1950s, it took fourteen weeks to grow a 3 pound chicken. Today, it takes only seven weeks to grow a 5 pound chicken. This gain in efficiency is due principally to improvements in the conversion rate of feed to chicken. Feed represents about 65 percent of the cost of growing a chicken. Thus, if additional research can further improve the conversion rate of feed to chicken by just 1 percent, it would represent estimated additional income of \$2.5–3 million per week or \$130–156 million per year.

Environment

Environmental issues present a constant challenge to all poultry processors. Growing, slaughtering, and processing poultry is a difficult and tedious process that demands absolute efficiency to keep operating costs at an acceptable level. Inevitably, detractors argue that the process is dangerous to workers, inhumane to the poultry, hard on the environment, and results in food that may not be safe. Thus, media headlines such as "Human Cost of Poultry Business Bared," "Animal Rights Advocates Protest Chicken Coop Conditions," "Processing Plants Leave Toxic Trail," or "EPA Mandates Poultry Regulations" are routine.

Perdue Farms tries to be proactive in managing environmental issues. In April 1993, the company created an Environmental Steering Committee. Its mission is "... to provide all Perdue Farms work sites with vision, direction, and leadership so that they can be good corporate citizens from an environmental perspective today and in the future." The committee is responsible for overseeing how the company is doing in such environmentally sensitive areas as waste water, storm water, hazardous waste, solid waste, recycling, bio-solids, and human health and safety.

For example, disposing of dead birds has long been an industry problem. Perdue Farms developed small composters for use on each farm. Using this approach,

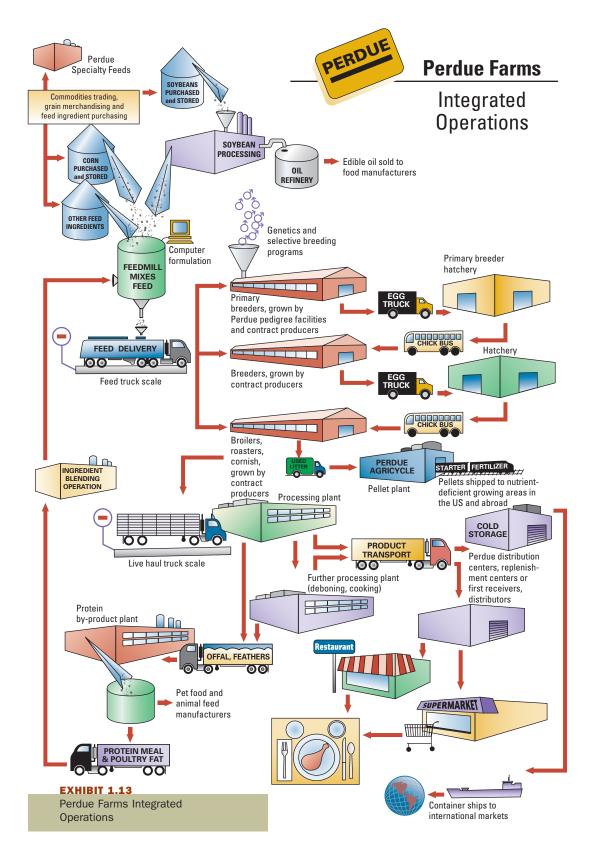




EXHIBIT 1.14

Quality Policy

- WE SHALL not be content to be of equal quality to our competitors.
- · OUR COMMITMENT is to be increasingly superior.
- CONTRIBUTION TO QUALITY is a responsibility shared by everyone in the Perdue organization.

EXHIBIT 1.15

Perdue Farms Technological Accomplishments

- · Conducts more research than all competitors combined
- Breeds chickens with consistently more breast meat than any other bird in the industry
- First to use digital scales to guarantee weights to customers
- First to package fully-cooked chicken products in microwaveable trays
- First to have a box lab to define quality of boxes from different suppliers
- First to test both its chickens and competitors' chickens on 52 quality factors every week
- · Improved on-time deliveries 20% between 1987 and 1993
- Built state of the art analytical and microbiological laboratories for feed and end product analysis
- First to develop best management practices for food safety across all areas of the company
- · First to develop commercially viable pelletized poultry litter

carcasses are reduced to an end-product that resembles soil in a matter of a few days. The disposal of hatchery waste is another environmental challenge. Historically, manure and unhatched eggs were shipped to a landfill. However, Perdue Farms developed a way to reduce the waste by 50 percent by selling the liquid fraction to a pet-food processor that cooks it for protein. The other 50 percent is recycled through a rendering process. In 1990, Perdue Farms spent \$4.2 million to upgrade its existing treatment facility with a state-of-the-art system at its Accomac, Virginia, and Showell, Maryland, plants. These facilities use forced hot air heated to 120 degrees to cause the microbes to digest all traces of ammonia, even during the cold winter months.

More than ten years ago, North Carolina's Occupational Safety and Health Administration cited Perdue Farms for an unacceptable level of repetitive stress injuries at its Lewiston and Robersonville, North Carolina, processing plants. This sparked a major research program in which Perdue Farms worked with Health and Hygiene Inc. of Greensboro, North Carolina, to learn more about ergonomics, the repetitive movements required to accomplish specific jobs. Results have been dramatic. Launched in 1991 after two years of development, the program videotapes employees at all of Perdue Farms' plants as they work in order to describe and place stress values on various tasks. Although the cost to Perdue Farms has been signifi-

cant, results have been dramatic with workers' compensation claims down 44 percent, lost-time recordables just 7.7 percent of the industry average, an 80 percent decrease in serious repetitive stress cases, and a 50 percent reduction in lost time for surgery for back injuries (Shelley Reese, "Helping Employees get a Grip," *Business and Health*, August 1998).

Despite these advances, serious problems continue to develop. Some experts have called for conservation measures that might limit the density of chicken houses in a given area or even require a percentage of existing chicken houses to be taken out of production periodically. Obviously this would be very hard on the farm families who own existing chicken houses and could result in fewer acres devoted to agriculture. Working with AgriRecycle Inc. of Springfield, Missouri, Perdue Farms has developed a possible solution. The plan envisions the poultry companies processing excess manure into pellets for use as fertilizer. This would permit sales outside the poultry growing region, better balancing the input of grain. Spokesmen estimate that as much as 120,000 tons, nearly one-third of the surplus nutrients from manure produced each year on the DelMarVa Peninsula, could be sold to corn growers in other parts of the country. Prices would be market driven but could be \$25 to \$30 per ton, suggesting a potential, small profit. Still, almost any attempt to control the problem potentially raises the cost of growing chickens, forcing poultry processors to look elsewhere for locations where the chicken population is less dense.

In general, solving industry environmental problems presents at least five major challenges to the poultry processor:

- How to maintain the trust of the poultry consumer
- How to ensure that the poultry remain healthy
- How to protect the safety of the employees and the process
- How to satisfy legislators who need to show their constituents that they are taking firm action when environmental problems occur
- · How to keep costs at an acceptable level

Jim Perdue sums up Perdue Farms' position as follows: "... we must not only comply with environmental laws as they exist today, but look to the future to make sure we don't have any surprises. We must make sure our environmental policy statement [see Exhibit 1.16] is real, that there's something behind it and that we do what we say we're going to do."

Logistics and Information Systems

The explosion of poultry products and increasing number of customers during recent years placed a severe strain on the existing logistics system, which was developed at a time when there were far fewer products, fewer delivery points, and lower volume. Hence, the company had limited ability to improve service levels, could not support further growth, and could not introduce innovative services that might provide a competitive advantage.

In the poultry industry, companies are faced with two significant problems—time and forecasting. Fresh poultry has a limited shelf life—measured in days. Thus forecasts must be extremely accurate and deliveries must be timely. On one hand, estimating requirements too conservatively results in product shortages. Mega-customers such as Wal-Mart will not tolerate product shortages that lead to empty shelves and lost sales. On the other hand, if estimates are overstated, the result is outdated products that cannot be sold and losses for Perdue Farms. A common expression in the poultry industry is "you either sell it or smell it."

Forecasting has always been extremely difficult in the poultry industry because the processor needs to know approximately eighteen months in advance how many broilers will be needed in order to size hatchery supply flocks and contract with growers to provide live broilers. Most customers (e.g., grocers and food-service buyers) have a much shorter planning window. Additionally, there is no way for Perdue Farms to know when rival poultry processors will put a particular product on special, reducing Perdue Farms sales, or when bad weather and other uncontrollable problems may reduce demand.

In the short run, information technology (IT) has helped by shortening the distance between the customer and Perdue Farms. As far back as 1987, personal computers (PCs) were placed directly on each customer-service associate's desk, allowing the associate to enter customer orders directly. Next, a system was developed to put dispatchers in direct contact with every truck in the system so that they would have accurate information about product inventory and truck location at all times. Now, IT is moving to further shorten the distance between the customer and the Perdue Farms service representative by putting a PC on the customer's desk. All of these steps improve communication and shorten the time from order to delivery.

To control the entire supply chain management process, Perdue Farms purchased a multi-million-dollar information technology system that represents the biggest nontangible asset expense in the company's history. This integrated, state-of-the-art information system required total process re-engineering, a project that took eighteen months and required training 1,200 associates. Major goals of the system were to (1) make it easier and more desirable for the customer to do business with Perdue Farms, (2) make it easier for Perdue Farms associates to get the job done, and (3) take as much cost out of the process as possible.

Industry Trends

The poultry industry is affected by consumer, industry, and governmental regulatory trends. Currently, chicken is the number one meat consumed in the United States, with a 40 percent market share. The typical American consumes about 81 pounds of chicken, 69 pounds of beef, and 52 pounds of pork annually (USDA data). Additionally, chicken is becoming the most popular meat in the world. In 1997, poultry set an export record of \$2.5 billion. Although exports fell 6 percent in 1998, the decrease was attributed to Russia's and Asia's financial crisis, and food-industry experts expected this to be only a temporary setback. Hence, the world market is clearly a growth opportunity for the future.

Government agencies whose regulations impact the industry include the Occupational Safety and Health Administration (OSHA) for employee safety and the Immigration and Naturalization Service (INS) for undocumented workers. OSHA enforces its regulations via periodic inspections, and levies fines when noncompliance is found. For example, a Hudson Foods poultry plant was fined more than a million dollars for alleged willful violations causing ergonomic injury to workers. The INS also uses periodic inspections to find undocumented workers. It estimates that undocumented aliens working in the industry vary from 3 to 78 percent of the workforce at individual plants. Plants that are found to use undocumented workers, especially those that are repeat offenders, can be heavily fined.



EXHIBIT 1.16

Perdue Farms
Environmental Policy
Statement

Perdue Farms is committed to environmental stewardship and shares that commitment with its farm family partners. We're proud of the leadership we're providing our industry in addressing the full range of environmental challenges related to animal agriculture and food processing. We've invested—and continue to invest—millions of dollars in research, new technology, equipment upgrades, and awareness and education as part of our ongoing commitment to protecting the environment.

- Perdue Farms was among the first poultry companies with a dedicated Environmental Services department. Our team of environmental managers is responsible for ensuring that every Perdue facility operates within 100 percent compliance of all applicable environmental regulations and permits.
- Through our joint venture, Perdue AgriRecycle, Perdue Farms is investing \$12 million to build in Delaware a first-of-its-kind pellet plant that will convert surplus poultry litter into a starter fertilizer that will be marketed internationally to nutrient deficient regions. The facility, which will serve the entire DelMarVa region, is scheduled to begin operation in April, 2001.
- We continue to explore new technologies that will reduce water usage in our processing plants without compromising food safety or quality.
- We invested thousands of man-hours in producer education to assist our family farm partners in managing their independent poultry operations in the most environmentally responsible manner possible. In addition, all our poultry producers are required to have nutrient management plans and dead-bird composters.
- Perdue Farms was one of four poultry companies operating in Delaware to sign an agreement with Delaware officials outlining our companies' voluntary commitment to help independent poultry producers dispose of surplus chicken litter.
- Our Technical Services department is conducting ongoing research into feed technology as a means of reducing the nutrients in poultry manure. We've already achieved phosphorous reductions that far exceed the industry average.
- We recognize that the environmental impact of animal agriculture is more
 pronounced in areas where development is decreasing the amount of farmland
 available to produce grain for feed and to accept nutrients. That is why we
 view independent grain and poultry producers as vital business partners and
 strive to preserve the economic viability of the family farm.

At Perdue Farms, we believe that it is possible to preserve the family farm; provide a safe, abundant and affordable food supply; and protect the environment. However, we believe that can best happen when there is cooperation and trust between the poultry industry, agriculture, environmental groups and state officials. We hope Delaware's effort will become a model for other states to follow.

The Future

The marketplace for poultry in the twenty-first century will be very different from that of the past. Understanding the wants and needs of generation Xers and echo-boomers will be key to responding successfully to these differences.

Quality will continue to be essential. In the 1970s, quality was the cornerstone of Frank Perdue's successful marketing program to "brand" his poultry. However, in the twenty-first century, quality will not be enough. Today's customers expect—even demand—all products to be high quality. Thus, Perdue Farms plans to use customer service to further differentiate the company. The focus will be on learning how to become indispensable to the customer by taking cost out of the product and delivering it exactly the way the customer wants it, where and when the customer wants it. In short, as Jim Perdue says, "Perdue Farms wants to become so easy to do business

with that the customer will have no reason to do business with anyone else."

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*Adapted from George C. Rubenson and Frank M. Shipper, Department of Management and Marketing, Franklin P. Perdue School of Business, Salisbury University. Copyright 2001 by the authors.

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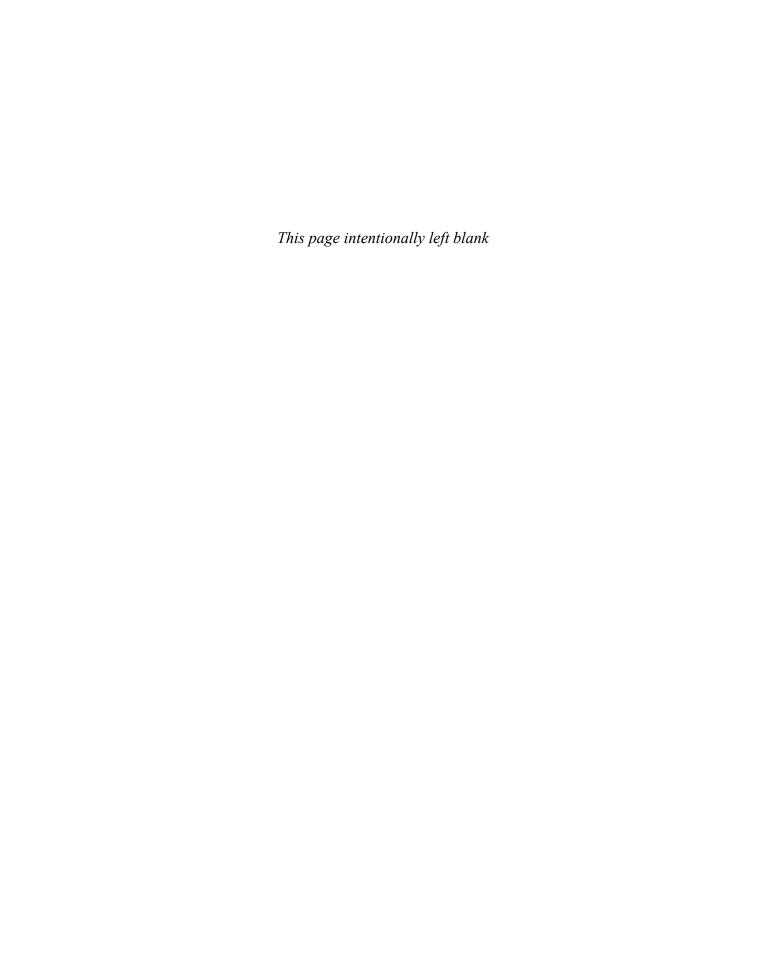
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Part 2

Organizational
Purpose and
Structural Design

Chapter 2

Strategy, Organization

Design, and Effectiveness

Chapter 3

Fundamentals of Organization Structure

3ettina Anzeletti

Chapter 2

Strategy, Organization Design, and Effectiveness



Bettina Anzeletti

The Role of Strategic Direction in Organization Design Organizational Purpose

Strategic Intent · Operative Goals · The Importance of Goals

A Framework for Selecting Strategy and Design

Porter's Competitive Forces and Strategies • Miles and Snow's Strategy Typology • How Strategies Affect Organization Design • Other Factors Affecting Organization Design

Assessing Organizational Effectiveness

Traditional Effectiveness Approaches

Goal Indicators · Resource-based Indicators · Internal Process Indicators

The Balanced Scorecard Approach to Effectiveness

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



One of the primary responsibilities of managers is to position their organizations for success by establishing goals and strategies that can keep the organization competitive. Consider MySpace. It started as a social networking site, but managers' new goal is to make it a "social portal," of which networking is only a part. MySpace has plenty of users, but revenues haven't been rolling in as quickly as top executives at parent company Fox Interactive Media (owned by News Corporation) would like. To meet tough revenue goals, the company's co-founders, CEO Chris DeWolfe and President Tom Anderson, are expanding MySpace into user-generated videos, global marketing partnerships with big-name brands such as McDonald's, Harley-Davidson, and State Farm Insurance, and a joint venture with major music companies. Other goals include beefing up the company's mobile business and revamping the website to make it both easier to use and more hospitable to advertising. Yet, even as this text is being written, goals and strategic direction might be changing at MySpace. "We are a company that needs to move fast," says Anderson.

Purpose of This Chapter

Top managers give direction to organizations. They set goals and develop the plans for their organization to attain them. The purpose of this chapter is to help you understand the types of goals that organizations pursue and some of the competitive strategies managers use to reach those goals. We will provide an overview of strategic management, examine two significant frameworks for determining strategic action, and look at how strategies affect organization design. The chapter also describes the most popular approaches to measuring the effectiveness of organizational efforts. To manage organizations well, managers need a clear sense of how to measure effectiveness.

Managing by Design

Ouestions



THE ROLE OF STRATEGIC DIRECTION IN ORGANIZATION DESIGN

An **organizational goal** is a desired state of affairs that the organization attempts to reach.² A goal represents a result or end point toward which organizational efforts are directed. The choice of goals and strategy influences how the organization should be designed.

Top executives decide the end purpose the organization will strive for and determine the direction it will take to accomplish it. It is this purpose and direction that shapes how the organization is designed and managed. Indeed, the primary responsibility of top management is to determine an organization's goals, strategy, and design, therein adapting the organization to a changing environment.³ Middle managers do much the same thing for major departments within the guidelines provided by top management. Exhibit 2.1 illustrates the relationships through which top managers provide direction and then design.

The direction-setting process typically begins with an assessment of the opportunities and threats in the external environment, including the amount of change, uncertainty, and resource availability, which we discuss in more detail in Chapter 4. Top managers also assess internal strengths and weaknesses to define the company's distinctive competence compared with other firms in the industry. This competitive analysis of the internal and external environments is one of the central concepts in strategic management.⁴

ASSESS YOUR ANSWER

A company's strategic intent or direction reflects managers' systematic analysis of organizational and environmental factors.

ANSWER: Agree. The best strategies come from systematic analysis of organizational strengths and weaknesses combined with analysis of opportunities and threats in the environment. Careful study combined with experience enable top managers to decide on specific goals and strategies.

The next step is to define and articulate the organization's strategic intent. This includes defining an overall mission and official goals based on the correct fit between external opportunities and internal strengths. Leaders then formulate specific operational goals and strategies that define how the organization is to accomplish its overall mission. In Exhibit 2.1, organization design reflects the way goals and strategies are implemented so that the organization's attention and resources are consistently focused toward achieving the mission and goals.

Organization design is the administration and execution of the strategic plan. Organization direction is implemented through decisions about structural form, including whether the organization will be designed for a learning or an efficiency orientation, as discussed in Chapter 1, as well as choices about information and control systems, the type of production technology, human resource policies, culture, and linkages to other organizations. Changes in structure, technology, human resource policies, culture, and interorganizational linkages will be discussed in subsequent chapters. Also note the arrow in Exhibit 2.1 running from organization design back to strategic intent. This means that strategies are often made within the

current structure of the organization, so that current design constrains, or puts limits on, goals and strategy. More often than not, however, the new goals and strategy are selected based on environmental needs, and then top management attempts to redesign the organization to achieve those ends.

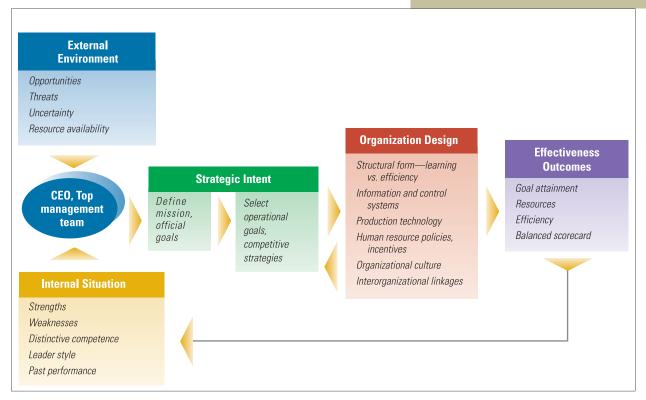
Finally, Exhibit 2.1 illustrates how managers evaluate the effectiveness of organizational efforts—that is, the extent to which the organization realizes its goals. This chart reflects the most popular ways of measuring performance, each of which is discussed later in this chapter. It is important to note here that performance measurements feed back into the internal environment, so that past performance of the organization is assessed by top management in setting new goals and strategic direction for the future.

The role of top management is important because managers can interpret the environment differently and develop different goals. For example, a new CEO at Borders Group believed the book retailer was missing an opportunity by emphasizing its bricks and mortar stores while paying little attention to the online world of book retailing. When George Jones took over as CEO, he quickly saw e-commerce as "a necessary component of our business." Borders ended its alliance with Amazon. com and reopened its own branded website. This gave Borders Rewards members the chance to earn benefits online, which they weren't able to do through Amazon. Aiming to become a force in online bookselling, Borders abandoned its strategy of

EXHIBIT 2.1

Top Management Role in Organization

Direction, Design, and Effectiveness



Source: Adapted from Arie Y. Lewin and Carroll U. Stephens, "Individual Properties of the CEO as Determinants of Organization Design," unpublished manuscript, Duke University, 1990; and Arie Y. Lewin and Carroll U. Stephens, "CEO Attributes as Determinants of Organization Design: An Integrated Model," Organization Studies 15, no. 2 (1994), 183–212.



expanding the book superstore concept, selling off most of its overseas stores and closing numerous stores in the United States.⁵

The choices top managers make about goals, strategies, and organization design have a tremendous impact on organizational effectiveness. Remember that goals and strategy are not fixed or taken for granted. Top managers and middle managers must select goals for their respective units, and the ability to make good choices largely determines firm success. Organization design is used to implement goals and strategy and also determines organization success.

ORGANIZATIONAL PURPOSE

All organizations, including MySpace, Johnson & Johnson, Google, Harvard University, the Catholic Church, the U.S. Department of Agriculture, the local laundry, and the neighborhood deli, exist for a purpose. This purpose may be referred to as the overall goal, or mission. Different parts of the organization establish their own goals and objectives to help meet the overall goal, mission, or purpose of the organization.

Strategic Intent

Many types of goals exist in organizations, and each type performs a different function. However, to achieve success, organizational goals and strategies are focused with strategic intent. **Strategic intent** means that all the organization's energies and resources are directed toward a focused, unifying, and compelling overall goal.⁶ Examples of ambitious goals that demonstrate strategic intent are Komatsu's vision to "Encircle Caterpillar," Canon's to "Beat Xerox," and Coca-Cola's "To put a Coke within 'arm's reach' of every consumer in the world." Strategic intent provides a focus for management action. Three aspects related to strategic intent are the mission, core competence, and competitive advantage.

Mission. The overall goal for an organization is often called the mission—the organization's reason for existence. The mission describes the organization's shared values and beliefs and its reason for being. The mission is sometimes called the official goals, which refers to the formally stated definition of business scope and outcomes the organization is trying to achieve. Official goal statements typically define business operations and may focus on values, markets, and customers that distinguish the organization. Whether called a mission statement or official goals, the organization's general statement of its purpose and philosophy is often written down in a policy manual or the annual report. The mission statement for State Farm is shown in Exhibit 2.2 Note how the overall mission, values, and vision are all defined.

One of the primary purposes of a mission statement is to serve as a communication tool. The *mission statement* communicates to current and prospective employees, customers, investors, suppliers, and competitors what the organization stands for and what it is trying to achieve. A mission statement communicates legitimacy to internal and external stakeholders, who may join and be committed to the organization because they identify with its stated purpose and vision. Most top leaders want employees, customers, competitors, suppliers, investors, and the local community to look on them in a favorable light, and the concept of legitimacy plays a critical role. In today's corporate world of weakened trust, increasing regulation, and concern for the natural environment, many organizations face the need to redefine their



guidelines in mind:

Establish and communicate organizational mission and goals. Communicate official goals to provide a statement of the organization's mission to external constituents. Communicate operational goals to provide internal direction, guidelines, and standards of performance for employees.



STATE FARM INSURANCE Our Mission, Our Vision, and Our Shared Values

State Farm's mission is to help people manage the risks of everyday life, recover from the unexpected, and realize their dreams.

We are people who make it our business to be like a good neighbor; who built a premier company by selling and keeping promises through our marketing partnerships; who bring diverse talents and experiences to our work of serving the State Farm customer.

Our success is built on a foundation of shared values—quality service and relationships, mutual trust, integrity, and financial strength.

Our vision for the future is to be the customer's first and best choice in the products and services we provide. We will continue to be the leader in the insurance industry and we will become a leader in the financial services arena. Our customers' needs will determine our path. Our values will guide us.

Source: "News and Notes from State Farm," Public Affairs Department, 2500 Memorial Boulevard, Murfreesboro, TN 37131.

mission to emphasize the firm's purpose in more than financial terms. ¹⁰ Companies where managers are sincerely guided by mission statements that focus on a larger social purpose, such as Medtronic's "To restore people to full life and health" or Liberty Mutual's "Helping people live safer, more secure lives," typically attract better employees, have better relationships with external parties, and perform better in the marketplace over the long term. ¹¹

Competitive Advantage. The overall aim of strategic intent is to help the organization achieve a sustainable competitive advantage. **Competitive advantage** refers to what sets the organization apart from others and provides it with a distinctive edge for meeting customer or client needs in the marketplace. Strategy necessarily changes over time to fit environmental conditions, and good managers pay close attention to trends that might require changes in how the company operates. Managers analyze competitors and the internal and external environments to find potential *competitive openings* and learn what new capabilities the organization needs to gain the upper hand against other companies in the industry. ¹² Consider how managers at Walgreens are shifting their goals and strategy to maintain a competitive advantage.

For decades, Walgreens has succeeded with strategic goals of opening conveniently located stores faster than competitors and filling more prescriptions than any other

drugstore chain. Recently, though, faced with the increased competitiveness of rivals and a weakened U.S. economy, the chain's managers began looking for competitive openings that could keep the company growing.

Rather than just selling prescriptions, Walgreens is redefining its strategic intent to become a broad health care provider. It began by opening pharmacies in hospitals and (continued)

EXHIBIT 2.2

State Farm's Mission Statement



Walgreens



assisted living facilities and by offering flu shots and other immunizations in its stores. Then, the company established Take Care Health Clinics to provide basic health services inside 136 Walgreens stores. Now, managers are moving aggressively into the health care industry by buying firms that operate health care centers at large corporations. These centers provide everything from treating simple illnesses to counseling employees on managing chronic diseases. Walgreens' managers see a tremendous opportunity. "In the U.S., there are more than 7,600 office sites with 1,000 or more employees that could support a health-care center," CEO Jeffrey Rein said.

Rein envisions Walgreens bringing together its various operations—basic prescription services, in-store clinics, specialty pharmaceuticals, and workplace health care centers—using electronic prescriptions and medical records, so that the company will meet a broad range of customers' health care needs.¹³

Strong customer service and top-notch pharmacist knowledge have always been key strengths for Walgreens. Now these competencies are being applied on a broader scale as the company moves into the larger health care industry. As at Walgreens, managers strive to develop strategies that focus on their core competencies in order to attain a competitive advantage.

Core Competence. A company's **core competence** is something the organization does especially well in comparison to its competitors. A core competence may be in the area of superior research and development, expert technological know-how, process efficiency, or exceptional customer service. 14 At VF, a large apparel company that owns Vanity Fair, Nautica, Wrangler, and The North Face, strategy focuses on the company's core competencies of operational efficiency and merchandising know-how. When VF bought The North Face, for example, its distribution systems were so poor that stores were getting ski apparel at the end of winter and camping gear at the end of summer. The company's operating profit margin was minus 35 percent. Managers at VF revamped The North Face's sourcing, distribution, and financial systems and within five years doubled sales to \$500 million and improved profit margins to a healthy 13 percent. 15 Gaylord Hotels, which has large hotel and conference centers in several states as well as the Opryland complex near Nashville, Tennessee, thrives based on a core competence of providing exceptional service for large group meetings. 16 Robinson Helicopter succeeds through superior technological know-how for building small, two-seater helicopters used for everything from police patrols in Los Angeles to herding cattle in Australia.¹⁷ In each case, leaders identified what their company does especially well and built the strategy around it.

Operative Goals

The organization's mission and overall goals provide a basis for developing more specific operative goals. **Operative goals** designate the ends sought through the actual operating procedures of the organization and explain what the organization is actually trying to do. ¹⁸ Operative goals describe specific measurable outcomes and are often concerned with the short run. Operative goals typically pertain to the primary tasks an organization must perform. ¹⁹ Specific goals for each primary task provide direction for the day-to-day decisions and activities within departments. Typical operative goals include performance goals, resource goals, market goals, employee development goals, productivity goals, and goals for innovation and change.



Overall Performance. Profitability reflects the overall performance of for-profit organizations. Profitability may be expressed in terms of net income, earnings per share, or return on investment. Other overall performance goals are growth and output volume. Growth pertains to increases in sales or profits over time. Volume pertains to total sales or the amount of products or services delivered. For example, Jelly Belly Candy Company, which practically created the market for gourmet jelly beans, has a goal of increasing sales by 25 percent to \$200 million by 2010. Related goals include introducing new lines of candies as well as getting Jelly Belly beans into more retail outlets.²⁰

Government and nonprofit organizations such as social service agencies or labor unions do not have goals of profitability, but they do have goals that attempt to specify the delivery of services to clients or members within specified expense levels. The Internal Revenue Service has a goal of providing accurate responses to 85 percent of taxpayer questions about new tax laws. Growth and volume goals also may be indicators of overall performance in nonprofit organizations. Expanding their services to new clients is a primary goal for many social service agencies, for example.

Resources. Resource goals pertain to the acquisition of needed material and financial resources from the environment. They may involve obtaining financing for the construction of new plants, finding less expensive sources for raw materials, or hiring top-quality technology graduates. Resource goals for Stanford University include attracting top-notch professors and students. Auto manufacturers such as Honda Motor Company and Toyota Motor Corporation have resource goals of obtaining high-quality auto parts at low cost. For nonprofit organizations, resource goals might include recruiting dedicated volunteers and expanding the organization's funding base.

Market. Market goals relate to the market share or market standing desired by the organization. Market goals are largely the responsibility of marketing, sales, and advertising departments. In the toy industry, Canada's Mega Bloks Inc. achieved its market goal of doubling its share of the toy building block market to 30 percent. The giant of the industry, Denmark's LEGO Group, is reevaluating strategies to try to regain the market share it has lost.²¹ Market goals can also apply to nonprofit organizations. Cincinnati Children's Hospital Medical Center, not content with a limited regional role in health care, has gained a growing share of the national market by developing expertise in the niche of treating rare and complex conditions and relentlessly focusing on quality.²²

Employee Development. Employee development pertains to the training, promotion, safety, and growth of employees. It includes both managers and workers. Strong employee development goals are one of the characteristics common to organizations that regularly show up on *Fortune* magazine's list of "100 Best Companies to Work For." For example, family-owned Wegmans Food Markets, which has appeared on the list every year since its inception and was voted the nation's top supermarket chain by the Food Network in 2007, has a motto of "Employees First, Customers Second," reflecting the company's emphasis on employee development goals.²³

Productivity. Productivity goals concern the amount of output achieved from available resources. They typically describe the amount of resource inputs required to



reach desired outputs and are thus stated in terms of "cost for a unit of production," "units produced per employee," or "resource cost per employee." Managers at Akamai Technologies, which sells Web content delivery services, keep a close eye on sales per employee to see if the company is meeting productivity goals. Akamai's chief financial officer, Timothy Weller, sees this statistic as "the single easiest measure of employee productivity.²⁴

Innovation and Change. Innovation goals pertain to internal flexibility and readiness to adapt to unexpected changes in the environment. Innovation goals are often defined with respect to the development of specific new services, products, or production processes. Procter & Gamble is taking a new approach to innovation that brings in ideas from outside entrepreneurs and researchers. Managers set a goal of getting 50 percent of the company's innovation from outside the organization by 2010, up from about 35 percent in 2004 and only 10 percent in 2000.²⁵

Successful organizations use a carefully balanced set of operative goals. Although profitability goals are important, some of today's best companies recognize that a single-minded focus on bottom-line profits may not be the best way to achieve high performance. Innovation and change goals are increasingly important, even though they may initially cause a *decrease* in profits. Employee development goals are critical for helping to maintain a motivated, committed workforce.

The Importance of Goals

Both official goals and operative goals are important for the organization, but they serve very different purposes. Official goals and mission statements describe a value system for the organization and set an overall purpose and vision; operative goals represent the primary tasks of the organization. Official goals legitimize the organization; operative goals are more explicit and well defined.

Operative goals serve several specific purposes, as outlined in Exhibit 2.3. For one thing, goals provide employees with a sense of direction, so that they know what they are working toward. This can help to motivate employees toward specific targets and important outcomes. Numerous studies have shown that specific high goals can significantly increase employee performance. People like having a focus for their activities and efforts. Consider Guitar Center, a fast-growing retailer in the United States. Managers establish specific goals for sales teams at every Guitar Center store each morning, and employees do whatever they need to, short of losing the company money, to meet the targets. Guitar Center's unwritten mantra of "Take the deal" means that salespeople are trained to take any profitable deal, even at razor-thin margins, to meet daily sales goals. ²⁷

EXHIBIT 2.3Goal Type and Purpose

Type of Goals	Purpose of Goals
Official goals, mission: Operative goals:	Legitimacy Employee direction and motivation Decision guidelines Standard of performance



Another important purpose of goals is to act as guidelines for employee behavior and decision making. Appropriate goals can act as a set of constraints on individual behavior and actions so that employees behave within boundaries that are acceptable to the organization and larger society.²⁸ They help to define the appropriate decisions concerning organization structure, innovation, employee welfare, or growth. Finally, goals provide a standard for assessment. The level of organizational performance, whether in terms of profits, units produced, degree of employee satisfaction, level of innovation, or number of customer complaints, needs a basis for evaluation. Operative goals provide this standard for measurement.

A FRAMEWORK FOR SELECTING STRATEGY AND DESIGN

To support and accomplish the organization's strategic intent and keep people focused in the direction determined by organizational mission, vision, and operative goals, managers have to select specific strategy and design options that can help the organization achieve its purpose and goals within its competitive environment. In this section, we examine a couple of practical approaches to selecting strategy and design. The questionnaire in this chapter's "How Do You Fit the Design?" box on page 66 will give you some insight into your own strategic management competencies.

A **strategy** is a plan for interacting with the competitive environment to achieve organizational goals. Some managers think of goals and strategies as interchangeable, but for our purposes, *goals* define where the organization wants to go and *strategies* define how it will get there. For example, a goal might be to achieve 15 percent annual sales growth; strategies to reach that goal might include aggressive advertising to attract new customers, motivating salespeople to increase the average size of customer purchases, and acquiring other businesses that produce similar products. Strategies can include any number of techniques to achieve the goal. The essence of formulating strategies is choosing whether the organization will perform different activities than its competitors or will execute similar activities more efficiently than its competitors do.²⁹

Two models for formulating strategies are the Porter model of competitive strategies and Miles and Snow's strategy typology. Each provides a framework for competitive action. After describing the two models, we will discuss how the choice of strategies affects organization design.

Porter's Competitive Forces and Strategies

One popular and effective model for formulating strategy is Porter's competitive forces and strategies. Michael E. Porter studied a number of business organizations and proposed that managers can formulate a strategy that makes the organization more profitable and less vulnerable if they understand five forces in the industry environment.³⁰ Porter found the following forces determine a company's position vis-à-vis competitors in the industry:

• The Threat of New Entrants. The threat of new entrants to an industry can create pressure for established organizations, which might need to hold down prices or increase their level of investment. For example, when managers at Nike

Briefcase

As an organization manager, keep these guidelines in mind:

After goals have been defined, select strategies for achieving those goals. Define specific strategies based on Porter's competitive strategies or Miles and Snow's strategy typology.



learned that fast-growing athletic apparel company Under Armour planned to get into the business of selling athletic footwear, they quickly invested in reviving their company's long-dead cross-training category by designing the new SPARQ trainer.³¹

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The threat of entry in an industry depends largely on the amount and extent of potential barriers, such as cost. It is far more costly to enter the auto manufacturing industry, for instance, than to start a specialty coffee shop.

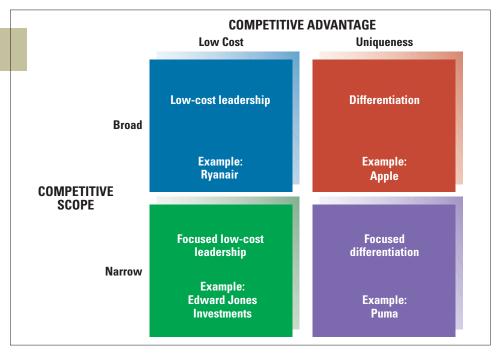
- The Power of Suppliers. Large, powerful suppliers can charge higher prices, limit services or quality, and shift costs to their customers, keeping more of the value for themselves. The concentration of suppliers and the availability of substitute suppliers are significant factors in determining supplier power. The sole supplier of materials or information to a company will have great power, for example. The Nielsen Company has wielded tremendous power with television networks because it has until recently been the sole source of ratings data that network executives use to make advertising and programming decisions. Nielsen's power has recently waned due to quality control problems, as well as the threat presented by TiVo, a provider of digital video recorders, which has begun offering its own detailed audience and ratings data to the networks.³²
- *The Power of Buyers*. Powerful customers, the flip side of powerful suppliers, can force down prices, demand better quality or service, and drive up costs for the supplying organization. Wal-Mart, for example, is so powerful that it can easily put the screws to manufacturers who supply goods for sale at its stores.
- The Threat of Substitutes. The power of alternatives and substitutes for a company's product or service may be affected by changes in cost, new technologies, social trends that will deflect buyer loyalty, and other environmental changes. Large pharmaceutical companies are under intense pressure from generic competition as patents on numerous popular drugs have expired in recent years.³³ Providers of conventional long-distance telephone services have suffered from the introduction of inexpensive Internet-based phone services.
- Rivalry among Existing Competitors. Rivalry among competitors is influenced by the preceding four forces, as well as by cost and product differentiation. Porter has referred to the "advertising slugfest" when describing the scrambling and jockeying for position that occurs among fierce rivals within an industry. The rivalry between Coke and Pepsi is a famous example. Recently, Coke scored big with its sponsorship of the Beijing Olympics, but Pepsi's creative marketing had many Chinese consumers thinking it was an official sponsor too.³⁴

In finding its competitive edge within these five forces, Porter suggests that a company can adopt one of three strategies: differentiation, low-cost leadership, or focus.³⁵ The focus strategy, in which the organization concentrates on a specific market or buyer group, is further divided into *focused low cost* and *focused differentiation*. This yields four basic strategies, as illustrated in Exhibit 2.4. To use this model, managers evaluate two factors, competitive advantage and competitive scope. With respect to advantage, managers determine whether to compete through lower costs or through the ability to offer unique or distinctive products and services that can command a premium price. Managers then determine whether the organization will compete on a broad scope (competing in many customer segments) or a narrow scope (competing in a selected customer segment or group of segments). These choices determine the selection of strategies, as illustrated in Exhibit 2.4.

Differentiation. In a **differentiation strategy**, organizations attempt to distinguish their products or services from others in the industry. An organization may use advertising, distinctive product features, exceptional service, or new technology to achieve a product perceived as unique. This strategy usually targets customers who are not particularly concerned with price, so it can be quite profitable.







Source: Adapted with the permission of The Free Press, a Division of Simon & Schuster Adult Publishing Group, from *Competitive Advantage: Creating and Sustaining Superior Performance* by Michael E. Porter. Copyright © 1985, 1988 by Michael E. Porter.

A differentiation strategy can reduce rivalry with competitors and fight off the threat of substitute products because customers are loyal to the company's brand. However, companies must remember that successful differentiation strategies require a number of costly activities, such as product research and design and extensive advertising. Companies that pursue a differentiation strategy need strong marketing abilities and creative employees who are given the time and resources to seek innovations. One good illustration of a company that benefits from a differentiation strategy is Apple. Apple has never tried to compete on price and likes being perceived as an "elite" brand. Its personal computers, for example, can command significantly higher prices than other PCs because of their distinctiveness. The company has built a loyal customer base by providing innovative, stylish products and creating a prestigious image. Consider the launch of the iPhone.



Sure, you can buy a cell phone for next to nothing these days. But when Apple launched the iPhone at a price of more than \$599, long lines of shoppers were eager to

buy them. Everyone who was anyone had to have an iPhone.

That's a bit of an exaggeration, of course, but demand for the pricey phone was strong even before Apple cut the price to expand sales to a wider group of consumers. Referred to as "perhaps the most-hyped gadget in history," the iPhone quickly became a status symbol. The less-expensive, faster iPhone 3G experienced even stronger demand when it was released in mid-2008. AT&T sold 2.4 million iPhones in the third quarter of that year.

Apple



Although Apple is still a small player in the broader cell phone market, the innovative technology of the iPhone, combined with creative marketing and the cachet of Apple, convinced many consumers that they needed a phone that gives them easy access to the Internet, digital music and video, and mobile social networks. So-called "smartphones" have been used for years by business professionals, with Research in Motion's BlackBerry being the leader. But it took Apple to build a strong consumer market for them.

Apple is now aiming directly at the BlackBerry, opening the door to third-party software applications that can make the iPhone more compatible with the needs of business users. The BlackBerry has a huge head start in this market, but as one IT professional said, "The iPhone is the coolest thing you'll touch." ³⁶

Service firms can use a differentiation strategy as well. Umpqua Bank, based in Portland, Oregon, for instance, wants to become a "lifestyle brand," rather than just a financial institution. Many branches have free wi-fi access, spacious seating areas with big-screen televisions, and Umpqua branded coffee. The company recently released its first CD—not a "certificate of deposit," but the kind with music on it. The bank worked with music marketing firm Rumblefish to put together a collection of songs by new or undiscovered artists in the markets where Umpqua operates. Over the past dozen or so years, Umpqua's differentiation strategy has helped it grow from about \$150 million in deposits to more than \$7 billion.³⁷

Low-Cost Leadership. The low-cost leadership strategy tries to increase market share by keeping costs low compared to competitors. With a low-cost leadership strategy, the organization aggressively seeks efficient facilities, pursues cost reductions, and uses tight controls to produce products or services more efficiently than its competitors. Low-cost doesn't necessarily mean low-price, but in many cases, low-cost leaders provide goods and services to customers at cheaper prices. For example, the CEO of Irish airline Ryanair said of the company's strategy: "It's the oldest, simplest formula: Pile 'em high and sell 'em cheap... We want to be the Wal-Mart of the airline business. Nobody will beat us on price. EVER." Ryanair can offer low fares because it keeps costs at rock bottom, lower than anyone else in Europe. The company's watchword is cheap tickets, not customer care or unique services.³⁸

The low-cost leadership strategy is concerned primarily with stability rather than taking risks or seeking new opportunities for innovation and growth. A low-cost position means a company can achieve higher profits than competitors because of its efficiency and lower operating costs. Low-cost leaders such as Ryanair or Wal-Mart can undercut competitors' prices and still earn a reasonable profit. In addition, if substitute products or potential new competitors enter the picture, the low-cost producer is in a better position to prevent loss of market share.

The best business strategy is to make products and services as distinctive as possible to gain an edge in the marketplace.

ANSWER: *Disagree.* Differentiation, making the company's products or services distinctive from others in the market, is one effective strategic approach. A low-cost leadership approach can be equally or even more effective depending on the organization's strengths and the nature of competition in the industry.

ASSESS YOUR ANSWER



Focus. With Porter's third strategy, the **focus strategy**, the organization concentrates on a specific regional market or buyer group. The company will try to achieve either a low-cost advantage or a differentiation advantage within a narrowly defined market. One good example of a focused low-cost strategy is Edward Jones, a St. Louis-based brokerage house. The firm has succeeded by building its business in rural and small-town America and providing investors with conservative, long-term investments.³⁹ An example of a focused differentiation strategy is Puma, the German athletic-wear manufacturer. In the mid-1990s, Puma was on the brink of bankruptcy. CEO Jochen Zeitz, then only 30 years old, revived the brand by targeting selected customer groups, especially armchair athletes, and creating stylish shoes and clothes that are setting design trends. Puma is "going out of its way to be different," says analyst Roland Könen.⁴⁰

Porter found that companies that did not consciously adopt a low-cost, differentiation, or focus strategy achieved below-average profits compared to those that used one of the three strategies. Many Internet companies have failed because managers did not develop competitive strategies that would distinguish them in the marketplace.⁴¹ On the other hand, Google became highly successful with a coherent differentiation strategy that distinguished it from other search engines. The ability of managers to devise and maintain a clear competitive strategy is considered one of the defining factors in an organization's success. However, in today's tumultuous environment, some scholars and consultants emphasize that managers also need to maintain flexibility in their strategic thinking, as further discussed in this chapter's Book Mark.

Miles and Snow's Strategy Typology

Another strategy typology was developed from the study of business strategies by Raymond Miles and Charles Snow.⁴² The Miles and Snow typology is based on the idea that managers seek to formulate strategies that will be congruent with the external environment. Organizations strive for a fit among internal organization characteristics, strategy, and the external environment. The four strategies that can be developed are the prospector, the defender, the analyzer, and the reactor.

Prospector. The **prospector** strategy is to innovate, take risks, seek out new opportunities, and grow. This strategy is suited to a dynamic, growing environment, where creativity is more important than efficiency. Nike, which innovates in both products and internal processes, exemplifies the prospector strategy. Nike's new Air Jordan XX3, for example, is the first in a program of shoes based on designs that can be produced using recycled materials and limited amounts of toxic chemical-based glues. CEO Mark Parker says Nike's growth strategy is based on both outward expansion and inward redesign of operations. Online companies such as Facebook, Google, and MySpace also reflect a prospector strategy.

Defender. The **defender** strategy is almost the opposite of the prospector. Rather than taking risks and seeking out new opportunities, the defender strategy is concerned with stability or even retrenchment. This strategy seeks to hold on to current customers, but it neither innovates nor seeks to grow. The defender is concerned primarily with internal efficiency and control to produce reliable, high-quality products for steady customers. This strategy can be successful when the organization exists in a declining industry or a stable environment. Paramount Pictures has been using a defender strategy for several years.⁴⁴ Paramount turns out a steady stream of reliable



BookMark 2.0 (HAVE YOU READ THIS BOOK?)

The Strategy Paradox: Why Committing to Success Leads to Failure (And What to Do About It)

By Michael E. Raynor



Strategies that have the greatest chance of success, says author, professor, and Deloitte consultant Michael Raynor, also have the highest probability of failure. Why? Because key uncertainties in the environment can break either for or against managers' best-laid plans. In his book, *The Strategy Paradox*, Raynor says the strategic choices of differentiation or low-cost enable companies to become highly successful when environmental circumstances favor the strategy, but they can lead to failure when market conditions shift in an unpredictable way.

RESOLVING THE PARADOX

So is business just a crapshoot? Despite uncertainty, Raynor says managers can implement strategies that deliver superior results while minimizing exposure to the vagaries of fate. He offers a set of tools based on a framework used by Johnson & Johnson:

• Anticipate the Future and Formulate Strategic Options. First managers anticipate the future by building as many different scenarios of the future as they can imagine. Each scenario describes possible future shifts in critical environmental forces affecting the company, which might include a radical change in the price of oil, a gamechanging technology shift, or an economic recession. Next, they develop long-range strategic options for each of the scenarios. For example, managers at Alliant Energy, a \$3 billion Wisconsin-based energy-utility holding company, were considering whether to invest in nonregulated generating assets. Rather than committing heavily to a

- particular strategy, they considered a series of scenarios that captured the full range of possible futures over a ten-year period and devised strategic options targeted to each set of competitive conditions.
- Decide on Strategic Actions and Manage Chosen Options.
 The next step is to translate analysis into action. Once senior managers have defined a range of alternative strategic options, they can determine which actions are appropriate as the future unfolds. Managing the options is the job of line managers once senior executives identify and commit to strategic options. The cycle continues as senior managers focus on the future while lower level managers implement strategic commitments for the short-term.

A RECIPE FOR AVOIDING DISASTER?

Raynor developed his ideas of the strategy paradox after studying winning companies and conducting postmortems on losing ones. He suggests that what separates the two is often poor timing or unforeseen changes in the environment rather than inferior strategies or flawed execution. Instead of a traditional strategic planning approach that treats environmental uncertainty as an afterthought, this approach puts uncertainty at the center of the strategic decision-making process, helping managers maintain strategic flexibility as the future unfolds.

The Strategy Paradox, by Michael E. Raynor, is published by Currency Doubleday, a division of Random House Inc.

hits but few blockbusters. Managers shun risk and sometimes turn down potentially high-profile films to keep a lid on costs. This has enabled the company to remain highly profitable while other studios have low returns or actually lose money.

Analyzer. The analyzer tries to maintain a stable business while innovating on the periphery. It seems to lie midway between the prospector and the defender. Some products will be targeted toward stable environments in which an efficiency strategy designed to keep current customers is used. Others will be targeted toward new, more dynamic environments, where growth is possible. The analyzer attempts to balance efficient production for current product or service lines with the creative development of new product lines. Amazon.com provides an example. The company's current strategy is to defend its core business of selling books and other physical goods over the Internet, but also to build a business in digital media, including



initiatives such as a digital book service, an online DVD rental business, and a digital music store to compete with Apple's iTunes.⁴⁵

Reactor. The reactor strategy is not really a strategy at all. Rather, reactors respond to environmental threats and opportunities in an ad hoc fashion. In a reactor strategy, top management has not defined a long-range plan or given the organization an explicit mission or goal, so the organization takes whatever actions seem to meet immediate needs. Although the reactor strategy can sometimes be successful, it can also lead to failed companies. Some large, once highly successful companies are struggling because managers failed to adopt a strategy consistent with consumer trends. In recent years, managers at Dell, long one of the most successful and profitable makers of personal computers in the world, have been floundering to find the appropriate strategy. Dell had a string of disappointing quarterly profits as the company reached the limits of its "make PCs cheap and build them to order" strategy. Competitors caught up, and Dell had failed to identify new strategic directions that could provide a new edge. 46

The Miles and Snow typology has been widely used, and researchers have tested its validity in a variety of organizations, including hospitals, colleges, banking institutions, industrial products companies, and life insurance firms. In general, researchers have found strong support for the effectiveness of this typology for organization managers in real-world situations.⁴⁷

How Strategies Affect Organization Design

Choice of strategy affects internal organization characteristics. Organization design characteristics need to support the firm's competitive approach. For example, a company wanting to grow and invent new products looks and "feels" different from a company that is focused on maintaining market share for long-established products in a stable industry. Exhibit 2.5 summarizes organization design characteristics associated with the Porter and Miles and Snow strategies.

With a low-cost leadership strategy, managers take an efficiency approach to organization design, whereas a differentiation strategy calls for a learning approach. Recall from Chapter 1 that organizations designed for efficiency have different characteristics from those designed for learning. A low-cost leadership strategy (efficiency) is associated with strong, centralized authority and tight control, standard operating procedures, and emphasis on efficient procurement and distribution systems. Employees generally perform routine tasks under close supervision and control and are not empowered to make decisions or take action on their own. A differentiation strategy, on the other hand, requires that employees be constantly experimenting and learning. Structure is fluid and flexible, with strong horizontal coordination. Empowered employees work directly with customers and are rewarded for creativity and risk taking. The organization values research, creativity, and innovativeness over efficiency and standard procedures.

The prospector strategy requires characteristics similar to a differentiation strategy, and the defender strategy takes an efficiency approach similar to low-cost leadership. Because the analyzer strategy attempts to balance efficiency for stable product lines with flexibility and learning for new products, it is associated with a mix of characteristics, as listed in Exhibit 2.5. With a reactor strategy, managers have left the organization with no direction and no clear approach to design.



Design the organization to support the firm's competitive strategy. With a lowcost leadership or defender strategy, select design characteristics associated with an efficiency orientation. For a differentiation or prospector strategy, on the other hand. choose characteristics that encourage learning, innovation, and adaptation. Use a balanced mixture of characteristics for an analyzer strategy.



EXHIBIT 2.5Organization Design
Outcomes of Strategy

Porter's Competitive Strategies

Strategy: Differentiation **Organization Design:**

- Learning orientation; acts in a flexible, loosely knit way, with strong horizontal coordination
- Strong capability in research
- Values and builds in mechanisms for customer intimacy
- Rewards employee creativity, risk taking, and innovation

Strategy: Low-Cost Leadership **Organization Design:.**

- Efficiency orientation; strong central authority; tight cost control, with frequent, detailed control reports
- Standard operating procedures
- Highly efficient procurement and distribution systems
- Close supervision; routine tasks; limited employee empowerment

Miles and Snow's Strategy Typology

Strategy: Prospector **Organization Design:**

- Learning orientation; flexible, fluid, decentralized structure
- · Strong capability in research

Strategy: Defender **Organization Des.ign:**

- Efficiency orientation; centralized authority and tight cost control
- Emphasis on production efficiency; low overhead
- Close supervision; little employee empowerment

Strategy: Analyzer **Organization Design:**

- Balances efficiency and learning; tight cost control with flexibility and adaptability
- Efficient production for stable product lines; emphasis on creativity, research, risk-taking for innovation

Strategy: Reactor **Organization Design:**

 No clear organizational approach; design characteristics may shift abruptly, depending on current needs

Source: Based on Michael E. Porter, Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: The Free Press, 1980); Michael Treacy and Fred Wiersema, "How Market Leaders Keep Their Edge," Fortune (February 6, 1995), 88–98; Michael Hitt, R. Duane Ireland, and Robert E. Hoskisson, Strategic Management (St. Paul, Minn.: West, 1995), 100–113; and Raymond E. Miles, Charles C. Snow, Alan D. Meyer, and Henry J. Coleman, Jr., "Organizational Strategy, Structure, and Process," Academy of Management Review 3 (1978), 546–562.

Other Factors Affecting Organization Design

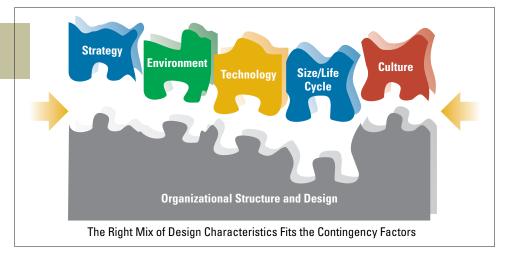
Strategy is one important factor that affects organization design. Ultimately, however, organization design is a result of numerous contingencies, which will be discussed throughout this book. The emphasis given to efficiency and control versus learning and flexibility is determined by the contingencies of strategy, environment, size and life cycle, technology, and organizational culture. The organization is designed to "fit" the contingency factors, as illustrated in Exhibit 2.6.

For example, in a stable environment, the organization can have a traditional structure that emphasizes vertical control, efficiency, specialization, standard procedures, and centralized decision making. However, a rapidly changing environment



EXHIBIT 2.6

Contingency Factors Affecting Organization Design



may call for a more flexible structure, with strong horizontal coordination and collaboration through teams or other mechanisms. Environment will be discussed in detail in Chapters 4 and 5. In terms of size and life cycle, young, small organizations are generally informal and have little division of labor, few rules and regulations, and ad hoc budgeting and performance systems. Large organizations such as Coca-Cola, Sony, or General Electric, on the other hand, have an extensive division of labor, numerous rules and regulations, and standard procedures and systems for budgeting, control, rewards, and innovation. Size and stages of the life cycle will be discussed in Chapter 9.

Design must also fit the workflow technology of the organization. For example, with mass production technology, such as a traditional automobile assembly line, the organization functions best by emphasizing efficiency, formalization, specialization, centralized decision making, and tight control. An e-business, on the other hand, would need to be more informal and flexible. Technology's impact on design will be discussed in detail in Chapters 7 and 8. A final contingency that affects organization design is corporate culture. An organizational culture that values teamwork, collaboration, creativity, and open communication, for example, would not function well with a tight, vertical structure and strict rules and regulations. The role of culture is discussed in Chapter 10.

One responsibility of managers is to design organizations that fit the contingency factors of strategy, environment, size and life cycle, technology, and culture. Finding the right fit leads to organizational effectiveness, whereas a poor fit can lead to decline or even the demise of the organization.

ASSESSING ORGANIZATIONAL EFFECTIVENESS

Understanding organizational goals and strategies, as well as the concept of fitting design to various contingencies, is a first step toward understanding organizational effectiveness. Organizational goals represent the reason for an organization's existence and the outcomes it seeks to achieve. The next few sections of the chapter explore the topic of effectiveness and how effectiveness is measured in organizations.



Recall from Chapter 1 that organizational effectiveness is the degree to which an organization realizes its goals. 48 *Effectiveness* is a broad concept. It implicitly takes into consideration a range of variables at both the organizational and departmental levels. Effectiveness evaluates the extent to which multiple goals—whether official or operative—are attained.

Efficiency is a more limited concept that pertains to the internal workings of the organization. Organizational efficiency is the amount of resources used to produce a unit of output.⁴⁹ It can be measured as the ratio of inputs to outputs. If one organization can achieve a given production level with fewer resources than another organization, it would be described as more efficient.⁵⁰

Sometimes efficiency leads to effectiveness, but in other organizations, efficiency and effectiveness are not related. An organization may be highly efficient but fail to achieve its goals because it makes a product for which there is no demand. Likewise, an organization may achieve its profit goals but be inefficient. Efforts to increase efficiency, particularly through severe cost cutting, can also sometimes make the organization less effective. One regional fast food chain wanting to cut costs decided to reduce food waste by not cooking any food until it was ordered. The move reduced the chain's costs, but it also led to delayed service, irritated customers, and lower sales.⁵¹

Overall effectiveness is difficult to measure in organizations. Organizations are large, diverse, and fragmented. They perform many activities simultaneously, pursue multiple goals, and generate many outcomes, some intended and some unintended.⁵² Managers determine what indicators to measure in order to gauge the effectiveness of their organizations. Studies and surveys have found that many managers have a difficult time with the concept of evaluating effectiveness based on characteristics that are not subject to hard, quantitative measurement.⁵³ However, top executives at some of today's leading companies are finding new ways to measure effectiveness, including the use of such "soft" indications as customer loyalty and employee engagement.

First, we will discuss several traditional approaches to measuring effectiveness that focus on which indicators managers consider most important to track. Later, we will examine an approach that integrates concern for various parts of the organization.

TRADITIONAL EFFECTIVENESS APPROACHES

Organizations bring resources in from the environment, and those resources are transformed into outputs delivered back into the environment, as shown in Exhibit 2.7 Traditional approaches to measuring effectiveness look at different parts of the organization and measure indicators connected with outputs, inputs, or internal activities.

Goal Indicators

The **goal approach** to effectiveness consists of identifying an organization's output goals and assessing how well the organization has attained those goals.⁵⁴ This is a logical approach because organizations do try to attain certain levels of output, profit, or client satisfaction. The goal approach measures progress toward



attainment of those goals. For example, an important measure for the Women's National Basketball Association is number of tickets sold per game. During the league's first season, President Val Ackerman set a goal of 4,000 to 5,000 tickets per game. The organization actually averaged nearly 9,700 tickets per game, indicating that the WNBA was highly effective in meeting its goal for attendance.⁵⁵

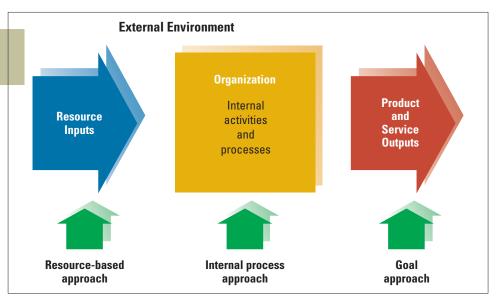
The important goals to consider are operative goals, because official goals (mission) tend to be abstract and difficult to measure. ⁵⁶ Indicators tracked with the goal approach include:

- Profitability—the positive gain from business operations or investments after expenses are subtracted
- Market share—the proportion of the market the firm is able to capture relative to competitors
- Growth—the ability of the organization to increase its sales, profits, or client base over time
- Social responsibility—how well the organization serves the interests of society as well as itself
- Product quality—the ability of the organization to achieve high quality in its products or services

Resource-based Indicators

The **resource-based approach** looks at the input side of the transformation process shown in Exhibit 2.7. It assumes organizations must be successful in obtaining and managing valued resources in order to be effective. From a resource-based perspective, organizational effectiveness is defined as the ability of the organization, in either absolute or relative terms, to obtain scarce and valued resources and successfully integrate and manage them.⁵⁷ The resource-based approach is valuable when other indicators of performance are difficult to obtain. In many nonprofit and social welfare organizations, for example, it is hard to measure output goals or internal efficiency.







In a broad sense, resource indicators of effectiveness encompass the following dimensions:

- Bargaining position—the ability of the organization to obtain from its environment scarce and valued resources, including financial resources, raw materials, human resources, knowledge, and technology
- The abilities of the organization's decision makers to perceive and correctly interpret the real properties of the external environment
- The abilities of managers to use tangible (e.g., supplies, people) and intangible (e.g., knowledge, corporate culture) resources in day-to-day organizational activities to achieve superior performance
- The ability of the organization to respond to changes in the environment

Internal Process Indicators

In the **internal process approach**, effectiveness is measured as internal organizational health and efficiency. An effective organization has a smooth, well-oiled internal process. Employees are happy and satisfied. Department activities mesh with one another to ensure high productivity. This approach does not consider the external environment. The important element in effectiveness is what the organization does with the resources it has, as reflected in internal health and efficiency. The best-known proponents of an internal process model are from the human relations approach to organizations. Such writers as Chris Argyris, Warren G. Bennis, Rensis Likert, and Richard Beckhard have all worked extensively with human resources in organizations and emphasize the connection between human resources and effectiveness. Results from a study of nearly 200 secondary schools showed that both human resources and employee-oriented processes were important in explaining and promoting effectiveness in those organizations.

Internal process indicators include:60

- A strong, adaptive corporate culture and positive work climate
- Operational efficiency, such as using minimal resources to achieve outcomes
- Undistorted horizontal and vertical communication
- Growth and development of employees

THE BALANCED SCORECARD APPROACH TO EFFECTIVENESS

Business organizations have typically focused on financial measures such as profit and return on investment to assess performance. Nonprofit organizations also have to assess budgets, spending, and fund-raising income, and each of these measures is concerned with finances. Traditional approaches based on goal, resource-based, or internal process indicators all have something to offer, but each one, just like sole reliance on financial numbers, tells only part of the story. In recent years, a new approach that balances a concern for various parts of the organization rather than focusing on one aspect has become popular. The **balanced scorecard** combines several indicators of effectiveness into a single framework, balancing traditional financial measures with operational measures relating to a company's critical success factors.⁶¹

Briefcase

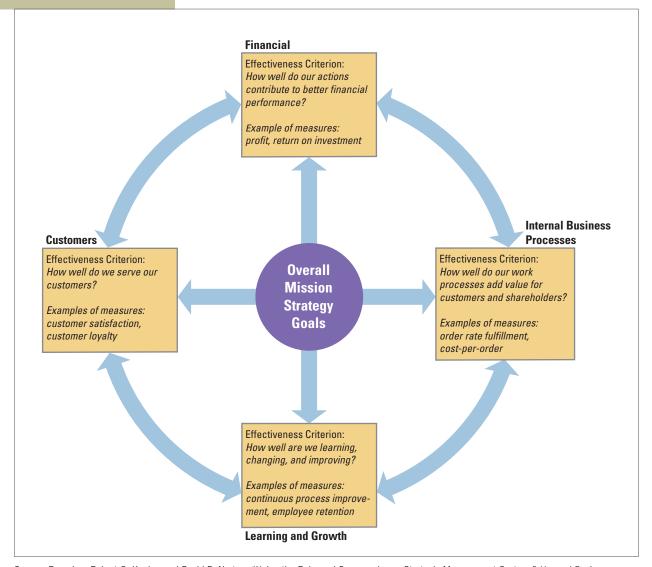
As an organization manager, keep these guidelines in mind:

Use the goal approach, internal process approach, and resource-based approach to obtain specific pictures of organizational effectiveness. Assess the four components of the balanced scorecard to obtain a broader, more balanced picture of effectiveness.



Exhibit 2.8 illustrates the four effectiveness categories considered by the balanced scorecard. Within each area of effectiveness—financial performance, customer service, internal business processes, and the organization's capacity for learning and growth—managers identify key performance indicators the organization will track. The *financial perspective* reflects a concern that the organization's activities contribute to improving short- and long-term financial performance. It includes traditional measures such as net income and return on investment. *Customer service indicators* measure such things as how customers view the organization, as well as customer retention and satisfaction. *Business process*

EXHIBIT 2.8Balanced Scorecard
Effectiveness Criteria



Source: Based on Robert S. Kaplan and David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," *Harvard Business Review* (January–February 1996), 75–85; Chee W. Chow, Kamal M. Haddad, and James E. Williamson, "Applying the Balanced Scorecard to Small Companies," *Management Accounting* 79, no. 2 (August 1997), 21–27; and Cathy Lazere, "All Together Now," *CFO* (February 1998), 28–36.



indicators focus on production and operating statistics, such as speed of order fulfillment and cost per order. The final component looks at the organization's potential for learning and growth, focusing on how well resources and hu man capital are being managed for the company's future. Measurements include such things as employee satisfaction and retention, amount of training people receive, business process improvements, and the introduction of new products. The components of the scorecard are designed in an integrative manner so that they reinforce one another and link short-term actions with long-term strategic goals, as illustrated in Exhibit 2.8.

 $\mathbf{\gamma}$ The best measures of business performance are financial.

ANSWER: *Disagree.* If you can have only one type of measure of business performance, it might have to be financial. But diverse views of performance, such as using the balanced scorecard, have proven to be more effective than financials alone, because managers can understand and control the actions that cause business effectiveness. Financial numbers alone provide narrow and limited information.

ASSESS YOUR ANSWER

The balanced scorecard helps managers assess the organization from many perspectives so they have a better understanding of total effectiveness. Successful managers keep the organization focused on data in all four components rather than relying on just one, such as finances, which tells only part of the story. Companies such as Best Buy, Wells Fargo, and Hilton Corporation, for instance, are striving to understand how they perform on all four components of effectiveness and looking at the relationships among the components. For example, how does internal efficiency relate to customer satisfaction or financial outcomes? How do measures of employee engagement, customer satisfaction, sales performance, and profitability interconnect and contribute to overall effectiveness? Hilton found that a boost in customer retention rates led to an increase in revenues. Best Buy has connected employee engagement to better store performance.⁶²

Thus, the balanced scorecard has evolved into a system that helps managers see how organizational effectiveness results from accomplishing outcomes in four consistent and mutually supportive areas. Overall effectiveness is a result of how well these interdependent elements are aligned, so that individuals, teams, departments, and so forth are working in concert to attain specific goals that ultimately help the organization achieve high performance and fulfill its mission.⁶³

DESIGN ESSENTIALS

Organizations exist for a purpose. Top managers decide the organization's strategic intent, including a specific mission to be accomplished. The mission statement, or official goals, makes explicit the purpose and direction of an organization. Operative goals designate specific ends sought through actual operating procedures. Official and operative goals are a key element in organizations because they meet these needs—establishing legitimacy with external groups,



providing employees with a sense of direction and motivation, and setting standards of performance.

- Two other aspects related to strategic intent are competitive advantage and core competence. Competitive advantage refers to what sets the organization apart from others and provides it with a distinctive edge. A core competence is something the organization does extremely well compared to competitors. Managers look for competitive openings and develop strategies based on their core competencies.
- Strategies may include any number of techniques to achieve the stated goals. Two models for formulating strategies are Porter's competitive forces and strategies and the Miles and Snow strategy typology. Organization design needs to fit the firm's competitive approach to contribute to organizational effectiveness.
- Assessing organizational effectiveness reflects the complexity of organizations as a topic of study. No easy, simple, guaranteed measure will provide an unequivocal assessment of performance. Organizations must perform diverse activities well—from obtaining resource inputs to delivering outputs—to be successful. Traditional approaches use output goals, resource acquisition, or internal health and efficiency as the indicators of effectiveness.
- No approach is suitable for every organization, but each offers some advantages that the others may lack. In addition, a more recent approach to measuring effectiveness is the balanced scorecard approach, which takes into consideration financial performance, customer service, internal business processes, and the organization's capacity for learning and growth. Managers track and analyze key metrics in these four areas to see how they are interconnected and contribute to overall effectiveness.

Key Concepts

analyzer balanced scorecard competitive advantage core competence defender differentiation strategy focus strategy goal approach internal process approach low-cost leadership strategy mission official goals operative goals organizational goal

prospector reactor resource-based approach strategic intent strategy

Discussion Questions

- 1. Discuss the role of top management in setting organizational direction.
- 2. How might a company's goals for employee development be related to its goals for innovation and change? To goals for productivity? Can you discuss ways these types of goals might conflict in an organization?
- 3. What is a goal for the class for which you are reading this text? Who established this goal? Discuss how the goal affects your direction and motivation.
- 4. What is the difference between a goal and a strategy as defined in the text? Identify both a goal and a strategy for a campus or community organization with which you are involved.
- 5. Discuss the similarities and differences in the strategies described in Porter's competitive strategies and Miles and Snow's typology.
- 6. Do you believe mission statements and official goal statements provide an organization with genuine legitimacy in the external environment? Discuss.

- 7. Suppose you have been asked to evaluate the effectiveness of the police department in a medium-sized community. Where would you begin, and how would you proceed? What effectiveness approach would you prefer?
- 8. What are the advantages and disadvantages of the resource-based approach versus the goal approach for measuring organizational effectiveness?
- 9. What are the similarities and differences between assessing effectiveness on the basis of the balanced scorecard versus the stakeholder approach described in Chapter 1? Explain.
- 10. A noted organization theorist once said, "Organizational effectiveness can be whatever top management defines it to be." Discuss.

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Chapter 2 Workshop: The Balanced Scorecard and Organizational Effectiveness*

- 1. Divide into groups of four to six members.
- Select an organization to study for this exercise. It should be an organization for which one of you has worked, or it could be part of the university.
- 3. Using the exhibit "The Balanced Scorecard Approach to Effectiveness" (Exhibit 2.8), your group should list eight potential measures that show a balanced view of performance across the four categories. Use the following table.
- 4. How will achieving these goals help the organization to become more effective? Which goals could be given more weight than others? Why?
- 5. Present your chart to the rest of the class. Each group should explain why it chose those particular measures and which they think are more important. Be prepared to defend your position to the other groups, which are encouraged to question your choices.

Effectiveness Category	Goal or Subgoal	Performance Gauge	How to Measure	Source of Data	What Do You Consider Effective?
(Example)	Equilibrium	Turnover rates	Compare percentages of workers who left	HRM files	25% reduction in first year
Financial	1.				
	2.				
Customers	3.				
	4.				
Internal Business Processes	5.				
	6.				
Learning and Growth	7.				
	8.				

^{*}Adapted by Dorothy Marcic from general ideas in Jennifer Howard and Larry Miller, *Team Management*, The Miller Consulting Group, 1994, p. 92.



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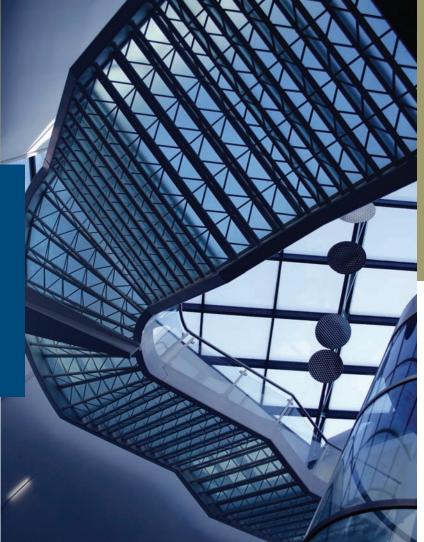


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Chapter 3

Fundamentals of Organization Structure



Bettina Anzeletti

Organization Structure

Information-Sharing Perspective on Structure

Vertical Information Sharing · Horizontal Information Sharing

Organization Design Alternatives

Required Work Activities \cdot Reporting Relationships \cdot Departmental Grouping Options

Functional, Divisional, and Geographic Designs

Functional Structure • Functional Structure with Horizontal

Linkages · Divisional Structure · Geographic Structure

Matrix Structure

Conditions for the Matrix · Strengths and Weaknesses

Horizontal Structure

Characteristics • Strengths and Weaknesses

Virtual Networks and Outsourcing

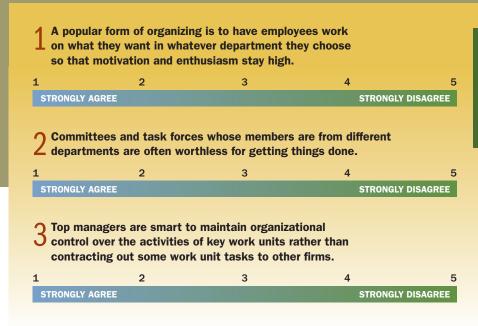
How the Structure Works · Strengths and Weaknesses

Hybrid Structure

Applications of Structural Design

Structural Alignment • Symptoms of Structural Deficiency **Design Essentials**

Before reading this chapter, please circle your opinion below for each of the following statements:



Wyeth Pharmaceuticals makes and sells some very powerful drugs, including Effexor for depression, Zosyn to treat infectious diseases, and Telazol, a combined anesthetic/tranquilizer for animals. But Wyeth no longer manages clinical testing of new drugs or vaccines. Outrageous? Shocking? No, just a new reality. In 2004, Wyeth outsourced its entire clinical testing operation—from protocol design to patient recruitment to site monitoring—to Accenture's Health and Life Sciences Practice. Accenture also took over the management of Wyeth's 175 or so clinical data employees and operations. An additional 400 or so people from the Accenture Global Delivery Centers assist in operations. ¹ It's all part of Wyeth's drive to improve quality, efficiency, speed, and innovation by outsourcing some of its operations to other firms that can handle them better and faster.

Now, you might wonder how Accenture operates. Let's just say that even CEO Bill Green doesn't have a permanent desk. Accenture doesn't have a formal head-quarters, no official branches, no permanent offices. The company's chief technologist is in Germany, its head of human resources in Chicago, the chief financial officer in Silicon Valley, and most of its consultants constantly on the move.²

No doubt about it, many organizations are more complex and amorphous than they used to be. Wyeth and Accenture reflect the structural trend among today's organizations toward outsourcing, alliances, and virtual networking. Today's companies also use other structural innovations such as teams and matrix designs to achieve the flexibility they need. Still other firms continue to be successful with traditional functional structures that are coordinated and controlled through the vertical hierarchy. Organizations use a wide variety of structural alternatives to help them achieve their purpose and goals, and nearly every firm needs to undergo reorganization at some point to help meet new challenges. Structural changes are needed to reflect new strategies or respond to changes in other contingency factors introduced in Chapter 2: environment, technology, size and life cycle, and culture.

Managing

by Design

Questions



Purpose of This Chapter

This chapter introduces basic concepts of organization structure and shows how to design structure as it appears on the organization chart. First we define structure and provide an overview of structural design. Then, an information-sharing perspective explains how to design vertical and horizontal linkages to provide needed information flow. The chapter next presents basic design options, followed by strategies for grouping organizational activities into functional, divisional, matrix, horizontal, virtual network, or hybrid structures. The final section examines how the application of basic structures depends on the organization's situation and outlines the symptoms of structural misalignment.

ORGANIZATION STRUCTURE

There are three key components in the definition of **organization structure**:

- 1. Organization structure designates formal reporting relationships, including the number of levels in the hierarchy and the span of control of managers and supervisors.
- 2. Organization structure identifies the grouping together of individuals into departments and of departments into the total organization.
- 3. Organization structure includes the design of systems to ensure effective communication, coordination, and integration of efforts across departments.³

These three elements of structure pertain to both vertical and horizontal aspects of organizing. For example, the first two elements are the structural *framework*, which is the vertical hierarchy.⁴ The third element pertains to the pattern of *interactions* among organizational employees. An ideal structure encourages employees to provide horizontal information and coordination where and when it is needed.

Organization structure is reflected in the organization chart. It isn't possible to see the internal structure of an organization the way we might see its manufacturing tools, offices, or products. Although we might see employees going about their duties, performing different tasks, and working in different locations, the only way to actually see the structure underlying all this activity is through the organization chart. The organization chart is the visual representation of a whole set of underlying activities and processes in an organization. Exhibit 3.1 shows a simple organization chart for a traditional organization. The organization chart can be quite useful in understanding how a company works. It shows the various parts of an organization, how they are interrelated, and how each position and department fits into the whole.

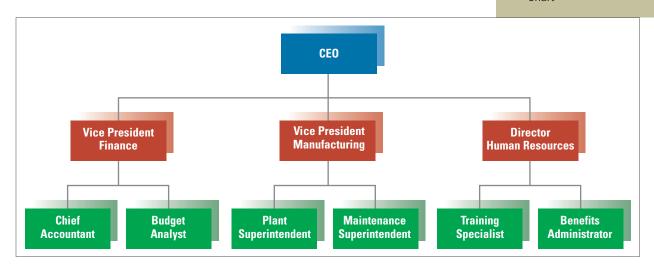
The concept of an organization chart, showing what positions exist, how they are grouped, and who reports to whom, has been around for centuries.⁵ For example, diagrams outlining church hierarchy can be found in medieval churches in Spain. However, the use of the organization chart for business stems largely from the Industrial Revolution. As we discussed in Chapter 1, as work grew more complex and was performed by greater and greater numbers of workers, there was a pressing need to develop ways of managing and controlling organizations. The growth of the railroads provides an example. After the collision of two passenger trains in Massachusetts in 1841, the public demanded better control of the operation. As a result, the board of directors of the Western Railroad took steps to outline "definite responsibilities for



charts that describe task responsibilities, reporting relationships, and the grouping of individuals into departments. Provide sufficient documentation so that all people within the organization know to whom they report and how they fit into the total organization picture.



EXHIBIT 3.1A Sample Organization Chart



each phase of the company's business, drawing solid lines of authority and command for the railroad's administration, maintenance, and operation."

The type of organization structure that grew out of these efforts in the late nine-teenth and early twentieth centuries was one in which the CEO was placed at the top and everyone else was arranged in layers down below, as illustrated in Exhibit 3.1. The thinking and decision making are done by those at the top, and the physical work is performed by employees who are organized into distinct, functional departments. This structure was quite effective and became entrenched in business, nonprofit, and military organizations for most of the twentieth century. However, this type of vertical structure is not always effective, particularly in rapidly changing environments. Over the years, organizations have developed other structural designs, many of them aimed at increasing horizontal coordination and communication and encouraging adaptation to external changes. This chapter's Book Mark suggests that new approaches to organizing and managing people are crucial for companies to attain durable competitive advantages in the 21st century.

A popular form of organizing is to have employees work on what they want in whatever department they choose so that motivation and enthusiasm stay high.

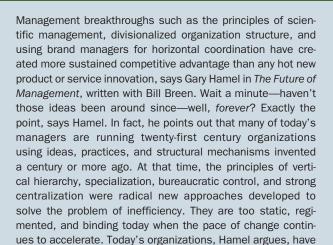
ANSWER: *Disagree.* A small number of firms have tried this approach with some success, but a typical organization needs to structure its work activities, positions, and departments in a way that ensures work is accomplished and coordinated to meet organizational goals. Many managers try to give some consideration to employee choices as a way to keep enthusiasm high.

ASSESS YOUR ANSWER



BookMark 3.0 (HAVE YOU READ THIS BOOK?)

The Future of Management
By Gary Hamel with Bill Breen



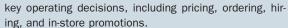
SOME STRUCTURAL INNOVATORS

ally efficient."

Hamel suggests that the practice of management must undergo a transformation akin to that which occurred with the Industrial Revolution and the advent of scientific management. Here, from *The Future of Management*, are a few examples that offer glimpses of what is possible when managers build structure around principles of community, creativity, and information sharing rather than strict hierarchy:

to become "as strategically adaptable as they are operation-

 Whole Foods Market. Teams are the basic organizational unit at Whole Foods, and they have a degree of autonomy nearly unprecedented in the retail industry. Each store is made up of eight or so self-directed teams that oversee departments such as fresh produce, prepared foods, dairy, or checkout. Teams are responsible for all



- W. L. Gore. W. L. Gore's innovation was to organize work so that good things happen whether managers are "in control" or not. Gore, best known for Gore-Tex fabric, lets employees decide what they want to do. There are no management layers, few titles, and no organization charts. As at Whole Foods, the core operating units are small teams, but at Gore, people can choose which teams to work on and say no to requests from anyone. Yet Gore also builds in strong accountability—people are reviewed by at least twenty of their peers every year.
- Visa. Everybody's heard of Visa, but few people know anything about the organization behind the brand. Visa is the world's first almost-entirely virtual company. In the early 1970s, a group of banks formed a consortium which today has grown into a global network of 21,000 financial institutions and more than 1.3 billion cardholders. The organization is largely self-organizing, continually evolving as conditions change.

HOW TO BE A MANAGEMENT INNOVATOR

Most companies have a system for product innovation, but Hamel notes that few have a well-honed process for management innovation. *The Future of Management* provides detailed steps managers can take to increase the chances of a breakthrough in management thinking. Hamel considers the rise of modern management and organization design the most important innovation of the twentieth century. It is time now, though, for twenty-first century ideas.

The Future of Management, by Gary Hamel with Bill Breen, is published by Harvard Business School Press.

INFORMATION-SHARING PERSPECTIVE ON STRUCTURE

The organization should be designed to provide both vertical and horizontal information flow as necessary to accomplish the organization's overall goals. If the structure doesn't fit the information requirements of the organization, people either will have too little information or will spend time processing information that is not vital

to their tasks, thus reducing effectiveness.⁷ However, there is an inherent tension between vertical and horizontal mechanisms in an organization. Whereas vertical linkages are designed primarily for control, horizontal linkages are designed for coordination and collaboration, which usually means reducing control.

Organizations can choose whether to orient toward a traditional organization designed for efficiency, which emphasizes vertical communication and control, or toward a contemporary learning organization, which emphasizes horizontal communication and coordination. Exhibit 3.2 compares organizations designed for efficiency with those designed for learning and adaptation. An emphasis on efficiency and control is associated with specialized tasks, a hierarchy of authority, rules and regulations, formal reporting systems, few teams or task forces, and centralized decision making, which means problems and decisions are funneled to top levels of the hierarchy for resolution. Emphasis on learning and adaptation is associated with shared tasks, a relaxed hierarchy, few rules, face-to-face communication, many teams and task forces, and informal, decentralized decision making. Decentralized decision making means decision-making authority is pushed down to lower organizational levels.

Organizations may have to experiment to find the correct degree of centralization or decentralization to meet their needs. For example, a study by William Ouchi found that three large school districts that shifted to a more flexible, decentralized structure, giving school principals more autonomy, responsibility, and control over resources, performed better and more efficiently than large districts that were highly centralized.8 Top executives at New York City Transit are decentralizing the subway system to let managers of individual subway lines make almost every decision about what happens on the tracks, in the trains, and in the stations. Decentralization helps New York City Transit respond faster and more directly to customer complaints and other problems. Previously, a request to fix a leak causing slippery conditions in a station could languish for years because the centralized system slowed decision making to a crawl.9 On the other hand, some large decentralized companies sometimes need to build in more centralized communication and control systems to keep these huge, global corporations functioning efficiently. Consider the structural decisions that helped CEO Lewis Campbell revive Textron Inc., a \$12 billion industrial conglomerate with headquarters in Providence, Rhode Island.

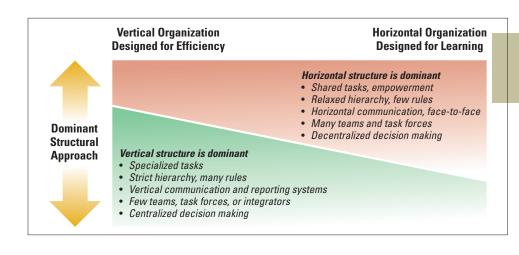


EXHIBIT 3.2

The Relationship of Organization Design to Efficiency versus Learning Outcomes



INPRACTICE

Textron CEO Lewis Campbell was a confirmed believer in decentralization, but in 2001, he took a look at the company's situation and knew something had to change. "We were

Textron Inc.

adrift," says Campbell. "We were doing all the things we used to do but were not getting results." An economic downturn, combined with a steep decline in the industrial and aviation markets from which Textron derived most of its profits, had left Textron in a free fall. Over a two-year period, profits declined 75 percent.

To get the company operating at peak efficiency required some dramatic changes. At the time, Textron's many business units operated autonomously, with each unit handling its own administrative functions and managers making decisions focused on meeting their own division's goals. Many division managers didn't even know what other units of the company did. At the annual management summit, Campbell decreed that the various units would now be required to cooperate and share resources. The new focus would be on how the company as a whole was doing, and bonuses were linked to companywide rather than division performance. To improve efficiency, more than 1,500 payroll systems were cut down to just three, numerous health care plans across the disparate divisions were reduced to just one, and more than a hundred data centers were consolidated into a handful. Managers who had been accustomed to making all their own decisions lost some of their autonomy as companywide decisions, such as a Six Sigma quality improvement program, were centralized to headquarters level and implemented top down.

Taking Textron away from its roots as a decentralized organization to one with a single vision and more centralized decision making didn't lead to overnight success, but the efficiencies soon began to accumulate. Within a few years, Textron's economic health had significantly improved, and Campbell was being hailed as a turnaround artist.¹0 ■

It couldn't have been easy, bringing centralization to a company that had thrived on decentralization for its entire existence, but Campbell believed it was necessary for the current situation the company faced. Managers are always searching for the best combination of vertical control and horizontal collaboration, centralization and decentralization, for their own situations.¹¹

Vertical Information Sharing

Organization design should facilitate the communication among employees and departments that is necessary to accomplish the organization's overall task. Managers create *information linkages* to facilitate communication and coordination among organizational elements. **Vertical linkages** are used to coordinate activities between the top and bottom of an organization and are designed primarily for control of the organization. Employees at lower levels should carry out activities consistent with top-level goals, and top executives must be informed of activities and accomplishments at the lower levels. Organizations may use any of a variety of structural devices to achieve vertical linkage, including hierarchical referral, rules, plans, and formal management information systems.¹²

Hierarchical Referral. The first vertical device is the hierarchy, or chain of command, which is illustrated by the vertical lines in Exhibit 3.1. If a problem arises that employees don't know how to solve, it can be referred up to the next level in the



hierarchy. When the problem is solved, the answer is passed back down to lower levels. The lines of the organization chart act as communication channels.

Rules and Plans. The next linkage device is the use of rules and plans. To the extent that problems and decisions are repetitious, a rule or procedure can be established so employees know how to respond without communicating directly with their manager. Rules and procedures provide a standard information source enabling employees to be coordinated without actually communicating about every task. At PepsiCo's Gemesa cookie business in Mexico, for example, managers carefully brief production workers on goals, processes, and procedures so that employees themselves do most of the work of keeping the production process running smoothly, enabling the plants to operate with fewer managers. Plans also provide standing information for employees. The most widely used plan is the budget. With carefully designed and communicated budget plans, employees at lower levels can be left on their own to perform activities within their resource allotment.

Vertical Information Systems. A **vertical information system** is another strategy for increasing vertical information capacity. Vertical information systems include the periodic reports, written information, and computer-based communications distributed to managers. Information systems make communication up and down the hierarchy more efficient.

In today's world of corporate financial scandals and ethical concerns, many top managers are considering strengthening their organization's linkages for vertical information and control. The other major issue in organizing is to provide adequate horizontal linkages for coordination and collaboration.

Horizontal Information Sharing

Horizontal communication overcomes barriers between departments and provides opportunities for coordination among employees to achieve unity of effort and organizational objectives. **Horizontal linkage** refers to communication and coordination horizontally across organizational departments. Its importance is articulated by comments made by Lee Iacocca when he took over Chrysler Corporation in the 1980s:

What I found at Chrysler were thirty-five vice presidents, each with his own turf ... I couldn't believe, for example, that the guy running engineering departments wasn't in constant touch with his counterpart in manufacturing. But that's how it was. Everybody worked independently. I took one look at that system and I almost threw up. That's when I knew I was in really deep trouble... Nobody at Chrysler seemed to understand that interaction among the different functions in a company is absolutely critical. People in engineering and manufacturing almost have to be sleeping together. These guys weren't even flirting!\frac{1}{2}

During his tenure at Chrysler, Iacocca pushed horizontal coordination to a high level. Everyone working on a specific vehicle project—designers, engineers, and manufacturers, as well as representatives from marketing, finance, purchasing, and even outside suppliers—worked together on a single floor so they could easily communicate.

Horizontal linkage mechanisms often are not drawn on the organization chart, but nevertheless are a vital part of organization structure. The following devices are

Briefcase

As an organization manager, keep these guidelines in mind:

Provide vertical and horizontal information linkages to integrate diverse departments into a coherent whole. Achieve vertical linkage through hierarchy referral, rules and plans, and vertical information systems. Achieve horizontal linkage through crossfunctional information systems, direct contact, task forces, full-time integrators, and teams.



structural alternatives that can improve horizontal coordination and information flow.¹⁵ Each device enables people to exchange information.

Information Systems. A significant method of providing horizontal linkage in today's organizations is the use of cross-functional information systems. Computerized information systems enable managers or frontline workers throughout the organization to routinely exchange information about problems, opportunities, activities, or decisions. For example, Siemens uses an organization-wide information system that enables 450,000 employees around the world to share knowledge and collaborate on projects to provide better solutions to customers. The information and communications division recently collaborated with the medical division to develop new products for the health care market.¹⁶

Some organizations also encourage employees to use the company's information systems to build relationships all across the organization, aiming to support and enhance ongoing horizontal coordination across projects and geographical boundaries. CARE International, one of the world's largest private international relief organizations, enhanced its personnel database to make it easy for people to find others with congruent interests, concerns, or needs. Each person in the database has listed past and current responsibilities, experience, language abilities, knowledge of foreign countries, emergency experiences, skills and competencies, and outside interests. The database makes it easy for people working across borders to seek each other out, share ideas and information, and build enduring horizontal connections.¹⁷

Direct Contact. A higher level of horizontal linkage is direct contact between managers or employees affected by a problem. One way to promote direct contact is to create a special **liaison role**. A liaison person is located in one department but has the responsibility for communicating and achieving coordination with another department. Liaison roles often exist between engineering and manufacturing departments because engineering has to develop and test products to fit the limitations of manufacturing facilities. Companies also implement other forms of direct contact. At Johnson & Johnson, top executives set up a committee made up of managers from research and development (R&D) and sales and marketing. The direct contact between managers in these two departments enables the company to establish priorities for which new drugs to pursue and market. J & J's CEO also created a new position to oversee R&D, with an express charge to increase coordination with sales and marketing executives.¹⁸

Task Forces. Liaison roles usually link only two departments. When linkage involves several departments, a more complex device such as a task force is required. A **task force** is a temporary committee composed of representatives from each organizational unit affected by a problem. Each member represents the interest of a department or division and can carry information from the meeting back to that department.

Task forces are an effective horizontal linkage device for temporary issues. They solve problems by direct horizontal coordination and reduce the information load on the vertical hierarchy. Typically, they are disbanded after their tasks are accomplished.

Organizations have used task forces for everything from organizing the annual company picnic to solving expensive and complex manufacturing problems. One

example is the Executive Automotive Committee established by Jürgen Schremp when he was CEO of DaimlerChrysler (now Daimler AG) This task force was set up specifically to identify ideas for increasing cooperation and component sharing among Mercedes, Chrysler (which was then owned by Daimler) and Mitsubishi (in which DaimlerChrysler owned a 37 percent stake). The task force started with a product road map, showing all Mercedes, Chrysler, Dodge, Jeep, and Mitsubishi vehicles to be launched over a ten-year period, along with an analysis of the components they would use, so task force members could identify overlap and find ways to share parts and cut time and costs.²⁰

2 Committees and task forces whose members are from different departments are often worthless for getting things done.

ANSWER: Disagree. The point of cross-functional committees and task forces is to share information to coordinate their departmental activities. Meeting, talking, and disagreeing is the work of the committee. These groups should not try to "get things done" in the sense of being efficient.

ASSESS YOUR ANSWER

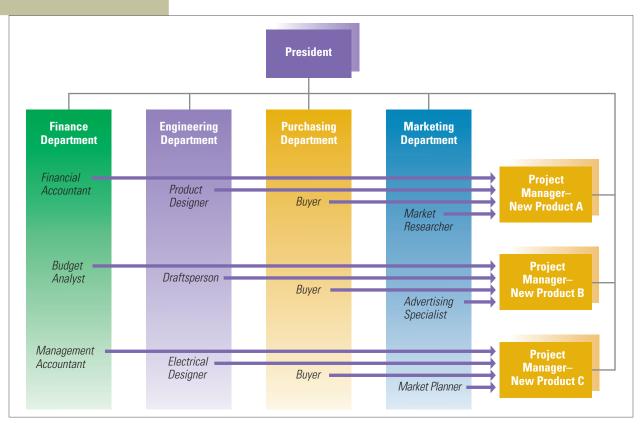
Full-time Integrator. A stronger horizontal linkage device is to create a full-time position or department solely for the purpose of coordination. A full-time **integrator** frequently has a title, such as product manager, project manager, program manager, or brand manager. Unlike the liaison person described earlier, the integrator does not report to one of the functional departments being coordinated. He or she is located outside the departments and has the responsibility for coordinating several departments. The brand manager for Planters Peanuts, for example, coordinates the sales, distribution, and advertising for that product.

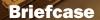
The integrator can also be responsible for an innovation or change project, such as coordinating the design, financing, and marketing of a new product. An organization chart that illustrates the location of project managers for new product development is shown in Exhibit 3.3. The project managers are drawn to the side to indicate their separation from other departments. The arrows indicate project members assigned to the new product development. New Product A, for example, has a financial accountant assigned to keep track of costs and budgets. The engineering member provides design advice, and purchasing and manufacturing members represent their areas. The project manager is responsible for the entire project. He or she sees that the new product is completed on time, is introduced to the market, and achieves other project goals. The horizontal lines in Exhibit 3.3 indicate that project managers do not have formal authority over team members with respect to giving pay raises, hiring, or firing. Formal authority rests with the managers of the functional departments, who have formal authority over subordinates.

Integrators need excellent people skills. Integrators in most companies have a lot of responsibility but little authority. The integrator has to use expertise and persuasion to achieve coordination. He or she spans the boundary between departments and must be able to get people together, maintain their trust, confront problems, and resolve conflicts and disputes in the interest of the organization.²¹



EXHIBIT 3.3Project Manager Location in the Structure





As an organization manager, keep this guideline in mind:

Recognize that the strongest horizontal linkage mechanisms are more costly in terms of time and human resources but are necessary when the organization needs a high degree of horizontal coordination to achieve its goals.

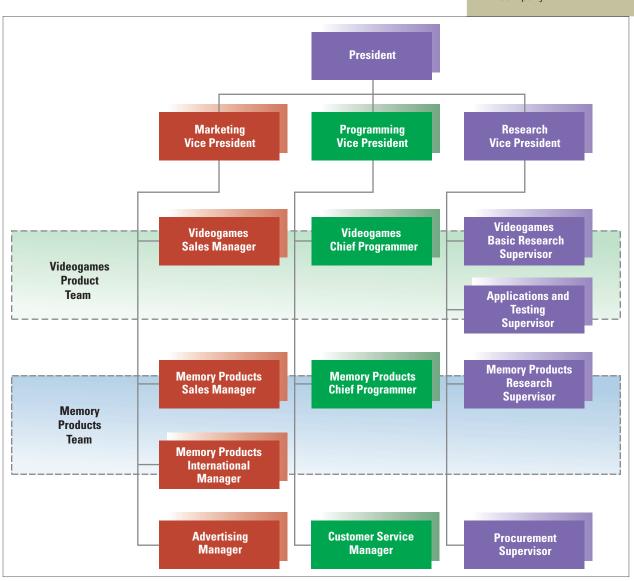
Teams. Project teams tend to be the strongest horizontal linkage mechanism. **Teams** are permanent task forces and are often used in conjunction with a full-time integrator. When activities among departments require strong coordination over a long period of time, a cross-functional team is often the solution. Special project teams may be used when organizations have a large-scale project, a major innovation, or a new product line. One good example of a special project team comes from Healthwise, a nonprofit organization that works with numerous health care organizations and online health sites like WebMD. The company put together a special project team made up of doctors, other health specialists, writers, and technical people to create a new product line called HealthMastery Campaigns. HealthMastery is a series of programs that e-mails information, surveys, and reminders to consumers on topics such as asthma, back problems, or smoking cessation, fitting with the company's goal of providing information to help consumers make informed healthcare decisions.²²

Hewlett-Packard's Medical Products Group uses *virtual cross-functional teams*, made up of members from various countries, to develop and market medical products and services such as electrocardiograph systems, ultrasound imaging technologies, and patient monitoring systems.²³ A **virtual team** is one that is made up of organizationally or geographically dispersed members who are linked primarily through

advanced information and communications technologies. Members frequently use the Internet and collaboration software to work together, rather than meeting face to face.²⁴ IBM's virtual teams, for instance, collaborate primarily via internal websites using wiki technology.²⁵

An illustration of how teams provide strong horizontal coordination is shown in Exhibit 3.4. Wizard Software Company develops and markets software for various applications, from videogames to financial services. Wizard uses teams to coordinate each product line across the research, programming, and marketing departments, as illustrated by the dashed lines and shaded areas in the exhibit. Members from each

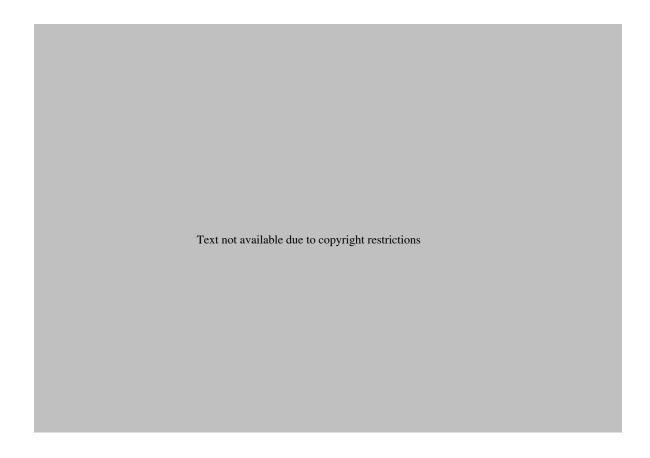
EXHIBIT 3.4
Teams Used for
Horizontal Coordination
at Wizard Software
Company





team meet at the beginning of each day as needed to resolve problems concerning customer needs, backlogs, programming changes, scheduling conflicts, and any other problem with the product line. Are you cut out for horizontal team work? Complete the questionnaire in the "How Do You Fit the Design?" box to assess your feelings about working on a team.

Exhibit 3.5 summarizes the mechanisms for achieving horizontal linkages. These devices represent alternatives that managers can select to increase horizontal coordination in any organization. The higher-level devices provide more horizontal information capacity, although the cost to the organization in terms of time and human resources is greater. If horizontal communication is insufficient, departments will find themselves out of synchronization and will not contribute to the overall goals of the organization. When the amount of horizontal coordination needed is high, managers should select higher-level mechanisms.



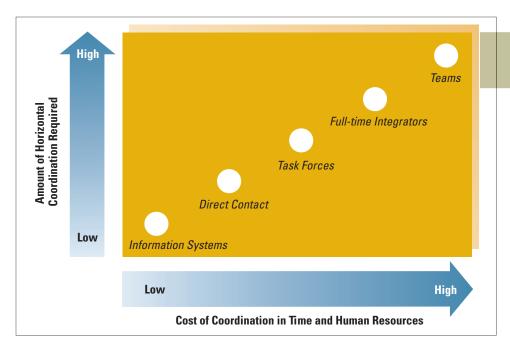


EXHIBIT 3.5
Ladder of Mechanisms
for Horizontal Linkage
and Coordination

ORGANIZATION DESIGN ALTERNATIVES

The overall design of organization structure indicates three things—required work activities, reporting relationships, and departmental groupings.

Required Work Activities

Departments are created to perform tasks considered strategically important to the company. For example, in a typical manufacturing company, work activities fall into a range of functions that help the organization accomplish its goals, such as a human resource department to recruit and train employees, a purchasing department to obtain supplies and raw materials, a production department to build products, a sales department to sell products, and so forth. As organizations grow larger and more complex, managers find that more functions need to be performed. Organizations typically define new positions, departments, or divisions as a way to accomplish new tasks deemed valuable by the organization. An interesting example comes from the United States Army, which created a small aviation unit to provide surveillance in Iraq. The new unit was to be focused on detecting and stopping insurgents planting roadside bombs. Previously, the Army had relied totally on air surveillance from the Air Force, but those resources were limited and had to be assigned by top headquarters. The Army's new aviation unit is on call for commanders in the field and fits with the Army's goal of being more responsive to the needs of smaller combat units in direct conflict with adversaries.26



Reporting Relationships

Once required work activities and departments are defined, the next question is how these activities and departments should fit together in the organizational hierarchy. Reporting relationships, often called the *chain of command*, are represented by vertical lines on an organization chart. The chain of command should be an unbroken line of authority that links all persons in an organization and shows who reports to whom. In a large organization such as General Electric, Bank of America, or Microsoft, 100 or more charts might be needed to identify reporting relationships among thousands of employees. The definition of departments and the drawing of reporting relationships define how employees are to be grouped into departments.

Departmental Grouping Options

Options for departmental grouping, including functional grouping, divisional grouping, multifocused grouping, horizontal grouping, and virtual network grouping, are illustrated in Exhibit 3.6. **Departmental grouping** affects employees because they share a common supervisor and common resources, are jointly responsible for performance, and tend to identify and collaborate with one another.²⁷

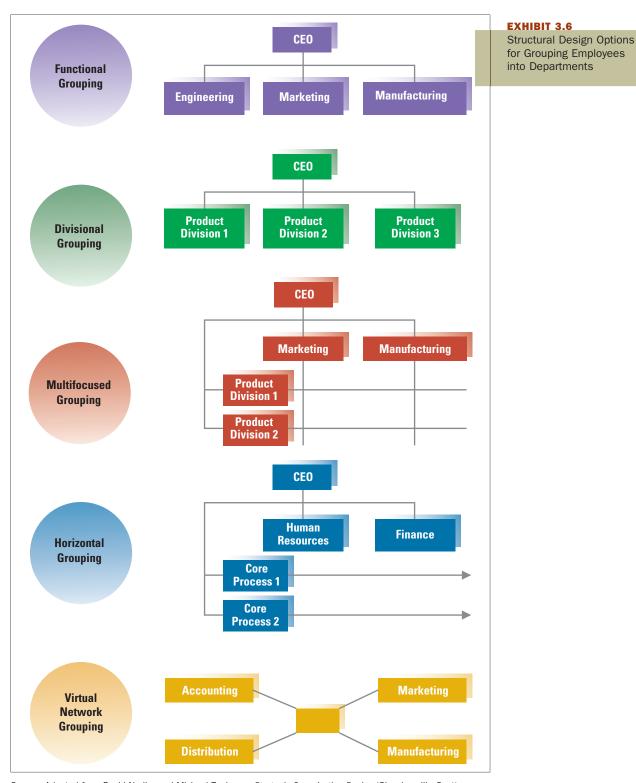
Functional grouping places together employees who perform similar functions or work processes or who bring similar knowledge and skills to bear. For example, all marketing people work together under the same supervisor, as do all manufacturing employees, all human resources people, and all engineers. For an Internet company, all the people associated with maintaining the website might be grouped together in one department. In a scientific research firm, all chemists may be grouped in a department different from biologists because they represent different disciplines.

Divisional grouping means people are organized according to what the organization produces. All people required to produce toothpaste—including personnel in marketing, manufacturing, and sales—are grouped together under one executive. In huge corporations, such as Time Warner Corporation, some product or service lines may represent independent businesses, such as Warner Brothers Entertainment (movies and videos), Time Inc. (publisher of magazines such as *Sports Illustrated*, *Time*, and *People*), and AOL (Internet services).

Multifocused grouping means an organization embraces two or more structural grouping alternatives simultaneously. These structural forms are often called *matrix* or *hybrid*. They will be discussed in more detail later in this chapter. An organization may need to group by function and product division simultaneously or might need to combine characteristics of several structural options.

Horizontal grouping means employees are organized around core work processes, the end-to-end work, information, and material flows that provide value directly to customers. All the people who work on a core process are brought together in a group rather than being separated into functional departments. For example, at field offices of the U.S. Occupational Safety and Health Administration, teams of workers representing various functions respond to complaints from American workers regarding health and safety issues, rather than having the work divided up among specialized employees.²⁸

Virtual network grouping is the most recent approach to departmental grouping. With this grouping, the organization is a loosely connected cluster of separate components. In essence, departments are separate organizations that are electronically connected for the sharing of information and completion of tasks. Departments can be spread all over the world rather than located together in one geographic location.



Source: Adapted from David Nadler and Michael Tushman, Strategic Organization Design (Glenview, III.: Scott Foresman, 1988), 68.



The organizational forms described in Exhibit 3.6 provide the overall options within which the organization chart is drawn and the detailed structure is designed. Each structural design alternative has significant strengths and weaknesses, to which we now turn.

FUNCTIONAL, DIVISIONAL, AND GEOGRAPHIC DESIGNS

Functional grouping and divisional grouping are the two most common approaches to structural design.

Functional Structure

In a **functional structure**, activities are grouped together by common function from the bottom to the top of the organization. All engineers are located in the engineering department, and the vice president of engineering is responsible for all engineering activities. The same is true in marketing, R&D, and manufacturing. An example of the functional organization structure was shown in Exhibit 3.1 earlier in this chapter.

With a functional structure, all human knowledge and skills with respect to specific activities are consolidated, providing a valuable depth of knowledge for the organization. This structure is most effective when in-depth expertise is critical to meeting organizational goals, when the organization needs to be controlled and coordinated through the vertical hierarchy, and when efficiency is important. The structure can be quite effective if there is little need for horizontal coordination. Exhibit 3.7 summarizes the strengths and weaknesses of the functional structure.

One strength of the functional structure is that it promotes economy of scale within functions. Economy of scale results when all employees are located in the same place and can share facilities. Producing all products in a single plant, for example, enables the plant to acquire the latest machinery. Constructing only

EXHIBIT 3.7

Strengths and Weaknesses of Functional Organization Structure

Strengths Weaknesses 1. Allows economies of scale within 1. Slow response time to functional departments environmental changes 2. Enables in-depth knowledge and 2. May cause decisions to pile on top; skill development hierarchy overload 3. Enables organization to accomplish 3. Leads to poor horizontal functional goals coordination among departments 4. Is best with only one or a few 4. Results in less innovation products 5. Involves restricted view of organizational goals

Source: Organizational Dynamics by Duncan. Copyright 1979 by Elsevier Science & Technology Journals. Reproduced with permission of Elsevier Science & Technology Journals in the format Other book via Copyright Clearance Center.



one facility instead of separate facilities for each product line reduces duplication and waste. The functional structure also promotes in-depth skill development of employees. Employees are exposed to a range of functional activities within their own department.²⁹

The main weakness of the functional structure is a slow response to environmental changes that require coordination across departments. The vertical hierarchy becomes overloaded. Decisions pile up, and top managers do not respond fast enough. Other disadvantages of the functional structure are that innovation is slow because of poor coordination, and each employee has a restricted view of overall goals.

Some organizations perform very effectively with a functional structure. Consider the case of Blue Bell Creameries, Inc.

It is the third best-selling brand of ice cream in the United States but many Americans have never heard of it. That's because Blue Bell Creameries, with headquarters in Brenham,



Texas, sells its ice cream in only seventeen, mostly southern, states. Keeping distribution limited "allows us to focus on making and selling ice cream," says CEO and president Paul Kruse, the fourth generation of Kruses to run Blue Bell. Or, as another family slogan puts it, "It's a cinch by the inch but it's hard by the yard."

The "little creamery in Brenham," as the company markets itself, is obsessed with quality control and doesn't let anyone outside the company touch its product from the plant to the freezer case. "We make it all, we deliver it all in our own trucks, and we maintain all the stock in retailers' freezers," says chairman Ed Kruse. At one time, the company was even buying packages of Oreos at retail prices, cutting open each package by hand, and dumping the cookies into the mixers to make Blue Bell's Cookies 'n Cream flavor. Blue Bell sells more than \$400 million in ice cream a year and commands a huge percentage of the ice cream market in Texas, Louisiana, and Alabama. People outside the region often pay \$89 to have four half-gallons packed in dry ice and shipped to them. Despite the demand, management refuses to compromise quality by expanding into regions that cannot be satisfactorily serviced or by growing so fast that the company can't adequately train employees in the art of making ice cream.

Blue Bell's major departments are sales, quality control, production, maintenance, and distribution. There is also an accounting department and a small R&D group. Most employees have been with the company for years and have a wealth of experience in making quality ice cream. The environment is stable. The customer base is well established. The only change has been the increase in demand for Blue Bell Ice Cream.³⁰

The functional structure is just right for Blue Bell Creameries. The organization has chosen to stay medium-sized and focus on making a single product—quality ice cream. However, as Blue Bell expands, it may have problems coordinating across departments, requiring stronger horizontal linkage mechanisms.

Functional Structure with Horizontal Linkages

A recent survey found that organizing by functions is still the prevalent approach to organization design.³¹ However, in today's fast-moving world, very few companies can be successful with a strictly functional structure. Organizations compensate for

Blue Bell Creameries, Inc.



As an organization manager, keep these guidelines in mind:

When designing overall organization structure, choose a functional structure when efficiency is important, when indepth knowledge and expertise are critical to meeting organizational goals, and when the organization needs to be controlled and coordinated through the vertical hierarchy. Use a divisional structure in a large organization with multiple product lines and when you wish to give priority to product goals and coordination across functions.

the vertical functional hierarchy by installing horizontal linkages, as described earlier in this chapter. Managers improve horizontal coordination by using information systems, direct contact between departments, full-time integrators or project managers (illustrated in Exhibit 3.3), task forces, or teams (illustrated in Exhibit 3.4). One interesting use of horizontal linkages occurred at Karolinska Hospital in Stockholm, Sweden, which had forty-seven functional departments. Even after top executives cut that down to eleven, coordination was still inadequate. The top executive team set about reorganizing workflow at the hospital around patient care. Instead of bouncing a patient from department to department, Karolinska now envisions the illness to recovery period as a process with "pit stops" in admissions, X-ray, surgery, and so forth. The most interesting aspect of the approach is the new position of nurse coordinator. Nurse coordinators serve as full-time integrators, troubleshooting transitions within or between departments. The improved horizontal coordination dramatically improved productivity and patient care at Karolinska.³² Karolinska is effectively using horizontal linkages to overcome some of the disadvantages of the functional structure.

Divisional Structure

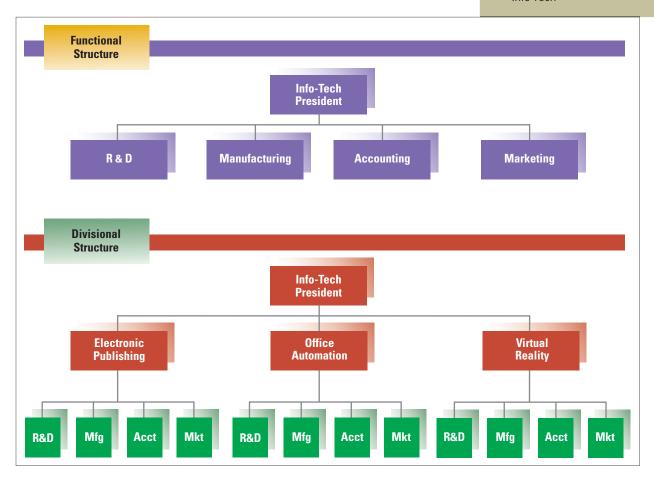
The term **divisional structure** is used here as the generic term for what is sometimes called a *product structure* or *strategic business units*. With this structure, divisions can be organized according to individual products, services, product groups, major projects or programs, divisions, businesses, or profit centers. The distinctive feature of a divisional structure is that grouping is based on organizational outputs. For example, United Technologies Corporation (UTC), which is among the 50 largest U.S. industrial firms, has numerous divisions, including Carrier (air conditioners and heating), Otis (elevators and escalators), Pratt & Whitney (aircraft engines), and Sikorsky (helicopters).³³

The difference between a divisional structure and a functional structure is illustrated in Exhibit 3.8. The functional structure can be redesigned into separate product groups, and each group contains the functional departments of R&D, manufacturing, accounting, and marketing. Coordination across functional departments within each product group is maximized. The divisional structure promotes flexibility and change because each unit is smaller and can adapt to the needs of its environment. Moreover, the divisional structure *decentralizes* decision making, because the lines of authority converge at a lower level in the hierarchy. The functional structure, by contrast, is *centralized*, because it forces decisions all the way to the top before a problem affecting several functions can be resolved.

Strengths and weaknesses of the divisional structure are summarized in Exhibit 3.9. The divisional organization structure is excellent for achieving coordination across functional departments. It works well when organizations can no longer be adequately controlled through the traditional vertical hierarchy, and when goals are oriented toward adaptation and change. Giant, complex organizations such as General Electric, Nestlé, and Johnson & Johnson are subdivided into a series of smaller, self-contained organizations for better control and coordination. In these large companies, the units are sometimes called divisions, businesses, or strategic business units. The structure at Johnson & Johnson includes some 250 separate operating units, including McNeil Consumer Products, makers of Tylenol; Ortho Pharmaceuticals, which makes Retin-A and birth-control pills; and J & J Consumer Products, the company that brings us



EXHIBIT 3.8
Reorganization from
Functional Structure to
Divisional Structure at
Info-Tech



Johnson's Baby Shampoo and Band-Aids. Each unit is a separately chartered, autonomous company operating under the guidance of Johnson & Johnson's corporate headquarters.³⁴ Some U.S. government organizations also use a divisional structure to better serve the public. One example is the Internal Revenue Service, which wanted to be more customer oriented. The agency shifted its focus to informing, educating, and serving the public through four separate divisions serving distinct taxpayer groups—individual taxpayers, small businesses, large businesses, and tax-exempt organizations. Each division has its own budget, personnel, policies, and planning staffs that are focused on what is best for each particular taxpayer segment.³⁵

The divisional structure has several strengths.³⁶ This structure is suited to fast change in an unstable environment and provides high product or service visibility. Since each product line has its own separate division, customers are able to contact the correct division and achieve satisfaction. Coordination across functions is excellent. Each product can adapt to requirements of individual customers or regions. The divisional structure typically works best in organizations that have



EXHIBIT 3.9 Strengths and Weaknesses of Divisional Organization Structure

Strengths

- 1. Suited to fast change in unstable environment
- Leads to customer satisfaction because product responsibility and contact points are clear
- Involves high coordination across functions
- 4. Allows units to adapt to differences in products, regions, customers
- 5. Best in large organizations with several products
- 6. Decentralizes decision making

Weaknesses

- 1. Eliminates economies of scale in functional departments
- Leads to poor coordination across product lines
- 3. Eliminates in-depth competence and technical specialization
- 4. Makes integration and standardization across product lines difficult

Source: Organizational Dynamics by Duncan. Copyright 1979 by Elsevier Science & Technology Journals. Reproduced with permission of Elsevier Science & Technology Journals in the format Textbook via Copyright Clearance Center.

multiple products or services and enough personnel to staff separate functional units. Decision making is pushed down to the divisions. Each division is small enough to be quick on its feet, responding rapidly to changes in the market.

One disadvantage of using divisional structuring is that the organization loses economies of scale. Instead of fifty research engineers sharing a common facility in a functional structure, ten engineers may be assigned to each of five product divisions. The critical mass required for in-depth research is lost, and physical facilities have to be duplicated for each product line. Another problem is that product lines become separate from each other, and coordination across product lines can be difficult. As one Johnson & Johnson executive said, "We have to keep reminding ourselves that we work for the same corporation." ³⁷

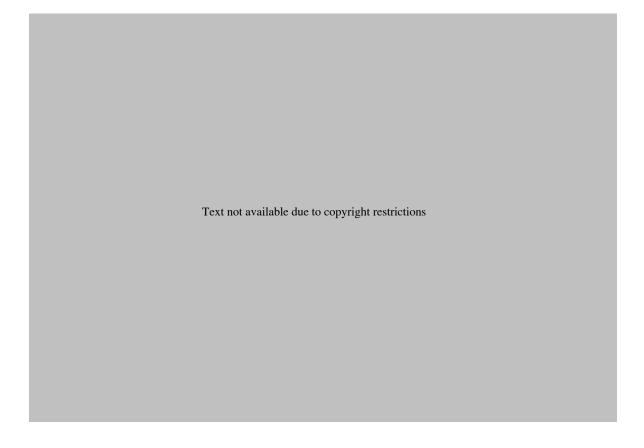
Some companies that have a large number of divisions have had real problems with cross-unit coordination. Sony lost the digital media products business to Apple partly because of poor coordination. With the introduction of the iPod, Apple quickly captured 60 percent of the U.S. market versus 10 percent for Sony. The digital music business depends on seamless coordination. Sony's Walkman didn't even recognize some of the music sets that could be made with the company's SonicStage software and thus didn't mesh well with the division selling music downloads.³⁸ Unless effective horizontal mechanisms are in place, a divisional structure can hurt overall performance. One division may produce products or programs that are incompatible with products sold by another division, as at Sony. Customers can become frustrated when a sales representative from one division is unaware of developments in other divisions. Task forces and other horizontal linkage devices are needed to coordinate across divisions. A lack of technical specialization is also a problem in a divisional structure. Employees identify with the product line rather than with a functional specialty. R&D personnel, for example, tend to do applied research to benefit the product line rather than basic research to benefit the entire organization.

Geographic Structure

Another basis for structural grouping is the organization's users or customers. The most common structure in this category is geography. Each region of the country may have distinct tastes and needs. Each geographic unit includes all functions required to produce and market products or services in that region. Large non-profit organizations such as the Girl Scouts of the USA, Habitat for Humanity, Make-A-Wish Foundation, and the United Way of America frequently use a type of geographic structure, with a central headquarters and semi-autonomous local units. The national organization provides brand recognition, coordinates fund-raising services, and handles some shared administrative functions, while day-to-day control and decision making is decentralized to local or regional units.³⁹

For multinational corporations, self-contained units are created for different countries and parts of the world. Exhibit 3.10 shows a potential geographic structure for a computer company. This structure focuses managers and employees on specific geographic regions and sales targets.⁴⁰ Top executives at Citigroup are considering reorganizing to a geographic structure to improve efficiency and give the giant global corporation a more unified face to local customers. The reorganization would put one top manager in charge of all the various banking operations throughout a specific region such as Asia, Europe, or North America.⁴¹

The strengths and weaknesses of a geographic divisional structure are similar to the divisional organization characteristics listed in Exhibit 3.9. The organization can adapt to the specific needs of its own region, and employees identify with regional



adapt to the specific needs of its own region, and employees identify with regional goals rather than with national goals. Horizontal coordination within a region is emphasized rather than linkages across regions or to the national office.

Briefcase

As an organization manager, keep these guidelines in mind:

Consider a matrix structure when the organization needs to give equal priority to both products and functions because of dual pressures from customers in the environment. Use either a functional matrix or a product matrix if the balanced matrix with dual lines of authority is not appropriate for your organization.

MATRIX STRUCTURE

Sometimes, an organization's structure needs to be multifocused in that both product and function or product and geography are emphasized at the same time. One way to achieve this is through the **matrix structure**. The matrix can be used when both technical expertise and product innovation and change are important for meeting organizational goals. The matrix structure often is the answer when organizations find that the functional, divisional, and geographic structures combined with horizontal linkage mechanisms will not work.

The matrix is a strong form of horizontal linkage. The unique characteristic of the matrix organization is that both product divisions and functional structures (horizontal and vertical) are implemented simultaneously, as shown in Exhibit 3.11. The product managers and functional managers have equal authority within the organization, and employees report to both of them. The matrix structure is similar to the use of full-time integrators or product managers described earlier in this chapter (Exhibit 3.3), except that in the matrix structure the product managers (horizontal) are given formal authority equal to that of the functional managers (vertical).

Conditions for the Matrix

A dual hierarchy may seem an unusual way to design an organization, but the matrix is the correct structure when the following conditions are present:⁴²

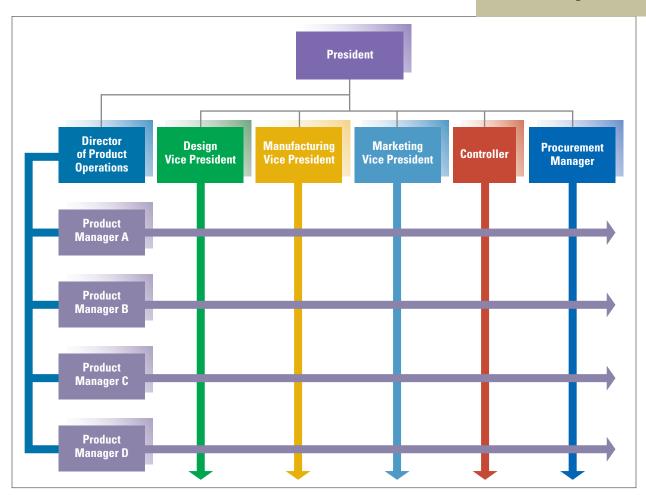
- Condition 1. Pressure exists to share scarce resources across product lines. The organization is typically medium sized and has a moderate number of product lines. It feels pressure for the shared and flexible use of people and equipment across those products. For example, the organization is not large enough to assign engineers full-time to each product line, so engineers are assigned parttime to several products or projects.
- Condition 2. Environmental pressure exists for two or more critical outputs, such as for in-depth technical knowledge (functional structure) and frequent new products (divisional structure). This dual pressure means a balance of power is needed between the functional and product sides of the organization, and a dual-authority structure is needed to maintain that balance.
- Condition 3. The environmental domain of the organization is both complex and uncertain. Frequent external changes and high interdependence between departments require a large amount of coordination and information processing in both vertical and horizontal directions.

Under these three conditions, the vertical and horizontal lines of authority must be given equal recognition. A dual-authority structure is thereby created so the balance of power between them is equal.

Referring again to Exhibit 3.11, assume the matrix structure is for a clothing manufacturer. Product A is footwear, product B is outerwear, product C is sleepwear, and so on. Each product line serves a different market and customers. As a medium-size organization, the company must effectively use people from manufacturing, design, and marketing to work on each product line. There are not enough designers



EXHIBIT 3.11Dual-Authority Structure in a Matrix Organization



to warrant a separate design department for each product line, so the designers are shared across product lines. Moreover, by keeping the manufacturing, design, and marketing functions intact, employees can develop the in-depth expertise to serve all product lines efficiently.

The matrix formalizes horizontal teams along with the traditional vertical hierarchy and tries to give equal balance to both. However, the matrix may shift one way or the other. Many companies have found a balanced matrix hard to implement and maintain because one side of the authority structure often dominates. As a consequence, two variations of matrix structure have evolved—the **functional matrix** and the **product matrix**. In a functional matrix, the functional bosses have primary authority and the project or product managers simply coordinate product activities. In a product matrix, by contrast, the project or product managers have primary authority and functional managers simply assign technical personnel to projects and provide advisory expertise as needed. For many organizations, one of these approaches works better than the balanced matrix with dual lines of authority.⁴³

All kinds of organizations have experimented with the matrix, including hospitals, consulting firms, banks, insurance companies, government agencies, and many



types of industrial firms.⁴⁴ This structure has been used successfully by large, global organizations such as Procter & Gamble, Unilever, and Dow Chemical, which fine-tuned the matrix to suit their own particular goals and culture.

Strengths and Weaknesses

The matrix structure is best when environmental change is high and when goals reflect a dual requirement, such as for both product and functional goals. The dual-authority structure facilitates communication and coordination to cope with rapid environmental change and enables an equal balance between product and functional bosses. The matrix facilitates discussion and adaptation to unexpected problems. It tends to work best in organizations of moderate size with a few product lines. The matrix is not needed for only a single product line, and too many product lines make it difficult to coordinate both directions at once. Exhibit 3.12 summarizes the strengths and weaknesses of the matrix structure based on what we know of organizations that use it.⁴⁵

The strength of the matrix is that it enables an organization to meet dual demands from customers in the environment. Resources (people, equipment) can be flexibly allocated across different products, and the organization can adapt to changing external requirements.⁴⁶ This structure also provides an opportunity for employees to acquire either functional or general management skills, depending on their interests.

One disadvantage of the matrix is that some employees experience dual authority, reporting to two bosses and sometimes juggling conflicting demands. This can be frustrating and confusing, especially if roles and responsibilities are not clearly defined by top managers.⁴⁷ Employees working in a matrix need excellent interpersonal and conflict-resolution skills, which may require special training in human

EXHIBIT 3.12

Strengths and Weaknesses of Matrix Organization Structure

Strengths

- Achieves coordination necessary to meet dual demands from customers
- 2. Flexible sharing of human resources across products
- Suited to complex decisions and frequent changes in unstable environment
- Provides opportunity for both functional and product skill development
- 5. Best in medium-sized organizations with multiple products

Weaknesses

- Causes participants to experience dual authority, which can be frustrating and confusing
- 2. Means participants need good interpersonal skills and extensive training
- Is time consuming; involves frequent meetings and conflict resolution sessions
- Will not work unless participants understand it and adopt collegial rather than vertical type relationships
- 5. Requires great effort to maintain power balance

Source: Adapted from Robert Duncan, "What Is the Right Organization Structure? Decision Tree Analysis Provides the Answer," *Organizational Dynamics* (Winter 1979), 429.



relations. The matrix also forces managers to spend a great deal of time in meetings.⁴⁸ If managers do not adapt to the information and power sharing required by the matrix, the system will not work. Managers must collaborate with one another rather than rely on vertical authority in decision making. The successful implementation of one matrix structure occurred at a steel company in Great Britain.

As far back as anyone could remember, the steel industry in England was stable and certain. Then in the 1980s and 1990s, excess European steel capacity, an eco-



Englander Steel

nomic downturn, the emergence of the mini mill electric arc furnace, and competition from steelmakers in Germany and Japan forever changed the steel industry. By the turn of the century, traditional steel mills in the United States, such as Bethlehem Steel and LTV Corporation, were facing bankruptcy. Mittal Steel in Asia and Europe's leading steelmaker, Arcelor, started acquiring steel companies to become world steel titans. The survival hope of small traditional steel manufacturers was to sell specialized products. A small company could market specialty products aggressively and quickly adapt to customer needs. Complex process settings and operating conditions had to be rapidly changed for each customer's order—a difficult feat for the titans.

Englander Steel employed 2,900 people, made 400,000 tons of steel a year (about 1 percent of Arcelor's output), and was 180 years old. For 160 of those years, a functional structure worked fine. As the environment became more turbulent and competitive, however, Englander Steel managers realized they were not keeping up. Fifty percent of Englander's orders were behind schedule. Profits were eroded by labor, material, and energy cost increases. Market share declined.

In consultation with outside experts, the president of Englander Steel saw that the company had to walk a tightrope. It had to specialize in a few high-value-added products tailored for separate markets, while maintaining economies of scale and sophisticated technology within functional departments. The dual pressure led to an unusual solution for a steel company: a matrix structure.

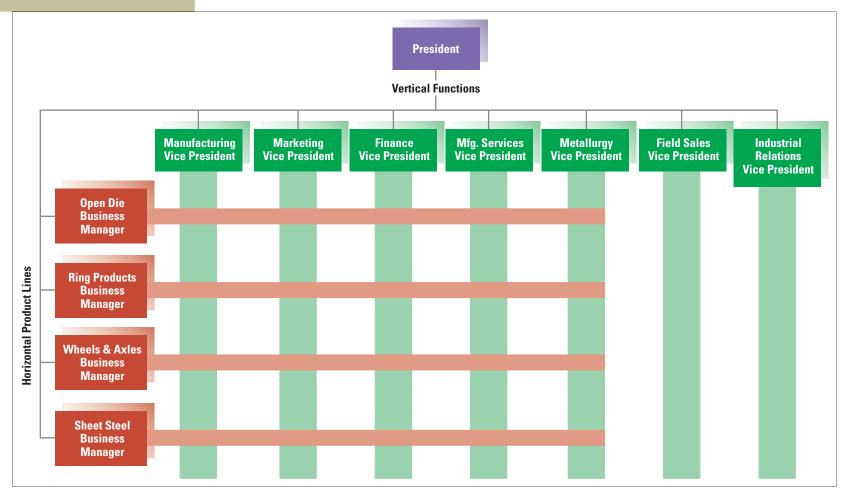
Englander Steel had four product lines: open-die forgings, ring-mill products, wheels and axles, and sheet steel. A business manager was given responsibility for and authority over each line, which included preparing a business plan and developing targets for production costs, product inventory, shipping dates, and gross profit. The managers were given authority to meet those targets and to make their lines profitable. Functional vice presidents were responsible for technical decisions. Functional managers were expected to stay abreast of the latest techniques in their areas and to keep personnel trained in new technologies that could apply to product lines. With 20,000 recipes for specialty steels and several hundred new recipes ordered each month, functional personnel had to stay current. Two functional departments—field sales and industrial relations—were not included in the matrix because they worked independently. The final design was a hybrid matrix structure with both matrix and functional relationships, as illustrated in Exhibit 3.13.

Implementation of the matrix was slow. Middle managers were confused. Meetings to coordinate orders across functional departments seemed to be held every day. After about a year of training by external consultants, Englander Steel was on track. Ninety percent of the orders were now delivered on time and market share recovered. Both productivity and profitability increased steadily. The managers thrived on matrix involvement. Meetings to coordinate product and functional decisions provided a growth experience. Middle managers began including younger managers in the matrix discussions as training for future management responsibility. 49

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EXHIBIT 3.13

Matrix Structure for Englander Steel



This example illustrates the correct use of a matrix structure. The dual pressure to maintain economies of scale and to market four product lines gave equal emphasis to the functional and product hierarchies. Through continuous meetings for coordination, Englander Steel achieved both economies of scale and flexibility.

HORIZONTAL STRUCTURE

A recent approach to organizing is the **horizontal structure**, which organizes employees around core processes. Organizations typically shift toward a horizontal structure during a procedure called reengineering. **Reengineering**, or *business process reengineering*, basically means the redesign of a vertical organization along its horizontal workflows and processes. A **process** refers to an organized group of related tasks and activities that work together to transform inputs into outputs that create value for customers. Examples of processes include order fulfillment, new product development, and customer service. Reengineering changes the way managers think about how work is done. Rather than focusing on narrow jobs structured into distinct functional departments, they emphasize core processes that cut horizontally across the organization and involve teams of employees working together to serve customers.

A good illustration of process is provided by claims handling at Progressive Casualty Insurance Company. In the past, a customer would report an accident to an agent, who would pass the information to a customer service representative, who, in turn, would pass it to a claims manager. The claims manager would batch the claim with others from the same territory and assign it to an adjuster, who would schedule a time to inspect the vehicle damage. Today, adjusters are organized into teams that handle the entire claims process from beginning to end. One member handles claimant calls to the office while others are stationed in the field. When an adjuster takes a call, he or she does whatever is possible over the phone. If an inspection is needed, the adjuster contacts a team member in the field and schedules an appointment immediately. Progressive now measures the time from call to inspection in hours rather than the seven to ten days it once took.⁵¹

When a company is reengineered to a horizontal structure, all employees throughout the organization who work on a particular process (such as claims handling or order fulfillment) have easy access to one another so they can communicate and coordinate their efforts. The horizontal structure virtually eliminates both the vertical hierarchy and old departmental boundaries. This structural approach is largely a response to the profound changes that have occurred in the workplace and the business environment over the past fifteen to twenty years. Technological progress emphasizes computer- and Internet-based integration and coordination. Customers expect faster and better service, and employees want opportunities to use their minds, learn new skills, and assume greater responsibility. Organizations mired in a vertical mindset have a hard time meeting these challenges. Thus, numerous organizations have experimented with horizontal mechanisms such as cross-functional teams to achieve coordination across departments or task forces to accomplish temporary projects. Increasingly, organizations are shifting away from hierarchical, function-based structures to structures based on horizontal processes.

Briefcase

As an organization manager, keep these guidelines in mind:

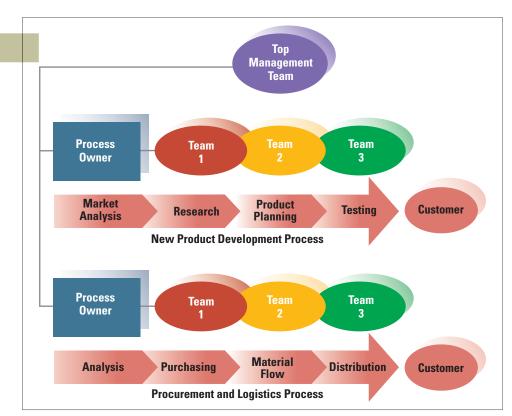
Consider a horizontal structure when customer needs and demands change rapidly and when learning and innovation are critical to organizational success. Carefully determine core processes and train managers and employees to work within the horizontal structure.

EXHIBIT 3.14
A Horizontal Structure

Characteristics

An illustration of a company reengineered into a horizontal structure appears in Exhibit 3.14. Such an organization has the following characteristics:⁵²

- Structure is created around cross-functional core processes rather than tasks, functions, or geography. Thus, boundaries between departments are obliterated. Ford Motor Company's Customer Service Division, for example, has core process groups for business development, parts supply and logistics, vehicle service and programs, and technical support.
- Self-directed teams, not individuals, are the basis of organizational design and performance. Schwa, a restaurant in Chicago that serves elaborate multicourse meals, is run by a team. Members rotate jobs so that everyone is sometimes a chef, sometimes a dishwasher, sometimes a waiter, or sometimes the person who answers the phone, takes reservations, or greets customers at the door.⁵³
- Process owners have responsibility for each core process in its entirety. For Ford's parts supply and logistics process, for example, a number of teams may work on jobs such as parts analysis, purchasing, material flow, and distribution, but a process owner is responsible for coordinating the entire process.
- People on the team are given the skills, tools, motivation, and authority to make
 decisions central to the team's performance. Team members are cross-trained to
 perform one another's jobs, and the combined skills are sufficient to complete a
 major organizational task.



Source: Based on Frank Ostroff, *The Horizontal Organization* (New York: Oxford University Press, 1999); John A. Byrne, "The Horizontal Corporation," *BusinessWeek* (December 20, 1993), 76–81; and Thomas A. Stewart, "The Search for the Organization of Tomorrow." *Fortune* (May 18, 1992), 92–98.



- Teams have the freedom to think creatively and respond flexibly to new challenges that arise.
- Customers drive the horizontal corporation. Effectiveness is measured by endof-process performance objectives (based on the goal of bringing value to the
 customer), as well as customer satisfaction, employee satisfaction, and financial
 contribution.
- The culture is one of openness, trust, and collaboration, focused on continuous improvement. The culture values employee empowerment, responsibility, and well-being.

General Electric's Salisbury, North Carolina, plant shifted to a horizontal structure to improve flexibility and customer service.

General Electric's plant in Salisbury, North Carolina, which manufactures electrical lighting panel boards for industrial and commercial purposes, used to be organized



GE Salisbury

functionally and vertically. Because no two GE customers have identical needs, each panel board has to be configured and built to order, which frequently created bottlenecks in the standard production process. In the mid-1980s, faced with high product-line costs, inconsistent customer service, and a declining market share, managers began exploring new ways of organizing that would emphasize teamwork, responsibility, continuous improvement, empowerment, and commitment to the customer.

By the early 1990s, GE Salisbury had made the transition to a horizontal structure that links sets of multiskilled teams who are responsible for the entire build-to-order process. The new structure is based on the goal of producing lighting panel boards "of the highest possible quality, in the shortest possible cycle time, at a competitive price, with the best possible service." The process consists of four linked teams, each made up of ten to fifteen members representing a range of skills and functions. A production-control team serves as process owner (as illustrated earlier in Exhibit 3.14) and is responsible for order receipt, planning, coordination of production, purchasing, working with suppliers and customers, tracking inventory, and keeping all the teams focused on meeting objectives. The fabrication team cuts, builds, welds, and paints the various parts that make up the steel box that will house the electrical components panel, which is assembled and tested by the electrical components team. The electrical components team also handles shipping. A maintenance team takes care of heavy equipment maintenance that cannot be performed as part of the regular production process. Managers have become associate advisors who serve as guides and coaches and bring their expertise to the teams as needed.

The key to success of the horizontal structure is that all the operating teams work in concert with each other and have access to the information they need to meet team and process goals. Teams are given information about sales, backlogs, inventory, staffing needs, productivity, costs, quality, and other data, and each team regularly shares information about its part of the build-to-order process with the other teams. Joint production meetings, job rotation, and cross-training of employees are some of the mechanisms that help ensure smooth integration. The linked teams assume responsibility for setting their own production targets, determining production schedules, assigning duties, and identifying and solving problems.

(continued)

Productivity and performance have dramatically improved with the horizontal structure. Bottlenecks in the workflow, which once wreaked havoc with production schedules, have been virtually eliminated. A six-week lead time has been cut to two-and-a-half days. More subtle but just as important are the increases in employee and customer satisfaction that GE Salisbury has realized since implementing its new structure.⁵⁴

Strengths and Weaknesses

As with all structures, the horizontal structure has both strengths and weaknesses, as listed in Exhibit 3.15.

The most significant strength of the horizontal structure is enhanced coordination, which can dramatically increase the company's flexibility and response to changes in customer needs. The structure directs everyone's attention toward the customer, which leads to greater customer satisfaction as well as improvements in productivity, speed, and efficiency. In addition, because there are no boundaries between functional departments, employees take a broader view of organizational goals rather than being focused on the goals of a single department. The horizontal structure promotes an emphasis on teamwork and cooperation, so that team members share a commitment to meeting common objectives. Finally, the horizontal structure can improve the quality of life for employees by giving them opportunities to share responsibility, make decisions, and contribute significantly to the organization.

A weakness of the horizontal structure is that it can harm rather than help organizational performance unless managers carefully determine which core processes are critical for bringing value to customers. Simply defining the processes around

EXHIBIT 3.15 Strengths and Weaknesses of

Horizontal Structure

Strengths

- Promotes flexibility and rapid response to changes in customer needs
- Directs the attention of everyone toward the production and delivery of value to the customer
- 3. Each employee has a broader view of organizational goals
- 4. Promotes a focus on teamwork and collaboration
- Improves quality of life for employees by offering them the opportunity to share responsibility, make decisions, and be accountable for outcomes

Weaknesses

- 1. Determining core processes is difficult and time consuming
- Requires changes in culture, job design, management philosophy, and information and reward systems
- 3. Traditional managers may balk when they have to give up power and authority
- 4. Requires significant training of employees to work effectively in a horizontal team environment
- 5. Can limit in-depth skill development

Sources: Based on Frank Ostroff, The Horizontal Organization: What the Organization of the Future Looks Like and How It Delivers Value to Customers (New York: Oxford University Press, 1999); and Richard L. Daft, Organization Theory and Design, 6th ed. (Cincinnati, Ohio: South-Western, 1998), 253.

which to organize can be difficult. In addition, shifting to a horizontal structure is complicated and time consuming because it requires significant changes in culture, job design, management philosophy, and information and reward systems. Traditional managers may balk when they have to give up power and authority to serve instead as coaches and facilitators of teams. Employees have to be trained to work effectively in a team environment. Finally, because of the cross-functional nature of work, a horizontal structure can limit in-depth knowledge and skill development unless measures are taken to give employees opportunities to maintain and build technical expertise.

VIRTUAL NETWORKS AND OUTSOURCING

Recent developments in organization design extend the concept of horizontal coordination and collaboration beyond the boundaries of the traditional organization. The most widespread design trend in recent years has been the outsourcing of various parts of the organization to outside partners.⁵⁵ **Outsourcing** means to contract out certain tasks or functions, such as manufacturing, human resources, or credit processing, to other companies.

Companies in almost every industry are jumping on the outsourcing bandwagon. For example, more than 1,000 law enforcement agencies across the United States have turned to PropertyRoom.com to manage the time-consuming business of cataloging and auctioning off unclaimed stolen goods such as cars, computers, jewelry, or paintings.⁵⁶ And consider the U.S. military, which increasingly uses private military company contractors to handle just about everything except the core activity of fighting battles and securing defensive positions. Kellogg Brown & Root, a subsidiary of the Halliburton Corporation, for instance, builds and maintains military bases and provides catering and cleaning services. In the business world, Wachovia Corporation transferred administration of its human resources programs to Hewitt Associates, and British food retailer J. Sainsbury's lets Accenture handle its entire information technology department. About 20 percent of drug manufacturer Eli Lilly & Company's chemistry work is done in China by start-up labs such as Chem-Explorer; and companies such as India's Wipro, France's S.R. Teleperformance, and the U.S.-based Convergys manage call center and technical support operations for big computer and cell phone companies around the world. Fiat Auto is involved in multiple complex outsourcing relationships with other companies handling logistics, maintenance, and the manufacturing of some parts.⁵⁷

Once, a company's units of operation "were either within the organization and 'densely connected' or they were outside the organization and not connected at all," as one observer phrased it.⁵⁸ Today, the lines are so blurred that it can be difficult to tell what is part of the organization and what is not. IBM handles back-office operations for many large companies, but it also outsources some of its own activities to other firms, which in turn may farm out some of their functions to still other organizations.⁵⁹

A few organizations carry outsourcing to the extreme to create a virtual network structure. With a **virtual network structure**, sometimes called a *modular structure*, the firm subcontracts most of its major functions or processes to separate companies and coordinates their activities from a small headquarters organization.⁶⁰

Briefcase

As an organization manager, keep these guidelines in mind:

Use a virtual network structure for extreme flexibility and rapid response to changing market conditions. Focus on key activities that give the organization its competitive advantage and outsource other activities to carefully selected partners.



How the Structure Works

The virtual network organization may be viewed as a central hub surrounded by a network of outside specialists. Rather than being housed under one roof or located within one organization, services such as accounting, design, manufacturing, marketing, and distribution are outsourced to separate companies that are connected electronically to a central office. Organizational partners located in different parts of the world may use networked computers or the Internet to exchange data and information so rapidly and smoothly that a loosely connected network of suppliers, manufacturers, and distributors can look and act like one seamless company. The virtual network form incorporates a free-market style to replace the traditional vertical hierarchy. Subcontractors may flow into and out of the system as needed to meet changing needs.

With a network structure, the hub maintains control over processes in which it has world-class or difficult-to-imitate capabilities and then transfers other activities—along with the decision making and control over them—to other organizations. These partner organizations organize and accomplish their work using their own ideas, assets, and tools.⁶¹ The idea is that a firm can concentrate on what it does best and contract out everything else to companies with distinctive competence in those specific areas, enabling the organization to do more with less.⁶² The network structure is often advantageous for start-up companies, such as TiVo Inc., the company that introduced the digital video recorder.

PRACTICE

The market for digital video recorders is hot, and major electronics, cable, and satellite companies are getting in on the action. The company that started it all was TiVo, a small

organization based in the San Francisco Bay area.

TiVo Inc.

TiVo's founders developed a technology to allow users to record up to 80 hours of television and replay it at their convenience, without commercial interruption and minus the hassles of digital storage media or videotapes. They knew speed was of the essence if they were to take this new market by storm. The only way to do it was by outsourcing practically everything. TiVo first developed major manufacturing and marketing partnerships with large companies such as Sony, Hughes Electronics, and Royal Philips Electronics. In addition, the company outsourced distribution, public relations, advertising, and customer support. TiVo managers considered the customer support function particularly critical. Because TiVo was a new concept, ordinary call-center approaches wouldn't work. Leaders worked closely with outsourcing partner ClientLogic to develop processes and training materials that would help customer-service agents "think like a TiVo customer."

Using the virtual network structure enabled a small company like TiVo to get the advanced capabilities it needed without having to spend time and limited financial resources building an organization from scratch. TiVo leaders concentrated on technological innovation and developing and managing relationships with outsourcing firms. Today, TiVo has partnership agreements with numerous organizations, including a recent one with YouTube that will allow TiVo subscribers to watch user-generated videos from the website on their televisions, and one with Comcast, the nation's number one cable operator, that will help TiVo reach a larger customer base. The deal with Comcast is critical. Without a cable partner, TiVo would find it difficult to remain a major player in the growing market for digital video recorders.⁶³



EXHIBIT 3.16Partial Virtual Network
Structure at TiVo

TiVo faces stiff competition, but using the virtual network structure enabled it to get established and survive in the growing industry. TiVo is marketing itself as a premium DVR service to compete with the fast-growing and less expensive options offered by satellite and cable providers. Exhibit 3.16 illustrates a simplified network structure for TiVo, showing some of the functions that are outsourced to other companies.

Strengths and Weaknesses

Exhibit 3.17 summarizes the strengths and weaknesses of the virtual network structure. One of the major strengths is that the organization, no matter how small, can be truly global, drawing on resources worldwide to achieve the best quality and price and then selling products or services worldwide just as easily through subcontractors. The network structure also enables a new or small company to develop products or services and get them to market rapidly without huge investments in factories, equipment, warehouses, or distribution facilities. The ability to arrange and rearrange resources to meet changing needs and best serve customers gives the network structure extreme flexibility and rapid response. New technologies can be developed quickly by tapping into a worldwide network of experts. The organization can continually redefine itself to meet changing product or market opportunities. A final strength is reduced administrative overhead. Large teams of staff specialists and administrators are not needed. Managerial and technical talent can be focused on key activities that provide competitive advantage while other activities are outsourced.



EXHIBIT 3.17 Strengths and Weaknesses of Virtual Network Structure

Strengths

- Enables even small organizations to obtain talent and resources worldwide
- Gives a company immediate scale and reach without huge investments in factories, equipment, or distribution facilities
- Enables the organization to be highly flexible and responsive to changing needs
- 4. Reduces administrative overhead costs

Weaknesses

- Managers do not have hands-on control over many activities and employees
- Requires a great deal of time to manage relationships and potential conflicts with contract partners
- 3. There is a risk of organizational failure if a partner fails to deliver or goes out of business
- Employee loyalty and corporate culture might be weak because employees feel they can be replaced by contract services

Sources: Based on Linda S. Ackerman, "Transition Management: An In-Depth Look at Managing Complex Change," *Organizational Dynamics* (Summer 1982), 46–66; and Frank Ostroff, *The Horizontal Organization* (New York: Oxford University Press, 1999), Fig 2.1, 34.

The virtual network structure also has a number of weaknesses. The primary weakness is a lack of control. The network structure takes decentralization to the extreme. Managers do not have all operations under their jurisdiction and must rely on contracts, coordination, and negotiation to hold things together. This also means increased time spent managing relationships with partners and resolving conflicts.

A problem of equal importance is the risk of failure if one organizational partner fails to deliver, has a plant burn down, or goes out of business. Managers in the headquarters organization have to act quickly to spot problems and find new arrangements. Finally, from a human resource perspective, employee loyalty can be weak in a network organization because of concerns over job security. Employees may feel that they can be replaced by contract services. In addition, it is more difficult to develop a cohesive corporate culture. Turnover may be higher because emotional commitment between the organization and employees is low. With changing products, markets, and partners, the organization may need to reshuffle employees at any time to get the correct mix of skills and capabilities.

HYBRID STRUCTURE

As a practical matter, many structures in the real world do not exist in the pure forms we have outlined in this chapter. Most large organizations, in particular, often use a **hybrid structure** that combines characteristics of various approaches tailored to specific strategic needs. Most companies combine characteristics of functional, divisional, geographic, horizontal, or network structures to take advantage of the strengths of various structures and avoid some of the weaknesses. Hybrid structures tend to be used in rapidly changing environments because they offer the organization greater flexibility.

One type of hybrid that is often used is to combine characteristics of the functional and divisional structures. When a corporation grows large and has several products or markets, it typically is organized into self-contained divisions of some type. Functions that are important to each product or market are decentralized to the self-contained units. However, some functions that are relatively stable and require economies of scale and in-depth specialization are also centralized at headquarters. Sun Petroleum Products Corporation (SPPC) reorganized to a hybrid structure to be more responsive to changing markets. The hybrid organization structure adopted by SPPC is illustrated in part 1 of Exhibit 3.18. Three major product divisions—fuels, lubricants, and chemicals—were created, each serving a different market and requiring a different strategy and management style. Each product-line vice president is now in charge of all functions for that product, such as marketing, planning, supply and distribution, and manufacturing. However, activities such as human resources, legal, technology, and finance were centralized as functional departments at headquarters in order to achieve economies of scale. Each of these departments provides services for the entire organization.⁶⁵

A second hybrid approach that is increasingly used today is to combine characteristics of functional, divisional, and horizontal structures. Ford Motor Company's Customer Service Division, a global operation made up of 12,000 employees serving nearly 15,000 dealers, provides an example of this type of hybrid. Beginning in 1995, when Ford launched its "Ford 2000" initiative aimed at becoming the world's leading automotive firm in the twenty-first century, top executives grew increasingly concerned about complaints regarding customer service. They decided that the horizontal model offered the best chance to gain a faster, more efficient, integrated approach to customer service. Part 2 of Exhibit 3.18 illustrates a portion of the Customer Service Division's hybrid structure. Several horizontally aligned groups, made up of multiskilled teams, focus on core processes such as parts supply and logistics (acquiring parts and getting them to dealers quickly and efficiently), vehicle service and programs (collecting and disseminating information about repair problems), and technical support (ensuring that every service department receives updated technical information). Each group has a process owner who is responsible for seeing that the teams meet overall objectives. Ford's Customer Service Division retained a functional structure for its finance, strategy and communications, and human resources departments. Each of these departments provides services for the entire division.66

In a huge organization such as Ford, managers may use a variety of structural characteristics to meet the needs of the total organization. Like many large organizations, for example, Ford also outsources some of its activities to other firms. A hybrid structure is often preferred over the pure functional, divisional, horizontal, or virtual network structure because it can provide some of the advantages of each and overcome some of the disadvantages.

Briefcase

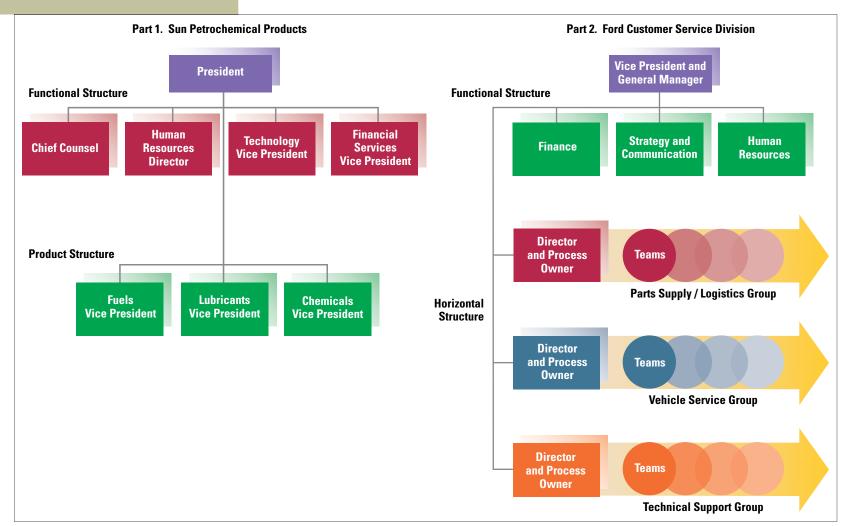
As an organization manager, keep these guidelines in mind:

Implement hybrid structures, when needed, to combine characteristics of functional, divisional, and horizontal structures. Use a hybrid structure in complex environments to take advantage of the strengths of various structural characteristics and avoid some of the weaknesses.

APPLICATIONS OF STRUCTURAL DESIGN

Each type of structure is applied in different situations and meets different needs. In describing the various structures, we touched briefly on conditions such as environmental stability or change and organizational size that are related to structure. Each form of structure—functional, divisional, matrix, horizontal, network, hybrid—represents a tool that can help managers make an organization more effective, depending on the demands of its situation.

EXHIBIT 3.18Two Hybrid Structures



Top managers are smart to maintain organizational control over the activities of key work units rather than contracting out some work unit tasks to other firms.

ANSWER: *Disagree.* Virtual networks and outsourcing forms of organization design have become popular because they offer increased flexibility and more rapid response in a fast-changing environment. Outsourced departments can be added or dropped as conditions change. Keeping control over all activities in-house might be more comfortable for some managers, but it discourages flexibility.

ASSESS YOUR ANSWER

Structural Alignment

Ultimately, the most important decision that managers make about structural design is to find the right balance between vertical control and horizontal coordination, depending on the needs of the organization. Vertical control is associated with goals of efficiency and stability, while horizontal coordination is associated with learning, innovation, and flexibility. Exhibit 3.19 shows a simplified continuum that illustrates how structural approaches are associated with vertical control versus horizontal coordination. The functional structure is appropriate when the organization needs to be coordinated through the vertical hierarchy and when efficiency is important for meeting organizational goals. The functional structure uses task specialization and a strict chain of command to gain efficient use of scarce resources, but it does not enable the organization to be flexible or innovative. At the opposite end of the scale, the horizontal structure is appropriate when the organization has a high need for coordination among functions to achieve innovation and promote learning. The horizontal structure enables organizations to differentiate themselves and respond quickly to changes, but at the expense of efficient resource use. The virtual network structure offers even greater flexibility and potential for rapid response by allowing the organization to add or subtract pieces as needed to adapt and meet changing needs from the environment and marketplace. Exhibit 3.19 also shows how other types of structure defined in this chapter—functional with horizontal linkages, divisional, and matrix—represent intermediate steps on the organization's path to efficiency or innovation and learning. The exhibit does not include all possible structures, but it illustrates how organizations attempt to balance the needs for efficiency and vertical control with innovation and horizontal coordination. In addition, as described in the chapter, many organizations use a hybrid structure to combine characteristics of various structural types.

Symptoms of Structural Deficiency

Top executives periodically evaluate organization structure to determine whether it is appropriate to changing needs. Managers try to achieve the best fit between internal reporting relationships and the needs of the external environment. As a general rule, when organization structure is out of alignment

Briefcase

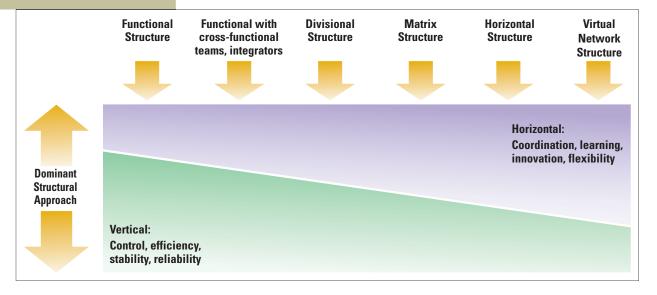
As an organization manager, keep these guidelines in mind:

Find the correct balance between vertical control and horizontal coordination to meet the needs of the organization. Consider a structural reorganization when symptoms of structural deficiency are observed.



EXHIBIT 3.19

Relationship of Structure to Organization's Need for Efficiency versus Learning



with organization needs, one or more of the following symptoms of structural deficiency appear.⁶⁷

- Decision making is delayed or lacking in quality. Decision makers may be overloaded because the hierarchy funnels too many problems and decisions to them. Delegation to lower levels may be insufficient. Another cause of poor-quality decisions is that information may not reach the correct people. Information linkages in either the vertical or horizontal direction may be inadequate to ensure decision quality.
- The organization does not respond innovatively to a changing environment. One reason for lack of innovation is that departments are not coordinated horizontally. The identification of customer needs by the marketing department and the identification of technological developments in the research department must be coordinated. Organization structure also has to specify departmental responsibilities that include environmental scanning and innovation.
- Employee performance declines and goals are not being met. Employee performance may decline because the structure doesn't provide clear goals, responsibilities, and mechanisms for coordination. The structure should reflect the complexity of the market environment yet be straightforward enough for employees to effectively work within.
- Too much conflict is evident. Organization structure should allow conflicting departmental goals to combine into a single set of goals for the entire organization. When departments act at cross-purposes or are under pressure to achieve departmental goals at the expense of organizational goals, the structure is often at fault. Horizontal linkage mechanisms are not adequate.



DESIGN ESSENTIALS

- Organization structure must accomplish two things for the organization. It must provide a framework of responsibilities, reporting relationships, and groupings, and it must provide mechanisms for linking and coordinating organizational elements into a coherent whole. The structure is reflected on the organization chart. Linking the organization into a coherent whole requires the use of information systems and linkage devices in addition to the organization chart.
- Organization structure can be designed to provide vertical and horizontal information linkages based on the information processing required to meet the organization's overall goal. Managers can choose whether to orient toward a traditional organization designed for efficiency, which emphasizes vertical linkages such as hierarchy, rules and plans, and formal information systems, or toward a contemporary organization designed for learning and adaptation, which emphasizes horizontal communication and coordination. Vertical linkages are not sufficient for most organizations today. Organizations provide horizontal linkages through cross-functional information systems, direct contact between managers across department lines, temporary task forces, full-time integrators, and teams.
- Alternatives for grouping employees and departments into overall structural design include functional grouping, divisional grouping, multifocused grouping, horizontal grouping, and virtual network grouping. The choice among functional, divisional, and horizontal structures determines where coordination and integration will be greatest. With functional and divisional structures, managers also use horizontal linkage mechanisms to complement the vertical dimension and achieve integration of departments and levels into an organizational whole. With a horizontal structure, activities are organized horizontally around core work processes.
- A virtual network structure extends the concept of horizontal coordination and collaboration beyond the boundaries of the organization. Core activities are performed by a central hub while other functions and activities are outsourced to contract partners.
- The matrix structure attempts to achieve an equal balance between the vertical and horizontal dimensions of structure. Most organizations do not exist in these pure forms, using instead hybrid structures that incorporate characteristics of two or more types of structure.
- Ultimately, managers attempt to find the correct balance between vertical control and horizontal coordination. Signs of structural misalignment include delayed decision making, lack of innovation, poor employee performance, and excessive conflict.
- Finally, an organization chart is only so many lines and boxes on a piece of paper. The purpose of the organization chart is to encourage and direct employees into activities and communications that enable the organization to achieve its goals. The organization chart provides the structure, but employees provide the behavior. The chart is a guideline to encourage people to work together, but management must implement the structure and carry it out.



Key Concepts

centralized
decentralized
departmental grouping
divisional grouping
divisional structure
functional grouping
functional matrix
functional structure
horizontal grouping
horizontal linkage

horizontal structure hybrid structure integrator liaison role matrix structure multifocused grouping organization structure outsourcing process product matrix reengineering
symptoms of structural deficiency
task force
teams
vertical information system
vertical linkages
virtual network grouping
virtual network structure
virtual team

Discussion Questions

- 1. What is the definition of *organization structure*? Does organization structure appear on the organization chart? Explain.
- 2. When is a functional structure preferable to a divisional structure?
- 3. Large corporations tend to use hybrid structures. Why?
- 4. What are the primary differences between a traditional organization designed for efficiency and a more contemporary organization designed for learning?
- 5. What is the difference between a task force and a team? Between liaison role and integrating role? Which of these provides the greatest amount of horizontal coordination?
- 6. What conditions usually have to be present before an organization should adopt a matrix structure?

- 7. The manager of a consumer products firm said, "We use the brand manager position to train future executives." Why do you think the brand manager position is considered a good training ground? Discuss.
- 8. Why do companies using a horizontal structure have cultures that emphasize openness, employee empowerment, and responsibility? What do you think a manager's job would be like in a horizontally organized company?
- 9. What types of organizational activities do you think are most likely to be outsourced? What types are least likely?
- 10. Describe the virtual network structure. What are the advantages and disadvantages of using this structure compared to performing all activities in-house within an organization?

Chapter 3 Workbook: You and Organization Structure*

To better understand the importance of organization structure in your life, do the following assignment.

Select one of the following situations to organize:

- A copy and print shop
- A travel agency
- A sports rental (such as Jet Skis or snowmobiles) in a resort area
- A bakery

Background

Organization is a way of gaining some power against an unreliable environment. The environment provides the organization with inputs, which include raw materials, human resources, and financial resources. There is a service or product to produce that involves technology. The

output goes to clients, a group that must be nurtured. The complexities of the environment and the technology determine the complexity of the organization.

Planning Your Organization

- 1. Write down the mission or purpose of the organization in a few sentences.
- 2. What are the specific tasks to be completed to accomplish the mission?
- 3. Based on the specifics in question 2, develop an organization chart. Each position in the chart will perform a specific task or is responsible for a certain outcome.
- 4. You are into your third year of operation, and your business has been very successful. You want to add a second location a few miles away. What issues will you face



- running the business at two locations? Draw an organization chart that includes the two business locations.
- 5. Five more years go by and the business has grown to five locations in two cities. How do you keep in touch with it all? What issues of control and coordination have arisen? Draw an up-to-date organization chart and explain your rationale for it.
- 6. Twenty years later you have seventy-five business locations in five states. What are the issues and problems that have to be dealt with through organizational structure? Draw an organization chart for this organization, indicat-

ing such factors as who is responsible for customer satisfaction, how you will know if customer needs are met, and how information will flow within the organization.

*Adapted by Dorothy Marcic from "Organizing," in Donald D. White and H. William Vroman, *Action in Organizations*, 2nd ed. (Boston: Allyn & Bacon, 1982), 154, and Cheryl Harvey and Kim Morouney, "Organization Structure and Design: The Club Ed Exercise," *Journal of Management Education* (June 1985), 425–429.

Case for Analysis: C & C Grocery Stores Inc.*

The first C & C Grocery store was started in 1947 by Doug Cummins and his brother Bob. Both were veterans who wanted to run their own business, so they used their savings to start the small grocery store in Charlotte, North Carolina. The store was immediately successful. The location was good, and Doug Cummins had a winning personality. Store employees adopted Doug's informal style and "serve the customer" attitude. C & C's increasing circle of customers enjoyed an abundance of good meats and produce.

By 1997, C & C had over 200 stores. A standard physical layout was used for new stores. Company head-quarters moved from Charlotte to Atlanta in 1985. The organization chart for C & C is shown in Exhibit 3.20. The central offices in Atlanta handled personnel, merchandising, financial, purchasing, real estate, and legal affairs for the entire chain. For management of individual stores, the organization was divided by regions. The southern, southeastern, and northeastern regions each had about seventy stores. Each region was divided into five districts of ten to fifteen stores each. A district director was responsible for supervision and coordination of activities for the ten to fifteen district stores.

Each district was divided into four lines of authority based on functional specialty. Three of these lines reached into the stores. The produce department manager within each store reported directly to the produce specialist for the division, and the same was true for the meat department manager, who reported directly to the district meat specialist. The meat and produce managers were responsible for all activities associated with the acquisition and sale of perishable products. The store manager's responsibility included the grocery line, front-end departments, and store operations. The store manager was responsible for appearance of personnel, cleanliness, adequate checkout service, and price accuracy. A grocery manager reported to the store manager, maintained inventories, and restocked shelves for grocery items. The district merchandising office was responsible for promotional campaigns, advertising circulars, district advertising, and attracting customers into

the stores. The grocery merchandisers were expected to coordinate their activities with each store in the district.

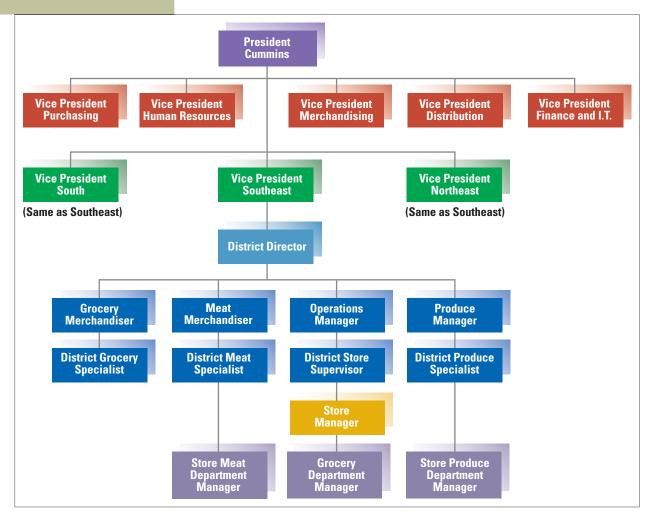
Business for the C & C chain has dropped off in all regions in recent years—partly because of a declining economy, but mostly because of increased competition from large discount retailers such as Wal-Mart, Target, and Costco Wholesale. When these large discounters entered the grocery business, they brought a level of competition unlike any C & C had seen before. C & C had managed to hold its own against larger supermarket chains, but now even the big chains were threatened by Wal-Mart, which became no. 1 in grocery sales in 2001. C & C managers knew they couldn't compete on price, but they were considering ways they could use advanced information technology to improve service and customer satisfaction and distinguish the store from the large discounters.

However, the most pressing problem was how to improve business with the resources and stores they now had. A consulting team from a major university was hired to investigate store structure and operations.

The consultants visited several stores in each region, talking to about fifty managers and employees. The consultants wrote a report that pinpointed four problem areas to be addressed by store executives.

- 1. The chain was slow to adapt to change. Store layout and structure were the same as had been designed fifteen years ago. Each store did things the same way, even though some stores were in low-income areas and other stores in suburban areas. A new computerized supply chain management system for ordering and stocking had been developed, but after two years it was only partially implemented in the stores. Other proposed information technology (IT) initiatives were still "on the back burner," not yet even in the development stage.
- Roles of the district store supervisor and the store manager were causing dissatisfaction. The store managers wanted to learn general management skills for potential promotion into district or regional management positions.

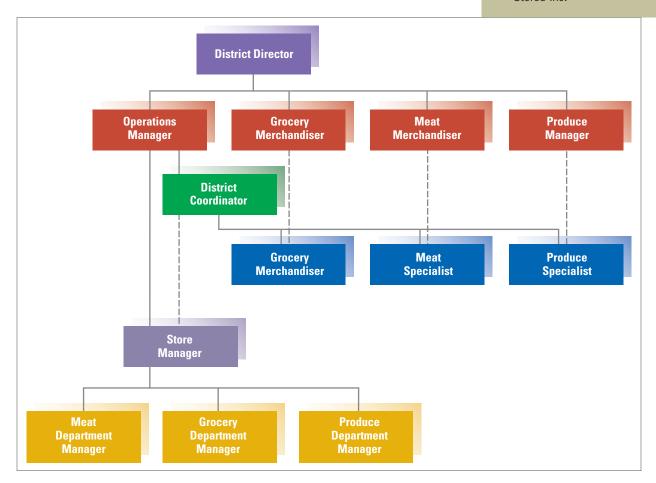
EXHIBIT 3.20Organization Structure for C & C Grocery Stores Inc.



However, their jobs restricted them to operational activities and they learned little about merchandising, meat, and produce. Moreover, district store supervisors used store visits to inspect for cleanliness and adherence to operating standards rather than to train the store manager and help coordinate operations with perishable departments. Close supervision on the operational details had become the focus of operations management rather than development, training, and coordination.

- 3. Cooperation within stores was low and morale was poor. The informal, friendly atmosphere originally created by Doug Cummins was gone. One example of this problem occurred when the grocery merchandiser and store manager in a Louisiana store decided to promote Coke and Diet Coke as a loss leader. Thousands of cartons of Coke were brought in for the sale, but the stockroom was not prepared and did not have
- room. The store manager wanted to use floor area in the meat and produce sections to display Coke cartons, but those managers refused. The produce department manager said that Diet Coke did not help his sales and it was okay with him if there was no promotion at all.
- 4. Long-term growth and development of the store chain would probably require reevaluation of long-term strategy. The percent of market share going to traditional grocery stores was declining nationwide due to competition from large superstores and discount retailers. In the near future, C & C might need to introduce nonfood items into the stores for one-stop shopping, add specialty or gourmet sections within stores, and investigate how new technology could help distinguish the company, such as through targeted marketing and promotion, providing superior service and convenience, and offering their customers the best product assortment and availability.

Proposed Reorganization of C & C Grocery
Stores Inc.



To solve the first three problems, the consultants recommended reorganizing the district and the store structure as illustrated in Exhibit 3.21. Under this reorganization, the meat, grocery, and produce department managers would all report to the store manager. The store manager would have complete store control and would be responsible for coordination of all store activities. The district supervisor's role would be changed from supervision to training and development. The district supervisor would head a team that included himself and several meat, produce, and merchandise specialists who would visit area stores as a team to provide advice and help for the store managers and other employees. The team would act in a liaison capacity between district specialists and the stores.

The consultants were enthusiastic about the proposed structure. With the removal of one level of district operational supervision, store managers would have more freedom and responsibility. The district liaison team would establish a cooperative team approach to management that could be adopted within stores. Focusing store responsibility on a single manager would encourage coordination within stores and adaptation to local conditions. It would also provide a focus of responsibility for storewide administrative changes.

The consultants also believed that the proposed structure could be expanded to accommodate nongrocery lines and gourmet units if these were included in C & C's future plans. Within each store, a new department manager could be added for pharmacy, gourmet/specialty items, or other major departments. The district team could be expanded to include specialists in these lines, as well as an information technology coordinator to act as liaison for stores in the district.

*Prepared by Richard L. Daft, from Richard L. Daft and Richard Steers, *Organizations: A Micro/Macro Approach* (Glenview, Ill.: Scott Foresman, 1986). Reprinted with permission.

Case for Analysis: Aquarius Advertising Agency*

The Aquarius Advertising Agency is a middle-sized firm that offered two basic services to its clients: (1) customized plans for the content of an advertising campaign (for example, slogans and layouts) and (2) complete plans for media (such as radio, TV, newspapers, billboards, and Internet). Additional services included aid in marketing and distribution of products and marketing research to test advertising effectiveness.

Its activities were organized in a traditional manner. The organization chart is shown in Exhibit 3.22. Each department included similar functions.

Each client account was coordinated by an account executive who acted as a liaison between the client and the various specialists on the professional staff of the operations and marketing divisions. The number of direct communications and contacts between clients and Aquarius specialists, clients and account executives, and Aquarius specialists and account executives is indicated in Exhibit 3.23. These sociometric data were gathered by a consultant who conducted a study of the patterns of formal and informal communication. Each intersecting cell of Aquarius personnel and the clients contains an index of the direct contacts between them.

Although an account executive was designated to be the liaison between the client and specialists within the agency, communications frequently occurred directly between clients and specialists and bypassed the account executive. These direct contacts involved a wide range of interactions, such as meetings, telephone calls, e-mail messages, and so on. A large number of direct communications occurred between agency specialists and their counterparts in the client organization. For example, an art specialist working as one member of a team on a particular client account would often be contacted directly by the client's in-house art specialist, and agency research personnel had direct communication with research people of the client firm. Also, some of the unstructured contacts often led to more formal meetings with clients in which agency personnel made presentations, interpreted and defended agency policy, and committed the agency to certain courses of action.

Both hierarchical and professional systems operated within the departments of the operations and marketing divisions. Each department was organized hierarchically with a director, an assistant director, and several levels of authority. Professional communications were widespread and mainly concerned with sharing knowledge and techniques, technical evaluation of work, and development of professional interests. Control in each department was exercised mainly through control of promotions and supervision of work done by subordinates. Many account executives, however, felt the need for more influence, and one commented:

Creativity and art. That's all I hear around here. It is hard as hell to effectively manage six or seven hotshots who claim they have to do their own thing. Each of them tries to sell his or her idea to the client, and most of the time I don't know what has happened until a week later. If I were a despot, I would make all of them check with me first to get approval. Things would sure change around here.

The need for reorganization was made more acute by changes in the environment. Within a short period of time, there was a rapid turnover in the major accounts handled by the agency. It was typical for advertising agencies to gain or lose clients quickly, often with no advance warning as consumer behavior and lifestyle changes emerged and product innovations occurred.

An agency reorganization was one solution proposed by top management to increase flexibility in this unpredictable environment. The reorganization would be aimed at reducing the agency's response time to environmental changes and at increasing cooperation and communication among specialists from different departments. The top managers are not sure what type of reorganization is appropriate. They would like your help analyzing their context and current structure and welcome your advice on proposing a new structure.

*Adapted from John F. Veiga and John N. Yanouzas, "Aquarius Advertising Agency," *The Dynamics of Organization Theory* (St. Paul, Minn.: West, 1984), 212–217, with permission.



EXHIBIT 3.22

Aquarius Advertising Agency Organization Chart

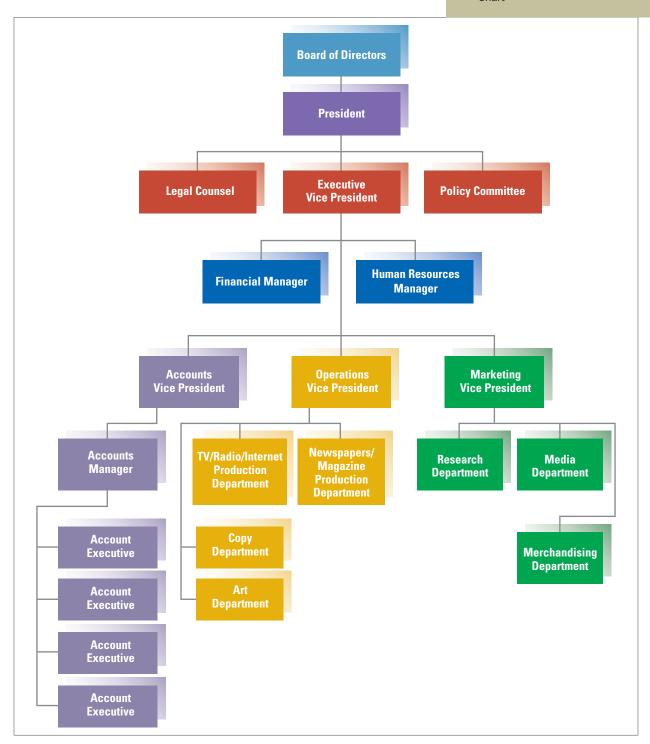




EXHIBIT 3.23

Sociometric Index of Aquarius Personnel and Clients

F = Frequent—daily

O = Occasional—once or twice per project

N = None

	Clients	Account Manager	Account Executives	TV/Radio Specialists	Newspaper/Magazine Specialists	Copy Specialists	Art Specialists	Merchandising Specialists	Media Specialists	Research Specialists
Clients	X	F	F	N	N	0	0	0	0	0
Account Manager		Х	F	N	N	N	N	N	N	N
Account Executives			Х	F	F	F	F	F	F	F
TV/Radio Specialists				X	N	0	0	N	N	0
Newspaper/Magazine Specialists					Х	0	0	N	0	0
Copy Specialists						X	N	0	0	0
Art Specialists							χ	0	0	0
Merchandising Specialists								Х	F	F
Media Specialists									Х	F
Research Specialists										Х

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Part 3

Open System Design Elements

Chapter 4

The External Environment

Chapter 5

Interorganizational Relationships

Chapter 6

Designing Organizations for the International Environment

© Ken Kan



The Organization's Environment

 $\textit{Task Environment} \cdot \textit{General Environment} \cdot \textit{International Environment} \\$

The Changing Environment

Simple–Complex Dimension · Stable–Unstable Dimension · Framework

Adapting to a Changing Environment

Adding Positions and Departments \cdot Building Relationships \cdot Differentiation and Integration \cdot Organic versus Mechanistic Management Processes \cdot Planning, Forecasting, and Responsiveness

Framework for Responses to Environmental Change

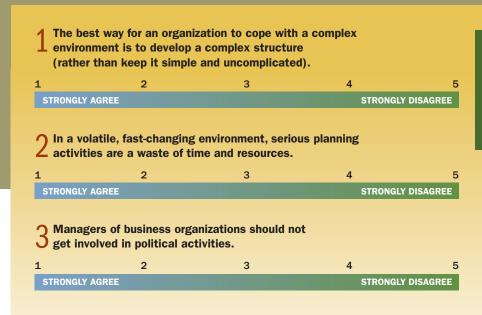
Dependence on External Resources

Influencing External Resources

Establishing Formal Relationships \cdot Influencing Key Sectors \cdot Organization–Environment Integrative Framework

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



In the spring and summer of 2008, anyone in the United States with a car felt the effects of skyrocketing oil prices each time they had to fill the gas tank. It was a surprise change in the environment that hit consumers on a personal level, causing them to alter their buying habits, travel routes, and vacation plans. That, in turn, created even bigger headaches for organizations already struggling with higher costs. Several restaurant chains filed for bankruptcy as people stayed home to save money and reduce their gasoline use. Amusement parks such as Six Flags and Cedar Fair saw their attendance slump. Airlines suffered the double whammy of fewer customers and exorbitant fuel costs. Retailers, auto makers, food processors, trucking companies, school systems, car rental firms, and every other type of organization felt the pinch.

On the other hand, some companies also benefited from the crisis. "Four-dollar gas is the best marketing tool I have," said Betsy Kachmar, assistant general manager of Fort Wayne Public Transportation Corporation, which saw a dramatic jump in bus ridership. Organic farmers and small companies producing food or other products for a local market became more competitive as prices of mass-produced goods increased due to transportation costs. Manufacturers of energy efficient appliances saw a rise in sales with consumers looking for ways to cut their energy use on everything from washing clothes to heating their homes. Sales at New York-based Eco Bags, which makes reusable fishnet shopping bags, doubled as grocers and customers turned away from using plastic bags made with oil.

The rapid rise in oil prices provides a dramatic example of how shifts in the external environment create both threats and opportunities for organizations. Organizations face tremendous uncertainty in dealing with events in the external environment and often have to adapt quickly to new competition, economic turmoil, changes in consumer interests, or innovative technologies.

Managing by Design Questions

Purpose of This Chapter

The purpose of this chapter is to develop a framework for assessing environments and how organizations can respond to them. First, we identify the organizational domain and the sectors that influence the organization. Then, we explore two major environmental forces on the organization—the need for information and the need for resources. Organizations respond to these forces through structural design, planning systems, and attempts to adapt to and influence elements in the external environment.

THE ORGANIZATION'S ENVIRONMENT

In a broad sense the environment is infinite and includes everything outside the organization. However, the analysis presented here considers only those aspects of the environment to which the organization is sensitive and must respond to survive. Thus, **organizational environment** is defined as all elements that exist outside the boundary of the organization and have the potential to affect all or part of the organization.

The environment of an organization can be understood by analyzing its domain within external sectors. An organization's **domain** is the chosen environmental field of action. It is the territory an organization stakes out for itself with respect to products, services, and markets served. Domain defines the organization's niche and defines those external sectors with which the organization will interact to accomplish its goals.

The environment comprises several **sectors** or subdivisions that contain similar elements. Ten sectors can be analyzed for each organization: industry, raw materials, human resources, financial resources, market, technology, economic conditions, government, sociocultural, and international. The sectors and a hypothetical organizational domain are illustrated in Exhibit 4.1. For most companies, the sectors in Exhibit 4.1 can be further subdivided into the task environment and general environment.

Task Environment

The **task environment** includes sectors with which the organization interacts directly and that have a direct impact on the organization's ability to achieve its goals. The task environment typically includes the industry, raw materials, and market sectors, and perhaps the human resources and international sectors.

The following examples illustrate how each of these sectors can affect organizations:

- In the industry sector, the retail landscape has begun a decided shift, with consumers rejecting huge stores for smaller shops or Internet retailers that offer greater choice, better service, or higher quality. In clothing, for instance, shoppers favor small niche retailers that offer rapid style changes. Regional grocery chains have grown more competitive by offering fresher and organic foods as well as prepared meals.³
- An interesting example in the *raw materials sector* concerns the beverage can industry. Steelmakers owned the beverage can market until the mid-1960s, when Reynolds Aluminum Company launched a huge aluminum recycling program to



Organize elements in the external environment into ten sectors for analysis: industry, raw materials, human resources, financial resources, market, technology, economic conditions, government, sociocultural, and international. Focus on sectors that may experience significant change at any time.

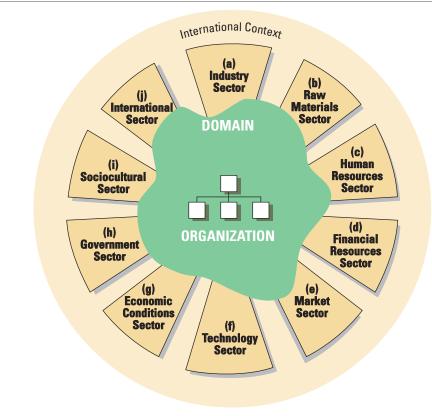


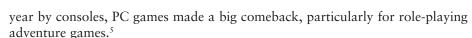
EXHIBIT 4.1
An Organization's Environment

- (a) Competitors, industry size and competitiveness, related industries
- (b) Suppliers, manufacturers, real estate, services
- (c) Labor market, employment agencies, universities, training schools, employees in other companies, unionization
- (d) Stock markets, banks, savings and loans, private investors
- (e) Customers, clients, potential users of products and services
- (f) Techniques of production, science, computers, information technology, e-commerce

- (g) Recession, unemployment rate, inflation rate, rate of investment, economics, growth
- (h) City, state, federal laws and regulations, taxes, services, court system, political processes
- (i) Age, values, beliefs, education, religion, work ethic, consumer and green movements
- (j) Competition from and acquisition by foreign firms, entry into overseas markets, foreign customs, regulations, exchange rate

gain a cheaper source of raw materials and make aluminum cans price-competitive with steel. 4

• In the *market sector*, makers of computer games have benefitted from a shift in consumer interest away from gaming consoles and back to lower-cost options. Today's more powerful PCs and bigger screens are perfect for gamers, and with the tough economy, many people aren't interested in laying out the big bucks for a console and a big screen television. After being overshadowed for several



- The *human resources sector* is of significant concern to every business. At a recent CEO roundtable discussion, Steve Creamer, president and CEO of Energy Solutions, said his company's single biggest problem is human capital. Other leaders agreed that factors such as the aging of the workforce, government limitations on visas for foreign workers, and fewer students entering fields such as engineering and science have combined to create a tremendous human resources headache for companies trying to stay competitive in a rapidly changing world.⁶
- For most companies today, the *international sector* is also a part of the task environment because of globalization and intense competition. China is already the world's largest producer of raw materials for pharmaceuticals, and in 2007, for the first time, a Chinese company won permission from the Food and Drug Administration to export finished medicines to the United States. India-based companies have been exporting generics to the United States for a decade, but experts believe China's growing firms, blessed with low costs and brilliant scientists, will quickly overtake them.⁷

General Environment

The **general environment** includes those sectors that might not have a direct impact on the daily operations of a firm but will indirectly influence it. The general environment often includes the government, sociocultural, economic conditions, technology, and financial resources sectors. These sectors affect all organizations eventually. Consider the following examples:

- In the *government sector*, regulations influence every phase of organizational life. One of the most prominent and far-reaching changes in the United States in recent years was the 2002 Sarbannes-Oxley Act, often referred to as SOX. SOX required several types of corporate governance reforms, including better internal monitoring to reduce the risk of fraud, certification of financial results by top executives, improved measures for internal auditing, and enhancing public financial disclosure. Additional regulations of this type are certain to follow the financial meltdown of banks and firms on Wall Street in 2008.
- Shifting demographics is a significant element in the *sociocultural sector*. In the United States, Hispanics have passed African Americans as the nation's largest minority group, and their numbers are growing so fast that Hispanics (or Latinos, as some prefer to be called) are becoming a driving force in U.S. politics, economics, and culture. The growing Hispanic population is forcing gradual changes in organizations from the U.S. Labor Department to the major television networks to the local auto parts store.8
- General *economic conditions* often affect the way a company must do business. The already-struggling auto industry had an abysmal year in 2008. Sales of cars and light trucks in the United States dropped about 20 percent and sales of gasguzzling large trucks and sport utility vehicles slowed to a crawl due to high gas prices, a weakening economy, the credit crunch, and declining consumer confidence. Auto makers had to scale back production, offer incentives to car buyers, and cut back their sales goals.⁹

- The *technology sector* is an area in which massive changes have occurred in recent years, from digital music and advances in mobile technology to cloning and stem-cell research. Chris DeWolfe, CEO of MySpace, believes the world has seen only the beginning of the "mobile revolution." Mobile devices extend the phenomenal power of blogging and social networking, which are breaking down barriers to the exchange of knowledge, information, opinions, and ideas around the world. The exchange of new scientific insights, for example, now happens in hours instead of years. So, too, does the exchange of opinions about a company's products or services.¹⁰
- All businesses have to be concerned with *financial resources*, and this sector is often first and foremost in the minds of entrepreneurs. Many small business owners have turned to online person-to-person (P-to-P) lending networks for small loans as banks have tightened their lending standards. Jeff Walsh, for example, borrowed around \$22,000 through Prosper.com for his coin laundry business. Alex Kalempa needed \$15,000 to expand his business of developing racing shift systems for motorcycles, but banks offered him credit lines of only \$500 to \$1,000. Kalempa went to LendingClub.com, where he got the \$15,000 loan at an interest rate several points lower than the banks were offering.¹¹

International Environment

The international sector can directly affect many organizations, and it has become extremely important in the last few years. In addition, international events can influence all domestic sectors of the environment as well. For example, adverse weather and a workers' strike in Western Africa, which supplies about two-thirds of the world's cocoa beans, sharply increased raw materials costs for Choco-Logo, a small maker of gourmet chocolates in Buffalo, New York. Farmers, fertilizer companies, food manufacturers, and grocers in the United States faced new competitive issues because of an unexpected grain shortage and rising costs related to international changes. Strong economic growth in developing countries has enabled millions of people to afford richer diets, including grain-fed meat, which directly contributed to the grain shortage in the United States. Countries and organizations around the world are connected as never before, and economic, political, and sociocultural changes in one part of the world eventually affect other areas.

Moreover, the distinctions between foreign and domestic operations have become increasingly irrelevant. Thomas Middelhoff of Germany's Bertelsmann AG, which purchased U.S. publisher Random House, put it this way: "There are no German and American companies. There are only successful and unsuccessful companies." U.S.-based Ford Motor Company owns Sweden's Volvo, while the iconic American beer Miller is owned by a South African company. Toyota is a Japanese corporation, but it has manufactured millions of vehicles in North American factories. The technology behind Intel's Centrino wireless components was born in a lab in Haifa, Israel, and Chinese researchers designed the microprocessors that control the pitch of the blade on General Electric's giant wind turbines. Because of the significance of the international sector and its tremendous impact on organization design, this topic will be covered in detail in Chapter 6.

Every organization faces uncertainty domestically as well as globally. Consider a new challenge facing managers at television network Univision.



The Latino population in the United States is growing by leaps and bounds, and Univision, the giant of Spanish-language television in the United States, now challenges the

Univision

major networks CBS, NBC, ABC, and Fox, especially in large cities. Univision won the loyalty of Latino audiences by keeping English out of its programs and commercials. Its prime-time lineup is based on telenovelas from Mexico, sexy soap-opera stories that attract a vast audience. Nielsen ratings indicate that Univision has 90 of the 100 most-watched Spanish-language shows in the United States.

But there's a shift taking place that Univision managers have so far failed to respond to: the interests and tastes of viewers are changing much more rapidly than Univision's shows. Births, not immigration, are now the main source of Latino growth, and American-born Latinos aren't interested in the same type of programs their parents and grandparents were. "I think of [Univision] as a horse-and-buggy company," said David R. Morse, president and CEO of New American Dimensions, which conducted a study of younger Latino viewers. Younger Latinos are more likely to speak English as their primary language, are better educated than their parents, and are more prone to marry outside their ethnic group. They want a broader variety of programs, and many prefer English-language television or bilingual programming.

Second- and third-generation bilingual Latinos are largely underserved by both Spanish and English language networks. Although they are ethnically proud, they don't feel they have to prove themselves. They just want quality programming that addresses their interests. As Jeff Valdez, founder of SiTV, an English language cable start-up that caters to young Latinos says, "They want to see themselves on screen. They want to hear their stories."¹⁶ ■

Can Univision transform its programming to satisfy younger Latino viewers, or is it destined to fade away as new companies like SiTV come on the scene with hip programs that attract the coveted audience of 18-to-34-year-olds? Univision is still a powerhouse, and it can succeed for years using its current formula. However, if the network doesn't keep pace with changing demands from the environment, it could indeed go the way of the horse and buggy.

Television networks are not the only organizations that have to adapt to both subtle and massive shifts in the environment. In the following sections, we will discuss in greater detail how companies can cope with and respond to environmental uncertainty and instability.

THE CHANGING ENVIRONMENT

How does the environment influence an organization? The patterns and events occurring in the environment can be described along several dimensions, such as whether the environment is stable or unstable, homogeneous or heterogeneous, simple or complex; the *munificence*, or amount of resources available to support the organization's growth; whether those resources are concentrated or dispersed; and the degree of consensus in the environment regarding the organization's intended domain.¹⁷ These dimensions boil down to two essential ways the environment influences organizations: (1) the need for information about the environment and (2) the need for resources from the environment. The environmental conditions of complexity and change create a greater need to gather information

and to respond based on that information. The organization also is concerned with scarce material and financial resources and with the need to ensure availability of resources.

Environmental uncertainty pertains primarily to those sectors that an organization deals with on a regular, day-to-day basis. Although sectors of the general environment—such as economic conditions, social trends, or technological changes—can create uncertainty for organizations, determining an organization's environmental uncertainty generally means focusing on sectors of the *task environment*, such as how many elements the organization deals with regularly, how rapidly these elements change, and so forth. To assess uncertainty, each sector of the organization's task environment can be analyzed along dimensions such as stability or instability and degree of complexity. The total amount of uncertainty felt by an organization is the uncertainty accumulated across environmental sectors.

Organizations must cope with and manage uncertainty to be effective. **Uncertainty** means that decision makers do not have sufficient information about environmental factors, and they have a difficult time predicting external changes. Uncertainty increases the risk of failure for organizational responses and makes it difficult to compute costs and probabilities associated with decision alternatives.¹⁹ The remainder of this section will focus on the information perspective, which is concerned with uncertainty created by the extent to which the environment is simple or complex and the extent to which events are stable or unstable. Later in the chapter, we discuss how organizations influence the environment to acquire needed resources.

Simple-Complex Dimension

The **simple-complex dimension** concerns environmental complexity, which refers to heterogeneity, or the number and dissimilarity of external elements relevant to an organization's operations. The more external factors that regularly influence the organization and the greater number of other companies in an organization's domain, the greater the complexity. A complex environment is one in which the organization interacts with and is influenced by numerous diverse external elements. In a simple environment, the organization interacts with and is influenced by only a few similar external elements.

Aerospace firms such as Boeing and Airbus operate in a complex environment, as do universities. Universities span a large number of technologies and are continually buffeted by social, cultural, and value changes. Universities also must cope with numerous ever-changing government regulations, competition for quality students and highly educated employees, and scarce financial resources for many programs. They deal with granting agencies, professional and scientific associations, alumni, parents, foundations, legislators, community residents, international agencies, donors, corporations, and athletic teams. This large number of external elements makes up the organization's domain, creating a complex environment. On the other hand, a family-owned hardware store in a suburban community is in a simple environment. The store does not have to deal with complex technologies or extensive government regulations, and cultural and social changes have little impact. Human resources are not a problem because the store is run by family members and parttime help. The only external elements of real importance are a few competitors, suppliers, and customers.

Stable-Unstable Dimension

The **stable-unstable dimension** refers to whether elements in the environment are dynamic. An environmental domain is stable if it remains the same over a period of months or years. Under unstable conditions, environmental elements shift abruptly. Environmental domains seem to be increasingly unstable for most organizations. This chapter's Book Mark examines the volatile nature of today's business world and gives some tips for managing in a fast-shifting environment.

Instability may occur when competitors react with aggressive moves and countermoves regarding advertising and new products or services. For example, News Corporation's MySpace held the crown as king of social networking until managers

BookMark 4.0 (HAVE YOU READ THIS BOOK?)

Confronting Reality: Doing What Matters to Get Things Right By Lawrence A. Bossidy and Ram Charan



The business world is changing at an increasingly rapid pace. That's the reality that spurred Larry Bossidy, retired chairman and CEO of Honeywell International, and Ram Charan, a noted author, speaker, and business consultant, to write Confronting Reality: Doing What Matters to Get Things Right. Too many managers, they believe, are tempted to hide their heads in the sand of financial issues rather than face the confusion and complexity of the organization's environment.

LESSONS FOR FACING REALITY

For many companies, today's environment is characterized by global hyper-competition, declining prices, and the growing power of consumers. Bossidy and Charan offer some lessons to leaders for navigating in a fast-changing world.

- Understand the environment as it is now and is likely to be
 in the future, rather than as it was in the past. Relying on
 the past and conventional wisdom can lead to disaster.
 Kmart, for example, stuck to its old formula as Wal-Mart
 gobbled its customers and carved out a new business
 model. Few could have predicted in 1990, for example,
 that Wal-Mart would now be America's biggest seller of
 groceries.
- Seek out and welcome diverse and unorthodox ideas.
 Managers need to be proactive and open-minded toward conversing with employees, suppliers, customers, colleagues, and anyone else they come in contact with.
 What are people thinking about? What changes and opportunities do they see? What worries them about the future?
- Avoid the common causes of manager failure to confront reality: filtered information, selective hearing, wishful thinking, fear, emotional overinvestment in a failing course of action, and unrealistic expectations. For example, when

- sales and profits fell off a cliff at data-storage giant EMC, managers displayed a bias toward hearing good news and believed the company was only experiencing a blip in the growth curve. When Joe Tucci was named CEO, however, he was determined to find out if the slump was temporary. By talking directly with top leaders at his customers' organization, Tucci was able to face the reality that EMC's existing business model based on high-cost technology was dead. Tucci implemented a new business model to fit that reality.
- Ruthlessly assess your organization. Understanding the
 internal environment is just as important. Managers
 need to evaluate whether their company has the talent,
 commitment, and attitude needed to drive the important changes. At EMC, Tucci realized his sales force
 needed an attitude shift to sell software, services, and
 business solutions rather than just expensive hardware.
 The arrogant, hard-driving sales tactics of the past had
 to be replaced with a softer, more customer-oriented
 approach.

STAYING ALIVE

Staying alive in today's business environment requires that managers stay alert. Managers should always be looking at their competitors, broad industry trends, technological changes, shifting government policies, changing market forces, and economic developments. At the same time, they work hard to stay in touch with what their customers really think and really want. By doing so, leaders can confront reality and be poised for change.

Confronting Reality: Doing What Matters to Get Things Right, by Lawrence A. Bossidy and Ram Charan, is published by Crown Business Publishing.

at upstart Facebook began aggressively promoting the college-focused niche site as a place for everyone. The "face" of Facebook—youthful founder and CEO Mark Zuckerberg—was suddenly crowding MySpace off of magazine covers and television talk shows, and the size of Facebook's worldwide user base surpassed MySpace before managers at MySpace even had time to react.²⁰ Sometimes specific, unpredictable events—such as reports of lead-tainted paint in Mattel toys made in China, the Pakistani government's attempt to block access to certain videos on YouTube, or the discovery of heart problems related to pain drugs such as Vioxx and Celebrex—create unstable conditions for organizations. Today, freewheeling bloggers are a tremendous source of instability for scores of companies, able to destroy a company's reputation virtually overnight. Kryptonite's reputation in bicycle locks plummeted after a blog noted that the locks could be opened with a Bic pen. After 10 days of blogging, Kryptonite announced a free product exchange that would cost the company about \$10 million.²¹

Although environments are more unstable for most organizations today, an example of a traditionally stable environment is a public utility.²² In the rural Midwest, demand and supply factors for a public utility are stable. A gradual increase in demand may occur, which is easily predicted over time. Toy companies, by contrast, have an unstable environment. Hot new toys are difficult to predict, a problem compounded by the fact that children are losing interest in toys at a younger age, their interest captured by video and computer games, electronics, and the Internet. Adding to the instability for toymakers is the shrinking retail market, with big toy retailers going out of business trying to compete with discounters such as Wal-Mart. Toymakers are trying to attract more customers in developing markets such as China, Poland, Brazil, and India to make up for the declining U.S. market, but hitting the target in those countries has proven to be a challenge. Companies such as Fisher-Price, owned by Mattel, can find their biggest products languishing on shelves as shoppers turn to less expensive locally made toys in countries where brand consciousness doesn't come into play. As one toy analyst said, "Chinese kids have been growing for 5,000 years without the benefits of Fisher-Price."²³

Framework

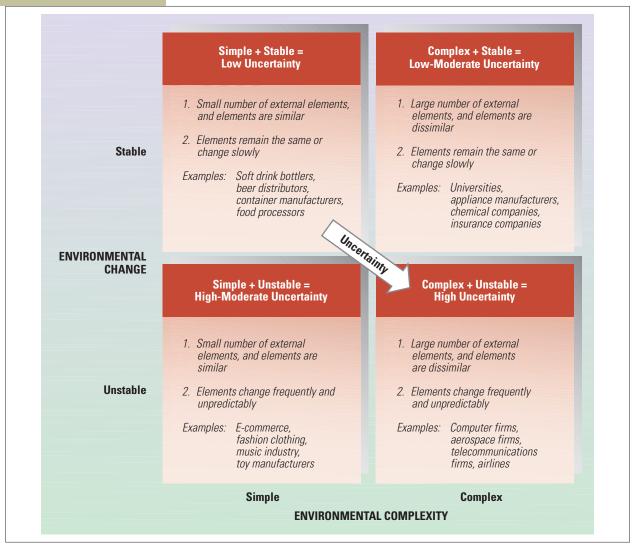
The simple–complex and stable–unstable dimensions are combined into a framework for assessing environmental uncertainty in Exhibit 4.2. In the *simple*, *stable* environment, uncertainty is low. There are only a few external elements to contend with, and they tend to remain stable. The *complex*, *stable* environment represents somewhat greater uncertainty. A large number of elements have to be scanned, analyzed, and acted upon for the organization to perform well. External elements do not change rapidly or unexpectedly in this environment.

Even greater uncertainty is felt in the *simple*, *unstable* environment.²⁴ Rapid change creates uncertainty for managers. Even though the organization has few external elements, those elements are hard to predict, and they react unexpectedly to organizational initiatives. The greatest uncertainty for an organization occurs in the *complex*, *unstable* environment. A large number of elements impinge upon the organization, and they shift frequently or react strongly to organizational initiatives. When several sectors change simultaneously, the environment becomes turbulent.²⁵

A soft drink distributor functions in a simple, stable environment. Demand changes only gradually. The distributor has an established delivery route, and supplies of soft drinks arrive on schedule. State universities, appliance manufacturers, and insurance companies are in somewhat stable, complex environments. A large number of external elements are present, but although they change, changes are gradual and predictable.

EXHIBIT 4.2

Framework for Assessing Environmental Uncertainty



Source: American Science Quarterly. Characteristics of Organizational Environments and Perceived Environments Uncertainty by Robert Duncan vol. 17, pp. 313–327, September 1972. Reprinted by permission.

Toy manufacturers are in simple, unstable environments. Organizations that design, make, and sell toys, as well as those that are involved in the clothing or music industry, face shifting supply and demand. Most Internet companies focus on a specific competitive niche and, hence, operate in simple but unstable environments as well. Although there may be few elements to contend with—e.g., technology, competitors—they are difficult to predict and change abruptly and unexpectedly.

The telecommunications industry and the airline industry face complex, unstable environments. Many external sectors are changing simultaneously. In the case

of airlines, in just a few years the major carriers were confronted with an air-traffic controller shortage, aging fleets of planes, labor unrest, soaring fuel prices, the entry of new competitors such as JetBlue and AirTran, a series of major air-traffic disasters, and a drastic decline in customer demand. Between 2001 and 2008, four large airlines and many smaller ones went through bankruptcy, and the airlines collectively laid off 170,000 employees.²⁶

ADAPTING TO A CHANGING ENVIRONMENT

Once you see how environments differ with respect to change and complexity, the next question is, "How do organizations adapt to each level of environmental uncertainty?" Environmental uncertainty represents an important contingency for organization structure and internal behaviors. Recall from Chapter 3 that organizations facing uncertainty often use structural mechanisms that encourage horizontal communication and collaboration to help the company adapt to changes in the environment. In this section we discuss in more detail how the environment affects organizations. An organization in a certain environment will be managed and controlled differently from an organization in an uncertain environment with respect to positions and departments, organizational differentiation and integration, control processes, and future planning and forecasting. Organizations need to have the right fit between internal structure and the external environment.

Adding Positions and Departments

As complexity and uncertainty in the external environment increase, so does the number of positions and departments within the organization, leading to increased internal complexity. This relationship is part of being an open system. Each sector in the external environment requires an employee or department to deal with it. The human resource department deals with unemployed people who want to work for the company. The marketing department finds customers. Procurement employees obtain raw materials from hundreds of suppliers. The finance group deals with bankers. The legal department works with the courts and government agencies. E-business departments handle electronic commerce, and information technology departments deal with the increasing complexity of computerized information and knowledge management systems. Adding new positions and departments is a common way for organizations to adapt to growing environmental complexity and uncertainty. Consider this example of how Wal-Mart is trying to mitigate some of the uncertainty in its environment.

Any organization with the size and power of Wal-Mart presents a large target for criticism, and the retailer has come under blistering attack for everything from its low wages and

INPRACTICE

minimal health benefits to its high-pressure tactics with suppliers and its environmental policies. Much of the criticism is organized by two union-backed organizations, Wake Up Wal-Mart and Wal-Mart Watch, which have spearheaded a relentless public relations campaign against the company, including rallies, blogs, letter-writing blitzes, press conferences, and town hall meetings.

Wal-Mart

(continued)

Wal-Mart managers went on the offensive. The company's tiny public relations department was expanded to dozens of employees, including a "war room" where former political operatives look for ways to dispute the claims of opponents. Additionally, Wal-Mart created two high-level executive positions to act as generals in the PR war. The position of director of media relations, for instance, oversees crisis communications and manages the hundreds of phone calls a day the company receives from reporters. The director is on call 24/7 to assist with "emergency response" related to PR issues. The second new position, senior director of campaign management, includes researching the opposition, managing Wal-Mart's relations with bloggers, and overseeing the war room.

Wal-Mart is profitable and successful, but the intense criticism has had an impact. Surveys reveal that the negative publicity has caused some shoppers to stop buying there. Wal-Mart leaders hope the new executives and expanded PR department can help turn the tide. 27

Building Relationships

The traditional approach to coping with environmental uncertainty was to establish buffer departments. The purpose of **buffering roles** is to absorb uncertainty from the environment.²⁸ The technical core performs the primary production activity of an organization. Buffer departments surround the technical core and exchange materials, resources, and money between the environment and the organization. They help the technical core function efficiently. The purchasing department buffers the technical core by stockpiling supplies and raw materials. The human resource department buffers the technical core by handling the uncertainty associated with finding, hiring, and training production employees.

A newer approach some organizations are trying is to drop the buffers and expose the technical core to the uncertain environment. These organizations no longer create buffers because they believe being well connected to customers and suppliers is more important than internal efficiency. For example, John Deere has assembly-line workers visiting local farms to determine and respond to customer concerns. LG Electronics pays consumers to test cell phone models, asking them to keep a journal where they jot down their feelings about features they like or don't like and draw pictures that represent their mood when they use the phone.²⁹ Opening up the organization to the environment by building closer relationships with external parties makes it more fluid and adaptable.

Boundary-spanning roles link and coordinate an organization with key elements in the external environment. Boundary spanning is primarily concerned with the exchange of information to (1) detect and bring into the organization information about changes in the environment and (2) send information into the environment that presents the organization in a favorable light.³⁰

Organizations have to keep in touch with what is going on in the environment so that managers can respond to market changes and other developments. A study of high-tech firms found that 97 percent of competitive failures resulted from lack of attention to market changes or the failure to act on vital information.³¹ To detect and bring important information into the organization, boundary personnel scan the environment. For example, a market-research department scans and monitors trends in consumer tastes. Boundary spanners in engineering and research and development (R&D) departments scan new technological developments, innovations, and raw materials. Boundary spanners prevent the organization from stagnating by keeping top managers informed about environmental changes. Often, the



Scan the external environment for threats, changes, and opportunities. Use boundary-spanning roles, such as market research and intelligence teams, to bring into the organization information about changes in the environment. Enhance boundary-spanning capabilities when the environment is uncertain.

greater the uncertainty in the environment, the greater the importance of boundary spanners.³²

One recent approach to boundary spanning is **business intelligence**, which refers to the high-tech analysis of large amounts of internal and external data to spot patterns and relationships that might be significant. For example, Verizon uses business intelligence to actively monitor customer interactions so that it can catch problems and fix them almost immediately.³³ Tools to automate the process are a hot area of software, with companies spending billions on business-intelligence software in recent years.³⁴

Business intelligence is related to another important area of boundary spanning, known as *competitive intelligence* (CI). Competitive intelligence gives top executives a systematic way to collect and analyze public information about rivals and use it to make better decisions.³⁵ Using techniques that range from Internet surfing to digging through trash cans, intelligence professionals dig up information on competitors' new products, manufacturing costs, or training methods and share it with top leaders. Intelligence teams are the newest wave of CI activities. An **intelligence team** is a cross-functional group of managers and employees, usually led by a competitive intelligence professional, who work together to gain a deep understanding of a specific business issue, with the aim of presenting insights, possibilities, and recommendations to top leaders.³⁶ Intelligence teams can provide insights that enable managers to make more informed decisions about goals, as well as devise contingency plans and scenarios related to major competitive issues.

Many successful companies involve everyone in boundary-spanning activities. People at the grassroots level are often able to see and interpret changes or problems sooner than managers, who are typically more removed from the day-to-day work.³⁷ At Cognos, which sells planning and budgeting programs to large corporations, any of the company's 3,000 employees can submit scoops about competitors through an internal Web site called Street Fighter. Each day, R&D and sales managers pore over the dozens of entries. Good tips are rewarded with prizes.³⁸

The boundary task of sending information into the environment to represent the organization is used to influence other people's perception of the organization. In the marketing department, advertising and sales people represent the organization to customers. Purchasers may call on suppliers and describe purchasing needs. The legal department informs lobbyists and elected officials about the organization's needs or views on political matters. Many companies set up special Web pages and blogs to present the organization in a favorable light.

1 The best way for an organization to cope with a complex environment is to develop a complex structure (rather than keep it simple and uncomplicated).

ANSWER: Agree. As an organization's environment becomes more complex, the organization has to add jobs, departments, and boundary spanning roles to cope with all the elements in the environment. When environmental sectors are complex, there is no way for an organization to stay simple and uncomplicated and continue to be effective.

ASSESS YOUR ANSWER

Differentiation and Integration

Another response to environmental uncertainty is the amount of differentiation and integration among departments. Organizational **differentiation** refers to "the differences in cognitive and emotional orientations among managers in different functional departments, and the difference in formal structure among these departments."³⁹ When the external environment is complex and rapidly changing, organizational departments become highly specialized to handle the uncertainty in their external sector. Success in each sector requires special expertise and behavior. Employees in an R&D department thus have unique attitudes, values, goals, and education that distinguish them from employees in manufacturing or sales departments.

A study by Paul Lawrence and Jay Lorsch examined three organizational departments—manufacturing, research, and sales—in ten corporations. ⁴⁰ This study found that each department evolved toward a different orientation and structure to deal with specialized parts of the external environment. Exhibit 4.3 illustrates the market, scientific, and manufacturing subenvironments identified by Lawrence and Lorsch. As shown in the exhibit, each department interacted with different external groups. The differences that evolved among departments within the organizations are shown in Exhibit 4.4. To work effectively with the scientific subenvironment, R&D had a goal of quality work, a long time horizon (up to five years), an informal structure, and task-oriented employees. Sales was at the opposite extreme. It had a goal of customer satisfaction, was oriented toward the short term (two weeks or so), had a very formal structure, and was socially oriented.

One outcome of high differentiation is that coordination among departments becomes difficult. More time and resources must be devoted to achieving

EXHIBIT 4.3
Organizational
Departments
Differentiate to
Meet Needs of
Subenvironments

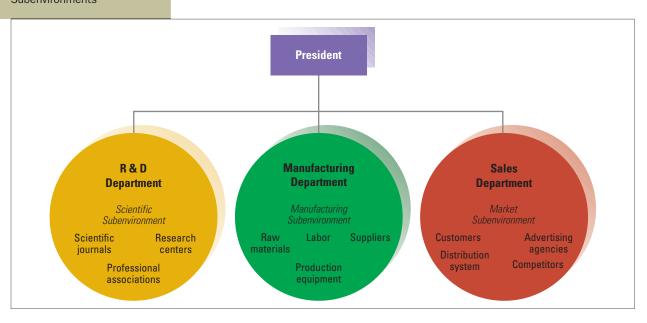


EXHIBIT 4.4

Differences in Goals and Orientations among Organizational Departments

Characteristic	R&D Department	Manufacturing Department	Sales Department	
Goals	New developments, quality	Efficient production	Customer satisfaction	
Time horizon	Long	Short	Short	
Interpersonal orientation	Mostly task	Task	Social	
Formality of structure	Low	High	High	

Source: Based on Paul R. Lawrence and Jay W. Lorsch, Organization and Environment (Homewood, Ill.: Irwin, 1969), 23-29.

coordination when attitudes, goals, and work orientation differ so widely. **Integration** is the quality of collaboration among departments. ⁴¹ Formal integrators are often required to coordinate departments. When the environment is highly uncertain, frequent changes require more information processing to achieve horizontal coordination, so integrators become a necessary addition to the organization structure. Sometimes integrators are called liaison personnel, project managers, brand managers, or coordinators. As illustrated in Exhibit 4.5, organizations with highly uncertain environments and a highly differentiated structure assign about 22 percent of management personnel to integration activities, such as serving on committees, on task forces, or in liaison roles. ⁴² In organizations characterized by very simple, stable environments, almost no managers are assigned to integration roles. Exhibit 4.5 shows that, as environmental uncertainty increases, so does differentiation among departments; hence, the organization must assign a larger percentage of managers to coordinating roles.

Lawrence and Lorsch's research concluded that organizations perform better when the levels of differentiation and integration match the level of uncertainty in the environment. Organizations that performed well in uncertain environments had high levels of both differentiation and integration, while those performing well in less uncertain environments had lower levels of differentiation and integration.

Organic versus Mechanistic Management Processes

Another response to environmental uncertainty is the amount of formal structure and control imposed on employees. Tom Burns and G. M. Stalker observed twenty industrial firms in England and discovered that internal management structure was related to the external environment.⁴³ When the external environment was stable, the internal organization was characterized by standard rules, procedures, and a clear hierarchy of authority. Organizations were formalized. They were also centralized, with most decisions made at the top. Burns and Stalker called this a **mechanistic** organization system.

In rapidly changing environments, the internal organization was much looser, free-flowing, and adaptive. Rules and regulations often were not written down or, if written down, were ignored. People had to find their own way through the system to figure out what to do. The hierarchy of authority was not clear. Decision-making authority was decentralized. Burns and Stalker used the term **organic** to characterize this type of management structure.

Briefcase

As an organization manager, keep these guidelines in mind:

Match internal organization structure to the external environment. If the external environment is complex, make the organization structure complex. Associate a stable environment with a mechanistic structure and an unstable environment with an organic structure. If the external environment is both complex and changing, make the organization highly differentiated and organic, and use mechanisms to achieve coordination across departments.

EXHIBIT 4.5

Environmental
Uncertainty and
Organizational Integrators

Industry	Plastics	Foods	Container
Environmental uncertainty	High	Moderate	Low
Departmental differentiation	High	Moderate	Low
Percent management in integrating roles	22%	17%	0%

Source: Based on Jay W. Lorsch and Paul R. Lawrence, "Environmental Factors and Organizational Integration," Organizational Planning: Cases and Concepts (Homewood, III.: Irwin and Dorsey, 1972), 45.

Exhibit 4.6 summarizes the differences in organic and mechanistic systems. As environmental uncertainty increases, organizations tend to become more organic, which means decentralizing authority and responsibility to lower levels, encouraging employees to take care of problems by working directly with one another, encouraging teamwork, and taking an informal approach to assigning tasks and responsibility. Thus, the organization is more fluid and is able to adapt continually to changes in the external environment.⁴⁴ Complete the questionnaire in the "How Do You Fit the Design?" box for some insight into whether you are more suited to working in an organic organization or a mechanistic one.

The learning organization, described in Chapter 1, and the horizontal and virtual network structures, described in Chapter 3, are organic organizational forms that are used by companies to compete in rapidly changing environments. Guiltless Gourmet, which sells low-fat tortilla chips and other high-quality snack foods, provides an example. When large companies like Frito Lay entered the low-fat snack-food market, Guiltless Gourmet shifted to a flexible network structure to remain competitive. The company redesigned itself to become basically a full-time marketing organization, while production and other activities were outsourced. An 18,000-square-foot plant in

EXHIBIT 4.6Mechanistic and Organic Forms

Mechanistic	Organic
 Tasks are broken down into specialized, separate parts. Tasks are rigidly defined. 	 Employees contribute to the common tasks of the department. Tasks are adjusted and redefined through employee teamwork.
There is a strict hierarchy of authority and control, and there are many rules.	There is less hierarchy of authority and control, and there are few rules.
4. Knowledge and control of tasks are centralized at the top of the organization.5. Communication is vertical.	4. Knowledge and control of tasks are located anywhere in the organization.5. Communication is horizontal.
or commenced to volude	

Source: Adapted from Gerald Zaltman, Robert Duncan, and Jonny Holbek, *Innovations and Organizations* (New York: Wiley, 1973), 131.

Austin was closed and the workforce cut from 125 to about 10 core people who handle marketing and sales promotions. The flexible structure allowed Guiltless Gourmet to adapt quickly to changing market conditions.⁴⁵

Planning, Forecasting, and Responsiveness

The whole point of increasing internal integration and shifting to more organic processes is to enhance the organization's ability to quickly respond to sudden changes in an uncertain environment. It might seem that in an environment where everything is changing all the time, planning is useless. However, in uncertain environments, planning and environmental forecasting actually become *more* important as a way



Does your mind best fit an organization in a certain or an uncertain environment? Think back to how you thought or behaved as a student, employee, or in a formal or informal leader position. Please answer whether each following item was Mostly True or Mostly False for you.

		Mostly True	Mostly False
1.	I always offered comments on my interpretation of data or issues.		
2.	I welcomed unusual viewpoints of others even if we were working under pressure.		
3.	I made it a point to attend industry trade shows and company (school) events.		
4.	I explicitly encouraged others to express opposing ideas and arguments.		
5.	I asked "dumb" questions.		
6.	I enjoyed hearing about new ideas even when working toward a deadline.		
7.	I expressed a controversial opinion to bosses and peers.		
8.	I suggested ways of improving my and others' ways of doing things.		

Scoring: Give yourself one point for each item you marked as Mostly True. If you scored less than 5, your mindfulness level may be suited to an organization in a stable rather than unstable environment. A score of 5 or above suggests a higher level of mindfulness and a better fit for an organization in an uncertain environment.

Interpretation: In an organization in a highly uncertain environment everything seems to be changing. In that case, an important quality for a professional employee or manager is "mindfulness," which includes the qualities of being open minded and an independent thinker. In a stable environment, an organization will be more "mechanistic," and a manager without mindfulness may perform okay because much work can be done in the traditional way. In an uncertain environment, everyone needs to facilitate new thinking, new ideas, and new ways of working. A high score on this exercise suggests higher mindfulness and a better fit with an "organic" organization in an uncertain environment.

Source: These questions are based on ideas from R. L. Daft and R. M. Lengel, Fusion Leadership, Chapter 4 (San Francisco, Calif.: Berrett Koehler, 2000); B. Bass and B. Avolio, Multifactor Leadership Questionnaire, 2nd ed. (Menlo Park, Calif.: Mind Garden, Inc); and Karl E. Weick and Kathleen M. Sutcliffe, Managing the Unexpected: Assuring High Performance in an Age of Complexity (San Francisco, Calif.: Jossey-Bass, 2001).

to keep the organization geared for a coordinated, speedy response. When the environment is stable, the organization can concentrate on current operational problems and day-to-day efficiency. Long-range planning and forecasting are not needed because environmental demands in the future will be the same as they are today.

With increasing environmental uncertainty, planning and forecasting become necessary.⁴⁶ Indeed, surveys of multinational corporations have found that as environments become more turbulent, managers increase their planning activities, particularly in terms of planning exercises that encourage learning, continual adaptation, and innovation.⁴⁷ Following the September 11, 2001, terrorist attacks in the United States, for example, there was a surge in the use of scenario and contingency planning as a way to manage uncertainty.⁴⁸

Planning can soften the adverse impact of external shifts. Organizations that have unstable environments often establish a separate planning department. In an unpredictable environment, planners scan environmental elements and analyze potential moves and countermoves by other organizations. Planning can be extensive and may forecast various scenarios for environmental contingencies. With scenario building, managers mentally rehearse different scenarios based on anticipating various changes that could affect the organization. Scenarios are like stories that offer alternative, vivid pictures of what the future will look like and how managers will respond. Royal Dutch/Shell Oil has long used scenario building and has been a leader in speedy response to massive changes that other organizations failed to perceive until it was too late.⁴⁹

ASSESS YOUR ANSWER

2 In a volatile, fast-changing environment, serious planning activities are a waste of time and resources.

ANSWER: *Disagree.* General Colin Powell once said, "No battle plan survives contact with the enemy." ⁵⁰ Yet no wise general would go into battle without one. Serious planning becomes more important in a turbulent environment, even though a plan will not last long. Planning and environmental forecasting help managers anticipate and be prepared to respond to changes. Lack of planning makes more sense in a stable, easily predictable environment.

Planning, however, cannot substitute for other actions, such as effective boundary spanning and adequate internal integration and coordination. The organizations that are most successful in uncertain environments are those that keep everyone in close touch with the environment so they can spot threats and opportunities, enabling the organization to respond immediately.

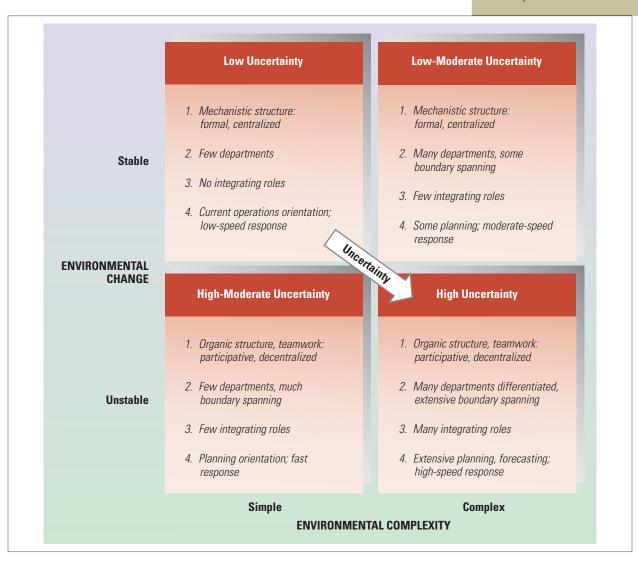
FRAMEWORK FOR RESPONSES TO ENVIRONMENTAL CHANGE

Exhibit 4.7 summarizes the ways in which environmental uncertainty influences organizational characteristics. The change and complexity dimensions are combined and illustrate four levels of uncertainty. The low uncertainty environment is simple

and stable. Organizations in this environment can have few departments and a mechanistic structure. In a low-moderate uncertainty environment, more departments are needed, along with more integrating roles to coordinate the departments. Some planning may occur. Environments that are high-moderate uncertainty are unstable but simple. Organization structure is organic and decentralized. Planning is emphasized and managers are quick to make internal changes as needed. The high uncertainty environment is both complex and unstable and is the most difficult environment from a management perspective. Organizations are large and have many departments, but they are also organic. A large number of management

EXHIBIT 4.7

Contingency Framework for Environmental Uncertainty and Organizational Responses



158

personnel are assigned to coordination and integration, and the organization uses boundary spanning, planning, and forecasting to enable a high-speed response to environmental changes.

DEPENDENCE ON EXTERNAL RESOURCES

Thus far, this chapter has described several ways in which organizations adapt to the lack of information and to the uncertainty caused by environmental change and complexity. We turn now to the third characteristic of the organization–environment relationship that affects organizations, which is the need for material and financial resources. The environment is the source of scarce and valued resources essential to organizational survival. Research in this area is called the *resource-dependence perspective*. **Resource dependence** means that organizations depend on the environment but strive to acquire control over resources to minimize their dependence. Organizations are vulnerable if vital resources are controlled by other organizations, so they try to be as independent as possible. Organizations do not want to become too vulnerable to other organizations because of negative effects on performance.

Although companies like to minimize their dependence, when costs and risks are high they also team up to share scarce resources and be more competitive on a global basis. Formal relationships with other organizations present a dilemma to managers. Organizations seek to reduce vulnerability with respect to resources by developing links with other organizations, but they also like to maximize their own autonomy and independence. Organizational linkages require coordination,⁵² and they reduce the freedom of each organization to make decisions without concern for the needs and goals of other organizations. Interorganizational relationships thus represent a tradeoff between resources and autonomy. To maintain autonomy, organizations that already have abundant resources will tend not to establish new linkages. Organizations that need resources will give up independence to acquire those resources. For example, DHL, the express delivery unit of Germany's Deutsche Post AG, lost billions of dollars trying to take over the U.S. package delivery market. By 2008, the company's boast in an early advertising campaign that "Yellow is the new Brown" (a swipe at package delivery leader UPS and its chocolate-brown trucks) was put on the shelf. DHL joined Big Brown in a strategic partnership that will have UPS handling DHL parcels in the United States. The two companies will continue to compete in overseas markets. In the face of \$3 billion in losses, difficulty building a local management team in the United States, and maintenance problems at U.S. package handling facilities, Deutsche Post's CEO Frank Appel called the partnership "a pragmatic and realistic strategy" for his company's U.S. operations. 53 Resource dependence will be discussed in more detail in the next chapter.

INFLUENCING EXTERNAL RESOURCES

In response to the need for resources, organizations try to maintain a balance between linkages with other organizations and their own independence. Organizations maintain this balance through attempts to modify, manipulate, or control other organizations.⁵⁴ To survive, the focal organization often tries to reach out and

EXHIBIT 4.8

Organizing Strategies for Controlling the External Environment

Establishing Formal Relationships

- 1. Acquire an ownership stake
- 2. Form joint ventures and partnerships
- 3. Lock in key players
- 4. Recruit executives
- 5. Use advertising and public relations

Influencing Key Sectors

- 1. Change where you do business (your domain)
- 2. Use political activity, regulation
- 3. Join in trade associations
- 4. Avoid illegitimate activities

change or control elements in the environment. Two strategies can be adopted to influence resources in the external environment: (1) establish favorable relationships with key elements in the environment and (2) shape the environmental domain by influencing key sectors. ⁵⁵ Techniques to accomplish each of these strategies are summarized in Exhibit 4.8. As a general rule, when organizations sense that valued resources are scarce, they will use the strategies in Exhibit 4.8 rather than go it alone. Notice how dissimilar these strategies are from the responses to environmental change and complexity described in Exhibit 4.7. The dissimilarity reflects the difference between responding to the need for resources and responding to the need for information.

Establishing Formal Relationships

Building formal relationships includes techniques such as acquiring ownership, establishing joint ventures and partnerships, developing connections with important people in the environment, recruiting key people, and using advertising and public relations.

Acquire an Ownership Stake. Companies use various forms of ownership to reduce uncertainty in an area important to the acquiring company. For example, a firm might buy a part of or a controlling interest in another company, giving it access to technology, products, or other resources it doesn't currently have.

A greater degree of ownership and control is obtained through acquisition or merger. An *acquisition* involves the purchase of one organization by another so that the buyer assumes control, such as when Ford bought Volvo, Hewlett-Packard bought EDS Corporation, and Wal-Mart purchased Britain's ASDA Group. A *merger* is the unification of two or more organizations into a single unit.⁵⁶ Sirius Satellite Radio and XM Satellite Radio Holdings merged to become Sirius XM Radio. The merger enabled the companies to combine resources and share risks to be more competitive against digital music providers and other emerging types of music distribution. In the past few years, there has been a huge wave of acquisition and merger activity in the telecommunications industry, reflecting how these companies cope with the tremendous uncertainty they face. Consider the emergence of the "new" AT&T.



AT&T was once all but dead, but the company has reemerged as a \$165 billion giant in the global telecommunications field thanks to mergers and acquisitions. SBC

AT&T

Communications, which was born after the break-up of giant AT&T in 1984, went on an acquisitions spree after the Telecommunications Act of 1996 opened the door to competition, buying Pacific Telesis Group (1997), Southern New England Telecommunications (1998), and Ameritech Corporation (1999). In 2005, SBC acquired AT&T, taking the name of that iconic organization and gaining a foothold in wireless with Cingular Wireless, which was a joint venture between AT&T and BellSouth. A year later, the newly-named AT&T merged with BellSouth, giving AT&T full control of Cingular and creating a telecommunications giant not unlike the "old" AT&T of the 1980s.

However, unlike the old company, AT&T faces a pack of tough rivals, including the No. 2 telecom company, Verizon Communications, which has also been involved in many mergers and acquisitions over the past several years. Other competitors include cable companies such as Comcast and Time Warner Cable, which are bundling together television, broadband, and Internet phone service, stealing customers from AT&T all over the country. The cable providers have also formed a partnership with Sprint, enabling them to provide wireless service as well. For its part, AT&T now sells packages of wireless phone services, Internet access, and pay television, as does Verizon. The two companies have recently taken integration one step further by airing video programming—from Saturday Night Live clips to user-generated video—across all three platforms. That enables them to sell advertising as a new source of revenue as growth in wireless begins to slow. However, the risks are high, and both companies face significant uncertainty and many new rivals as they enter this new area of business.⁵⁷

Form Joint Ventures and Partnerships. When there is a high level of complementarity between the business lines, geographical positions, or skills of two companies, the firms often go the route of a strategic alliance rather than ownership through merger or acquisition.⁵⁸ Such alliances are formed through contracts and joint ventures.

Contracts and joint ventures reduce uncertainty through a legal and binding relationship with another firm. Contracts come in the form of *license agreements* that involve the purchase of the right to use an asset (such as a new technology) for a specific time and *supplier arrangements* that contract for the sale of one firm's output to another. Contracts can provide long-term security by tying customers and suppliers to specific amounts and prices. For example, the Italian fashion house Versace forged a deal to license its primary asset—its name—for a line of designer eyeglasses. McDonald's contracts for an entire crop of russet potatoes to be certain of its supply of french fries. McDonald's also gains influence over suppliers through these contracts and has changed the way farmers grow potatoes and the profit margins they earn, which is consistent with the resource dependence perspective.⁵⁹

Joint ventures result in the creation of a new organization that is formally independent of the parents, although the parents will have some control. 60 Madrid-based tech startup FON has formed a joint venture with British phone carrier BT that will install FON wi-fi technology in the modems of nearly 2 million BT customers. Office Depot and Reliance Retail Limited, a division of India's largest private-sector employer, entered into a joint venture to provide office products and services to business customers in India. Food and agricultural corporation Cargill Inc. has numerous

joint ventures around the world and recently set up a venture with Spanish cooperative Hojiblance to source, trade, and supply customers worldwide with private label and bulk olive oils. As evidenced by these short examples, many joint ventures are undertaken to share risks when companies are doing business in other countries or on a global scale.

Lock in Key Players. Cooptation occurs when leaders from important sectors in the environment are made part of an organization. It takes place, for example, when influential customers or suppliers are appointed to the board of directors, such as when the senior executive of a bank sits on the board of a manufacturing company. As a board member, the banker may become psychologically coopted into the interests of the manufacturing firm. An interlocking directorate is a formal linkage that occurs when a member of the board of directors of one company sits on the board of directors of another company. The individual is a communications link between companies and can influence policies and decisions. When one individual is the link between two companies, this is typically referred to as a direct interlock. An indirect interlock occurs when a director of company A and a director of company B are both directors of company C. They have access to one another but do not have direct influence over their respective companies.⁶¹ Research shows that, as a firm's financial fortunes decline, direct interlocks with financial institutions increase. Financial uncertainty facing an industry also has been associated with greater indirect interlocks between competing companies.⁶²

Important business or community leaders also can be appointed to other organizational committees or task forces. By serving on committees or advisory panels, these influential people learn about the needs of the company and are more likely to include the company's interests in their decision making. Today, many companies face uncertainty from environmental pressure groups, so organizations are trying to bring in leaders from this sector, such as when DuPont appointed environmentalists to its biotechnology advisory panel.⁶³

Recruit Executives. Transferring or exchanging executives also offers a method of establishing favorable linkages with external organizations. For example, the aerospace industry often hires retired generals and executives from the Department of Defense. These generals have personal friends in the department, so the aerospace companies obtain better information about technical specifications, prices, and dates for new weapons systems. They can learn the needs of the defense department and are able to present their case for defense contracts in a more effective way. Companies without personal contacts find it nearly impossible to get a defense contract. Having channels of influence and communication between organizations serves to reduce financial uncertainty and dependence for an organization.

Get Your Side of the Story Out. A traditional way of establishing favorable relationships is through advertising. Organizations spend large amounts of money to influence the tastes and opinions of consumers. Advertising is especially important in highly competitive industries and in industries that experience variable demand. For example, since the U.S. Food and Drug Administration loosened regulations to permit advertising of prescription drugs in the United States, the major pharmaceutical companies have spent nearly \$5 billion annually on advertisements such as a cute cartoon bee pushing Nasonex spray for allergies or heart attack survivors promoting the benefits of cholesterol-fighting Lipitor.⁶⁴

Briefcase

As an organization manager, keep these guidelines in mind:

Reach out and control external sectors that threaten needed resources. Influence the domain by engaging in political activity, joining trade associations, and establishing favorable relationships. Establish relationships through ownership, joint ventures and strategic partnerships, cooptation, interlocking directorates, and executive recruitment. Reduce the amount of change or threat from the external environment so the organization will not have to change internally.

Public relations is similar to advertising, except that stories often are free and aimed at public opinion. Public relations people cast an organization in a favorable light in speeches, on websites, in press reports, and on television. Public relations attempts to shape the company's image in the minds of customers, suppliers, and government officials. Blogging is an important part of public relations activities for many companies today. Randy Baseler, vice president for marketing at Boeing Commercial Airplanes, started a public blog to share the company's view on products and marketing strategies. The open forum exposes Boeing to some stinging criticism, but it also enables the company to tell its side of the story and build better relationships with customers and the public.⁶⁵

Influencing Key Sectors

In addition to establishing favorable linkages, organizations often try to change the environment. There are four techniques for influencing or changing a firm's environment.

Change Where You Do Business. Early in this chapter, we talked about the organization's *domain* and the ten sectors of the task environment. An organization's domain is not fixed. Managers make decisions about which business to be in, the markets to enter, and the suppliers, banks, employees, and location to use, and this domain can be changed if necessary to keep the organization competitive. ⁶⁶ An organization can seek new environmental relationships and drop old ones. Managers may try to find a domain where there is little competition, no government regulation, abundant suppliers, affluent customers, and barriers to keep competitors out.

Acquisition and divestment are two techniques for altering the domain. For example, Google has acquired a number of companies to expand its domain beyond Internet search, including the \$1.65 billion acquisition of YouTube.⁶⁷ Divestment occurred when JC Penney sold off its chain of Eckerd drug stores to focus resources on the department store. Time Inc. is altering its domain as more readers and advertisers switch from print to online media. The company is selling off eighteen of its smaller niche magazines, including *Field & Stream* and *Parenting*, as well as cutting hundreds of employees at its other magazines—even such top sellers such as *People* and *Sports Illustrated*. Time managers made a decision to streamline publications in order to bolster the company's presence online.⁶⁸

Get Political. Political activity includes techniques to influence government legislation and regulation. Political strategy can be used to erect regulatory barriers against new competitors or to squash unfavorable legislation. Corporations also try to influence the appointment to agencies of people who are sympathetic to their needs.

As e-commerce continues to evolve, Internet companies such as Yahoo, Amazon, and Google have opened lobbying offices in Washington, D.C., to represent their interests. One example of their political activities is when telecom companies threatened to start charging Internet providers for speedy delivery of the Internet content the phone companies carry on their lines. The Internet firms lobbied Congress to insert language into telecom laws that would prohibit them from doing so.⁶⁹ Another Internet company that has become a sophisticated and influential lobbyist is eBay.

might follow suit.

"It is a fast-moving train, and if you get in front of it you'll get flattened," said an official with the state of Louisiana's licensing agency. She was talking about eBay's lob-



bying machine, which has become so powerful that it can practically make damaging or restrictive regulations disappear.

At any given time, there are approximately 90 million items for sale on eBay, and the company gets a fee for each successful transaction. Managers know that regulations on sellers would slow sales traffic, so lobbying against such regulation is a top priority for the company. In Louisiana, eBay lobbyists worked overtime to promote passage of a bill that would exempt some Internet transactions, such as those on eBay, from the state's licensing requirements for businesses conducting auctions. When Ohio passed a law that would have regulated eBay sellers in that state, the company worked to get it reversed. Auctioning laws in both Maine and Tennessee were also changed to exempt Internet sellers after lobbying efforts from eBay. Managers know that if a law takes hold in one state, other states

In addition to lobbying against unfavorable legislation, eBay also pushes for legislative changes that will benefit the company. For example, eBay's lobbying efforts in Illinois, New York, and Florida influenced those states to revise laws to allow Internet auction sites to compete with licensed ticket brokers and sell tickets for more than their face value, providing another stream of revenue for eBay. 70

Until recently, eBay worked primarily through a corps of local lobbyists in states all across the country. Now, though, like other major Internet firms, eBay has opened its own lobbying office in Washington, D.C. Former CEO Meg Whitman was always heavily involved in lobbying efforts. Many CEOs believe they should participate directly in lobbying. CEOs have easier access than lobbyists and can be especially effective when they do the politicking. Political activity is so important that "informal lobbyist" is an unwritten part of almost any CEO's job description.⁷¹

3 Managers of business organizations should not get involved in political activities.

ANSWER: *Disagree.* Smart business managers get involved in lobbying and other political activities to try to make sure the consequences of new laws and regulations are mostly positive for their own firms. Companies pay huge fees to associations and lobbyists to make sure government actions work out in their favor.

Unite with Others. Much of the work to influence the external environment is accomplished jointly with other organizations that have similar interests. For example, most large pharmaceutical companies belong to Pharmaceutical Research and Manufacturers of America. Manufacturing companies are part of the National Association of Manufacturers, and retailers join the Retail Industry Leaders

Association. Many software companies are members of the Initiative for Software

eBay

ASSESS YOUR ANSWER Choice (ISC). By pooling resources, these organizations can pay people to carry out activities such as lobbying legislators, influencing new regulations, developing public relations campaigns, and making campaign contributions. The National Tooling and Machining Association (NTMA) conducts lobbying on behalf of its members on issues that affect small business, such as taxes, health insurance, or government mandates. NTMA also gives its members statistics and information that help them become more competitive in the global marketplace.⁷²

Don't Fall into Illegitimate Activities. Illegitimate activities represent the final technique companies sometimes use to control their environmental domain, but this technique typically backfires. Conditions such as low profits, pressure from senior managers, or scarce environmental resources may lead managers to adopt behaviors not considered legitimate.⁷³ One study found that companies in industries with low demand, shortages, and strikes were more likely to be convicted for illegal activities, suggesting that illegal acts are an attempt to cope with resource scarcity. Some non-profit organizations have been found to use illegitimate or illegal actions to bolster their visibility and reputation as they compete with other organizations for scarce grants and donations, for example.⁷⁴

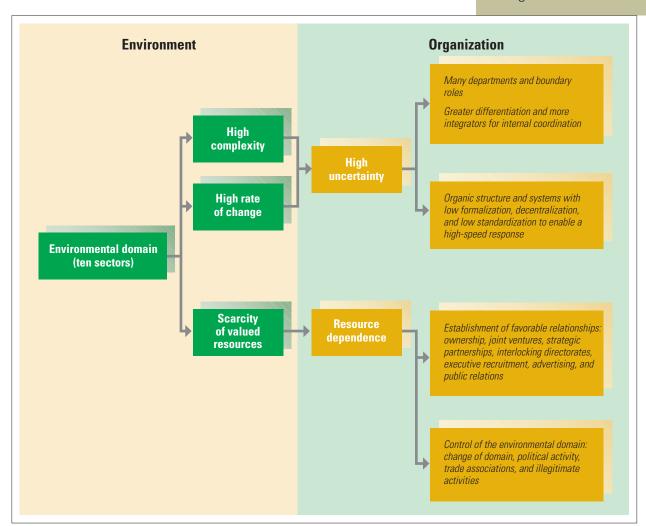
Types of illegitimate activities include payoffs to foreign governments, illegal political contributions, promotional gifts, and wiretapping. Bribery is one of the most frequent types of illegitimate activity, particularly in companies operating globally. Energy companies face tremendous uncertainty, for example, and need foreign governments to approve giant investments and authorize risky projects. Under pressure to win contracts in Nigeria, Albert "Jack" Stanley, a former executive at KBR (then a division of Halliburton Company), admits he orchestrated a total of about \$182 million in bribes to get Nigerian officials to approve the construction of a liquefied natural gas plant in that country. Stanley faces up to seven years in prison and a hefty fine after pleading guilty. In Germany, executives at both Siemens and Volkswagen have been charged with bribing labor representatives on their companies' supervisory boards. German law requires that firms give as many as half of their supervisory board seats to labor representatives. Executives need the board's support to carry out their plans and strategies for the company, and some resort to bribery to get the cooperation they need.

Organization-Environment Integrative Framework

The relationships illustrated in Exhibit 4.9 summarize the two major themes about organization–environment relationships discussed in this chapter. One theme is that the amount of complexity and change in an organization's domain influences the need for information and hence the uncertainty felt within an organization. Greater information uncertainty is resolved through greater structural flexibility and the assignment of additional departments and boundary roles. When uncertainty is low, management structures can be more mechanistic, and the number of departments and boundary roles can be fewer. The second theme pertains to the scarcity of material and financial resources. The more dependent an organization is on other organizations for those resources, the more important it is to either establish favorable linkages with those organizations or control entry into the domain. If dependence on external resources is low, the organization can maintain autonomy and does not need to establish linkages or control the external domain.

EXHIBIT 4.9

Relationship between Environmental Characteristics and Organizational Actions



DESIGN ESSENTIALS

- Change and complexity in the external environment have major implications for organization design and management action. Organizations are open social systems. Most are involved with hundreds of external elements. Important environmental sectors with which organizations deal are the industry, raw materials, human resources, financial resources, market, technology, economic conditions, government, sociocultural, and international.
- Organizational environments differ in terms of uncertainty and resource dependence. Organizational uncertainty is the result of the stable-unstable



and simple-complex dimensions of the environment. Resource dependence is the result of scarcity of the material and financial resources needed by the organization.

- Organization design takes on a logical perspective when the environment is considered. Organizations try to survive and achieve efficiencies in a world characterized by uncertainty and scarcity. Specific departments and functions are created to deal with uncertainties. The organization can be conceptualized as a technical core and departments that buffer environmental uncertainty. Boundary-spanning roles bring information about the environment into the organization and send information about the organization to the external environment.
- The concepts in this chapter provide specific frameworks for understanding how the environment influences the structure and functioning of an organization. Environmental complexity and change, for example, have specific impact on internal complexity and adaptability. Under great uncertainty, more resources are allocated to departments that will plan, deal with specific environmental elements, and integrate diverse internal activities. Moreover, organizations in rapidly changing environments typically reflect a loose, organic structure and management processes.
- When risk is great or resources are scarce, the organization can establish linkages through acquisitions, strategic alliances, interlocking directorates, executive recruitment, or advertising and public relations that will minimize risk and maintain a supply of scarce resources. Other techniques for influencing the environment include a change of the domain in which the organization operates, political activity, participation in trade associations, and perhaps illegitimate activities.
- Two important themes in this chapter are that organizations can learn and adapt to the environment and that organizations can change and control the environment. These strategies are especially true for large organizations that command many resources. Such organizations can adapt when necessary but can also neutralize or change problematic areas in the environment.

Key Concepts

boundary-spanning roles buffering roles business intelligence cooptation differentiation direct interlock domain general environment indirect interlock integration intelligence team interlocking directorate mechanistic organic organizational environment resource dependence sectors simple–complex dimension stable–unstable dimension task environment uncertainty

Discussion Questions

- 1. Define *organizational environment*. Would the task environment of a new Internet-based company be the same as that of a large government agency? Discuss.
- 2. What are some forces that influence environmental uncertainty? Which typically has the greatest impact on uncertainty—environmental complexity or environmental change? Why?

- 3. Name some factors causing environmental complexity for an organization of your choice. How might this environmental complexity lead to organizational complexity? Explain.
- 4. Discuss the importance of the international sector for today's organizations, compared to domestic sectors. What are some ways in which the international sector affects organizations in your city or community?
- 5. Describe differentiation and integration. In what type of environmental uncertainty will differentiation and integration be greatest? Least?
- 6. How do you think planning in today's organizations compares to planning twenty-five years ago? Do you think planning becomes more important or less important in a world where everything is changing fast and crises are a regular part of organizational life? Why?

- 7. What is an organic organization? A mechanistic organization? How does the environment influence organic and mechanistic structures?
- 8. Why do organizations become involved in interorganizational relationships? Do these relationships affect an organization's dependency? Performance?
- 9. Assume you have been asked to calculate the ratio of staff employees to production employees in two organizations—one in a simple, stable environment and one in a complex, shifting environment. How would you expect these ratios to differ? Why?
- 10. Is changing the organization's domain a feasible strategy for coping with a threatening environment? Explain. Can you think of an organization in the recent news that has changed its domain?

Chapter 4 Workbook: Organizations You Rely On*

Below, list eight organizations you somehow rely on in your daily life. Examples might be a restaurant, a clothing or CD store, a university, your family, the post office, the telephone company, an airline, a pizzeria that delivers, your place of work, and so on. In the first column, list those eight organizations. Then, in column 2, choose

another organization you could use in case the ones in column 1 were not available. In column 3, evaluate your level of dependence on the organizations listed in column 1 as Strong, Medium, or Weak. Finally, in column 4, rate the certainty of that organization being able to meet your needs as High (certainty), Medium, or Low.

Organization	Backup Organization	Level of Dependence	Level of Certainty
1.			
2.			
3.			
4.			
5.			
Ì		1	1

Organization	Backup Organization	Level of Dependence	Level of Certainty
6.			
J.			
7.			
1.			
0			
8.			

Questions

- 1. Do you have adequate backup organizations for those of high dependence? How might you create even more backups?
- 2. What would you do if an organization you rated high for dependence and high for certainty suddenly became high-dependence and low-certainty? How would your behavior relate to the concept of resource dependence?
- 3. Have you ever used any behaviors similar to those in Exhibit 4.8 to manage your relationships with the organizations listed in column 1?
- *Adapted by Dorothy Marcic from "Organizational Dependencies," in Ricky W. Griffin and Thomas C. Head, *Practicing Management*, 2nd ed. (Dallas: Houghton Mifflin), 2–3.

Case for Analysis: The Paradoxical Twins: Acme and Omega Electronics*

Part I

In 1986, Technological Products of Erie, Pennsylvania, was bought out by a Cleveland manufacturer. The Cleveland firm had no interest in the electronics division of Technological Products and subsequently sold to different investors two plants that manufactured computer chips and printed circuit boards. Integrated circuits, or chips, were the first step into microminiaturization in the electronics industry, and both plants had developed some expertise in the technology, along with their superior capabilities in manufacturing printed circuit boards. One of the plants, located in nearby Waterford, was renamed Acme Electronics; the other plant, within the city limits of Erie, was renamed Omega Electronics, Inc.

Acme retained its original management and upgraded its general manager to president. Omega hired a new president who had been a director of a large electronic research

laboratory and upgraded several of the existing personnel within the plant. Acme and Omega often competed for the same contracts. As subcontractors, both firms benefited from the electronics boom and both looked forward to future growth and expansion. The world was going digital, and both companies began producing digital microprocessors along with the production of circuit boards. Acme had annual sales of \$100 million and employed 550 people. Omega had annual sales of \$80 million and employed 480 people. Acme regularly achieved greater net profits, much to the chagrin of Omega's management.

Inside Acme

The president of Acme, John Tyler, was confident that, had the demand not been so great, Acme's competitor would not have survived. "In fact," he said, "we have been able to beat Omega regularly for the most profitable contracts, thereby increasing our profit." Tyler credited his firm's greater effectiveness to his managers' abilities to run a "tight ship." He explained that he had retained the basic structure developed by Technological Products because it was most efficient for high-volume manufacturing. Acme had detailed organization charts and job descriptions. Tyler believed everyone should have clear responsibilities and narrowly defined jobs, which would lead to efficient performance and high company profits. People were generally satisfied with their work at Acme; however, some of the managers voiced the desire to have a little more latitude in their jobs.

Inside Omega

Omega's president, Jim Rawls, did not believe in organization charts. He felt his organization had departments similar to Acme's, but he thought Omega's plant was small enough that things such as organization charts just put artificial barriers between specialists who should be working together. Written memos were not allowed since, as Rawls expressed it, "the plant is small enough that if people want to communicate, they can just drop by and talk things over."

The head of the mechanical engineering department said, "Jim spends too much of his time and mine making sure everyone understands what we're doing and listening to suggestions." Rawls was concerned with employee satisfaction and wanted everyone to feel part of the organization. The top management team reflected Rawls's attitudes. They also believed that employees should be familiar with activities throughout the organization so that cooperation between departments would be increased. A newer member of the industrial engineering department said, "When I first got here, I wasn't sure what I was supposed to do. One day I worked with some mechanical engineers and the next day I helped the shipping department design some packing cartons. The first months on the job were hectic, but at least I got a real feel for what makes Omega tick."

Part II

In the 1990s, mixed analog and digital devices began threatening the demand for the complex circuit boards manufactured by Acme and Omega. This "system-on-a-chip" technology combined analog functions, such as sound, graphics, and power management, together with digital circuitry, such as logic and memory, making it highly useful for new products such as cellular phones and wireless computers. Both Acme and Omega realized the threat to their futures and began aggressively to seek new customers.

In July 1992, a major photocopier manufacturer was looking for a subcontractor to assemble the digital memory units of its new experimental copier. The projected contract for the job was estimated to be \$7 million to \$9 million in annual sales.

Both Acme and Omega were geographically close to this manufacturer, and both submitted highly competitive bids for the production of 100 prototypes. Acme's bid was slightly lower than Omega's; however, both firms were asked to produce 100 units. The photocopier manufacturer told both firms that speed was critical because its president had boasted to other manufacturers that the firm would have a finished copier available by Christmas. This boast, much to the designer's dismay, required pressure on all subcontractors to begin prototype production before the final design of the copier was complete. This meant Acme and Omega would have at most two weeks to produce the prototypes or would delay the final copier production.

Part III

Inside Acme

As soon as John Tyler was given the blueprints (Monday, July 13, 1992), he sent a memo to the purchasing department asking to move forward on the purchase of all necessary materials. At the same time, he sent the blueprints to the drafting department and asked that it prepare manufacturing prints. The industrial engineering department was told to begin methods design work for use by the production department supervisors. Tyler also sent a memo to all department heads and executives indicating the critical time constraints of this job and how he expected that all employees would perform as efficiently as they had in the past.

The departments had little contact with one another for several days, and each seemed to work at its own speed. Each department also encountered problems. Purchasing could not acquire all the parts on time. Industrial engineering had difficulty arranging an efficient assembly sequence. Mechanical engineering did not take the deadline seriously and parceled its work to vendors so the engineers could work on other jobs scheduled previously. Tyler made it a point to stay in touch with the photocopier manufacturer to let it know things were progressing and to learn of any new developments. He traditionally worked to keep important clients happy. Tyler telephoned someone at the photocopier company at least twice a week and got to know the head designer quite well.

On July 17, Tyler learned that mechanical engineering was far behind in its development work, and he "hit the roof." To make matters worse, purchasing had not obtained all the parts, so the industrial engineers decided to assemble the product without one part, which would be inserted at the last minute. On Thursday, July 23, the final units were being assembled, although the process was delayed several times. On Friday, July 24, the last units were finished while Tyler paced around the plant. Late that afternoon, Tyler received a phone call from the head designer of the photocopier manufacturer, who told Tyler that he had received a call on Wednesday from Jim Rawls of Omega. He explained that Rawls's workers had found an error in the design of the connector cable and taken corrective action on their prototypes. He told Tyler that he had checked out

the design error and that Omega was right. Tyler, a bit overwhelmed by this information, told the designer that he had all the memory units ready for shipment and that, as soon as they received the missing component on Monday or Tuesday, they would be able to deliver the final units. The designer explained that the design error would be rectified in a new blueprint he was sending over by messenger and that he would hold Acme to the Tuesday delivery date.

When the blueprint arrived, Tyler called in the production supervisor to assess the damage. The alterations in the design would call for total disassembly and the unsoldering of several connections. Tyler told the supervisor to put extra people on the alterations first thing Monday morning and to try to finish the job by Tuesday. Late Tuesday afternoon, the alterations were finished and the missing components were delivered. Wednesday morning, the production supervisor discovered that the units would have to be torn apart again to install the missing component. When John Tyler was told this, he again "hit the roof." He called industrial engineering and asked if it could help out. The production supervisor and the methods engineer couldn't agree on how to install the component. John Tyler settled the argument by ordering that all units be taken apart again and the missing component installed. He told shipping to prepare cartons for delivery on Friday afternoon.

On Friday, July 31, fifty prototypes were shipped from Acme without final inspection. John Tyler was concerned about his firm's reputation, so he waived the final inspection after he personally tested one unit and found it operational. On Tuesday, August 4, Acme shipped the last fifty units.

Inside Omega

On Friday, July 10, Jim Rawls called a meeting that included department heads to tell them about the potential contract they were to receive. He told them that as soon as he received the blueprints, work could begin. On Monday, July 13, the prints arrived and again the department heads met to discuss the project. At the end of the meeting, drafting had agreed to prepare manufacturing prints, while industrial engineering and production would begin methods design.

Two problems arose within Omega that were similar to those at Acme. Certain ordered parts could not be delivered on time, and the assembly sequence was difficult

to engineer. The departments proposed ideas to help one another, however, and department heads and key employees had daily meetings to discuss progress. The head of electrical engineering knew of a Japanese source for the components that could not be purchased from normal suppliers. Most problems were solved by Saturday, July 18.

On Monday, July 20, a methods engineer and the production supervisor formulated the assembly plans, and production was set to begin on Tuesday morning. On Monday afternoon, people from mechanical engineering, electrical engineering, production, and industrial engineering got together to produce a prototype just to ensure that there would be no snags in production. While they were building the unit, they discovered an error in the connector cable design. All the engineers agreed, after checking and rechecking the blueprints, that the cable was erroneously designed. People from mechanical engineering and electrical engineering spent Monday night redesigning the cable, and on Tuesday morning, the drafting department finalized the changes in the manufacturing prints. On Tuesday morning, Rawls was a bit apprehensive about the design changes and decided to get formal approval. Rawls received word on Wednesday from the head designer at the photocopier firm that they could proceed with the design changes as discussed on the phone. On Friday, July 24, the final units were inspected by quality control and were then shipped.

Part IV

Ten of Acme's final memory units were defective, whereas all of Omega's units passed the photocopier firm's tests. The photocopier firm was disappointed with Acme's delivery delay and incurred further delays in repairing the defective Acme units. However, rather than give the entire contract to one firm, the final contract was split between Acme and Omega with two directives added: (1) maintain zero defects and (2) reduce final cost. In 1993, through extensive cost-cutting efforts, Acme reduced its unit cost by 20 percent and was ultimately awarded the total contract.

*Adapted from John F. Veiga, "The Paradoxical Twins: Acme and Omega Electronics," in John F. Veiga and John N. Yanouzas, *The Dynamics of Organizational Theory* (St. Paul: West, 1984), 132–138.

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Organizational Ecosystems

Is Competition Dead? \cdot The Changing Role of Management \cdot Interorganizational Framework

Resource Dependence

Supply Chain Relationships • Power Implications

Collaborative Networks

Why Collaboration? • From Adversaries to Partners

Population Ecology

Organizational Form and Niche \cdot Process of Ecological Change \cdot Strategies for Survival

Institutionalism

The Institutional View and Organization Design • Institutional Similarity

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



SAP and Microsoft go at each other tooth-and-nail for customers, but the two called a truce to jointly develop a piece of software that allows a Microsoft spreadsheet to bring in data from an SAP accounting program. Rival Internet companies Google, Yahoo!, and MySpace created an alliance to develop new technologies that will benefit all of the partners.¹ All over corporate America, and particularly in the rapidly changing and uncertain high-tech industry, companies are cheerfully sleeping with the enemy.

A widespread organizational trend today is to reduce boundaries and increase collaboration between companies, sometimes even between competitors. In many industries, the business environment is so complicated that no single company can develop all the expertise and resources needed to stay competitive. Why? Globalization and rapid advances in technology, communications, and transportation have created amazing new opportunities, but they have also raised the cost of doing business and made it increasingly difficult for any company to take advantage of those opportunities on its own. In this new economy, webs of organizations are emerging. Collaboration and partnership is the new way of doing business. Organizations think of themselves as teams that create value jointly rather than as autonomous companies that are in competition with all others.

You can see the results of interorganizational collaboration when a movie like the animated *Star Wars: The Clone Wars* from Lucasfilm Ltd. is launched. More than a month before the movie opened, Toys "R" Us mounted digital clocks in many of its stores, counting down the days until the chain began selling toys and action figures based on the film. Two of the retailer's flagship stores held midnight costume parties and trivia contests in connection with the opening. McDonald's teamed up with Lucasfilm to put together a Star Wars Happy Meal promotion, each meal coming with a specially-designed box and one of eighteen exclusive toys. Kids could continue their Star Wars experience online at the Happy Meal Virtual World, where

Managing

by Design

Questions

codes printed on Happy Meal packaging enabled them to unlock top-secret Jedi quests.² For some blockbuster movies, coordinated action among companies can yield millions in addition to box-office and DVD profits.

Purpose of This Chapter

This chapter explores the most recent trend in organizing, which is the increasingly dense web of relationships among organizations. Companies have always been dependent on other organizations for supplies, materials, and information. The question is how these relationships are managed. At one time it was a matter of a large, powerful company tightening the screws on small suppliers. Today a company can choose to develop positive, trusting relationships. The notion of horizontal relationships described in Chapter 3 and the understanding of environmental uncertainty in Chapter 4 are leading to the next stage of organizational evolution, which is horizontal relationships across organizations. Organizations can choose to build relationships in many ways, such as appointing preferred suppliers, establishing agreements, business partnering, joint ventures, or even mergers and acquisitions.

Interorganizational research has yielded perspectives such as resource dependence, collaborative networks, population ecology, and institutionalism. The sum total of these ideas can be daunting, because it means managers no longer can rest in the safety of managing a single organization. They have to figure out how to manage a whole set of interorganizational relationships, which is a great deal more challenging and complex.

ORGANIZATIONAL ECOSYSTEMS

Interorganizational relationships are the relatively enduring resource transactions, flows, and linkages that occur among two or more organizations.³ Traditionally, these transactions and relationships have been seen as a necessary evil to obtain what an organization needs. The presumption has been that the world is composed of distinct businesses that thrive on autonomy and compete for supremacy. A company may be forced into interorganizational relationships depending on its needs and the instability and complexity of the environment.

A new view described by James Moore argues that organizations are now evolving into business ecosystems. An **organizational ecosystem** is a system formed by the interaction of a community of organizations and their environment. An ecosystem cuts across traditional industry lines.⁴ A company can create its own ecosystem. Apple, for instance, travels in several major industries, including consumer electronics, Internet services, mobile phones, personal computers, and entertainment. Its ecosystem also includes hundreds of suppliers and millions of customers across many markets. Google is getting into the entertainment business as well, rolling out dozens of short cartoons by "Family Guy" creator Seth McFarlane and building a role as "middleman to Hollywood talent coming online." Cable television companies are offering new forms of phone service, and telephone companies are getting into the television business. Today, successful companies develop relationships with numerous other organizations cutting across traditional business boundaries.



Look for and develop relationships with other organizations. Don't limit your thinking to a single industry or business type. Build an ecosystem of which your organization is a part.

Is Competition Dead?

No company can go it alone under a constant onslaught of international competitors, changing technology, and new regulations. Organizations around the world are embedded in complex networks of confusing relationships—collaborating in some markets, competing fiercely in others. The number of corporate alliances has been increasing at a rate of 25 percent a year, and many of those have been between competitors.⁶ These alliances influence organizations' competitive behavior in varied ways.

Traditional competition, which assumes a distinct company competing for survival and supremacy with other stand-alone businesses, no longer exists because each organization both supports and depends on the others for success, and perhaps for survival. However, most managers recognize that the competitive stakes are higher than ever in a world where market share can crumble overnight and no industry is immune from almost instant obsolescence.⁷ In today's world, a new form of competition is in fact intensifying.⁸

For one thing, companies now need to coevolve with others in the ecosystem so that everyone gets stronger. Consider the wolf and the caribou. Wolves cull weaker caribou, which strengthens the herd. A strong herd means that wolves must become stronger themselves. With coevolution, the whole system becomes stronger. In the same way, companies coevolve through discussion with each other, shared visions, alliances, and managing complex relationships.

Exhibit 5.1 illustrates the complexity of an ecosystem by showing the myriad overlapping relationships in which high-tech companies were involved in 1999. Since then, many of these companies have merged, been acquired, or gone out of business. Ecosystems constantly change and evolve, with some relationships growing stronger while others weaken or are terminated. The changing pattern of relationships and interactions in an ecosystem contributes to the health and vitality of the system as an integrated whole.⁹

In an organizational ecosystem, conflict and cooperation exist at the same time. Consider the partnership between rivals Sony and Samsung.

Sony and Samsung illustrate the tangled connections that have developed among consumer electronics firms over the past several years. Many electronics companies that long prided themselves on independence have shifted to an ecosystem approach.

Samsung's mission has long been clear: knock off Sony as the world's top electronics maker. Within the past several years, the Korean underdog surpassed giant Sony



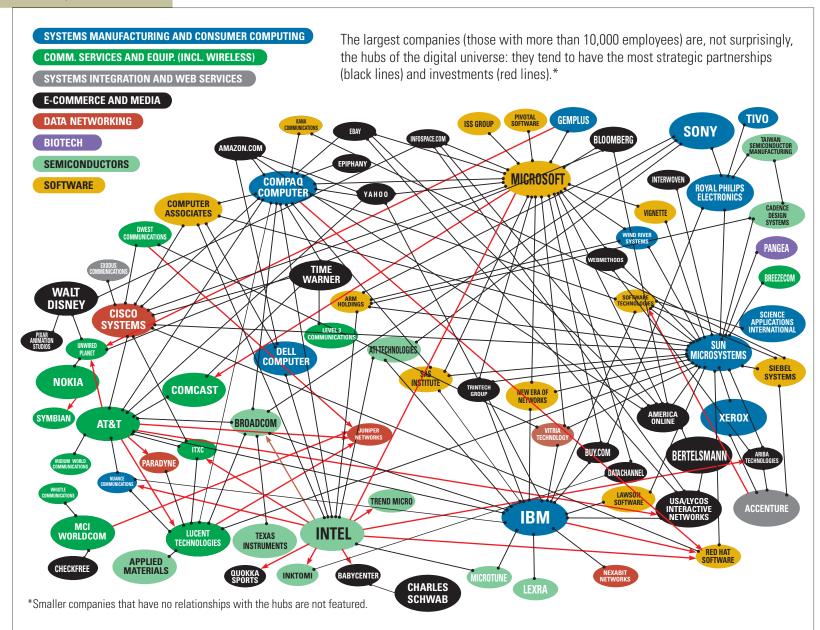
in market capitalization, revenue, and profits. The two companies continue to battle, along with a few other top electronics makers, for the No. 1 spot in global television sales.

So what possible reason could Samsung have for letting Sony use some of its key technologies for flat-panel televisions before Samsung's own products used them? Sony's televisions using those technologies ended up outselling Samsung's LCD sets by more than three to one in the year they were released. Not such a smart move on Samsung's part, you would think, but you might be wrong. By working closely with Sony, Samsung engineers and managers knew they were getting a crash course in how to make better LCD televisions. Previously the company had used the technology primarily for computer monitors and cellphones. Samsung engineer Jang Insik and his Sony counterpart Hiroshi Murayama talk by phone several times a day. "If we can learn from Sony," says Jang, "it will help us in advancing our technology."

(continued)

Sony Corporation and Samsung Electronics Company

EXHIBIT 5.1
An Organizational
Ecosystem (based on 1999 data)



As competition in electronics has intensified, Sony and Samsung have come to realize that they depend on each other in areas of technology and developing new products. The partnership between the two companies began in 2003, when both first started making LCD panels. Samsung had the better technology, but Sony had a far superior understanding of how to turn that technology into top-selling products. Sony closely guards its know-how, but Samsung was able to get a close-up look because of the partnership. Samsung televisions that came out the following year used some of the same features that made Sony's designs so popular. The two firms continue to try to out-do one another, but they continue to share information too, because managers at both companies know it's the best route to growing stronger.¹⁰

Mutual dependencies and partnerships have become a fact of life. Is competition dead? Companies today may use their strength to achieve victory over competitors, but ultimately cooperation carries the day.

The Changing Role of Management

Within business ecosystems managers learn to move beyond traditional responsibilities of corporate strategy and designing hierarchical structures and control systems. If a top manager looks down to enforce order and uniformity, the company is missing opportunities for new and evolving external relationships. ¹¹ In this new world, managers think about horizontal processes rather than vertical structures. Important initiatives are not just top down; they cut across the boundaries separating organizational units. Moreover, horizontal relationships now include linkages with suppliers and customers, who become part of the team. Business leaders can learn to lead economic coevolution. Managers learn to see and appreciate the rich environment of opportunities that grow from cooperative relationships with other contributors to the ecosystem. Rather than trying to force suppliers into low prices or customers into high prices, managers strive to strengthen the larger system evolving around them, finding ways to understand this big picture and how to contribute.

This is a broader leadership role than ever before. Managers in charge of coordinating with other companies have to learn new executive skills. A study of executive roles by the Hay Group distinguished between *operations roles* and *collaborative roles*. Most traditional managers are skilled in handling operations roles, which have traditional vertical authority and are accountable for business results primarily through direct control over people and resources. Collaborative roles, on the other hand, don't have direct authority over horizontal colleagues or partners, but are nonetheless accountable for specific business results. Managers in collaborative roles have to be highly flexible and proactive. They achieve results through personal communication and assertively seeking out needed information and resources. ¹²

The old way of managing relied almost exclusively on operations roles, defending the organization's boundaries and maintaining direct control over resources. Today, though, collaborative roles are becoming more important for success. When alliances fail, it is usually because of an inability of the partners to develop trusting, collaborative relationships rather than due to the lack of a solid business plan or strategy. In successful alliances, people work together almost as if they were members of the same company. Donovan Neale-May, president of advertising firm Neale-May & Partners, provides an example of the new collaborative management style. Neale-May realized that his agency was having trouble winning accounts because of its lack of international experience. He talked with other ad executives

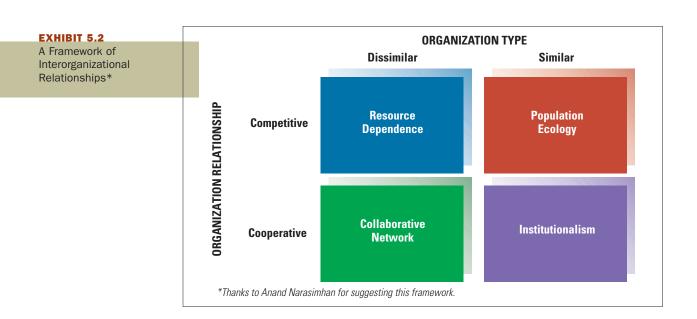
and learned that they experienced the same frustrations. "We have companies—our own neighbors here in Colorado—that won't hire us because we don't have offices in sixty-five countries," said John Metzger, CEO of a Boulder firm. Neale-May eventually spearheaded GlobalFluency, an international alliance of forty independent high-tech public relations agencies that share information and jointly market their services. The power of GlobalFluency has enabled small, owner-run agencies to win accounts that once went only to large competitors. Alliance members maintain

their independence for small jobs but they work together through GlobalFluency to

Interorganizational Framework

pitch for regional projects or international campaigns.¹⁴

Appreciating the larger organizational ecosystem is one of the most exciting areas of organization theory. The models and perspectives for understanding interorganizational relationships ultimately help managers change their role from top-down management to horizontal management across organizations. Exhibit 5.2 shows a framework for analyzing the different views of interorganizational relationships. Relationships among organizations can be characterized by whether the organizations are dissimilar or similar and whether relationships are competitive or cooperative. By understanding these perspectives, managers can assess their environment and adopt strategies to suit their needs. The first perspective is called resourcedependence theory, which was briefly described in Chapter 4. It describes rational ways organizations deal with each other to reduce dependence on the environment. The second perspective is about collaborative networks, wherein organizations allow themselves to become dependent on other organizations to increase value and productivity for all. The third perspective is population ecology, which examines how new organizations fill niches left open by established organizations and how a rich variety of new organizational forms benefits society. The final approach is called institutionalism and explains why and how organizations legitimate themselves in



the larger environment and design structures by borrowing ideas from each other. These four approaches to the study of interorganizational relationships are described in the remainder of this chapter.

RESOURCE DEPENDENCE

Resource dependence represents the traditional view of relationships among organizations. As described in Chapter 4, **resource-dependence theory** argues that organizations try to minimize their dependence on other organizations for the supply of important resources and try to influence the environment to make resources available.¹⁵ Organizations succeed by striving for independence and autonomy. When threatened by greater dependence, organizations will assert control over external resources to minimize that dependence.

When organizations feel resource or supply constraints, the resource dependence perspective says they maneuver to maintain their autonomy through a variety of strategies, several of which were described in Chapter 4. One strategy is to adapt to or alter the interdependent relationships. This could mean purchasing ownership in suppliers, developing long-term contracts or joint ventures to lock in necessary resources, or building relationships in other ways. Other techniques, as described in Chapter 4, include interlocking directorships to include members of supplier companies on the board of directors, joining trade associations to coordinate needs, using lobbying and political activities, or merging with another firm to guarantee resources and material supplies. Organizations operating under the resource-dependence philosophy will do whatever is needed to avoid excessive dependence on the environment and maintain control of resources, thereby reducing uncertainty. Locking in resources through long-term supplier relationships is one of the most common strategies.

Supply Chain Relationships

To operate efficiently and produce high-quality items that meet customers' needs, an organization must have reliable deliveries of high-quality, reasonably priced supplies and materials. Many organizations develop close relationships with key suppliers to gain control over necessary resources. **Supply chain management** refers to managing the sequence of suppliers and purchasers, covering all stages of processing from obtaining raw materials to distributing finished goods to consumers. Exhibit 5.3 illustrates a basic supply chain model. A supply chain is a network of multiple businesses and individuals that are connected through the flow of products or services. Research indicates that formalizing collaborative supply chain relationships can help organizations obtain and use resources more efficiently and improve their performance. To

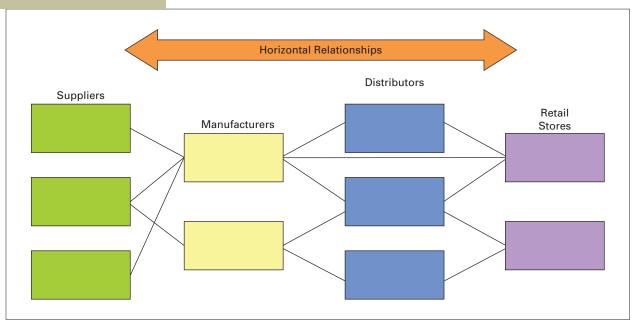
Many organizations manage supply chain relationships using the Internet and other sophisticated technologies, establishing electronic linkages between the organization and these external partners for the sharing and exchange of data. ¹⁸ Companies such as Apple, Wal-Mart, Nokia, Toyota, Tesco, and Samsung, for instance, are electronically connected with their partners so that everyone along the supply chain has almost completely transparent information about sales, orders, shipments, and other data. That means suppliers have data about orders, production levels, and needed materials, ensuring that resources are available when needed. In a recent study of supply chains, AMR Research ranked Apple as the best-performing supply

Briefcase

As an organization manager, keep these guidelines in mind:

Reach out and influence external sectors that threaten needed resources. Adopt strategies to control resources, especially when your organization is dependent and has little power. Assert your company's influence when you have power and control over resources.

EXHIBIT 5.3A Basic Supply Chain Model



Source: Global Supply Chain Games Project, Delft University and the University of Maryland, R. H. Smith School of Business, http://www.gscg.org:8080/opencms/export/sites/default/gscg/images/supplychain_simple.gif (accessed on February 6, 2008).

chain in the world, with Nokia at No. 2, Wal-Mart at No. 6, Samsung Electronics at No. 9, and the British supermarket chain Tesco at No. 12.¹⁹

Power Implications

In resource-dependence theory, large, independent companies have power over small suppliers.²⁰ For example, power in consumer products has shifted from vendors such as Rubbermaid and Procter & Gamble to the big discount retail chains, which can demand—and receive—special pricing deals. Wal-Mart has grown so large and powerful that it can dictate the terms with virtually any supplier. When one company has power over another, it can ask suppliers to absorb more costs, ship more efficiently, and provide more services than ever before, often without a price increase. Often the suppliers have no choice but to go along, and those who fail to do so may go out of business.

Power is also shifting in other industries. For decades, technology vendors have been putting out incompatible products and expecting their corporate customers to assume the burden and expense of making everything work together. Those days may be coming to an end. With a shaky economy, big corporations cut back their spending on technology, which led to stiffer competition among technology vendors and gave their corporate customers greater power to make demands. Another area that is seeing a big power shift is the publishing and bookselling industry, as illustrated by the following example.

Amazon calls itself the most customercentric company on earth, but many small publishers and authors are beginning to call it the biggest bully in the publishing indus-



try. If you've purchased from Amazon, you might have used the "Buy Now with 1 Click" button, which allows registered users to buy a book from Amazon instantly and get free shipping. But if you're a publisher and you cross the giant online retailer, you're likely to have the "Buy Now" button disabled for your titles. Customers can still buy the books, but they have to navigate to an open marketplace linking them to third-party sellers.

t -

Amazon.com

That's what happened to books published by the British unit of Hachette Livre, a subsidiary of French media company Lagardère, after a dispute with Amazon over the division of revenues from online sales. In Britain, as in other markets where Amazon has a commanding position, publishers have tough annual negotiations with Amazon about their cut of sales. Hachette Livre says Amazon has demanded an ever-increasing slice of the revenue pie that is shared between author, publisher, retailer, printer, and so forth.

Amazon has also disabled the "Buy Now" button for some small publishers in the United States that resisted the giant company's demands that they use an Amazon-owned company, BookSurge, for print-on-demand services. "This is a clear indication that once they have the clout they are willing to use it to the full extent that they can," said Paul Aiken, executive director of the Authors Guild, a trade group that uses BackinPrint.com for print-on-demand books. "It's ugly with Amazon and will probably get uglier." 21

COLLABORATIVE NETWORKS

The collaborative-network perspective is an emerging alternative to resourcedependence theory. Companies join together to become more competitive and to share scarce resources. Large aerospace firms partner with one another and with smaller companies and suppliers to design next-generation jets. Large pharmaceutical companies join with small biotechnology firms to share resources and knowledge and spur innovation. Consulting firms, investment companies, and accounting firms may join in an alliance to meet customer demands for expanded services.²² As companies move into their own uncharted territory, they are also racing into alliances. Sprint, Clearwire, Comcast, Google, Time Warner, Intel, and Bright House formed an alliance to develop new technology for ultrafast wireless Internet access for cell phones and laptops, called WiMax. They believed the collaborative network approach was the best way to get a jump on rivals Verizon and AT&T in developing next-generation wireless services. So far, the companies have jointly invested more than \$3 billion to develop a national WiMax network that will have the Internet download speed of a cable connection and the broad reach of a cell phone network.²³ Corporate alliances require managers who are good at building personal networks across boundaries. How effective are you at networking? Complete the questionnaire in the "How Do You Fit the Design?" box to find out.

Why Collaboration?

Why all this interest in interorganizational collaboration? Some key reasons include sharing risks when entering new markets, mounting expensive new programs and reducing costs, and enhancing organizational profile in selected industries or

technologies. Cooperation is a prerequisite for greater innovation, problem solving, and performance.²⁴ In addition, partnerships are a major avenue for entering global markets, with both large and small firms developing partnerships overseas and in North America.

North American companies traditionally have worked alone, competing with each other and believing in the tradition of individualism and self-reliance, but they have learned from their international experience just how effective interorganizational relationships can be. Both Japan and Korea have long traditions of corporate clans or industrial groups that collaborate and assist each other. North Americans typically have considered interdependence a bad thing, believing it would reduce competition. However, the experience of collaboration in other countries has shown that competition among companies can be fierce in some areas even as they collaborate

How Do You Fit the Design? Personal Networking

Are you a natural at reaching out to others for personal networking? Having multiple sources of information is a building block for partnering with people in other organizations. To learn something about your networking, answer the following questions. Please answer whether each item is Mostly True or Mostly False for you in school or at work.

	Mostly True	Mostly False
1. I learn early on about changes going on in the organization and how they might affect me or my job.		
2. I network as much to help other people solve problems as to help myself.		
3. I join professional groups and associations to expand my contacts and knowledge.		
4. I know and talk with peers in other organizations.		
5. I act as a bridge from my work group to other work groups.		
6. I frequently use lunches to meet and network with new people.		
7. I regularly participate in charitable causes.		

		Mostly True	Mostly False
8.	I maintain a list of friends and colleagues to whom I send Christmas cards.		
9.	I maintain contact with people from previous organizations and school groups.		
LO.	I actively give information to subordinates, peers, and my boss.		

Scoring: Give yourself one point for each item marked as Mostly True. A score of 7 or higher suggests very active networking. If you scored three or less, reaching out to others may not be natural for you and will require extra effort.

Interpretation: In a world of adversarial relationships between organizations, networking across organizational boundaries was not important. However, in a world of interorganizational partnerships, many good things flow from active networking, which will build a web of organizational relationships to get things done. If you are going to manage relationships with other organizations, networking is an essential part of your job. Networking builds social, work, and career relationships that facilitate mutual benefit. People with large, active networks tend to enjoy and contribute to partnerships and have broader impact on interorganizational relationships.

Organizations should strive to be as independent and selfsufficient as possible so that their managers aren't put in the position of "dancing to someone else's tune."

ANSWER: *Disagree.* Trying to be separate and independent is the old way of thinking. This view says organizations should minimize their dependence on other firms so that they do not become vulnerable. Today, though, successful companies see collaboration as a better approach to maintaining a balance of power and getting things done.

ASSESS YOUR ANSWER

in others. It is as if the brothers and sisters of a single family went into separate businesses and want to outdo one another, but they will help each other out when push comes to shove.

Interorganizational linkages provide a kind of safety net that encourages long-term investment and risk taking. Organizations can achieve higher levels of innovation and performance as they learn to shift from an adversarial to a partnership mindset.²⁵ Consider the following examples:

- Nintendo had become an "also-ran" in the video game console market, but it had a clear hit with the Wii. Why? Partly because, for the first time, Nintendo reached out to independent software developers and game makers. Nintendo executives made a special presentation at Namco Bandai Games, for example, listing reasons why the Wii would be profitable for both companies. By being a partner with other game developers rather that a rival, Nintendo dramatically increased the number and diversity of games that can run on the Wii.²⁶
- Procter & Gamble (P&G) and Clorox are fierce rivals in cleaning products and water purification, but both companies profited when they collaborated to produce Glad Press 'n Seal. The technology for the innovative plastic wrap was invented in P&G labs, but the company didn't have a plastic-wrap category of products. Managers approached Clorox with the idea of a joint venture to market the new plastic wrap under the well-established Glad brand name. Glad's share of the wrap market shot up 23 percent virtually overnight with the introduction of Glad Press 'n Seal.²⁷
- The Disney Channel invites magazines such as *J-14*, *Twist*, and *Popstar* to visit the sets of shows like "Hannah Montana" and "High School Musical," gives reporters access for interviews and photo shoots, and provides brief videos for the magazines to post on their websites. By working together, these companies continually find new ways to keep preteen interest booming for both the television shows and the magazines.²⁸

From Adversaries to Partners

Fresh flowers are blooming on the battle-scarred landscape where once-bitter rivalries once took place. In North America, collaboration among organizations initially occurred in nonprofit social service and mental health organizations, where public interest was involved. Community organizations collaborated to achieve greater effectiveness and better use of scarce resources.²⁹ With the push from international competitors and international examples, hard-nosed American business managers soon began shifting to a new partnership paradigm on which to base their relationships.

Briefcase

As an organization manager, keep these guidelines in mind:

Seek collaborative partnerships that enable mutual dependence and enhance value and gain for both sides. Get deeply involved in your partner's business, and vice versa, to benefit both.

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Exhibit 5.4 provides a summary of this change in mindset. Rather than organizations maintaining independence, the new model is based on interdependence and trust. Performance measures for the partnership are loosely defined, and problems are resolved through discussion and dialogue. Managing strategic relationships with other firms has become a critical management skill, as discussed in this chapter's Book Mark. In the new orientation, people try to add value to both sides and believe in high commitment rather than suspicion and competition. Companies work toward equitable profits for both sides rather than just for their own benefit. The new model is characterized by lots of shared information, including electronic linkages and face-to-face discussions to provide feedback and solve problems. Sometimes people from other companies are on site to enable very close coordination. Partners develop equitable solutions to conflicts rather than relying on legal contracts and lawsuits. Contracts may be loosely specified, and it is not unusual for business partners to help each other outside whatever is specified in the contract.³⁰

In this new view of partnerships, dependence on another company is seen to reduce rather than increase risks. Greater value can be achieved by both parties. By being entwined in a system of interorganizational relationships, everyone does better because they help one another. This is a far cry from the belief that organizations do best by being autonomous. The partnership mindset can be seen in a number of industries. Chrysler and Nissan formed a partnership whereby Nissan will build a fuel-efficient small car for Chrysler and Chrysler will build a full-size pickup based on the Dodge Ram to be sold by Nissan.³¹ Deere & Company joined with several

EXHIBIT 5.4Changing Characteristics of Interorganizational Relationships

Traditional Orientation: Adversarial	New Orientation: Partnership
Low dependence	High dependence
Suspicion, competition, arm's length	Trust, addition of value to both sides, high commitment
Detailed performance measures, closely monitored	Loose performance measures; problems discussed
Price, efficacy, own profits	Equity, fair dealing, both profit
Limited information and feedback	Electronic linkages to share key information, problem feedback, and discussion
Legal resolution of conflict	Mechanisms for close coordination; people on site
Minimal involvement and up-front investment, separate resources	Involvement in partner's product design and production, shared resources
Short-term contracts	Long-term contracts
Contract limiting the relationship	Business assistance beyond the contract

Source: Based on Mick Marchington and Steven Vincent, "Analysing the Influence of Institutional, Organizational, and Interpersonal Forces in Shaping Inter-Organizational Relations," *Journal of Management Studies* 41, no. 6 (September 2004), 1029–1056; Jeffrey H. Dyer, "How Chrysler Created an American *Keiretsu," Harvard Business Review* (July–August 1996), 42–56; Myron Magnet, "The New Golden Rule of Business," *Fortune* (February 21, 1994), 60–64; and Peter Grittner, "Four Elements of Successful Sourcing Strategies," *Management Review* (October 1995), 41–45.



BookMark 5.0 (HAVE YOU READ THIS BOOK?)

Managing Strategic Relationships: The Key to Business Success By Leonard Greenhalgh



What determines organizational success in the twenty-first century? According to Leonard Greenhalgh, author of *Managing Strategic Relationships: The Key to Business Success*, it's how successfully managers support, foster, and protect collaborative relationships both inside and outside the firm. In separate chapters, the book offers strategies for managing relationships between people and groups within the company and with other organizations. Effectively managing relationships generates a sense of commonwealth and consensus, which ultimately results in competitive advantage.

MANAGING RELATIONSHIPS IN A NEW ERA

Greenhalgh says managers need a new way of thinking to fit the realities of the new era. Here are a few guidelines:

- Recognize that detailed legal contracts can undermine trust and goodwill. Greenhalgh stresses the need to build relationships that are based on honesty, trust, understanding, and common goals instead of on narrowly defined legal contracts that concentrate on what one business can give to the other.
- Treat partners like members of your own organization.
 Members of partner organizations need to be active participants in the learning experience by becoming involved in training, team meetings, and other activities. Giving a

- partner organization's employees a chance to make genuine contributions promotes deeper bonds and a sense of unity.
- Top managers must be champions for the alliance.
 Managers from both organizations have to act in ways that signal to everyone inside and outside the organization a new emphasis on partnership and collaboration.
 Using ceremony and symbols can help instill a commitment to partnership in the company culture.

A PARTNERSHIP PARADIGM

To succeed in today's environment, old-paradigm management practices based on power, hierarchy, and adversarial relationships must be traded for new-era commonwealth practices that emphasize collaboration and communal forms of organization. The companies that will thrive, Greenhalgh believes, "are those that really have their act together—those that can successfully integrate strategy, processes, business arrangements, resources, systems, and empowered workforces." That can be accomplished, he argues, only by effectively creating, shaping, and sustaining strategic relationships.

Managing Strategic Relationships: The Key to Business Success, by Leonard Greenhalgh, is published by The Free Press.

independent Deere dealerships and two technical colleges to develop programs for training technicians to service agricultural and construction machines that now rely heavily on electronics and complex advanced technologies.³²

Canada's Bombardier and its suppliers were linked together almost like one organization to build the Continental, a "super-midsize" business jet that can comfortably fly eight passengers nonstop from coast to coast. Bombardier relied heavily on suppliers all over the world for design and manufacturing help. At one point, about 250 team members from Bombardier and 250 from outsider suppliers worked together in Montreal to make sure the design was going to be good for everyone. Integrating the partners and managing this multinational, multicompany endeavor was no easy task, but with development costs for a new plane reaching more than \$1 billion, the partnership approach just made sense.³³

By breaking down boundaries and becoming involved in partnerships with an attitude of fair dealing and adding value to both sides, today's companies are changing the concept of what makes an organization. The type of collaborative network

illustrated by Bombardier is also being used by a growing number of automotive companies. These companies are pushing the idea of partnership further than ever before, moving somewhat toward a network approach to organization design, as described in Chapter 3.

POPULATION ECOLOGY

This section introduces a different perspective on relationships among organizations. The **population-ecology perspective** differs from the other perspectives because it focuses on organizational diversity and adaptation within a population of organizations.³⁴ A **population** is a set of organizations engaged in similar activities with similar patterns of resource utilization and outcomes. Organizations within a population compete for similar resources or similar customers, such as financial institutions in the Seattle area or car dealerships in Houston, Texas.

Within a population, the question asked by ecology researchers is about the large number and variation of organizations in society. Why are new organizational forms that create such diversity constantly appearing? The answer is that individual organizational adaptation is severely limited compared to the changes demanded by the environment. Innovation and change in a population of organizations take place through the birth of new types of organizations more so than by the reform and change of existing organizations. Indeed, organizational forms are considered relatively stable, and the good of a whole society is served by the development of new forms of organization through entrepreneurial initiatives. New organizations meet the new needs of society more than established organizations that are slow to change.³⁵

What does this theory mean in practical terms? It means that large, established organizations often become dinosaurs. Consider that among the companies that appeared on the first *Fortune 500* list in 1955, only 71 are still on the list today. The most powerful companies on today's list—companies like Apple, Google, or Intel—hadn't even been thought of then. Large, established firms often have tremendous difficulty adapting to a rapidly changing environment. Hence, new organizational forms that fit the current environment emerge, fill a new niche, and over time take away business from established companies.³⁶ According to the population-ecology view, when looking at an organizational population as a whole, the changing environment determines which organizations survive or fail. The assumption is that individual organizations suffer from structural inertia and find it difficult to adapt to environmental changes. Thus, when rapid change occurs, old organizations are likely to decline or fail, and new organizations emerge that are better suited to the needs of the environment.

Why do established organizations have such a hard time adapting to a rapidly changing environment? Michael Hannan and John Freeman, originators of the population ecology model of organization, argue that there are many limitations on the ability of organizations to change. The limitations come from heavy investment in plants, equipment, and specialized personnel, limited information, established viewpoints of decision makers, the organization's own successful history that justifies current procedures, and the difficulty of changing corporate culture. True transformation is a rare and unlikely event in the face of all these barriers.³⁷

The population–ecology model is developed from theories of natural selection in biology, and the terms *evolution* and *selection* are used to refer to the underlying behavioral processes. Theories of biological evolution try to explain why certain life

forms appear and survive whereas others perish. Some theories suggest the forms that survive are typically best fitted to the immediate environment.

The environment of the 1940s and 1950s was suitable to Woolworth, but new organizational forms like Wal-Mart became dominant in the 1980s. Now, the environment is shifting again, indicating that the "Wal-Mart Era" might be coming to a close. Though Wal-Mart is still profitable and powerful, its influence in retail is slipping. Wal-Mart managers find themselves scrambling to keep up with swifter competitors and new types of retailers that offer greater selection or higher quality.³⁸ No company is immune to the processes of social change. In recent years, technology has brought tremendous environmental change, leading to the decline of many outdated organizations and a proliferation of new companies such as Google, Facebook, TiVo, MySpace, and eBay.

Organizational Form and Niche

The population-ecology model is concerned with organizational forms. **Organizational form** is an organization's specific technology, structure, products, goals, and personnel, which can be selected or rejected by the environment. Each new organization tries to find a **niche** (a domain of unique environmental resources and needs) sufficient to support it. The niche is usually small in the early stages of an organization but may increase in size over time if the organization is successful. If the organization does not find an appropriate niche, it will decline and may perish.

From the viewpoint of a single firm, luck, chance, and randomness play important parts in survival. New products and ideas are continually being proposed by both entrepreneurs and large organizations. Whether these ideas and organizational forms survive or fail is often a matter of chance—whether external circumstances happen to support them. A woman who started a small electrical contracting business in a rapidly growing area such as Austin, Texas, or Atlanta, Georgia, would have an excellent chance of success. If the same woman were to start the same business in a declining community elsewhere in the United States, her chance of success would be far less. Success or failure of a single firm thus is predicted by the characteristics of the environment as much as by the skills or strategies used by the organization's managers.

2 The success or failure of a start-up is largely determined by the smarts and management ability of the entrepreneur.

ANSWER: Disagree. Luck is often as important as smarts because larger forces in the environment, typically unseen by managers, allow some firms to succeed and others to fail. If a start-up happens to be in the right place at the right time, chances for success are much higher, regardless of management ability.

ASSESS

ANSWER

Briefcase As an organization

As an organization manager, keep these guidelines in mind:

Adapt your organization to new variations being selected and retained in the external environment. If you are starting a new organization, find a niche that contains a strong environmental need for your product or service, and be prepared for a competitive struggle over scarce resources.

Process of Ecological Change

The population-ecology model assumes that new organizations are always appearing in the population. Thus, organizational populations are continually undergoing

EXHIBIT 5.5

Elements in the Population–Ecology Model of Organizations



change. The process of change in the population occurs in three stages: variation, selection, and retention, as summarized in Exhibit 5.5.

• Variation. Variation means the appearance of new, diverse forms in a population of organizations. These new organizational forms are initiated by entrepreneurs, established with venture capital by large corporations, or set up by governments seeking to provide new services. Some forms may be conceived to cope with a perceived need in the external environment. In recent years, a large number of new firms have been initiated to develop computer software, to provide consulting and other services to large corporations, and to develop products and technologies for Internet commerce. Other new organizations produce a traditional product or service, but do it using new technology, new business models, or new management techniques that make the new companies far more able to survive. Organizational variations are analogous to mutations in biology, and they add to the scope and complexity of organizational forms in the environment. Two entrepreneurs in New York started a new type of law firm that experienced immediate success.

PRACTICE

When Mark Harris was a young associate at a prestigious law firm, he happened to glimpse a client's bill for a case he was working on. "It was only February, and already

we'd billed an amount equal to my salary for the year," Harris said. He realized that most of the money big law firms bring in goes to defray overhead expenses or into the pockets of the firm's partners. "The model seemed broken to me," Harris explains about his idea for a new kind of law firm.

Axiom Global Inc.

Along with partner Alec Guettel, Harris founded Axiom Global Inc. Axiom provides legal services to corporations on an as-needed basis, typically charging fees that are far less than traditional law firms. Axiom can charge less because it doesn't have to compensate highly-paid partners, and the company's lawyers often work from home or at a client's offices, helping to keep overhead to a minimum. Axiom has a staff of around 220 lawyers who take temporary assignments with corporate clients. They are employed full-time by Axiom and get benefits but no pay between assignments. Harris and Guettel found there were many highly-trained lawyers who wanted a different kind of life—more time with family, time to try their hand at writing a book, or just a break from the grueling pace. Joe Risco, for example, says he "wanted to chill out and try something different." Risco's first assignment was a nine-month project for Goldman Sachs. Although it took a while for Risco to get used to the prestige disparity between working for a big well-known firm and working for Axiom, he says he loves the broad range of experience he's getting.

Axiom has scored a number of *Fortune* 500 companies as clients, including Cisco Systems, General Electric, Google, and Xerox Corporation. "The model makes a lot of sense," says Don Liu of Xerox. Axiom isn't trying to displace top law firms for high-end work such as a major merger or a make-or-break lawsuit. But for more modest projects, this new type of law firm fits the bill—and cuts it by 25 to 50 percent.³⁹

Axiom is one of a number of start-ups using this variation on the traditional law firm. Some work primarily with smaller businesses that don't have in-house legal departments, while others aim for projects with large corporate clients. By providing services on an as-needed project basis at a lower cost, these new organizations are challenging the grip big law firms have on corporate business.

- Selection. Selection refers to whether a new organizational form such as Axiom is suited to the environment and can survive. Only a few variations are "selected in" by the environment and survive over the long term. Some variations will suit the external environment better than others. Some prove beneficial and thus are able to find a niche and acquire the resources from the environment necessary to survive. Other variations fail to meet the needs of the environment and perish. When there is insufficient demand for a firm's product and when insufficient resources are available to the organization, that organization will be "selected out."
- Retention. Retention is the preservation and institutionalization of selected organizational forms. Certain technologies, products, and services are highly valued by the environment. The retained organizational form may become a dominant part of the environment. Many forms of organization have been institutionalized, such as government, schools, churches, and automobile manufacturers. McDonald's, which owns 43 percent of the fast-food market and provides the first job for many teenagers, has become institutionalized in American life.

Institutionalized organizations like McDonald's seem to be relatively permanent features in the population of organizations, but they are not permanent in the long run. The environment is always shifting, and if the dominant organizational forms do not adapt to external change, they will gradually diminish and be replaced by other organizations. McDonald's has struggled in recent years to adapt to a changing fast-food market. Consumer satisfaction surveys reveal that customers think rivals Burger King and Wendy's provide fresher, higher-quality food at better prices. In addition, chains such as Subway and Quizno's are offering today's health-conscious customer an alternative to burgers and fries.⁴⁰

From the population-ecology perspective, the environment is the important determinant of organizational success or failure. The organization must meet an environmental need, or it will be selected out. The principles of variation, selection, and retention lead to the establishment of new organizational forms in a population of organizations.

Strategies for Survival

Another principle that underlies the population ecology model is the **struggle for existence**, or competition. Organizations and populations of organizations are engaged in a competitive struggle over resources, and each organizational form is fighting to

survive. The struggle is most intense among new organizations, and both the birth and survival frequencies of new organizations are related to factors in the larger environment. Factors such as size of urban area, percentage of immigrants, political turbulence, industry growth rate, and environmental variability, for example, have influenced the launching and survival of newspapers, telecommunication firms, railroads, government agencies, labor unions, and even voluntary organizations.⁴¹

In the population ecology perspective, **generalist** and **specialist** strategies distinguish organizational forms in the struggle for survival. Organizations with a wide niche or domain, that is, those that offer a broad range of products or services or that serve a broad market, are generalists. Organizations that provide a narrower range of goods or services or that serve a narrower market are specialists.

In the natural environment, a specialist form of flora and fauna would evolve in protective isolation in a place like Hawaii, where the nearest body of land is 2,000 miles away. The flora and fauna are heavily protected. In contrast, a place like Costa Rica, which experienced wave after wave of external influences, developed a generalist set of flora and fauna that has better resilience and flexibility for adapting to a broad range of environments. In the business world, Amazon.com started with a specialist strategy, selling books over the Internet, but evolved to a generalist strategy with the addition of music, DVDs, greeting cards, and other products, plus partnering with other organizations as an online shopping mall to sell a wide range of products. A company such as Olmec Corporation, which sells African-American and Hispanic dolls, would be considered a specialist, whereas Mattel is a generalist, marketing a broad range of toys for boys and girls of all ages.⁴²

Specialists are generally more competitive than generalists in the narrow area in which their domains overlap. However, the breadth of the generalist's domain serves to protect it somewhat from environmental changes. Though demand may decrease for some of the generalist's products or services, it usually increases for others at the same time. In addition, because of the diversity of products, services, and customers, generalists are able to reallocate resources internally to adapt to a changing environment, whereas specialists are not. However, because specialists are often smaller companies, they can sometimes move faster and be more flexible in adapting to changes.⁴³

Managerial impact on company success often comes from selecting a strategy that steers a company into an open niche. Axiom's founders, for example, saw that traditional law firms weren't meeting the needs of many small businesses as well as large corporations wanting lower-cost, as-needed legal services.

INSTITUTIONALISM

The institutional perspective provides yet another view of interorganizational relationships.⁴⁴ The **institutional perspective** describes how organizations survive and succeed through congruence between an organization and the expectations from its environment. The **institutional environment** is composed of norms and values from stakeholders (customers, investors, associations, boards, other organizations, government, the community, and so on). Thus the institutional view believes that organizations adopt structures and processes to please outsiders, and these activities come to take on rule-like status in organizations. The institutional environment reflects what the greater society views as correct ways of organizing and behaving.⁴⁵

Legitimacy is defined as the general perception that an organization's actions are desirable, proper, and appropriate within the environment's system of norms, values, and beliefs. 46 Institutional theory thus is concerned with the set of intangible norms and values that shape behavior, as opposed to the tangible elements of technology and structure. Organizations and industries must fit within the cognitive and emotional expectations of their audience. For example, people will not deposit money in a bank unless it sends signals of compliance with norms of wise financial management. Consider also your local government and whether it could raise property taxes for increased school funding if community residents did not approve of the school district's policies and activities.

Most organizations are concerned with legitimacy, as reflected in the annual *Fortune* magazine survey that ranks corporations based on their reputations, and the annual Reputation Quotient study, a survey of public opinion conducted by Harris Interactive and the Reputation Institute.⁴⁷ The fact that there is a payoff for having a good reputation is verified by a study of organizations in the airline industry. Having a good reputation was significantly related to higher levels of performance based on measures such as return on assets and net profit margin.⁴⁸

Many corporations actively shape and manage their reputations to increase their competitive advantage. In the wake of the mortgage meltdown and the failure of giants Bear Stearns and Lehman Brothers, for example, many companies in the finance industry began searching for new ways to bolster legitimacy. Citigroup, Merrill Lynch, and Wachovia all ousted their chief executives over mortgage-related issues, partly as a way to signal a commitment to better business practices.

The notion of legitimacy answers an important question for institutional theorists: Why is there so much homogeneity in the forms and practices of established organizations? For example, visit banks, high schools, hospitals, government departments, or business firms in a similar industry, in any part of the country, and they will look strikingly similar. When an organizational field is just getting started, such as in Internet-related businesses, diversity is the norm. New organizations fill emerging niches. However, once an industry becomes established, there is an invisible push toward similarity. *Isomorphism* is the term used to describe this move toward similarity.

The Institutional View and Organization Design

The institutional view also sees organizations as having two essential dimensions—technical and institutional. The technical dimension is the day-to-day work, technology, and operating requirements. The institutional structure is that part of the organization most visible to the outside public. Moreover, the technical dimension is governed by norms of rationality and efficiency, but the institutional dimension is governed by expectations from the external environment. As a result of pressure to do things in a proper and correct way, the formal structures of many organizations reflect the expectations and values of the environment rather than the demand of work activities. This means that an organization may incorporate positions or activities (equal employment officer, e-commerce division, chief ethics officer) perceived as important by the larger society to increase its legitimacy and survival prospects, even though these elements may decrease efficiency. For example, many small companies set up websites, even though the benefits gained from the site are sometimes outweighed by the costs of maintaining it. Having a website is perceived as essential by the larger society today. The formal structure and design of an organization may



manager, keep these

guidelines in mind:

Pursue legitimacy with your organization's major stakeholders in the external environment. Adopt strategies, structures, and management techniques that meet the expectations of significant parties, thereby ensuring their cooperation and access to resources.

not be rational with respect to workflow and products or services, but it will ensure survival in the larger environment.

Organizations adapt to the environment by signaling their congruence with the demands and expectations stemming from cultural norms, standards set by professional bodies, funding agencies, and customers. Structure is something of a facade disconnected from technical work through which the organization obtains approval, legitimacy, and continuing support. The adoption of structures thus might not be linked to actual production needs and might occur regardless of whether specific internal problems are solved. Formal structure is separated from technical action in this view.⁴⁹

Institutional Similarity

Organizations have a strong need to appear legitimate. In so doing, many aspects of structure and behavior may be targeted toward environmental acceptance rather than toward internal technical efficiency. Interorganizational relationships thus are characterized by forces that cause organizations in a similar population to look like one another. **Institutional similarity**, called *institutional isomorphism* in the academic literature, is the emergence of a common structure and approach among organizations in the same field. Isomorphism is the process that causes one unit in a population to resemble other units that face the same set of environmental conditions.⁵⁰

Exactly how does increasing similarity occur? How are these forces realized? Exhibit 5.6 provides a summary of three mechanisms for institutional adaptation. These three core mechanisms are *mimetic forces*, which result from responses to uncertainty; *coercive forces*, which stem from political influence; and *normative forces*, which result from common training and professionalism.⁵¹

Mimetic Forces. Most organizations, especially business organizations, face great uncertainty. It is not clear to senior executives exactly what products, services, technologies, or management practices will achieve desired goals, and sometimes the goals themselves are not clear. In the face of this uncertainty, **mimetic forces**, the pressure to copy or model other organizations, occur. Executives observe an innovation in a firm generally regarded as successful, so the practice is quickly copied. One example was the rapid growth of wi-fi hotspots in cafes, hotels, airports, and other public areas. Starbucks was one of the first companies to adopt

EXHIBIT 5.6Three Mechanisms

for Institutional Adaptation

	Mimetic	Coercive	Normative
Reason to become similar:	Uncertainty	Dependence	Duty, obligation
Events:	Innovation visibility	Political law, rules,	Professionalism—
		sanctions	certification, accreditation
Social basis:	Culturally supported	Legal	Moral
Example:	Reengineering,	Pollution controls, school	Accounting standards,
	benchmarking	regulations	consultant training

Source: Adapted from W. Richard Scott, Institutions and Organizations (Thousand Oaks, Calif.: Sage, 1995).

wi-fi, enabling customers to use laptops and handheld computers at its stores. The practice was quickly copied by both large and small companies, from Holiday Inns to the local deli.

Many times, this modeling is done without any clear proof that performance will be improved. Mimetic processes explain why fads and fashions occur in the business world. Once a new idea starts, many organizations grab onto it, only to learn that the application is difficult and may cause more problems than it solves. This was the case with the recent merger wave that swept many industries. The past few decades have seen the largest merger and acquisition wave in history, but evidence shows that many of these mergers did not produce the expected financial gains and other benefits. The sheer momentum of the trend was so powerful that many companies chose to merge not because of potential increases in efficiency or profitability but simply because it seemed like the right thing to do. 52

Techniques such as outsourcing, teams, Six Sigma quality programs, brainstorming, and the balanced scorecard have all been adopted without clear evidence that they will improve efficiency or effectiveness. The one certain benefit is that management's feelings of uncertainty will be reduced, and the company's image will be enhanced because the firm is seen as using the latest management techniques. A study of 100 organizations confirmed that those companies associated with using popular management techniques were more admired and rated higher in quality of management, even though these organizations often did not reflect higher economic performance.⁵³ Perhaps the clearest example of official copying is the technique of benchmarking that occurs as part of the total quality movement. *Benchmarking* means identifying who's best at something in an industry and then duplicating the technique for creating excellence, perhaps even improving it in the process.

The mimetic process works because organizations face high uncertainty, they are aware of innovations occurring in the environment, and the innovations are culturally supported, thereby giving legitimacy to adopters. This is a strong mechanism by which a group of banks, or high schools, or manufacturing firms begin to look and act like one another.

Managers should quickly copy or borrow techniques being used by other successful companies to make their own organization more effective and to keep pace with changing times.

ANSWER: Agree. Managers frequently copy techniques used by other, successful organizations as a way to appear legitimate and up to date. Copying other firms is one reason organizations may begin to look and act similar in their structures, processes, and management systems.

ASSESS YOUR ANSWER

Coercive Forces. All organizations are subject to pressure, both formal and informal, from government, regulatory agencies, and other important organizations in the environment, especially those on which a company is dependent. **Coercive forces** are the external pressures exerted on an organization to adopt structures, techniques, or behaviors similar to other organizations. For example, large corporations have recently been putting pressure on service providers, such as accounting or law firms, to step up their diversity efforts. Managers in these corporations have

felt pressure to increase diversity within their own organizations and they want the firms with which they do business to reflect a commitment to hiring and promoting more women and minorities as well.⁵⁴

Some pressures may have the force of law, such as government mandates to adopt new pollution control equipment. Health and safety regulations may demand that a safety officer be appointed. New regulations and government oversight boards have been set up for the accounting industry following widespread accounting scandals.

Coercive pressures may also occur between organizations where there is a power difference, as described in the resource-dependence section earlier in this chapter. Large retailers and manufacturers often insist that certain policies, procedures, and techniques be used by their suppliers. Wal-Mart, for instance, requires many of its suppliers to affix radio-frequency identification (RFID) tags to their products to enable easier tracking of merchandise. The giant retailer has also begun granting preference to suppliers who make their products more environmentally friendly, which acts as a coercive force.

As with other changes, those brought about because of coercive forces may not make the organization more effective, but it will look more effective and will be accepted as legitimate in the environment. Organizational changes that result from coercive forces occur when an organization is dependent on another, when there are political factors such as rules, laws, and sanctions involved, or when some other contractual or legal basis defines the relationship. Organizations operating under those constraints will adopt changes and relate to one another in a way that increases homogeneity and limits diversity.

Normative Forces. The third reason organizations change according to the institutional view is normative forces. **Normative forces** are pressures to change to achieve standards of professionalism and to adopt techniques that are considered by the professional community to be up to date and effective. Changes may be in any area, such as information technology, accounting requirements, marketing techniques, or collaborative relationships with other organizations.

Professionals share a body of formal education based on university degrees and professional networks through which ideas are exchanged by consultants and professional leaders. Universities, consulting firms, trade associations, and professional training institutions develop norms among professional managers. People are exposed to similar training and standards and adopt shared values, which are implemented in organizations with which they work. Business schools teach finance, marketing, and human resource majors that certain techniques are better than others, so using those techniques becomes a standard in the field. In one study, for example, a radio station changed from a functional to a multidivisional structure because a consultant recommended it as a "higher standard" of doing business. There was no proof that this structure was better, but the radio station wanted legitimacy and to be perceived as fully professional and up to date in its management techniques.

Companies accept normative pressures to become like one another through a sense of obligation or duty to high standards of performance based on professional norms shared by managers and specialists in their respective organizations. These norms are conveyed through professional education and certification and have almost a moral or ethical requirement based on the highest standards accepted by the profession at that time. In some cases, though, normative forces that maintain legitimacy break down, as they recently did in the accounting and finance industries, and coercive forces are needed to shift organizations back toward acceptable standards.



borrowing good ideas from other firms, complying with laws and regulations, and following procedures considered best for your company.

An organization may use any or all of the mechanisms of mimetic, coercive, or normative forces to change itself for greater legitimacy in the institutional environment. Firms tend to use these mechanisms when they are acting under conditions of dependence, uncertainty, ambiguous goals, and reliance on professional credentials. The outcome of these processes is that organizations become far more homogeneous than would be expected from the natural diversity among managers and environments.

DESIGN ESSENTIALS

- This chapter has been about the important evolution in interorganizational relationships. At one time organizations considered themselves autonomous and separate, trying to outdo other companies. Today more organizations see themselves as part of an ecosystem. The organization may span several industries and will be anchored in a dense web of relationships with other companies. In this ecosystem, collaboration is as important as competition. Indeed, organizations may compete and collaborate at the same time, depending on the location and issue. In business ecosystems, the role of management is changing to include the development of horizontal relationships with other organizations.
- Four perspectives have been developed to explain relationships among organizations. The resource-dependence perspective is the most traditional, arguing that organizations try to avoid excessive dependence on other organizations. In this view, organizations devote considerable effort to controlling the environment to ensure ample resources while maintaining independence. One key approach is to develop close relationships with suppliers through supply chain management.
- The collaborative-network perspective is an emerging alternative to resource dependence. Organizations welcome collaboration and interdependence with other organizations to enhance value for both. Many executives are changing mindsets away from autonomy toward collaboration, often with former corporate enemies. The new partnership mindset emphasizes trust, fair dealing, and achieving profits for all parties in a relationship.
- The population-ecology perspective explains why organizational diversity continuously increases with the appearance of new organizations filling niches left open by established companies. This perspective says that large companies usually cannot adapt to meet a changing environment; hence, new companies emerge with the appropriate form and skills to serve new needs. Through the process of variation, selection, and retention, some organizations will survive and grow while others perish. Companies may adopt a generalist or specialist strategy to survive in the population of organizations.
- The institutional perspective argues that interorganizational relationships are shaped as much by a company's need for legitimacy as by the need for providing products and services. The need for legitimacy means that the organization will adopt structures and activities that are perceived as valid, proper, and up to date by external stakeholders. In this way, established organizations copy techniques from one another and begin to look very similar. The emergence of common structures and approaches in the same field is called institutional

similarity or institutional isomorphism. There are three core mechanisms that explain increasing organizational homogeneity: mimetic forces, which result from responses to uncertainty; coercive forces, which stem from power differences and political influences; and normative forces, which result from common training and professionalism.

Each of the four perspectives is valid. They each represent different lenses through which the world of interorganizational relationships can be viewed: organizations experience a competitive struggle for autonomy; they can thrive through collaborative relationships with others; the slowness to adapt provides openings for new organizations to flourish; and organizations seek legitimacy as well as profits from the external environment. The important thing is for managers to be aware of interorganizational relationships and to consciously manage them.

Key Concepts

coercive forces collaborative network generalist institutional environment institutional perspective institutional similarity interorganizational relationships legitimacy mimetic forces niche normative forces organizational ecosystem organizational form population population-ecology perspective resource dependence retention selection specialist struggle for existence supply chain management variation

Discussion Questions

- 1. The concept of business ecosystems implies that organizations are more interdependent than ever before. From personal experience, do you agree? Explain.
- 2. How do you feel about the prospect of becoming a manager and having to manage a set of relationships with other companies rather than just managing your own company? Discuss.
- 3. Assume you are the manager of a small firm that is dependent on a large computer manufacturing customer that uses the resource-dependence perspective. Put yourself in the position of the small firm, and describe what actions you would take to survive and succeed. What actions would you take from the perspective of the large firm?
- 4. Many managers today were trained under assumptions of adversarial relationships with other companies. Do you think operating as adversaries is easier or more difficult than operating as partners with other companies? Discuss.
- 5. Discuss how the adversarial versus partnership orientations work among students in class. Is there a sense

- of competition for grades? Is it possible to develop true partnerships in which your work depends on others?
- 6. The population-ecology perspective argues that it is healthy for society to have new organizations emerging and old organizations dying as the environment changes. Do you agree? Why would European countries pass laws to sustain traditional organizations and inhibit the emergence of new ones?
- 7. Explain how the process of variation, selection, and retention might explain innovations that take place within an organization.
- 8. Do you believe that legitimacy really motivates a large, powerful organization such as Wal-Mart? Is acceptance by other people a motivation for individuals as well? Explain.
- 9. How does the desire for legitimacy result in organizations becoming more similar over time?
- 10. How do mimetic forces differ from normative forces? Give an example of each.

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Case for Analysis: Oxford Plastics Company*

Oxford Plastics manufactures high-quality plastics and resins for use in a variety of products, from lawn ornaments and patio furniture to automobiles. The Oxford plant located near Beatty, a town of about 45,000 in a southeastern state, employs about 3,000 workers. It plays an important role in the local economy and, indeed, that of the entire state, which offers few well-paying factory jobs.

In early 2004, Sam Henderson, plant manager of the Beatty facility, notified Governor Tom Winchell that Oxford was ready to announce plans for a major addition to the factory—a state-of-the-art color lab and paint shop that would enable better and faster matching of colors to customer requirements. The new shop would keep Oxford competitive in the fast-paced global market for plastics, as well as bring the Beatty plant into full compliance with updated U.S. Environmental Protection Agency (EPA) regulations.

Plans for the new facility were largely complete. The biggest remaining task was identifying the specific location. The new color lab and paint shop would cover approximately 25 acres, requiring Oxford to purchase some additional land adjacent to its 75-acre factory campus. Henderson was somewhat concerned with top management's preferred site because it fell outside the current industrial zoning boundary, and, moreover, would necessitate destruction of several 400- to 500-year-old beech trees. The owner of the property, a nonprofit agency, was ready to sell, whereas property located on the other side of the campus might be more difficult to obtain in a timely manner. Oxford was on a tight schedule to get the project completed. If the new facility wasn't up and running in a timely manner, there was a chance the EPA could force Oxford to stop using its old process—in effect, shutting down the factory.

The governor was thrilled with Oxford's decision to build the new shop in Beatty and he urged Henderson to immediately begin working closely with local and state officials to circumvent any potential problems. It was essential, he stressed, that the project not be bogged down or thwarted by conflict among different interest groups, as it was too important to the economic development of the region. Governor Winchell assigned Beth Friedlander, director of the Governor's Office of Economic Development, to work closely with Henderson on the project. However, Winchell was not willing to offer his commitment to help push through the rezoning, as he had been an enthusiastic public supporter of environmental causes.

Following his conversation with Governor Winchell, Henderson sat down to identify the various people and organizations that would have an interest in the new color lab project and that would need to collaborate in order for it to proceed in a smooth and timely manner. They are:

Oxford Plastics

- Mark Thomas, vice president of North American Operations. Thomas would be flying in from Oxford's Michigan headquarters to oversee land purchase and negotiations regarding the expansion.
- Sam Henderson, Beatty plant manager, who has spent his entire career at the Beatty facility, beginning on the factory floor fresh out of high school.
- Wayne Talbert, local union president. The union is strongly in favor of the new shop being located in Beatty because of the potential for more and higher-wage jobs.

State Government

- Governor Tom Winchell, who can exert pressure on local officials to support the project.
- Beth Friedlander, director of the Governor's Office of Economic Development.
- Manu Gottlieb, director of the State Department of Environmental Quality.

City Government

- Mayor Barbara Ott, a political newcomer, who has been in office for less than a year and who campaigned on environmental issues.
- Major J. Washington, the Chamber of Commerce chair of local economic development.

Public

- May Pinelas, chairman of Historic Beatty, who argues vociferously that the future of the region lies in historic and natural preservation and tourism.
- Tommy Tompkins, president of the Save Our Future Foundation, a coalition of private individuals and representatives from the local university who have long been involved in public environmental issues and have successfully thwarted at least one previous expansion project.

Henderson is feeling torn about how to proceed. He thinks to himself, "To move forward, how will I build a coalition among these diverse organizations and groups?" He understands the need for Oxford to move quickly, but he wants Oxford to have a good relationship with the people and organizations that will surely oppose destruction

of more of Beatty's natural beauty. Henderson has always liked finding a win-win compromise, but there are so many groups with an interest in this project that he's not sure where to start. Maybe he should begin by working closely with Beth Friedlander from the governor's office—there's no doubt this is an extremely important project for the state's economic development. On the other hand, it's the local people who are going to be most affected and most involved in the final decisions. Oxford's vice president has suggested a press conference to announce the new shop at the end of the week, but Henderson is worried about putting the news out cold. Perhaps he should call a meeting of interested parties now and let everyone get their feelings out into the open? He knows it could get emotional, but he wonders if things won't get much uglier later on if he doesn't.

*Source: Based on "Mammoth Motors' New Paint Shop," a role play originally prepared by Arnold Howitt, executive director of the A. Alfred Taubman Center for State and Local Government at the Kennedy School of Government, Harvard University, and subsequently edited by Gerald Cormick, a principal in the CSE Group and senior lecturer for the Graduate School of Public Affairs at the University of Washington.

Case for Analysis: Hugh Russel, Inc.*

The following story is a personal recollection by David Hurst of the experience of a group of managers in a mature organization undergoing profound change. . . . The precipitating event in this change was a serious business crisis. . . .

When I joined Hugh Russel Inc. in 1979, it was a medium-sized Canadian distributor of steel and industrial products. With sales of CDN \$535 million and 3,000 employees, the business was controlled by the chairman, Archie Russel, who owned 16 percent of the common shares. The business consisted of four groups—the core steel distribution activities (called "Russelsteel"), industrial bearings and valves distribution, a chain of wholesalers of hardware and sporting goods, and a small manufacturing business. . . .

The company was structured for performance. . . . The management was professional, with each of the divisional hierarchies headed by a group president reporting to Peter Foster in his capacity as president of the corporation. Jobs were described in job descriptions, and their mode of execution was specified in detailed standard operating procedures. Three volumes of the corporate manual spelled out policy on everything from accounting to vacation pay. Extensive accounting and data processing systems allowed

managers to track the progress of individual operations against budgets and plans. Compensation was performance-based, with return on net assets (RONA) as the primary measure and large bonuses (up to 100 percent of base) for managers who made their targets.

At the senior management level, the culture was polite but formal. The board of directors consisted of Archie's friends and associates together with management insiders. Archie and Peter ran the organization as if they were majority owners. Their interaction with management outside of the head office was restricted to the occasional field trip....

Crisis

Nine months after I joined the company as a financial planner, we were put "in play" by a raider and, after a fierce bidding war, were acquired in a hostile takeover. Our acquirer was a private company controlled by the eldest son of an entrepreneur of legendary wealth and ability, so we had no inkling at the time of the roller-coaster ride that lay ahead of us. We were unaware that not only did the son not have the support of his father in this venture but also he had neglected to consult his two brothers, who

were joint owners of the acquiring company! As he had taken on \$300 million of debt to do the deal, this left each of the brothers on the hook for a personal guarantee of \$100 million. They were not amused, and it showed!

Within days of the deal, we were inundated by waves of consultants, lawyers, and accountants: each shareholder seemed to have his or her own panel of advisers. After six weeks of intensive analysis, it was clear that far too much had been paid for us and that the transaction was vastly overleveraged. At the start of the deal, the acquirer had approached our bankers and asked them if they wanted a piece of the "action." Concerned at the possible loss of our banking business and eager to be associated with such a prominent family, our bankers had agreed to provide the initial financing on a handshake. Now, as they saw the detailed numbers for the first time and became aware of the dissent among the shareholders, they withdrew their support and demanded their money back. We needed to refinance \$300 million of debt—fast. . . .

Change

The takeover and the subsequent merger of our new owner's moribund steel-fabricating operations into Hugh Russel changed our agenda completely. We had new shareholders (who fought with each other constantly), new bankers, and new businesses in an environment of soaring interest rates and plummeting demand for our products and services. Almost overnight, the corporation went from a growthoriented, acquisitive, earnings-driven operation to a broken, cash-starved company, desperate to survive. Closures, layoffs, downsizing, delayering, asset sales, and "rationalization" became our new priorities. . . . At the head office, the clarity of jobs vanished. For example, I had been hired to do financial forecasting and raise capital in the equity markets, but with the company a financial mess, this clearly could not be done. For all of us, the future looked dangerous and frightening as bankruptcy, both personal and corporate, loomed ahead.

And so it was in an atmosphere of crisis that Wayne Mang, the new president (Archie Russel and Peter Foster left the organization soon after the deal), gathered the first group of managers together to discuss the situation. Wayne Mang had been in the steel business for many years and was trusted and respected by the Hugh Russel people. An accountant by training, he used to call himself the "personnel manager" to underscore his belief in both the ability of people to make the difference in the organization and the responsibility of line management to make this happen. The hastily called first meeting consisted of people whom Wayne respected and trusted from all over the organization. They had been selected without regard for their position in the old hierarchy.

The content and style of that first meeting were a revelation to many! Few of them had ever been summoned

to the head office for anything but a haranguing over their budgets. Now they were being told the complete gory details of the company's situation and, for the first time, being treated as if they had something to contribute. Wayne asked for their help.

During that first meeting, we counted nineteen major issues confronting the corporation. None of them fell under a single functional area. We arranged ourselves into task forces to deal with them. I say "arranged ourselves" because that was the way it seemed to happen. Individuals volunteered without coercion to work on issues in which they were interested or for which their skills were relevant. They also volunteered others who were not at the meeting but, it was thought, could help. There was some guidance—each task force had one person from the head office whose function it was to report what was happening back to the "center"—and some members found themselves on too many task forces, which required that substitutes be found. But that was the extent of the conscious management of the process.

The meeting broke up at 2:00 A.M., when we all went home to tell our incredulous spouses what had happened....

The cross-functional project team rapidly became our preferred method of organizing new initiatives, and at the head office, the old formal structure virtually disappeared. The teams could be formed at a moment's notice to handle a fast-breaking issue and dissolved just as quickly. We found, for example, that even when we weren't having formal meetings, we seemed to spend most of our time talking to each other informally. Two people would start a conversation in someone's office, and almost before you knew it, others had wandered in and a small group session was going. Later on, we called these events "bubbles"; they became our equivalent of campfire meetings. . . .

Later, when I became executive vice president, Wayne and I deliberately shared an office so we could each hear what the other was doing in real time and create an environment in which "bubbles" might form spontaneously. As people wandered past our open door, we would wave them in to talk; others would wander in after them. The content of these sessions always had to do with our predicament, both corporate and personal. It was serious stuff, but the atmosphere was light and open. Our fate was potentially a bad one, but at least it would be shared. All of us who were involved then cannot remember ever having laughed so much. We laughed at ourselves and at the desperate situation. We laughed at the foolishness of the bankers in having financed such a mess, and we laughed at the antics of the feuding shareholders, whose outrageous manners and language we learned to mimic to perfection.

I think it was the atmosphere from these informal sessions that gradually permeated all our interactions—with employees, bankers, suppliers, everyone with whom we

came into contact. Certainly, we often had tough meetings, filled with tension and threat, but we were always able to "bootstrap" ourselves back up emotionally at the informal debriefings afterward. . . .

Perhaps the best example of both the change in structure and the blurring of the boundaries of the organization was our changing relationships with our bankers. In the beginning, at least for the brief time that the loan was in good standing, the association was polite and at arm's length. Communication was formal. As the bank realized the full horror of what it had financed (a process that took about 18 months), the relationship steadily grew more hostile. Senior executives of the bank became threatening, spelling out what actions they might take if we did not solve our problem. This hostility culminated in an investigation by the bank for possible fraud (a standard procedure in many banks when faced with a significant loss).

Throughout this period, we had seen a succession of different bankers, each of whom had been assigned to our account for a few months. As a result of our efforts to brief every new face that appeared, we had built a significant network of contacts within the bank with whom we had openly shared a good deal of information and opinion. When no fraud was found, the bank polled its own people on what to do. Our views presented so coherently by our people (because everyone knew what was going on), and shared so widely with so many bankers, had an enormous influence on the outcome of this process. The result was the formation of a joint company-bank team to address a shared problem that together we could solve. The boundary between the corporation and the bank was now blurred: to an outside observer, it would have been unclear where the corporation ended and the bank began. . . .

Our corporation had extensive formal reporting systems to allow the monitoring of operations on a regular basis. After the takeover, these systems required substantial modifications. For example . . . we had to report our results to the public every quarter at a time when we were losing nearly 2 million dollars a week! We knew that unless we got to our suppliers ahead of time, they could easily panic and refuse us credit. Hasty moves on their part could have had fatal consequences for the business.

In addition, our closure plans for plants all over Canada and the United States brought us into contact with unions and governments in an entirely different way. We realized that we had no option but to deal with these audiences in advance of events.

I have already described how our relationship with the bankers changed as a result of our open communication. We found exactly the same effect with these new audiences. Initially, our major suppliers could not understand why we had told them we were in trouble before we had to. We succeeded, however, in framing the situation in a way that

enlisted their cooperation in our survival, and by the time the "war story" was news, we had their full support. Similarly, most government and union organizations were so pleased to be involved in the process before announcements were made that they bent over backward to be of assistance. Just as had been the case with the bank, we set up joint task forces with these "outside" agencies to resolve what had become shared problems. A significant contributor to our ability to pull this off was the high quality of our internal communication. Everyone on the teams knew the complete, up-to-date picture of what was happening. An outside agency could talk to anyone on a team and get the same story. In this way, we constructed a formidable network of contacts, many of whom had special skills and experience in areas that would turn out to be of great help to us in the future.

The addition of multiple networks to our information systems enhanced our ability both to gather and to disseminate information. The informality and openness of the networks, together with the high volume of face-to-face dialogues, gave us an early-warning system with which to detect hurt feelings and possible hostile moves on the part of shareholders, suppliers, nervous bankers, and even customers. This information helped us head off trouble before it happened. The networks also acted as a broadcast system through which we could test plans and actions before announcing them formally. In this way, not only did we get excellent suggestions for improvement, but everyone felt that he or she had been consulted before action was taken. . . .

We had a similar experience with a group of people outside the company during the hectic last six months of 1983, when we were trying to finalize a deal for the shareholders and bankers to sell the steel distribution business to new owners. The group of people in question comprised the secretaries of the numerous lawyers and accountants involved in the deal. . . .

We made these secretaries part of the network, briefing them in advance on the situation, explaining why things were needed, and keeping them updated on the progress of the deal. We were astounded at the cooperation we received: our calls were put through, our messages received prompt responses, and drafts and opinions were produced on time. In the final event, a complex deal that should have taken nine months to complete was done in three. All of this was accomplished by ordinary people going far beyond what might have been expected of them. . . .

We had been thrust into crisis without warning, and our initial activities were almost entirely reactions to issues that imposed themselves upon us. But as we muddled along in the task forces, we began to find that we had unexpected sources of influence over what was happening. The changing relationship with the bank illustrates this neatly. Although we had no formal power in that situation, we found that by framing a confusing predicament in a coherent

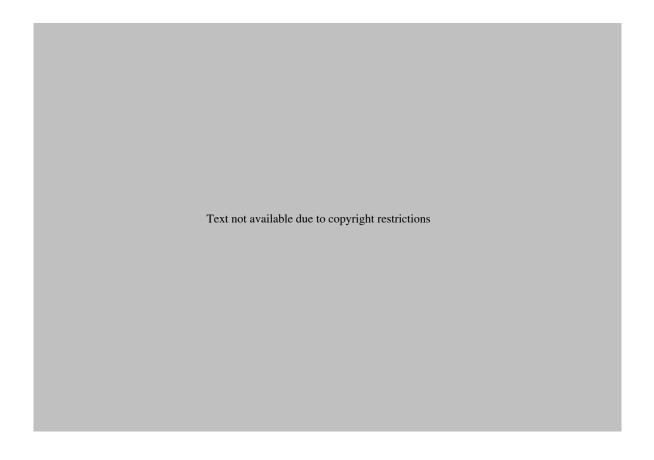
way, we could, via our network, influence the outcomes of the bank's decisions. The same applied to suppliers: by briefing them ahead of time and presenting a reasonable scenario for the recovery of their advances, we could influence the decisions they would make.

Slowly we began to realize that, although we were powerless in a formal sense, our networks, together with our own internal coherence, gave us an ability to get things done invisibly. As we discussed the situation with all the parties involved, a strategy began to emerge. A complicated financial/tax structure would allow the bank to "manage" its loss and give it an incentive not to call on the shareholders' personal guarantees. The core steel distribution business could be refinanced in the process and sold to new owners. The wrangle between the shareholders could be resolved, and each could go his or her own way. All that had to be done was to bring all the parties together, including a buyer for the steel business, and have them agree that this was the best course to follow. Using our newfound skills, we managed to pull it off.

It was not without excitement: at the last minute, the shareholders raised further objections to the deal. Only the bank could make them sell, and they were reluctant to do so, fearful that they might attract a lawsuit. Discreet calls to the major suppliers, several of whose executives were on the board of the bank, did the trick. "This business needs to be sold and recapitalized," the suppliers were told. "If the deal does not go through, you should probably reduce your credit exposure." The deal went through. By the end of 1983, we had new owners, just in time to benefit from the general business recovery. The ordeal was over.

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Entering the Global Arena

Motivations for Global Expansion \cdot Stages of International Development \cdot Global Expansion through International Strategic Alliances

Designing Structure to Fit Global Strategy

Model for Global versus Local Opportunities \cdot International Division \cdot Global Product Division Structure \cdot Global Geographic Division Structure \cdot Global Matrix Structure

Building Global Capabilities

The Global Organizational Challenge • Global Coordination Mechanisms

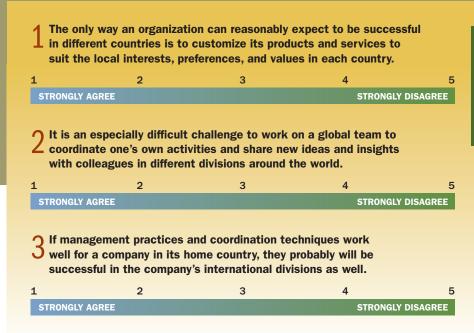
Cultural Differences in Coordination and Control

National Value Systems $\,\cdot\,$ Three National Approaches to Coordination and Control

The Transnational Model of Organization

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



Saks Incorporated planned to open a store in China in time for the Beijing Olympics, but the games came and went before construction ever got underway. Bertlesmann AG's Gruner + Jahr division, Europe's largest magazine publisher, tried for decades to extend that success into the United States but eventually sold off its U.S. assets in what one reporter called "a billion dollar experiment gone horribly wrong." The entrepreneurial firm First Net Card was established with a goal of providing credit for online transactions to anyone in the world, but managers found the complications of dealing with international credit and banking laws mind-boggling. After two years and a mountain of legal research, First Net was licensed to provide credit only in the United States, Canada, and Britain.¹

That's the reality of international business. When an organization decides to do business in another country, managers face a whole new set of challenges and roadblocks. They sometimes find that transferring their domestic success internationally requires a totally different approach. Wal-Mart entered South Korea with high hopes in 1996, but ten years later sold all its South Korean stores to a local retailer and withdrew from that country.² It is not the only successful organization to have pulled out of one or another foreign market battered and bruised, managers scratching their heads over what went wrong.

Succeeding on a global scale isn't easy. Managers have to make tough decisions about strategic approach, how best to get involved in international markets, and how to design the organization to reap the benefits of international expansion. Despite the challenges, managers in most organizations think the potential rewards outweigh the risks. U.S.-based firms set up foreign operations to produce goods and services needed by consumers in other countries, as well as to obtain lower costs or technical know-how for producing products and services to sell domestically. In return, companies from Japan, Germany, the United Kingdom, and other countries

Managing by Design Questions 210

compete with American organizations on their own turf as well as abroad. Interest in international business is stronger today than ever before.

Purpose of This Chapter

This chapter explores how managers design the organization for the international environment. We begin by looking at some of the primary motivations for organizations to expand internationally, the typical stages of international development, and the use of strategic alliances as a means for international expansion. Then, the chapter examines global strategic approaches and the application of various structural designs for global advantage. Next, we discuss some of the specific challenges global organizations face, mechanisms for addressing them, and cultural differences that influence the organization's approach to designing and managing a global firm. Finally, the chapter takes a look at the *transnational model*, a type of global organization that achieves high levels of the varied capabilities needed to succeed in a complex and volatile international environment.

ENTERING THE GLOBAL ARENA

Only a few decades ago, many companies could afford to ignore the international environment. Today, the number of companies doing business on a global scale is increasing and the awareness of national borders decreasing, as reflected in the frequency of foreign participation at the top management level. Fourteen of the *Fortune* 100 companies are now run by foreign-born CEOs. Citigroup picked India-born Vikram S. Pandit as its CEO, Alcoa's top leader was born in Morocco, and Dow Chemical is headed by a native Australian.³ The trend is seen in other countries as well. Wales-born Howard Stringer was named Sony's first non-Japanese CEO in 2004, and Nancy McKinstry is the first American to head Dutch publisher Wolters Kluwer.⁴

Why has global experience at the top become so important to organizations? Because the world is rapidly developing into a unified global field, and companies need top leaders who have a global outlook. The Book Mark discusses some of the factors contributing to our increasingly-interconnected world and how this interconnection affects organizations. Extraordinary advancements in communications, technology, and transportation have created a new, highly competitive landscape. Products can be made and sold anywhere in the world, communications are instant, and productdevelopment life cycles are growing shorter. No company is isolated from global influence. Some large so-called American companies such as Coca-Cola, IBM, McDonald's, and Procter & Gamble rely on international sales for a substantial portion of their sales and profits. Yum! Brands, which owns Pizza Hut, Taco Bell, KFC, and Long John Silver's, gets 55 percent of its profits from overseas, and managers expect that to grow to 70 percent within a decade.⁵ On the other hand, organizations in other countries search for customers in the United States. Vietnam-based Kinh Do Foods Corporation operates fast food restaurants in the Philippines, Singapore, and South Korea, as well as Vietnam, and managers are aiming at both the British and U.S. markets. Russia's Lukoil has hundreds of gas stations in New Jersey and Pennsylvania and plans further expansion. India's top technology-services companies get 60 to 70 percent of their sales from North America, while Armonk, New York-based IBM gets about the same percentage of its revenues from overseas.6

BookMark 6.0 (HAVE YOU READ THIS BOOK?)

The World Is Flat: A Brief History of the Twenty-First Century By Thomas L. Friedman



The global competitive playing field is being leveled. How fast is globalization happening? Three-time Pulitzer-Prize winning New York Times columnist Thomas L. Friedman started working on the second edition of his best-selling book, The World Is Flat, before the first edition was barely off the press. However, Friedman asserts that the forces causing this accelerated phase of globalization actually began to unfold in the final years of the twentieth century.

WHAT MAKES THE WORLD GO FLAT?

Friedman outlines ten forces that flattened the world, which he calls Flatteners. Many of these forces are directly or indirectly related to advanced technology, including:

- Work Flow Software. A dizzying array of software programs enable computers to easily communicate with one another. That's what makes it possible for a company like animation studio Wild Brain to make films with a team of production employees spread all over the world, or for Boeing airplane factories to automatically resupply global customers with parts. It means companies can create global virtual offices, as well as outsource pieces of their operations to whoever can do the job best and most efficiently, no matter in which country they are located.
- Supply-Chaining. Work flow software also enhances supply-chaining, the horizontal collaboration among suppliers, retailers, and customers that became a phenomenon in the 1990s. In turn, the more supply chains grow and proliferate, the flatter the world becomes. Supply

- chaining forces the adoption of common standards and technologies among companies so that every link can interact seamlessly.
- The Steroids. Friedman refers to a variety of new technologies as steroids "because they are amplifying and turbocharging all the other flatteners." Perhaps the most significant element is the wireless revolution, which enables you to "take everything that had been digitized, made virtual and personal, and do it from anywhere." As Alan Cohen, senior vice president at Airespace says, "Your desk goes with you everywhere you are now. And the more people have the ability to push and pull information from anywhere to anywhere faster, the more barriers to competition and communication disappear."

HOW TO BENEFIT FROM A FLATTER WORLD

A flatter, interconnected world means employees and organizations can collaborate and compete more successfully than ever, whatever their size and wherever they are located. But the benefits of a flatter world are not automatic. Friedman offers strategies for how companies can align themselves with the new reality of globalization. He warns U.S. companies (and employees) that they should embrace the idea that there will no longer be such a thing as an American firm or an American job. In a flat world, the best companies are the best collaborators.

The World Is Flat, by Thomas L. Friedman, is published by Farrar, Straus &

Motivations for Global Expansion

Economic, technological, and competitive forces have combined to push many companies from a domestic to a global focus. The importance of the global environment for today's organizations is reflected in the shifting global economy. As one indication, Fortune magazine's list of the Global 500, the world's 500 largest companies by revenue, indicates that economic clout is being diffused across a broad global scale. In Exhibit 6.1, each circle represents the total revenues of all Global 500 companies in each country. Although the United States accounts for the majority of the Global 500 revenues, a number of less-developed countries are growing stronger. China, for example, had fifteen companies on the Global 500 in 2003, the year this chart was produced by Fortune, compared to only three companies on the list ten years earlier. China has grown even stronger since then, with twenty-nine companies on the 2008 Global

EXHIBIT 6.1

The Global Economy as Reflected in the Fortune Global 500.

Note: Each circle represents the total revenues of all Global 500 companies in that country in 2003. The number in parentheses indicates the number of companies that country had on the Global 500 list in that year. **Britain** Sweder \$96 (6) \$1,079 Finland \$71 (4) (35)Japan \$2,181 (82)Britain/ etherlands \$250 (2) Germany \$388 (12) **United States** \$1,363 Revenue: \$5,841 billion (34)Number of companies on Global 500: (189) th Kore China \$266 \$358 (11) (15) **France** Switzerland \$1,246 (12) (37)India \$60 (4) Italy \$300 Malaysia (8) \$26 (1) Mexico Brazil \$49 (1) Australia \$107 (7)

Source: Fortune Global 500, Copyright 2004 Time Inc. All rights reserved.



Consider building an international presence to realize economies of scale, exploit economies of scope, or obtain scarce or low-cost production factors such as labor and raw materials.

500 list. Japan, on the other hand, has continued to decline in importance, dropping from 149 companies in 1993 to eighty-two in 2003 and down to sixty-four in 2008.⁷

As power continues to shift, organizations are viewing participation in global business as a necessity. Indeed, in some industries, a company can be successful only by succeeding on a global scale. In general, three primary factors motivate companies to expand internationally: economies of scale, economies of scope, and low-cost production factors.⁸

Economies of Scale. Building a global presence expands an organization's scale of operations, enabling it to realize **economies of scale**. The trend toward large organizations was initially sparked by the Industrial Revolution, which created pressure in many industries for larger factories that could seize the benefits of economies of scale offered by new technologies and production methods. Through large-volume production, these industrial giants were able to achieve the lowest possible cost per unit of production. However, for many companies, domestic markets no longer provide the high level of sales needed to maintain enough volume to achieve scale economies. In an industry such as automobile manufacturing, for example, a company would need a tremendous share of the domestic market to achieve scale economies.

Thus, an organization such as Ford Motor Company is forced to become international in order to survive. Economies of scale also enable companies to obtain volume discounts from suppliers, lowering the organization's cost of production.

Economies of Scope. A second factor is the enhanced potential for exploiting **economies** of scope. Scope refers to the number and variety of products and services a company offers, as well as the number and variety of regions, countries, and markets it serves. Having a presence in multiple countries provides marketing power and synergy compared to the same size firm that has presence in fewer countries. For example, an advertising agency with a presence in several global markets gains a competitive edge serving large companies that span the globe. Or consider the case of McDonald's, which has to obtain nearly identical ketchup and sauce packets for its restaurants around the world. A supplier that has a presence in every country McDonald's serves has an advantage because it provides cost, consistency, and convenience benefits to McDonald's, which does not have to deal with a number of local suppliers in each country. Transmatic Manufacturing Co., based in Holland, Michigan, supplies high-precision metal parts to companies such as Motorola and Delphi Corp. When Transmatic began losing contracts to suppliers in China, where the large U.S. firms had manufacturing facilities, owner P. J. Thompson decided to make the international leap. "My customers are multinational and they want me to be multinational too," says Thompson.9

Economies of scope can also increase a company's market power as compared to competitors, because the company develops broad knowledge of the cultural, social, economic, and other factors that affect its customers in varied locations and can provide specialized products and services to meet those needs.

Low-Cost Production Factors. The third major force motivating global expansion relates to **factors of production**. One of the earliest, and still one of the most powerful, motivations for U.S. companies to invest abroad is the opportunity to obtain raw materials, labor, and other resources at the lowest possible cost. Organizations have long turned overseas to secure raw materials that were scarce or unavailable in their home country. In the early twentieth century, for example, tire companies went abroad to develop rubber plantations to supply tires for America's growing automobile industry. Today, U.S. paper manufacturers such as Weyerhaeuser and U.S. Paper Co., forced by environmental concerns to look overseas for new timberlands, are managing millions of acres of tree farms in New Zealand and other areas.¹⁰

Many companies also turn to other countries as a source of cheap labor. Textile manufacturing in the United States is now practically nonexistent as companies have shifted most production to Asia, Mexico, Latin America, and the Caribbean, where the costs of labor and supplies are much lower. Aerospace-related companies are building factories in Mexico, where they get cheaper labor and favorable government regulations. U.S. makers of toys, consumer electronics, and other goods outsource work to China and other low-wage countries. Manufacturing of non-upholstered furniture is rapidly following the same pattern. Companies are closing plants in the United States and importing high-quality wooden furniture from China, where as many as thirty workers can be hired for the cost of one cabinet-maker in the United States. But the trend isn't limited to manufacturing. A number of growing service firms in India, for example, write software, perform consulting work, integrate back-office solutions, and handle technical support for some of the biggest corporations in the United States—and do the work for 40 percent less than comparable U.S. firms. Comparable U.S. firms.

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Other organizations have gone international in search of lower costs of capital, sources of cheap energy, reduced government restrictions, or other factors that lower the company's total production costs. Companies can locate facilities wherever it makes the most economic sense in terms of needed employee education and skill levels, labor and raw materials costs, and other production factors. Companies such as Yahoo! and Google, for instance, can't find the technological brainpower they need in the United States, so they are building research and development facilities in India to take advantage of highly-skilled workers.¹³ Automobile manufacturers such as Toyota, BMW, General Motors, and Ford have built plants in South Africa, Brazil, and Thailand, where they typically get dramatically lower costs for factors such as land, water, and electricity.¹⁴ Foreign companies also come to the United States to obtain favorable circumstances. Kalexsyn, a small chemical research firm in Kalamazoo, Michigan, does about 25 percent of its business with Western European biotechnology firms that need high quality instead of low prices.¹⁵ Japan's Honda and Toyota, South Korea's Samsung Electronics, and the Swiss drug company Novartis have all built plants or research centers in the United States to take advantage of tax breaks, find skilled workers, or be closer to major customers and suppliers.¹⁶

Stages of International Development

No company can become a global giant overnight. Managers have to consciously adopt a strategy for global development and growth. Organizations enter foreign markets in a variety of ways and follow diverse paths. However, the shift from domestic to global typically occurs through stages of development, as illustrated in Exhibit 6.2.¹⁷ In stage one, the **domestic stage**, the company is domestically oriented, but managers are aware of the global environment and may want to consider initial foreign involvement to expand production volume and realize economies of scale. Market potential is limited and is primarily in the home country. The structure of the company is domestic, typically functional or divisional, and initial foreign sales are handled through an export department. The details of freight forwarding, customs problems, and foreign exchange are handled by outsiders.

EXHIBIT 6.2Four Stages of International Evolution

	I. Domestic	II. International	III. Multinational	IV. Global
Strategic Orientation	Domestically oriented	Export-oriented, multidomestic	Multinational	Global
Stage of Development	Initial foreign involvement	Competitive positioning	Explosion	Global
Structure	Domestic structure plus export department	Domestic structure plus international division	Worldwide geographic product	Matrix, transnational
Market Potential	Moderate, mostly domestic	Large, multidomestic	Very large, multinational	Whole world

Source: Based on Nancy J. Adler, International Dimensions of Organizational Behavior, 4th ed. (Cincinnati, Ohio: South-Western, 2002), 8–9; and Theodore T. Herbert, "Strategy and Multinational Organization Structure: An Interorganizational Relationships Perspective," Academy of Management Review 9 (1984), 259–271.

In stage two, the **international stage**, the company takes exports seriously and begins to think multidomestically. **Multidomestic** means competitive issues in each country are independent of other countries; the company deals with each country individually. The concern is with international competitive positioning compared with other firms in the industry. At this point, an international division has replaced the export department, and specialists are hired to handle sales, service, and warehousing abroad. Multiple countries are identified as a potential market. For example, Purafil, a small company with headquarters in Doraville, Georgia, sells air filters that remove pollution and cleanse the air in fifty different countries. Although Purafil is small, it maintains contracts with independent sales firms in the various countries who know the local markets and cultures.¹⁸ The company first began exporting in the early 1990s and now gets 60 percent of its revenues from overseas.

In stage three, the **multinational stage**, the company has extensive experience in a number of international markets and has established marketing, manufacturing, or research and development (R&D) facilities in several foreign countries. The organization obtains a large percentage of revenues from sales outside the home country. Explosive growth occurs as international operations take off, and the company has business units scattered around the world along with suppliers, manufacturers, and distributors. Examples of companies in the multinational stage include Siemens of Germany, Sony of Japan, and Coca-Cola of the United States. Wal-Mart, although it is the world's biggest company, is just moving into the multinational stage, with only about 22 percent of sales from international business in fiscal year 2006 (the most recent figures available). However, international sales are the fastest growing part of the retail giant's business.¹⁹

The fourth and ultimate stage is the **global stage**, which means the company transcends any single country. The business is not merely a collection of domestic industries; rather, subsidiaries are interlinked to the point where competitive position in one country significantly influences activities in other countries.²⁰ Truly **global companies** no longer think of themselves as having a single home country, and, indeed, have been called *stateless corporations*.²¹ This represents a new and dramatic evolution from the multinational company of the 1960s and 1970s. For example, the CEO of digital-media company Thomson SA says he doesn't want people to think of the company as being based any particular place.²²

Global companies operate in truly global fashion, and the entire world is their marketplace. Global companies such as Nestlé, Royal Dutch/Shell, Unilever, and Matsushita Electric may operate in more than a hundred countries. The structural problem of holding together this huge complex of subsidiaries scattered thousands of miles apart is immense. Organization structure for global companies can be extremely complex and often evolves into an international matrix or transnational model, which will be discussed later in this chapter.

Global Expansion through International Strategic Alliances

One of the most popular ways companies get involved in international operations is through international strategic alliances. Companies in rapidly changing industries such as media and entertainment, pharmaceuticals, biotechnology, and software might have hundreds of these relationships.²³



inexpensive ways to

become involved in

international sales

and operations.

Typical alliances include licensing, joint ventures, and consortia.²⁴ For example, when entering new markets, particularly in developing areas of the world, retailers such as Saks Fifth Avenue and Barneys New York limit their risks by licensing their names to foreign partners. Saks has licensed stores in Riyadh and Dubai, Saudi Arabia, and in Mexico, for instance, and Barneys has a licensed store in Japan. Both firms, as well as other U.S.-based department stores, are currently making a strong international push in light of weak sales and stiff competition in the United States.²⁵ A **joint venture** is a separate entity created with two or more active firms as sponsors. This is a popular approach to sharing development and production costs and penetrating new markets. Joint ventures may be with either customers or competitors.²⁶ Competing firms Sprint, Deutsche Telecom, and Telecom France cooperate with each other and with several smaller firms in a joint venture that serves the telecommunication needs of global corporations in sixty-five countries.²⁷ Navistar International Corporation, based in Warrenville, Illinois, formed a joint venture with rival Mahindra & Mahindra Ltd., a fast-growing equipment maker in India, to build trucks and buses for export.²⁸ And Wal-Mart hopes to get a foothold in India's fast-growing but difficult retail market through a joint venture with Bharti Enterprises to establish Bharti Wal-Mart Private Limited.²⁹

Companies often seek joint ventures to take advantage of a partner's knowledge of local markets, to achieve production cost savings through economies of scale, to share complementary technological strengths, or to distribute new products and services through another country's distribution channels. Another growing approach is for companies to become involved in **consortia**, groups of independent companies—including suppliers, customers, and even competitors—that join together to share skills, resources, costs, and access to one another's markets.³⁰ Consortia are often used in other parts of the world, such as the *keiretsu* family of corporations in Japan. In Korea, these interlocking company arrangements are called *chaebol*.

DESIGNING STRUCTURE TO FIT GLOBAL STRATEGY

As we discussed in Chapter 3, an organization's structure must fit its situation by providing sufficient information processing for coordination and control while focusing employees on specific functions, products, or geographic regions. Organization design for international firms follows a similar logic, with special interest in global versus local strategic opportunities.

Model for Global versus Local Opportunities

When organizations venture into the international domain, managers strive to formulate a coherent global strategy that will provide synergy among worldwide operations for the purpose of achieving common organizational goals. One dilemma they face is choosing whether to emphasize global **standardization** versus national responsiveness. Managers must decide whether they want each global affiliate to act autonomously or whether activities should be standardized across countries. These decisions are reflected in the choice between a *globalization* versus a *multidomestic* global strategy.

The **globalization strategy** means that product design, manufacturing, and marketing strategy are standardized throughout the world.³¹ For example, the Japanese took business away from Canadian and American companies by developing

similar high-quality, low-cost products for all countries. The Canadian and American companies incurred higher costs by tailoring products to specific countries. Black & Decker became much more competitive internationally when it standardized its line of power hand tools. Other products, such as Coca-Cola, are naturals for globalization, because only advertising and marketing need to be tailored for different regions. In general, services are less suitable for globalization because different customs and habits often require a different approach to providing service. This was part of Wal-Mart's trouble in the South Korean market. The retailer continued to use Westernstyle displays and marketing strategies, whereas successful South Korean retailers build bright, eye-catching displays and hire clerks to promote their goods using megaphones and hand-clapping. Wal-Mart similarly flubbed in Indonesia, where it closed its stores after only a year. Customers didn't like the brightly lit, highly organized stores, and, because no haggling was permitted, they perceived the goods as being overpriced.³²

Other companies have also begun shifting away from a strict globalization strategy. Economic and social changes, including a backlash against huge global corporations, have prompted consumers to be less interested in global brands and more in favor of products that have a local feel.³³ However, a globalization strategy can help a manufacturing organization reap economy-of-scale efficiencies by standardizing product design and manufacturing, using common suppliers, introducing products around the world faster, coordinating prices, and eliminating overlapping facilities. By sharing technology, design, suppliers, and manufacturing standards worldwide in a coordinated global automotive operation, Ford saved \$5 billion during the first three years.³⁴ Similarly, Gillette Company, which makes grooming products such as the Mach3 shaving system for men and the Venus razor for women, has large production facilities that use common suppliers and processes to manufacture products whose technical specifications are standardized around the world.³⁵

1 The only way an organization can reasonably expect to be successful in different countries is to customize its products and services to suit the local interests, preferences, and values in each country.

ANSWER: *Disagree.* It is the case that people around the world often want products and services that are tailored to their local needs and interests, and many organizations are quite successful by responding to local market demands. However, other international organizations attain competitive advantages by using the same product design and marketing strategies in many countries throughout the world.

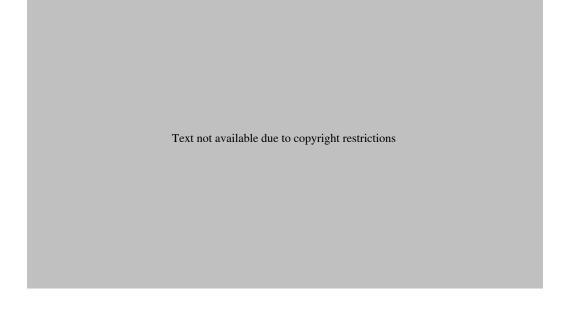
A multidomestic strategy means that competition in each country is handled independently of competition in other countries. Thus, a multidomestic strategy would encourage product design, assembly, and marketing tailored to the specific needs of each country. Some companies have found that their products do not thrive in a single global market. For instance, people in different countries have very different expectations for personal-care products such as deodorant or toothpaste. Many people in parts of Mexico use laundry detergent for washing dishes. Food companies such as Kraft have discovered that they must tailor their cookies and crackers to different markets. Kraft's Oreo, the top-selling cookie in the United States, sold poorly

ASSESS YOUR ANSWER in China until the company reformulated it to suit local tastes. Now, it's the top seller in that country too.³⁶

Different global organization designs, as well, are better suited to the need for either global standardization or national responsiveness. Recent research on more than 100 international firms based in Spain has provided further support for the connection between international structure and strategic focus.³⁷ The model in Exhibit 6.3 illustrates how organization design and international strategy fit the needs of the environment.³⁸

Companies can be characterized by whether their product and service lines have potential for globalization, which means advantages through worldwide standardization. Companies that sell similar products or services across many countries have a globalization strategy. On the other hand, some companies have products and services appropriate for a multidomestic strategy, which means local-country advantages through differentiation and customization to meet local needs.

As indicated in Exhibit 6.3, when forces for both global standardization and national responsiveness in many countries are low, simply using an international division with the domestic structure is an appropriate way to handle international business. For some industries, however, technological, social, or economic forces may create a situation in which selling standardized products worldwide provides a basis for competitive advantage. In these cases, a global product structure is appropriate. This structure provides product managers with authority to handle their product lines on a global basis and enables the company to take advantage of a unified global marketplace. In other cases, companies can gain competitive advantages through national responsiveness—by responding to unique needs in the various countries in which they do business. For these companies, a worldwide geographic structure is appropriate. Each country or region will have subsidiaries modifying

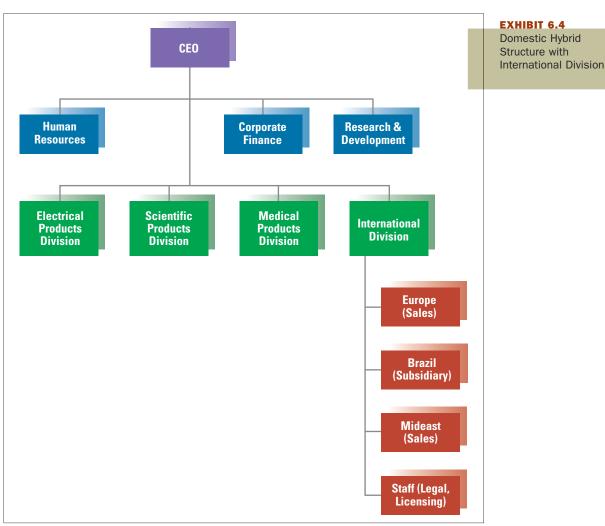


products and services to fit that locale. A good illustration is the advertising firm of Ogilvy & Mather, which divides its operations into four primary geographic regions because advertising approaches need to be modified to fit the tastes, preferences, cultural values, and government regulations in different parts of the world.³⁹ Children are frequently used to advertise products in the United States, but this approach in France is against the law. The competitive claims of rival products regularly seen on U.S. television would violate government regulations in Germany.⁴⁰

In many instances, companies need to respond to both global and local opportunities simultaneously, in which case the global matrix structure can be used. Part of the product line may need to be standardized globally and other parts tailored to the needs of local countries. Let's discuss each of the structures in Exhibit 6.3 in more detail.

International Division

As companies begin to explore international opportunities, they typically start with an export department that grows into an **international division**. The international division has a status equal to the other major departments or divisions within the company and is illustrated in Exhibit 6.4. Whereas the domestic divisions are typically



organized along functional or product lines, the international division is organized according to geographic interests, as illustrated in the exhibit. The international division has its own hierarchy to handle business (licensing, joint ventures) in various countries, selling the products and services created by the domestic divisions, opening subsidiary plants, and in general moving the organization into more sophisticated international operations.

Although functional structures are often used domestically, they are less frequently used to manage a worldwide business. ⁴¹ Lines of functional hierarchy running around the world would extend too long, so some form of product or geographic structure is used to subdivide the organization into smaller units. Firms typically start with an international department and, depending on their strategy, later use product or geographic division structures or a matrix. One study found that 48 percent of organizations identified as global leaders use divisional structures, while 28 percent reported using matrix structures. ⁴²

Global Product Division Structure

In a **global product structure**, the product divisions take responsibility for global operations in their specific product area. This is one of the most commonly used structures through which managers attempt to achieve global goals because it provides a fairly straightforward way to effectively manage a variety of businesses and products around the world. Managers in each product division can focus on organizing for international operations as they see fit and directing employees' energy toward their own division's unique set of global problems or opportunities.⁴³ In addition, the structure provides top managers at headquarters with a broad perspective on competition, enabling the entire corporation to respond more rapidly to a changing global environment.⁴⁴

With a global product structure, each division's manager is responsible for planning, organizing, and controlling all functions for the production and distribution of its products for any market around the world. As we saw in Exhibit 6.3, the global product structure works best when the company has opportunities for worldwide production and sale of standard products for all markets, thus providing economies of scale and standardization of production, marketing, and advertising.

Eaton Corporation has used a form of worldwide product structure, as illustrated in Exhibit 6.5. In this structure, the automotive components group, industrial group, and so on are responsible for manufacture and sale of products worldwide. The vice president of the international division is responsible for coordinators in each region, including a coordinator for Japan, Australia, South America, and northern Europe. The coordinators find ways to share facilities and improve production and delivery across all product lines sold in their regions. These coordinators fulfill the same function as integrators described in Chapter 3.

The product structure is great for standardizing production and sales around the globe, but it also has problems. Often the product divisions do not work well together, competing instead of cooperating in some countries; and some countries may be ignored by product managers. The solution adopted by Eaton Corporation of using country coordinators who have a clearly defined role is a superb way to overcome these problems.



Choose a global prod-

uct structure when the organization can gain competitive advantages through a globalization strategy (global integration). Choose a global geographic structure when the company has advantages with a multidomestic strategy (national responsive-

ness). Use an interna-

tional division when

the company is pri-

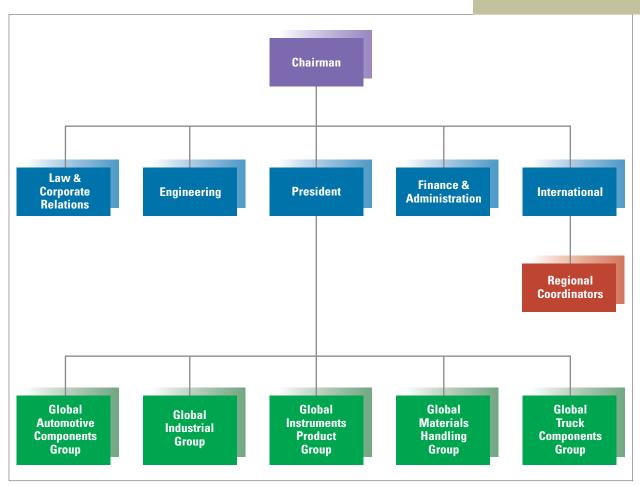
tional operations.

marily domestic and

has only a few interna-



EXHIBIT 6.5
Partial Global Product
Structure Used by Eaton
Corporation



Source: Based on New Directions in Multinational Corporate Organization (New York: Business International Corp., 1981).

Global Geographic Division Structure

A regionally based organization is well suited to companies that want to emphasize adaptation to regional or local market needs through a multidomestic strategy, as illustrated earlier in Exhibit 6.3. The **global geographic structure** divides the world into geographic regions, with each geographic division reporting to the CEO. Each division has full control of functional activities within its geographic area. For example, Nestlé, with headquarters in Switzerland, puts great emphasis on the autonomy of regional managers who know the local culture. The largest branded food company in the world, Nestlé rejects the idea of a single global market and uses a geographic structure to focus on the local needs and competition in each country. Local managers have the authority to tinker with a product's flavoring, packaging, portion size, or other elements as they see fit. Many of the company's 8,000 brands are registered in only one country.

Companies that use this type of structure have typically been those with mature product lines and stable technologies. They can find low-cost manufacturing within countries, as well as meet different needs across countries for marketing and sales. However, several business and organizational trends have led to a broadening of the kinds of companies that use the global geographic structure. 46 The growth of service organizations has outpaced manufacturing for several years, and services by their nature must occur on a local level. In addition, to meet new competitive threats, many manufacturing firms are emphasizing the ability to customize their products to meet specific needs, which requires a greater emphasis on local and regional responsiveness. All organizations are compelled by current environmental and competitive challenges to develop closer relationships with customers, which may lead companies to shift from product-based to geographic-based structures. IBM, for example, is creating new regional divisions for developing markets, such as the Middle East, Asia, the Americas, Africa, and Eastern Europe. CEO Sam Palmisano believes developing relationships with governments, utilities, and other organizations in each region is critical to helping IBM tailor software and services to the needs of these emerging and fast-growing information technology markets.⁴⁷

The problems encountered by senior management using a global geographic structure result from the autonomy of each regional division. For example, it is difficult to do planning on a global scale—such as new-product R&D—because each division acts to meet only the needs of its region. New domestic technologies and products can be difficult to transfer to international markets because each division thinks it will develop what it needs. Likewise, it is difficult to rapidly introduce products developed offshore into domestic markets, and there is often duplication of line and staff managers across regions. Because regional divisions act to meet specific needs in their own areas, tracking and maintaining control of costs can be a real problem. The following example illustrates how executives at Colgate-Palmolive overcame some of the problems associated with the geographic structure.

PRACTICE

ture of the form illustrated in Exhibit 6.6. O

For several years, Colgate-Palmolive Company, which manufactures and markets personal-care, household, and specialty products, used a global geographic struc-

Colgate-Palmolive Company ture of the form illustrated in Exhibit 6.6. Colgate has a long, rich history of international involvement and has relied on regional divisions in North America, Europe, Latin America, the Far East, and the South Pacific to stay on the competitive edge. Well over half of the company's total sales are generated outside of the United States.

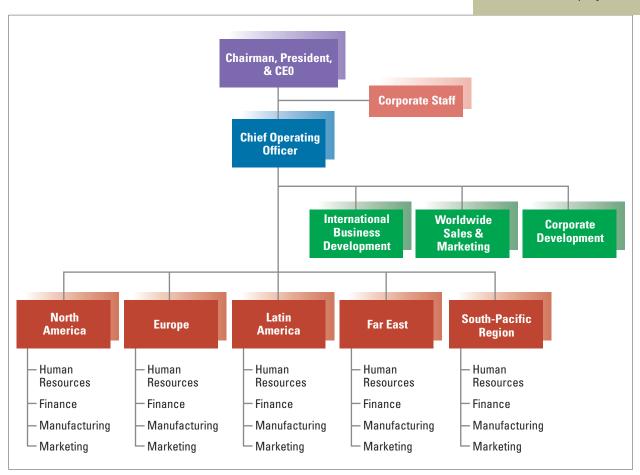
The regional approach supports Colgate's cultural values, which emphasize individual autonomy, an entrepreneurial spirit, and the ability to act locally. Each regional president reports directly to the chief operating officer, and each division has its own staff functions such as human resources (HR), finance, manufacturing, and marketing. Colgate handled the problem of coordination across geographic divisions by creating an *international business development group* that has responsibility for long-term company planning and worldwide product coordination and communication. It used several product team leaders, many of whom had been former country managers with extensive experience and knowledge. The product leaders are essentially coordinators and advisors to the geographic divisions; they have no power to direct, but they have the ability and the organizational support needed to exert substantial influence. The addition of this business development group quickly reaped positive results in terms of more rapid introduction of new products across all countries and better, lower-cost marketing.

The success of the international business development group prompted Colgate's top management to add two additional coordinating positions—a *vice president of corporate development* to focus on acquisitions, and a *worldwide sales and marketing group* that coordinates sales and marketing initiatives across all geographic locations. With these worldwide positions added to the structure, Colgate maintains its focus on each region and achieves global coordination for overall planning, faster product introductions, and enhanced sales and marketing efficiency.⁴⁸

Global Matrix Structure

We've discussed how Eaton used a global product division structure and found ways to coordinate across worldwide divisions. Colgate-Palmolive used a global geographic division structure and found ways to coordinate across geographic regions. Each of these companies emphasized a single dimension. Recall from Chapter 3

EXHIBIT 6.6
Global Geographic
Structure of ColgatePalmolive Company



Source: Based on Robert J. Kramer, Organizing for Global Competitiveness: The Geographic Design (New York: The Conference Board, 1993), 30.

that a matrix structure provides a way to achieve vertical and horizontal coordination simultaneously along two dimensions. A **global matrix structure** is similar to the matrix described in Chapter 3, except that for multinational corporations the geographic distances for communication are greater and coordination is more complex.

The matrix works best when pressure for decision making balances the interests of both product standardization and geographic localization and when coordination to share resources is important. For many years, Asea Brown Boveri (ABB), an electrical equipment corporation headquartered in Zurich, used a global matrix structure that worked extremely well to coordinate a 200,000-employee company operating in more than 140 countries.

PRACTICE tries ABB's average plant has fewer than 2

ABB has given new meaning to the notion of "being local worldwide." ABB owns 1,300 subsidiary companies, divided into 5,000 profit centers located in 140 coun-

Asea Brown
Boveri Ltd.
(ABB)

tries. ABB's average plant has fewer than 200 workers and most of the company's 5,000 profit centers contain only forty to fifty people, meaning almost everyone stays close to the customer. For many years, ABB used a complex global matrix structure similar to Exhibit 6.7 to achieve worldwide economies of scale combined with local flexibility and responsiveness.

At the top are the chief executive officer and an international committee of eight top managers, who hold frequent meetings around the world. Along one side of the matrix are sixty-five or so business areas located worldwide, into which ABB's products and services are grouped. Each business area leader is responsible for handling business on a global scale, allocating export markets, establishing cost and quality standards, and creating mixed-nationality teams to solve problems. For example, the leader for power transformers is responsible for twenty-five factories in sixteen countries.

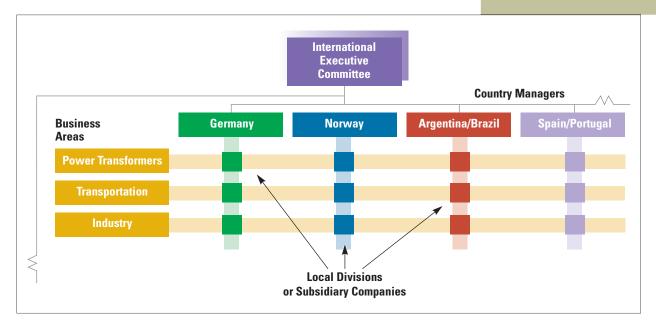
Along the other side of the matrix is a country structure; ABB has more than 100 country managers, most of them citizens of the country in which they work. They run national companies and are responsible for local balance sheets, income statements, and career ladders. The German president, for example, is responsible for 36,000 people across several business areas that generate annual revenues in Germany of more than \$4 billion.

The matrix structure converges at the level of the 1,300 local companies. The presidents of local companies report to two bosses—the business area leader, who is usually located outside the country, and the country president, who runs the company of which the local organization is a subsidiary.

ABB's philosophy is to decentralize things to the lowest levels. Global managers are generous, patient, and multilingual. They must work with teams made up of different nationalities and be culturally sensitive. They craft strategy and evaluate performance for people and subsidiaries around the world. Country managers, by contrast, are regional line managers responsible for several country subsidiaries. They must cooperate with business area managers to achieve worldwide efficiencies and the introduction of new products. Finally, the presidents of local companies have both a global boss—the business area manager—and a country boss, and they learn to coordinate the needs of both.⁴⁹

ABB is a large, successful company that achieved the benefits of both product and geographic organizations through this matrix structure. However, over the past several years, as ABB has faced increasingly complex competitive issues, leaders

EXHIBIT 6.7Global Matrix Structure



have transformed the company toward a complex structure called the *transnational model*, which will be discussed later in this chapter.

In the real world, as with the domestic hybrid structure, many international firms such as ABB, Colgate, IBM, Nestlé, or Eaton Corp. apply a *global hybrid* or *mixed structure*, in which two or more different structures or elements of different structures are used. Hybrid structures are typical in highly volatile environments. Siemens AG of Germany, for example, combines elements of functional, geographic, and product divisions to respond to dynamic market conditions in the multiple countries where it operates.⁵⁰

Organizations that operate on a global scale frequently have to make adjustments to their structures to overcome the challenges of doing business in a global environment. In the following sections, we will look at some specific challenges organizations face in the global arena and mechanisms for successfully addressing them.

BUILDING GLOBAL CAPABILITIES

There are many instances of well-known companies that have trouble transferring successful ideas, products, and services from their home country to the international domain. We talked earlier about the struggles Wal-Mart is facing internationally, but Wal-Mart is not alone. PepsiCo set a five-year goal to triple its international soft-drink revenues and boldly expanded its presence in international markets. Yet five years later, the company had withdrawn from some of those markets and had to take a nearly \$1 billion loss from international beverage operations.⁵¹ Hundreds of American companies that saw Vietnam as a tremendous international opportunity in the mid-1990s are now calling it quits amid heavy losses. Political and

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cultural differences sidetracked most of the ventures. Only a few companies, such as Citigroup's Citibank unit and Caterpillar's heavy-equipment business, have found success in that country.⁵² Managers taking their companies international face a tremendous challenge in how to capitalize on the incredible opportunities that global expansion presents.

The Global Organizational Challenge

Exhibit 6.8 illustrates the three primary segments of the global organizational challenge: greater complexity and differentiation, the need for integration, and the problem of transferring knowledge and innovation across a global firm. Organizations have to accept an extremely high level of environmental complexity in the international domain and address the many differences that occur among countries. Environmental complexity and country variations require greater organizational differentiation, as described in Chapter 4.

At the same time, organizations must find ways to effectively achieve coordination and collaboration among far-flung units and facilitate the development and transfer of organizational knowledge and innovation for global learning.⁵³ Although many small companies are involved in international business, most international companies grow very large, creating a huge coordination problem. Exhibit 6.9 provides some understanding of the size and impact of international firms by comparing the revenues of several large multinational companies with the gross domestic product (GDP) of selected countries.



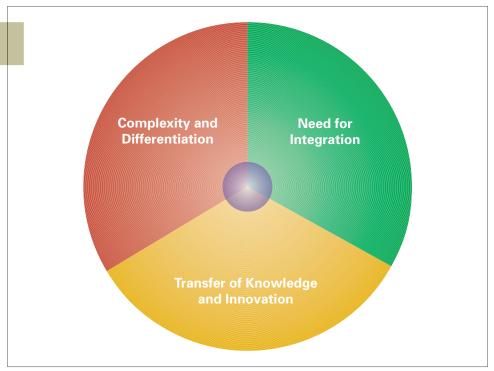


EXHIBIT 6.9

Comparison of Leading Multinational Companies and Selected Countries, 2008 (in U.S. dollars)

Company	Revenue*	Country	Annual GDP†
Exxon Mobil	\$404.6 billion	Egypt	\$403.9 billion
Wal-Mart	\$378.8 billion	Greece	\$370.2 billion
Royal Dutch Shell	\$355.8 billion	Malaysia	\$355.2 billion
BP	\$291.4 billion	Nigeria	\$292.6 billion
Toyota	\$262.3 billion	Algeria	\$269.2 billion
ING Group	\$212.0 billion	Peru	\$218.8 billion
General Motors	\$181.1 billion	Finland	\$182.0 billion
General Electric	\$172.7 billion	Kazakhstan	\$167.6 billion

^{*}This size comparison is assuming revenues were valued at the equivalent of GDP.

Source: "Count: Really Big Business," Fast Company (December 2008-January 2009), 46.

Increased Complexity and Differentiation. When organizations enter the international arena, they encounter a greater level of internal and external complexity than anything experienced on the domestic front. Companies have to create a structure to operate in numerous countries that differ in economic development, language, political systems and government regulations, cultural norms and values, and infrastructure such as transportation and communication facilities. For example, computer maker Lenovo, incorporated in Hong Kong, has nine operational hubs, and its top managers and corporate functions are spread around the world. The CEO is in Singapore, the chairman in Raleigh, North Carolina, and the chief financial officer in Hong Kong. Worldwide marketing is coordinated in India.⁵⁴

One factor increasing the complexity for organizations is the growing consumer demand for products and services that meet local needs and preferences. Even American fast food chains, once considered ultimate examples of standardization for a world market, have felt the need to be more responsive to local and national differences. KFC sells chicken in China, but you can also find congee soup and fried dough there for breakfast. McDonald's sells Rice Burgers in Taiwan, a deep-fried patty of beef ragout called the McKroket in the Netherlands, a Maharaja Mac made with chicken instead of beef in India, and the Bulgogi Burger, a pork patty marinated in soy-sauce, in South Korea. Restaurant design and décor may also vary widely in different countries.⁵⁵

All the complexity in the international environment is mirrored in a greater internal organizational complexity. Recall from Chapter 4 that, as environments become more complex and uncertain, organizations grow more highly differentiated, with many specialized positions and departments to cope with specific sectors in the environment. Top management might need to set up specialized departments to deal with the diverse government, legal, and accounting regulations in various countries, for example. More boundary-spanning departments are needed to sense and respond to the external environment. Companies operating globally frequently disperse operations such as engineering, design, manufacturing, marketing, and

[†]Gross domestic product.

sales around the world. In particular, many organizations have set up global product development systems to achieve greater access to international expertise and design products that are better suited to global markets. A Deloitte Research study found that 48 percent of North American and Western European manufacturers surveyed had set up engineering operations in other countries.⁵⁶ In addition, organizations might implement a variety of strategies, a broader array of activities, and a much larger number of products and services on an international level.

Need for Integration. As organizations become more differentiated, with multiple products, divisions, departments, and positions scattered across numerous countries, managers face a tremendous integration challenge. Integration refers to the quality of collaboration across organizational units. The question is how to achieve the coordination and collaboration that is necessary for a global organization to reap the benefits of economies of scale, economies of scope, and labor and production cost efficiencies that international expansion offers. Even in a domestic firm, high differentiation among departments requires that more time and resources be devoted to achieving coordination because employees' attitudes, goals, and work orientations differ widely. Imagine what it must be like for an international organization, whose operating units are divided not only by goals and work attitudes but by geographic distance, time differences, cultural values, and perhaps even language as well. Recall how Colgate-Palmolive created several specific units to achieve coordination and integration among regional divisions. Other companies, too, must find ways to share information, ideas, new products, and technologies across the organization. Consider how IBM is striving for better integration as it tries to fend off growing competition from Indian technology services companies.

PRACTICE

IBM has more than 200,000 employees around the world, but that doesn't help if the skills needed by a specific client in London or New York or Bangalore can't be

rapidly put into action because the experts are located elsewhere.

In its globalization effort, IBM created geographic divisions around the world that each had their own administration, manufacturing, and service operations. Yet, as competition has increased, particularly from companies such as India's Tata Consultancy Services and Infosys Technologies, that approach is too slow and too costly. Thus, IBM has embarked on a massive project to go one step further and organize employees along skill lines rather than just geography. "Our customers need us to put the right skills in the right place at the right time," says Senior Vice President Robert W. Moffatt Jr., the manager in charge of the operation.

The new organization involves bunching employees into "competency centers" spread around the world, so that people with specific skills are grouped together. The approach enables IBM to take advantage of low-cost labor in some places, yet also have highly-skilled employees in close proximity to clients. Instead of each country division having its own complete workforce, some people are drawn from the competency centers long enough to complete a specific client project. IBM has even come up with mathematical formulas to identify who should be pulled from the various centers to work on a particular project. Managers believe their new approach, which they call "globally integrated operations," can help lower costs, provide superior service, and give IBM an edge over fast-growing rivals.⁵⁷

IBM

All organizations working globally, like IBM, face the challenge of getting all the pieces working together in the right way at the right time and in the right place. Another issue is how to share knowledge and innovations across global divisions.

Transfer of Knowledge and Innovation. The third piece of the international challenge is for organizations to learn from their international experiences by sharing knowledge and innovations across the enterprise. The diversity of the international environment offers extraordinary opportunities for learning and the development of diverse capabilities.

Organizational units in each location acquire the skills and knowledge to meet environmental challenges that arise in that particular locale. Much of that knowledge, which may be related to product improvements, operational efficiencies, technological advancements, or myriad other competencies, is relevant across multiple countries, so organizations need systems that promote the transfer of knowledge and innovation across the global enterprise. One good example comes from Procter & Gamble. Liquid Tide was one of P&G's most successful U.S. product launches in the 1980s, but the product came about from the sharing of innovations developed in diverse parts of the firm. Liquid Tide incorporated a technology for helping to suspend dirt in wash water from P&G headquarters in the United States, the formula for its cleaning agents from P&G technicians in Japan, and special ingredients for fighting mineral salts present in hard water from company scientists in Brussels.⁵⁸

However, getting employees to transfer ideas and knowledge across national boundaries can be exceedingly challenging. Consider what happened in one virtual team made up of members from India, Israel, Canada, the United States, Singapore, Spain, Brussels, Great Britain, and Australia:

"Early on ... team members were reluctant to seek advice from teammates who were still strangers, fearing that a request for help might be interpreted as a sign of incompetence. Moreover, when teammates did ask for help, assistance was not always forthcoming. One team member confessed to carefully calculating how much information she was willing to share. Going the extra mile on behalf of a virtual teammate, in her view, came at a high price of time and energy, with no guarantee of reciprocation." ⁵⁹

This lack of trust among people scattered at different locations around the world is one primary reason why many organizations tap only a fraction of the potential that is available from the cross-border transfer of knowledge and innovation. Other reasons include:⁶⁰

- Language barriers, cultural dissimilarities, and geographic distances can prevent managers from spotting the knowledge and opportunities that exist across disparate country units.
- Sometimes managers don't appreciate the value of organizational integration and want to protect the interests of their own division rather than cooperate with other divisions.
- Divisions sometimes view knowledge and innovation as power and want to hold onto it as a way to gain an influential position within the global firm.
- The "not-invented-here" syndrome makes some managers reluctant to tap into the know-how and expertise of other units.
- Much of an organization's knowledge is in the minds of employees and cannot easily be written down and shared with other units.

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Organizations have to encourage both the development and the sharing of knowledge, implement systems for tapping into knowledge wherever it exists, and share innovations to meet global challenges.

Global Coordination Mechanisms

Managers meet the global challenge of coordination and transferring knowledge and innovation across highly differentiated units in a variety of ways. Some of the most common are the use of global teams, stronger headquarters planning and control, and specific coordination roles.

Global Teams. The popularity and success of teams on the domestic front allowed managers to see firsthand how this mechanism can achieve strong horizontal coordination, as described in Chapter 3, and thus recognize the promise teams held for coordination across a global firm as well. **Global teams**, also called *transnational teams*, are cross-border work groups made up of multiskilled, multinational members whose activities span multiple countries. 61 Typically, teams are of two types: intercultural teams, whose members come from different countries and meet face to face, and virtual global teams, whose members remain in separate locations around the world and conduct their work electronically.⁶² Heineken formed the European Production Task Force, a thirteen-member team made up of multinational members, to meet regularly and come up with ideas for optimizing the company's production facilities across Europe. 63 Tandem Services uses virtual global teams of software developers who coordinate their work electronically so that the team is productive around the clock. Team members in London code a project and transmit the code each evening to members in the United States for testing. U.S. team members then forward the code they've tested to Tokyo for debugging. The next morning, the London team members pick up with the code debugged by their Tokyo colleagues, and another cycle begins.⁶⁴

The most advanced and competitive use of global teams involves simultaneous contributions in three strategic areas.⁶⁵ First, global teams help companies address the differentiation challenge, enabling them to be more locally responsive by providing knowledge to meet the needs of different regional markets, consumer preferences, and political and legal systems. At the same time, teams provide integration benefits, helping organizations achieve global efficiencies by developing regional or worldwide cost advantages and standardizing designs and operations across countries. Finally, these teams contribute to continuous organizational learning, knowledge transfer, and adaptation on a global level.

However, building effective global teams is not easy. Cultural and language differences can create misunderstandings, and resentments and mistrust can quickly derail the team's efforts. Many times an "us against them" mentality develops, which is just the opposite of what organizations want from global teams.⁶⁶ No wonder when the executive council of *CIO* magazine asked global chief information officers to rank their greatest challenges, managing virtual global teams ranked as the most pressing issue.⁶⁷

Managers have to invest the time and energy to enable global teams to communicate and collaborate effectively. For example, managers at Nokia are careful to select people who have a collaborative mindset, and they form many teams with volunteers who are highly committed to the task or project. The company also tries to make sure some members of a team have worked together before, providing a base for trusting relationships. Making the best use of technology is critical. In addition to a virtual

ASSESS YOUR ANSWER

2 It is an especially difficult challenge to work on a global team to coordinate one's own activities and share new ideas and insights with colleagues in different divisions around the world.

ANSWER: Agree. The problems of different languages, locations, cultural values, and business practices make membership on an international team especially difficult. Global teams can be effective only if members have the patience and skills to surmount the barriers and openly share information and ideas. Global teams made up of people who are culturally astute and genuinely want to coordinate and communicate with their counterparts in other countries perform better.

work space that team members can access twenty-four hours a day, Nokia provides an online resource where virtual workers are encouraged to post photos and share personal information. Given that the inability of members to get to know one another is one of the biggest barriers to effective global teamwork, encouraging and supporting social networking has paid off for Nokia. In a study of fifty-two virtual teams in fifteen leading multinational companies, London Business School researchers found that Nokia's teams were among the most effective, even though they were made up of people working in several different countries, across time zones and cultures.⁶⁸

Headquarters Planning. A second approach to achieving stronger global coordination is for headquarters to take an active role in planning, scheduling, and control to keep the widely distributed pieces of the global organization working together and moving in the same direction. In one survey, 70 percent of global companies reported that the most important function of corporate headquarters was to "provide enterprise leadership." Without strong leadership, highly autonomous divisions can begin to act like independent companies rather than coordinated parts of a global whole. To counteract this, top management may delegate responsibility and decision-making authority in some areas, such as adapting products or services to meet local needs, while maintaining strong control through centralized systems in other areas to provide the coordination and integration needed. Plans, schedules, and formal rules and procedures can help ensure greater communication among divisions and with headquarters, as well as foster cooperation and synergy among far-flung units to achieve the organization's goals in a cost-efficient way. Top managers can provide clear strategic direction, guide far-flung operations, and resolve competing demands from various units.

Expanded Coordination Roles. Organizations may also implement structural solutions to achieve stronger coordination and collaboration.⁷¹ Creating specific organizational roles or positions for coordination is a way to integrate all the pieces of the enterprise to achieve a strong competitive position. In successful international firms, the role of top *functional managers*, for example, is expanded to include responsibility for coordinating across countries, identifying and linking the organization's expertise and resources worldwide. In an international organization, the manufacturing manager has to be aware of and coordinate with manufacturing operations of the company in various other parts of the world so that the company achieves manufacturing efficiency and shares technology and ideas across

Briefcase

As an organization manager, keep these guidelines in mind:

Use mechanisms such as global teams, headquarters planning, and specific coordination roles to provide needed coordination and integration among far-flung international units. Emphasize information and knowledge sharing to help the organization learn and improve on a global scale.

units. A new manufacturing technology developed to improve efficiency in Ford's Brazilian operations may be valuable for European and North American plants as well. Manufacturing managers are responsible for being aware of new developments wherever they occur and for using their knowledge to improve the organization. Similarly, marketing managers, HR managers, and other functional managers at an international company are involved not only in activities for their particular location but in coordinating with their sister units in other countries as well.

Whereas functional managers coordinate across countries, *country managers* coordinate across functions. A country manager for an international firm has to coordinate all the various functional activities located within the country to meet the problems, opportunities, needs, and trends in the local market, enabling the organization to achieve multinational flexibility and rapid response. The country manager in Venezuela for a global consumer products firm such as Colgate-Palmolive would coordinate everything that goes on in that country, from manufacturing to HR to marketing, to ensure that activities meet the language, cultural, government, and legal requirements of Venezuela. The country manager in Ireland or Canada would do the same for those countries. Country managers also help with the transfer of ideas, trends, products, and technologies that arise in one country and might have significance on a broader scale. Some organizations also use *business integrators* to provide coordination on a regional basis that might include several countries. These managers reach out to various parts of the organization to resolve problems and coordinate activities across groups, divisions, or countries.

Another coordination role is that of formal *network coordinator* to coordinate information and activities related to key customer accounts. These coordinators would enable a manufacturing organization, for example, to provide knowledge and integrated solutions across multiple businesses, divisions, and countries for a large retail customer such as Tesco, Wal-Mart, or Carrefour.⁷² Top managers in successful global firms also encourage and support informal networks and relationships to keep information flowing in all directions. Much of an organization's information exchange occurs not through formal systems or structures but through informal channels and relationships. By supporting these informal networks, giving people across boundaries opportunities to get together and develop relationships and then ways to keep in close touch, executives enhance organizational coordination.

International companies today have a hard time staying competitive without strong interunit coordination and collaboration. Those firms that stimulate and support collaboration are typically better able to leverage dispersed resources and capabilities to reap operational and economic benefits.⁷³ Benefits that result from interunit collaboration include the following:

- Cost savings. Collaboration can produce real, measurable results in the way of cost savings from the sharing of best practices across global divisions. For example, at BP, a business unit head in the United States improved inventory turns and cut the working capital needed to run U.S. service stations by learning the best practices from BP operations in the United Kingdom and the Netherlands.
- Better decision making. By sharing information and advice across divisions, managers can make better business decisions that support their own unit as well as the organization as a whole.
- *Greater revenues*. By sharing expertise and products among various divisions, organizations can reap increased revenues. BP again provides an example. More than seventy-five people from various units around the world flew to China to

assist the team developing an acetic acid plant there. As a result, BP finished the project and began realizing revenues sooner than project planners had expected.

• *Increased innovation*. The sharing of ideas and technological innovations across units stimulates creativity and the development of new products and services. McDonald's is taking an approach called "freedom within a framework" that allows regional and national managers to develop practices and products suited to the local area. The company then makes sure international managers have plenty of both formal and informal ways to communicate and share ideas. The Big Tasty, a whopping 5.5 oz. beef patty slathered in barbeque sauce and topped with three slices of cheese, was created in a test kitchen in Germany and launched in Sweden, but as word spread, the sandwich was adopted by restaurants in places like Brazil, Italy, and Portugal, where it became a huge hit.⁷⁴

CULTURAL DIFFERENCES IN COORDINATION AND CONTROL

Just as social and cultural values differ from country to country, the management values and organizational norms of international companies tend to vary depending on the organization's home country. Organizational norms and values are influenced by the values in the larger national culture, and these in turn influence the organization's structural approach and the ways managers coordinate and control an international firm.

National Value Systems

Studies have attempted to determine how national value systems influence management and organizations. One of the most influential was conducted by Geert Hofstede, who identified several dimensions of national value systems that vary widely across countries.⁷⁵ More recent research by Project GLOBE (Global Leadership and Organizational Behavior Effectiveness) has supported and extended Hofstede's assessment. Project GLOBE used data collected from 18,000 managers in 62 countries to identify 9 dimensions that explain cultural differences, including those identified by Hofstede.⁷⁶ These studies provide managers with an understanding of key cultural differences that can enhance their and their organizations' effectiveness on a global scale.⁷⁷ Complete the questionnaire in the "How Do You Fit the Design?" box to see how prepared you are to work internationally.

Two dimensions that seem to have a strong impact within organizations are power distance and uncertainty avoidance. High power distance means that people accept inequality in power among institutions, organizations, and people. Low power distance means that people expect equality in power. High uncertainty avoidance means that members of a society feel uncomfortable with uncertainty and ambiguity and thus support beliefs that promise certainty and conformity. Low uncertainty avoidance means that people have a high tolerance for the unstructured, the unclear, and the unpredictable.

The value dimensions of *power distance* and *uncertainty avoidance* are reflected within organizations in beliefs regarding the need for hierarchy, centralized decision making and control, formal rules and procedures, and specialized jobs.⁷⁸ In countries that value high power distance, for example, organizations tend to be more hierarchical and centralized, with greater control and coordination from the

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As an organization manager, keep these guidelines in mind:

Appreciate cultural value differences and strive to use coordination mechanisms that are in tune with local values. When broader coordination mechanisms are needed, focus on education and corporate culture as ways to gain understanding and acceptance.

top levels of the organization. On the other hand, organizations in countries that value low power distance are more likely to be decentralized. A low tolerance for uncertainty tends to be reflected in a preference for coordination through rules and procedures. Organizations in countries where people have a high tolerance for uncertainty typically have fewer rules and formal systems, relying more on informal networks and personal communication for coordination.



Are you ready to negotiate a sales contract with someone from another country? Coordinate a new product for use overseas? Companies large and small deal on a global basis. To what extent do you display the behaviors below? Please answer each item as Mostly True or Mostly False for you.

Are	e You Typically:	Mostly True	Mostly False
1.	Impatient? Do you have a short attention span? Do you want to keep moving to the next topic?		
2.	A poor listener? Are you uncomfortable with silence? Does your mind think about what you want to say next?		
3.	Argumentative? Do you enjoy arguing for its own sake?		
4.	Not familiar with cultural specifics in other countries? Do you have limited experience in other countries?		
5.	Placing more emphasis on the short-term than on the long-term in your thinking and planning?		
6.	Thinking that it is a waste of time getting to know someone personally before discussing business?		
7.	Legalistic to win your point? Holding others to an agreement regardless of changing circumstances?		
8.	Thinking "win/lose" when negotiating? Trying to win a negotiation		

at the other's expense?

Scoring: Give yourself one point for each Mostly True answer. A score of 3 or lower suggests that you may have international style and awareness. A score of 6 or higher suggests low presence or awareness with respect to other cultures.

Interpretation: A low score on this exercise is a good thing. American managers often display crosscultural ignorance during business negotiations compared to counterparts from other countries. American habits can be disturbing, such as emphasizing areas of disagreement over agreement, spending little time understanding the views and interests of the other side, and adopting an adversarial attitude. Americans often like to leave a negotiation thinking they won, which can be embarrassing to the other side. For this quiz, a low score shows better international presence. If you answered "Mostly True" to three or fewer questions, then consider yourself ready to assist with an international negotiation. If you scored six or higher "Mostly True" responses, it is time to learn more about how business people behave in other national cultures before participating in international business deals. Try to develop greater focus on other people's needs and an appreciation for different viewpoints. Be open to compromise and develop empathy for people who are different from you.

Source: Adapted from Cynthia Barnum and Natasha Wolniansky, "Why Americans Fail at Overseas Negotiations," *Management Review* (October 1989), 54–57.

ASSESS YOUR ANSWER

If management practices and coordination techniques work well for a company in its home country, they probably will be successful in the company's international divisions as well.

ANSWER: Disagree. National culture has a tremendous impact on how people in different countries feel about issues of power and control, rules and procedures, and every other aspect of organizational life. Management practices and coordination and control techniques that work well in a country such as the United States might be ineffective or even offensive in a country such as Japan or China. Managers have to stretch out of their familiar comfort zone to succeed internationally.

Although organizations do not always reflect the dominant cultural values, studies have found rather clear patterns of different management structures when comparing countries in Europe, the United States, and Asia.

Three National Approaches to Coordination and Control

Let's look at three primary approaches to coordination and control as represented by Japanese, American, and European companies.⁷⁹ It should be noted that companies in each country use tools and techniques from each of the three coordination methods. However, there are broad, general patterns that illustrate cultural differences.

Centralized Coordination in Japanese Companies. When expanding internationally, Japanese companies have typically developed coordination mechanisms that rely on centralization. Top managers at headquarters actively direct and control overseas operations, whose primary focus is to implement strategies handed down from headquarters. A recent study of R&D activities in high-tech firms in Japan and Germany supports the idea that Japanese organizations tend to be more centralized. Whereas the German firms leaned toward dispersing R&D groups out into different regions, Japanese companies tended to keep these activities centralized in the home country.80 This centralized approach enables Japanese companies to leverage the knowledge and resources located at the corporate center, attain global efficiencies, and coordinate across units to obtain synergies and avoid turf battles. Top managers use strong structural linkages to ensure that managers at headquarters remain up to date and fully involved in all strategic decisions. However, centralization has its limits. As the organization expands and divisions grow larger, headquarters can become overloaded and decision making slows. The quality of decisions may also suffer as greater diversity and complexity make it difficult for headquarters to understand and respond to local needs in each region.

China is a rapidly growing part of the international business environment, and limited research has been done into management structures of Chinese firms. Many Chinese-based firms are still relatively small and run in a traditional family-like manner. However, similar to Japan, organizations typically reflect a distinct hierarchy of authority and relatively strong centralization. Hierarchy plays an important role in Chinese culture and management, so employees feel obligated to follow

orders directed from above.⁸¹ Interestingly, though, one study found that Chinese employees are loyal not just to the boss, but also to company policies.⁸² As Chinese organizations grow larger, more insight will be gained into how these firms handle the balance of coordination and control.

European Firms' Decentralized Approach. A different approach has typically been taken by European companies. Rather than relying on strong, centrally directed coordination and control as in the Japanese firms, international units tend to have a high level of independence and decision-making autonomy. Companies rely on a strong mission, shared values, and informal personal relationships for coordination. Thus, great emphasis is placed on careful selection, training, and development of key managers throughout the international organization. Formal management and control systems are used primarily for financial rather than technical or operational control. Many European managers don't appreciate headquarters taking control over operational issues. When SAP AG tried to assert a more centralized control system to speed up development of new software and fend off growing competition, German engineers rebelled at the loss of autonomy. "They said, 'You don't tell us what to do—we tell you what to build," one former executive recalls.⁸³

With a decentralized approach, each international unit focuses on its local markets, enabling the company to excel in meeting diverse needs. One disadvantage is the cost of ensuring, through training and development programs, that managers throughout a huge, global firm share goals, values, and priorities. Decision making can also be slow and complex, and disagreements and conflicts among divisions are more difficult to resolve.

The United States: Coordination and Control through Formalization. U.S.-based companies that have expanded into the international arena have taken still a third direction. Typically, these organizations have delegated responsibility to international divisions, yet retained overall control of the enterprise through the use of sophisticated management control systems and the development of specialist headquarters staff. Formal systems, policies, standards of performance, and a regular flow of information from divisions to headquarters are the primary means of coordination and control. Decision making is based on objective data, policies, and procedures, which provides for many operating efficiencies and reduces conflict among divisions and between divisions and headquarters. However, the cost of setting up complex systems, policies, and rules for an international organization may be quite high. This approach also requires a larger headquarters staff for reviewing, interpreting, and sharing information, thus increasing overhead costs. Finally, standard routines and procedures don't always fit the needs of new problems and situations. Flexibility is limited if managers pay so much attention to the standard systems that they fail to recognize opportunities and threats in the environment.

Clearly, each of these approaches has advantages. But as international organizations grow larger and more complex, the disadvantages of each tend to become more pronounced. Because traditional approaches have been inadequate to meet the demands of a rapidly changing, complex global environment, many large international companies are moving toward a *transnational model* of organization, which is highly differentiated to address the increased complexity of the global environment, yet offers very high levels of coordination, learning, and transfer of organizational knowledge and innovations.

THE TRANSNATIONAL MODEL OF ORGANIZATION

The **transnational model** represents the most advanced kind of international organization. It reflects the ultimate in both organizational complexity, with many diverse units, and organizational coordination, with mechanisms for integrating the varied parts. The transnational model is useful for large, multinational companies with subsidiaries in many countries that try to exploit both global and local advantages as well as technological advancements, rapid innovation, and global learning and knowledge sharing. Rather than building capabilities primarily in one area, such as global efficiency, national responsiveness, or global learning, the transnational model seeks to achieve all three simultaneously. Dealing with multiple, interrelated, complex issues requires a complex form of organization and structure.

The transnational model represents the most current thinking about the kind of structure needed by highly complex global organizations such as Philips NV, illustrated in Exhibit 6.10. Incorporated in the Netherlands, Philips has hundreds of operating units all over the world and is typical of global companies such as Unilever, Matsushita, or Procter & Gamble. 4 General Electric is shifting toward a transnational structure as it strives to become a truly global organization. CEO Jeff Immelt is dispersing operations around the world and shifting the giant firm's culture and training programs toward a global outlook. As Christopher Bartlett, a Harvard professor who has studied GE, said, the company's executives are learning to manage a worldwide organization "as a network, not a centralized hub with foreign appendages." 85

The units of a transnational organization network, as illustrated in Exhibit 6.10, are far-flung. Achieving coordination, a sense of participation and involvement by subsidiaries, and a sharing of information, knowledge, new technology, and customers is a tremendous challenge. For example, a global corporation like Philips, Unilever, or GE is so large that size alone is a huge problem in coordinating global operations. In addition, some subsidiaries become so large that they no longer fit a narrow strategic role defined by headquarters. While being part of a larger organization, individual units need some autonomy for themselves and the ability to have an impact on other parts of the organization.

The transnational model addresses these challenges by creating an integrated network of individual operations that are linked together to achieve the multidimensional goals of the overall organization. The management philosophy is based on *interdependence* rather than either full divisional independence or total dependence of these units on headquarters for decision making and control. The transnational model is more than just an organization chart. It is a managerial state of mind, a set of values, a shared desire to make a worldwide learning system work, and an idealized structure for effectively managing such a system. Several characteristics distinguish the transnational organization from other global organization forms such as the matrix, described earlier.

1. Assets and resources are dispersed worldwide into highly specialized operations that are linked together through interdependent relationships. Resources and capabilities are widely distributed to help the organization sense and respond to diverse stimuli such as market needs, technological developments, or consumer trends that emerge in different parts of the world. To manage this increased complexity and differentiation, managers forge interdependent relationships among the various product, functional, or geographic units. Mechanisms such

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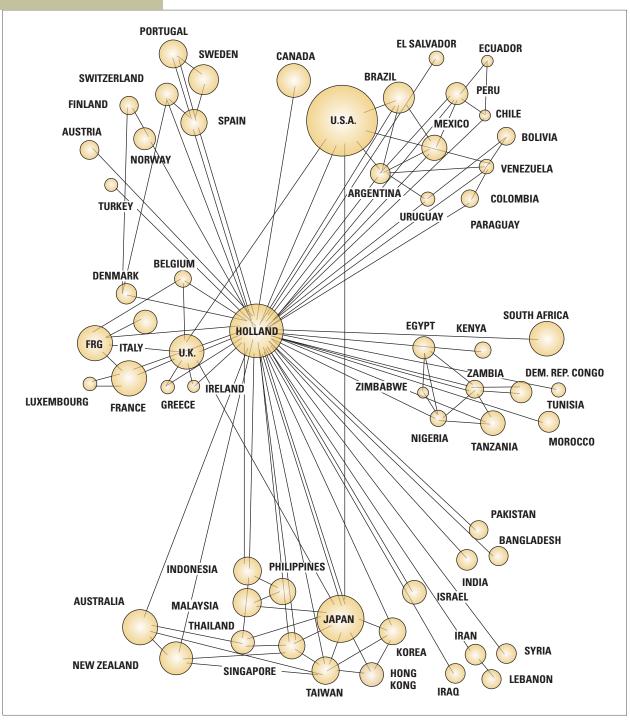
As an organization manager, keep this guideline in mind:

Strive toward a transnational model of organization when the company has to respond to multiple global forces simultaneously and needs to promote worldwide integration, learning, and knowledge sharing.



EXHIBIT 6.10

International Organizational Units and Interlinkages within Philips NV



Source: Academy of Management Review by Ghoshal and Bartlett. Copyright 1990 by Academy of Management (NY). Reproduced with permission of Academy of Management (NY) in the format Other book via Copyright Clearance Center.

- as cross-subsidiary teams, for example, compel units to work together for the good of their own unit as well as the overall organization. Rather than being completely self-sufficient, each group has to cooperate to achieve its own goals. Such interdependencies encourage the collaborative sharing of information and resources, cross-unit problem solving, and collective implementation demanded by today's competitive international environment. Materials, people, products, ideas, resources, and information are continually flowing among the dispersed parts of the integrated network. In addition, managers actively shape, manage, and reinforce informal information networks that cross functions, products, divisions, and countries.
- 2. Structures are flexible and ever-changing. The transnational operates on a principle of *flexible centralization*. It may centralize some functions in one country, some in another, yet decentralize still other functions among its many geographically dispersed operations. An R&D center may be centralized in Holland and a purchasing center may be located in Sweden, while financial accounting responsibilities are decentralized to operations in many countries. A unit in Hong Kong may be responsible for coordinating activities across Asia, while activities for all other countries are coordinated by a large division headquarters in London. The transnational model requires that managers be flexible in determining structural needs based on the benefits to be gained. Some functions, products, and geographic regions by their nature may need more central control and coordination than others. In addition, coordination and control mechanisms will change over time to meet new needs or competitive threats. Some companies have begun setting up multiple headquarters in different countries as the organization gets too large and too complex to manage from one place. Irdeto Holdings BV, for example, now has headquarters in both Amsterdam and Beijing. U.S.-based Halliburton Company is planning to open a second corporate headquarters in Dubai.87
- 3. Subsidiary managers initiate strategy and innovations that become strategy for the corporation as a whole. In traditional structures, managers have a strategic role only for their division. In a transnational structure, various centers and subsidiaries can shape the company from the bottom up by developing creative responses and initiating programs in response to local needs, then dispersing those innovations worldwide. Transnational companies recognize each of the worldwide units as a source of capabilities and knowledge that can be used to benefit the entire organization. In addition, environmental demands and opportunities vary from country to country, and exposing the whole organization to this broader range of environmental stimuli triggers greater learning and innovation.
- 4. Unification and coordination are achieved primarily through corporate culture, shared vision and values, and management style, rather than through formal structures and systems. A study by Hay Group found that one of the defining characteristics of companies that succeed on a global scale is that they successfully coordinate worldwide units and subsidiaries around a common strategic vision and values rather than relying on formal coordination systems alone. Rehieving unity and coordination in an organization in which employees come from a variety of different national backgrounds, are separated by time and geographic distance, and have different cultural norms is more easily accomplished through shared understanding than through formal systems. Top leaders build a context of shared vision, values, and perspectives among managers who in turn cascade these elements through all parts of the organization. Selection and training of managers emphasizes flexibility and open-mindedness. In addition,

people are often rotated through different jobs, divisions, and countries to gain broad experience and become socialized into the corporate culture. Achieving coordination in a transnational organization is a much more complex process than simple centralization or decentralization of decision making. It requires shaping and adapting beliefs, culture, and values so that everyone participates in information sharing and learning.

Taken together, these characteristics facilitate strong coordination, organizational learning, and knowledge sharing on a broad global scale. The transnational model is truly a complex and messy way to conceptualize organization structure, but it is becoming increasingly relevant for large, global firms that treat the whole world as their playing field and do not have a single country base. The autonomy of organizational parts gives strength to smaller units and allows the firm to be flexible in responding to rapid change and competitive opportunities on a local level, while the emphasis on interdependency enables global efficiencies and organizational learning. Each part of the transnational company is aware of and closely integrated with the organization as a whole so local actions complement and enhance other company parts.

DESIGN ESSENTIALS

- This chapter examined how managers design organizations for a complex international environment. Almost every company today is affected by significant global forces, and many are developing overseas operations to take advantage of global markets. Three primary motivations for global expansion are to realize economies of scale, exploit economies of scope, and achieve scarce or low-cost factors of production such as labor, raw materials, or land. One popular way to become involved in international operations is through strategic alliances with international firms. Alliances include licensing, joint ventures, and consortia.
- Organizations typically evolve through four stages, beginning with a domestic orientation, shifting to an international orientation, then changing to a multinational orientation, and finally moving to a global orientation that sees the whole world as a potential market. Organizations typically use an export department, then use an international department, and eventually develop into a worldwide geographic or product structure.
- Geographic structures are most effective for organizations that can benefit from a multidomestic strategy, meaning that products and services will do best if tailored to local needs and cultures. A product structure supports a globalization strategy, which means that products and services can be standardized and sold worldwide. Huge global firms might use a matrix structure to respond to both local and global forces simultaneously. Many firms use hybrid structures by combining elements of two or more different structures to meet the dynamic conditions of the global environment.
- Succeeding on a global scale is not easy. Three aspects of the global organizational challenge are addressing environmental complexity through greater organizational complexity and differentiation, achieving integration and coordination among the highly differentiated units, and implementing mechanisms

- for the transfer of knowledge and innovations. Common ways to address the problem of integration and knowledge transfer are through global teams, stronger headquarters planning and control, and specific coordination roles.
- Managers also recognize that diverse national and cultural values influence the organization's approach to coordination and control. Three varied national approaches are the centralized coordination and control typically found in many Japanese-based firms, a decentralized approach common among European firms, and the formalization approach often used by U.S.-based international firms. Most companies, however, no matter their home country, use a combination of elements from each of these approaches.
- Companies operating globally need broad coordination methods, and some are moving toward the transnational model of organization. The transnational model is based on a philosophy of interdependence. It is highly differentiated yet offers very high levels of coordination, learning, and transfer of knowledge across far-flung divisions. The transnational model represents the ultimate global design in terms of both organizational complexity and organizational integration. Each part of the transnational organization is aware of and closely integrated with the organization as a whole so that local actions complement and enhance other company parts.

Key Concepts

consortia
domestic stage
economies of scale
economies of scope
factors of production
global companies
global geographic structure
global matrix structure

global product structure global stage global teams globalization strategy international division international stage joint venture multidomestic multidomestic strategy multinational stage power distance standardization transnational model uncertainty avoidance

Discussion Questions

- 1. Under what conditions should a company consider adopting a global geographic structure as opposed to a global product structure?
- 2. Name some companies that you think could succeed today with a globalization strategy and explain why you selected those companies. How does the globalization strategy differ from a multidomestic strategy?
- 3. Why would a company want to join a strategic alliance rather than go it alone in international operations? What do you see as the potential advantages and disadvantages of international alliances?
- 4. Do you think it makes sense for a transnational organization to have more than one headquarters? What might be some advantages associated with two

- headquarters, each responsible for different things? Can you think of any drawbacks?
- 5. What are some of the primary reasons a company decides to expand internationally? Identify a company in the news that has recently built a new overseas facility. Which of the three motivations for global expansion described in the chapter do you think best explains the company's decision? Discuss.
- 6. When would an organization consider using a matrix structure? How does the global matrix differ from the domestic matrix structure described in Chapter 3?
- 7. Name some of the elements that contribute to greater complexity for international organizations. How do organizations address this complexity? Do you

- think these elements apply to an online company such as MySpace that wants to grow internationally? Discuss.
- 8. Traditional values in Mexico support high power distance and a low tolerance for uncertainty. What would you predict about a company that opens a division in Mexico and tries to implement global teams characterized by shared power and authority and the lack of formal guidelines, rules, and structure?
- 9. Do you believe it is possible for a global company to simultaneously achieve the goals of global efficiency and integration, national responsiveness and flexibility, and the worldwide transfer of knowledge and innovation? Discuss.
- 10. Compare the description of the transnational model in this chapter to the elements of the learning organization described in Chapter 1. Do you think the transnational model seems workable for a huge global firm? Discuss.

Chapter 6 Workbook: Made in the U.S.A.?

Find three different consumer products, such as a shirt, a toy, and a shoe. Try to find out the following information for each product, as shown in the table. To find this information, use websites, articles on the company from various business newspapers and magazines, and the labels on the items. You could also try calling the company and talking with someone there.

Product	What country do materials come from?	Where is it manufactured or assembled?	Which country does the marketing and advertising?	In what different countries is the product sold?
1.				
2.				
3.				

What can you conclude about international products and organizations based on your analysis?

Case for Analysis: TopDog Software*

At the age of 39, after working for nearly fifteen years at a leading software company on the West Coast, Ari Weiner and his soon-to-be-wife, Mary Carpenter, had cashed in their stock options, withdrew all their savings, maxed out their credit cards, and started their own business, naming it TopDog Software after their beloved Alaskan malamute. The two had developed a new software package for customer relationship management (CRM) applications that they were certain was far superior to anything on the market at that time. TopDog's software was particularly effective for use in call centers because it provided a highly efficient way to integrate massive amounts of customer data and make it almost immediately accessible to call center representatives as they worked the phones. The software, which could be used as a stand-alone product or easily integrated with other major CRM software packages, dramatically expedited customer identification and verification, rapidly selected pertinent bits of data, and provided them in an easily interpreted format so that call center or customer service reps could provide fast, friendly, and customized service.

The timing proved to be right on target. CRM was just getting hot, and TopDog was poised to take advantage of the trend as a niche player in a growing market. Weiner and Carpenter brought in two former colleagues as partners and were soon able to catch the attention of a venture capitalist firm to gain additional funding. Within a couple of years, TopDog had twenty-eight employees and sales had reached nearly \$4 million.

Now, though, the partners are facing the company's first major problem. TopDog's head of sales, Samantha Jenkins, has learned of a new company based in London that is beta testing a new CRM package that promises to outpace TopDog's—and the London-based company, FastData, has been talking up its global aspirations in the press. "If we stay focused on the United States and they start out as a global player, they'll kill us within months!" Sam moaned. "We've got to come up with an international strategy to deal with this kind of competition."

In a series of group meetings, off-site retreats, and oneon-one conversations, Weiner and Carpenter have gathered

opinions and ideas from their partners, employees, advisors, and friends. Now they have to make a decision—should TopDog go global? And if so, what approach would be most effective? There's a growing market for CRM software overseas, and new companies such as FastData will soon be cutting into TopDog's U.S. market share as well. Samantha Jenkins isn't alone in her belief that TopDog has no choice but to enter new international markets or get eaten alive. Others, however, are concerned that TopDog isn't ready for that step. The company's resources are already stretched to the limit, and some advisors have warned that rapid global expansion could spell disaster. TopDog isn't even well established in the United States, they argue, and expanding internationally could strain the company's capabilities and resources. Others have pointed out that none of the managers has any international experience and the company would have to hire someone with significant global exposure to even think about entering new markets.

Although Mary tends to agree that TopDog for the time being should stay focused on building its business in the United States, Ari has come to believe that global expansion of some type is a necessity. But if TopDog does eventually decide on global expansion, he wonders how on earth they should proceed in such a huge, complex environment. Sam, the sales manager, is arguing that the company should set up its own small foreign offices from scratch and staff them primarily with local people. Building a U.K. office and an Asian office, she asserts, would give

TopDog an ideal base for penetrating markets around the world. However, it would be quite expensive, not to mention the complexities of dealing with language and cultural differences, legal and government regulations, and other matters. Another option would be to establish alliances or joint ventures with small European and Asian companies that could benefit from adding CRM applications to their suite of products. The companies could share expenses in setting up foreign production facilities and a global sales and distribution network. This would be a much less costly operation and would give TopDog the benefit of the expertise of the foreign partners. However, it might also require lengthy negotiations and would certainly mean giving up some control to the partner companies.

One of TopDog's partners is urging still a third, even lower-cost approach, that of licensing TopDog's software to foreign distributors as a route to international expansion. By giving foreign software companies rights to produce, market, and distribute its CRM software, TopDog could build brand identity and customer awareness while keeping a tight rein on expenses. Ari likes the low-cost approach, but he wonders if licensing would give TopDog enough participation and control to successfully develop its international presence. As another day winds down, Weiner and Carpenter are no closer to a decision about global expansion than they were when the sun came up.

*Source: Based on Walter Kuemmerle, "Go Global—Or No?" *Harvard Business Review* (June 2001), 37–49.

Case for Analysis: Rhodes Industries

David Javier was reviewing the consulting firm's proposed changes in organization structure for Rhodes Industries (RI). As Javier read the report, he wondered whether the changes recommended by the consultants would do more harm than good for RI. Javier had been president of RI for eighteen months, and he was keenly aware of the organizational and coordination problems that needed to be corrected in order for RI to improve profits and growth in its international businesses.

Company Background

Rhodes Industries was started in the 1950s in Southern Ontario, Canada, by Robert Rhodes, an engineer who was an entrepreneur at heart. He started the business by first making pipe and then glass for industrial uses, but as soon as the initial business was established, he quickly branched into new areas such as industrial sealants, coatings, and cleaners, and even into manufacturing mufflers and parts for the trucking industry. Much of this expansion occurred

by acquiring small firms in Canada and the United States during the 1960s. RI had a conglomerate-type structure with rather diverse subsidiaries scattered around North America, all reporting directly to the Ontario headquarters. Each subsidiary was a complete local business and was allowed to operate independently so long as it contributed profits to RI.

During the 1970s and 1980s, the president at the time, Clifford Michaels, brought a strong international focus to RI. His strategy was to acquire small companies worldwide with the belief they could be formed into a cohesive unit that would bring RI synergies and profits through low cost of manufacturing and by serving businesses in international markets. Some of RI's businesses were acquired simply because they were available at a good price, and RI found itself in new lines of business such as consumer products (paper and envelopes) and electrical equipment (switchboards, lightbulbs, and security systems), in addition to its previous lines of business. Most of these products had local

brand names or were manufactured for major international companies such as General Electric or Corning Glass.

During the 1990s, a new president of RI, Sean Rhodes, the grandson of the founder, took over the business and adopted the strategy of focusing RI on three lines of business—Industrial Products, Consumer Products, and Electronics. He led the acquisition of more international businesses that fit these three categories, and divested a few businesses that didn't fit. Each of the three divisions had manufacturing plants as well as marketing and distribution systems in North America, Asia, and Europe. The Industrial Products division included pipe, glass, industrial sealants and coatings, cleaning equipment, and truck parts. The Electronics division included specialty lightbulbs, switchboards, computer chips, and resistors and capacitors for original equipment manufacturers. Consumer Products included dishes and glassware, paper and envelopes, and pencils and pens.

Structure

In 2004 David Javier replaced Sean Rhodes as president. He was very concerned about whether a new organization structure was needed for RI. The current structure was based on three major geographic areas—North America, Asia, and Europe—as illustrated in Exhibit 6.11. The various

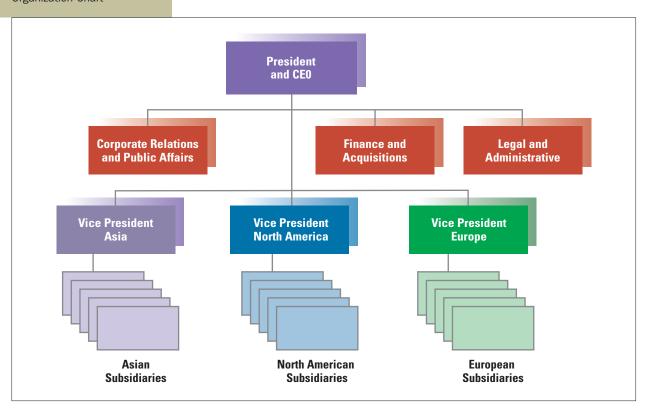
autonomous units within those regions reported to the office of the regional vice president. When several units existed in a single country, one of the subsidiary presidents was also responsible for coordinating the various businesses in that country, but most coordination was done through the regional vice president. Businesses were largely independent, which provided flexibility and motivation for the subsidiary managers.

The headquarters functional departments in Ontario were rather small. The three central departments—Corporate Relations and Public Affairs, Finance and Acquisitions, and Legal and Administrative—served the corporate business worldwide. Other functions such as HR management, new product development, marketing, and manufacturing all existed within individual subsidiaries and there was little coordination of these functions across geographic regions. Each business devised its own way to develop, manufacture, and market its products in its own country and region.

Organizational Problems

The problems Javier faced at RI, which were confirmed in the report on his desk, fell into three areas. First, each subsidiary acted as an independent business, using its own reporting systems and acting to maximize its own profits. This autonomy made it increasingly difficult to consolidate

EXHIBIT 6.11
Rhodes Industries
Organization Chart



financial reports worldwide and to gain the efficiencies of uniform information and reporting systems.

Second, major strategic decisions were made to benefit individual businesses or for a country's or region's local interests. Local projects and profits received more time and resources than did projects that benefited RI worldwide. For example, an electronics manufacturer in Singapore refused to increase production of chips and capacitors for sale in the United Kingdom because it would hurt the bottom line of the Singapore operation. However, the economies of scale in Singapore would more than offset shipping costs to the United Kingdom and would enable RI to close expensive manufacturing facilities in Europe, increasing RI's efficiency and profits.

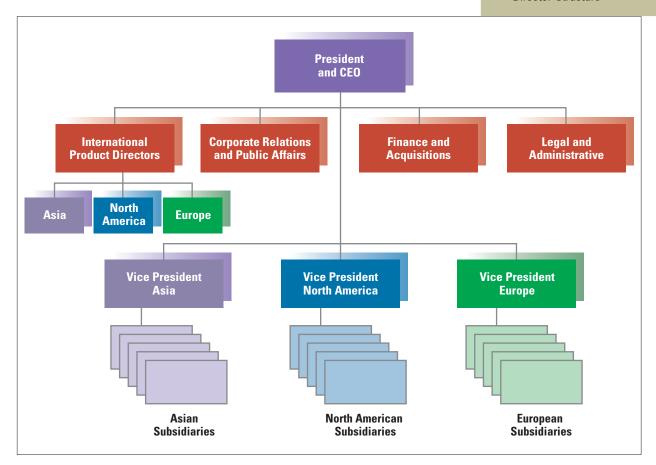
Third, there had been no transfer of technology, new product ideas, or other innovations within RI. For example, a cost-saving technology for manufacturing lightbulbs in Canada had been ignored in Asia and Europe. A technical innovation that provided homeowners with cell phone access to home security systems developed in Europe has

been ignored in North America. The report on Javier's desk stressed that RI was failing to disperse important innovations throughout the organization. These ignored innovations could provide significant improvements in both manufacturing and marketing worldwide. The report said, "No one at RI understands all the products and locations in a way that allows RI to capitalize on manufacturing improvements and new product opportunities." The report also said that better worldwide coordination would reduce RI's costs by 7 percent each year and increase market potential by 10 percent. These numbers were too big to ignore.

Recommended Structure

The report from the consultant recommended that RI try one of two options for improving its structure. The first alternative was to create a new international department at headquarters with the responsibility to coordinate technology transfer and product manufacturing and marketing worldwide (Exhibit 6.12). This department would have a

Proposed Product
Director Structure



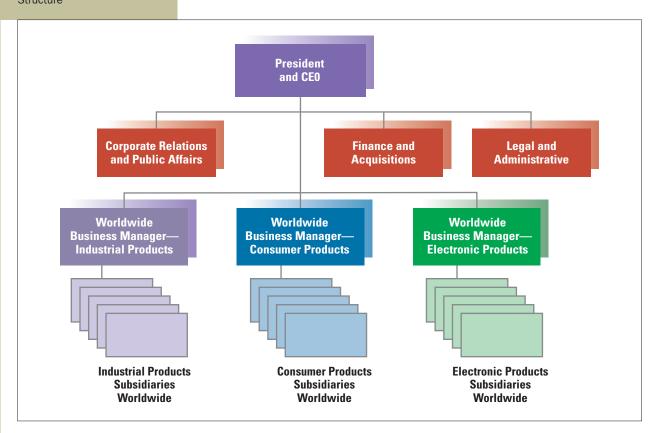
product director for each major product line—Industrial, Consumer, and Electronics—who would have authority to coordinate activities and innovations worldwide. Each product director would have a team that would travel to each region and carry information on innovations and improvements to subsidiaries in other parts of the world.

The second recommendation was to reorganize into a worldwide product structure, as shown in Exhibit 6.13. All subsidiaries worldwide associated with a product line would report to the product line business manager. The business manager and staff would be responsible for developing business strategies and for coordinating all manufacturing efficiencies and product developments worldwide for its product line.

This worldwide product structure would be a huge change for RI. Many questions came to Javier's mind. Would the subsidiaries still be competitive and adaptive in local markets if forced to coordinate with other subsidiaries around the world? Would business managers be able to change the habits of subsidiary managers toward more global behavior? Would it be a better idea to appoint product director coordinators as a first step, or jump to the business manager product structure right away? Javier had a hunch that the move to worldwide product coordination made sense, but he wanted to think through all the potential problems and how RI would implement the changes.

EXHIBIT 6.13

Proposed Worldwide Business Manager Structure



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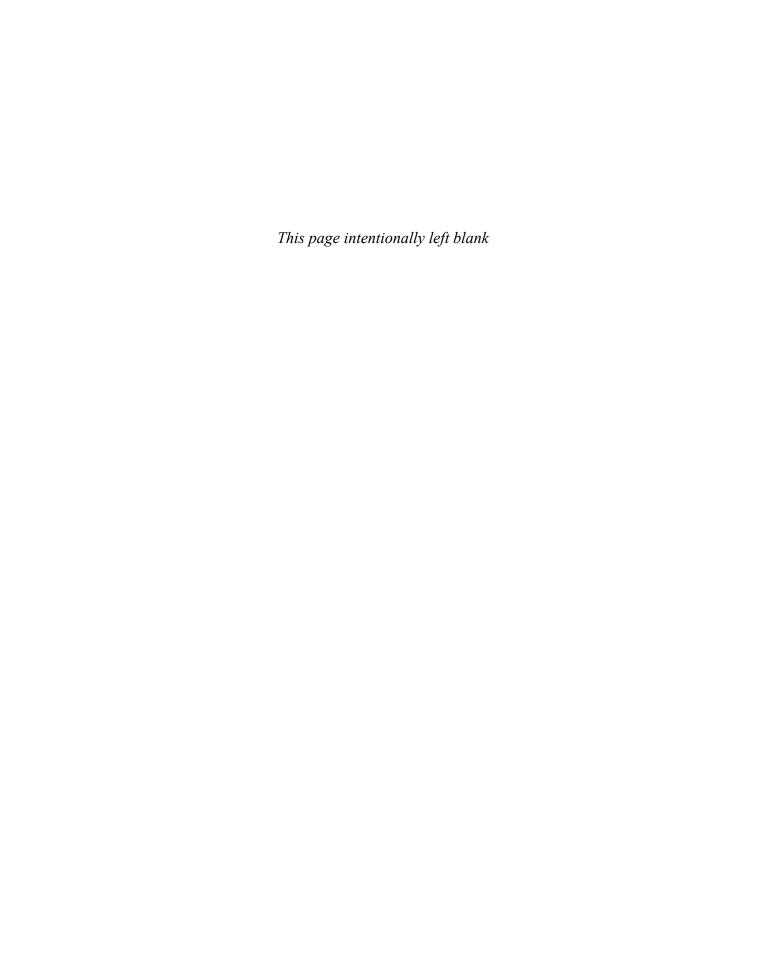
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Part 4

Internal Design Elements

Chapter 7

Manufacturing and Service Technologies

Chapter 8

Using IT for Coordination and Control

Chapter 9

Organization Size, Life Cycle, and Decline

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Chapter

Core Organization Manufacturing Technology

Manufacturing Firms · Strategy, Technology, and Performance

Contemporary Applications

Flexible Manufacturing Systems · Lean Manufacturing · Performance and Structural Implications

Core Organization Service Technology

Service Firms • Designing the Service Organization

Non-Core Departmental Technology

Variety · Analyzability · Framework

Department Design

Workflow Interdependence among Departments

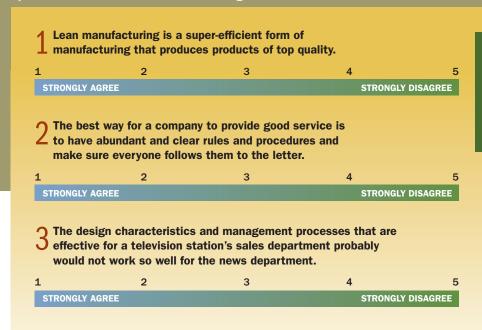
Types · Structural Priority · Structural Implications

Impact of Technology on Job Design

Job Design · Sociotechnical Systems

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



An auto parts factory sends engineers around the world to learn about new production methods. A team of airline employees studies the pit stop techniques used by NASCAR racing crews. A small clothing manufacturer in New York invests in a computerized German-made knitting machine. What do all these organizations have in common? They are looking for ways to provide goods and services more efficiently and effectively.

For many manufacturers in the United States, it's a do-or-die situation. Manufacturing has been on the decline in the United States and other developed countries for years, with services becoming an increasingly greater part of the economy. A report from the U.S. Business and Industry Council indicates that more than 100 U.S.-based manufacturing industries lost a significant percentage of their domestic market to imports between 1997 and 2004, and nineteen industries lost more than half of their U.S. market during that time period. However, some manufacturing companies are applying new technology to gain a new competitive edge. For example, by integrating computerized production equipment and sophisticated information systems, American Axle & Manufacturing (AAM) dramatically improved efficiency and productivity to the point where it began winning contracts to make components in Detroit that a competitor had previously been making in China.² Service companies also need to keep pace with changing technology and continually strive for better approaches. Many service firms are fighting for their lives as global competition intensifies, and the cost of ineffective or outdated technology and procedures can be organizational decline and failure.

This chapter explores both service and manufacturing technologies. **Technology** refers to the work processes, techniques, machines, and actions used to transform organizational inputs (materials, information, ideas) into outputs (products and services).³ Technology is an organization's production process and includes work procedures as well as machinery.

One important theme in this chapter is how core technology influences organization structure. Understanding core technology provides insight into how an

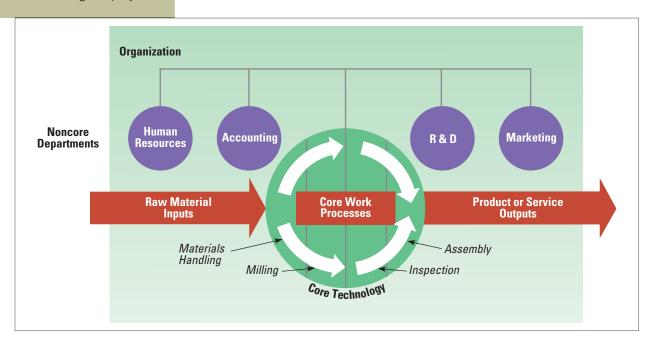
Managing

Questions

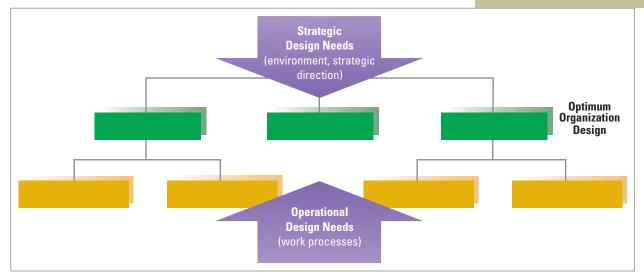
organization can be structured for efficient performance.⁴ An organization's **core technology** is the work process that is directly related to the organization's mission, such as teaching in a high school, medical services in a health clinic, or manufacturing at AAM. For example, at AAM, the core technology begins with raw materials (e.g., steel, aluminum, and composite metals). Employees take action on the raw material to make a change in it (they cut and forge metals and assemble parts), thus transforming the raw material into the output of the organization (axles, drive shafts, crankshafts, transmission parts, etc.). For a service organization like UPS, the core technology includes the production equipment (e.g., sorting machines, package handling equipment, trucks, airplanes) and procedures for delivering packages and overnight mail. In addition, as at companies like UPS and AAM, computers and new information technology have revolutionized work processes in both manufacturing and service organizations. The specific impact of new information technology on organizations will be described in Chapter 8.

Exhibit 7.1 features an example of core technology for a manufacturing plant. Note how the core technology consists of raw material inputs, a transformation work process (milling, inspection, assembly) that changes and adds value to the raw material and produces the ultimate product or service output that is sold to consumers in the environment. In today's large, complex organizations, core work processes vary widely and sometimes can be hard to pinpoint. A core technology can be partly understood by examining the raw materials flowing into the organization, the variability of work activities, the degree to which the production process is mechanized, the extent to which one task depends on another in the workflow, or the number of new product or service outputs.

EXHIBIT 7.1
Core Transformation
Process for a
Manufacturing Company



Pressures Affecting Organization Design



Source: Based on David A. Nadler and Michael L. Tushman, with Mark B. Nadler, Competing by Design: The Power of Organizational Architecture (New York: Oxford University Press, 1997), 54.

Organizations are also made up of many departments, each of which may use a different work process (technology) to provide a good or service within an organization. A **non-core technology** is a department work process that is important to the organization but is not directly related to its primary mission. In Exhibit 7.1, non-core work processes are illustrated by the departments of human resources (HR), accounting, research and development (R&D), and marketing. Thus, R&D transforms ideas into new products, and marketing transforms inventory into sales, each using a somewhat different work process. The output of the HR department is people to work in the organization, and accounting produces accurate statements about the organization's financial condition.

Purpose of This Chapter

In this chapter, we will discuss both core and non-core work processes and their relationship to designing organization structure. The nature of the organization's work processes must be considered in designing the organization for maximum efficiency and effectiveness. The optimum organization design is based on a variety of elements. Exhibit 7.2 illustrates that forces affecting organization design come from both outside and inside the organization. External strategic needs, such as environmental conditions, strategic direction, and organizational goals, create top-down pressure for designing the organization in such a way as to fit the environment and accomplish goals. These pressures on design have been discussed in previous chapters. However, decisions about design should also take into consideration pressures from the bottom up—from the work processes that are performed to produce the organization's

products or services. The operational work processes will influence the structural design associated with both the core technology and non-core departments. Thus, the subject with which this chapter is concerned is, "How should the organization be designed to accommodate and facilitate its operational work processes?"

The remainder of the chapter will unfold as follows. First, we examine how the technology for the organization as a whole influences organization structure and design. This discussion includes both manufacturing and service technologies. Next, we examine differences in departmental technologies and how the technologies influence the design and management of organizational subunits. Third, we explore how interdependence—flow of materials and information—among departments affects structure.

CORE ORGANIZATION MANUFACTURING TECHNOLOGY

Manufacturing technologies include traditional manufacturing processes and contemporary applications, such as flexible manufacturing and lean manufacturing.

Manufacturing Firms

The first and most influential study of manufacturing technology was conducted by Joan Woodward, a British industrial sociologist. Her research began as a field study of management principles in south Essex. The prevailing management wisdom at the time (1950s) was contained in what were known as universal principles of management. These principles were "one best way" prescriptions that effective organizations were expected to adopt. Woodward surveyed 100 manufacturing firms firsthand to learn how they were organized. She and her research team visited each firm, interviewed managers, examined company records, and observed the manufacturing operations. Her data included a wide range of structural characteristics (span of control, levels of management), dimensions of management style (written versus verbal communications, use of rewards), and the type of manufacturing process. Data were also obtained that reflected commercial success of the firms.

Woodward developed a scale and organized the firms according to technical complexity of the manufacturing process. **Technical complexity** represents the extent of mechanization of the manufacturing process. High technical complexity means most of the work is performed by machines. Low technical complexity means workers play a larger role in the production process. Woodward's scale of technical complexity originally had ten categories, as summarized in Exhibit 7.3. These categories were further consolidated into three basic technology groups:

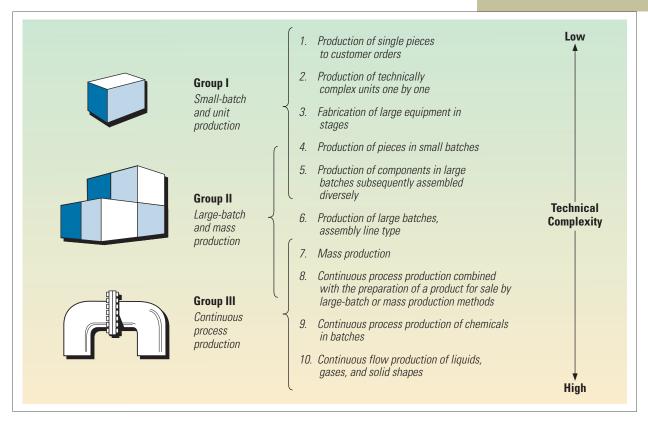
• Group I: Small-batch and unit production. These firms tend to be job shop operations that manufacture and assemble small orders to meet specific needs of customers. Custom work is the norm. Small-batch production relies heavily on the human operator; it is thus not highly mechanized. One example of small-batch production is Hermes International's Kelly handbag, named for the late actress Grace Kelly. Craftsmen stitch the majority of each \$7,000 bag by hand and sign it when they finish. Another example comes from Rockwell Collins, which makes electronic equipment for airplanes. Although sophisticated computerized machinery is used for part of the production process, final assembly requires highly skilled human operators to ensure absolute reliability of products used



Use the categories developed by Woodward to diagnose whether the production technology in a manufacturing firm is small batch, mass production, or continuous process. Use a more organic structure with small-batch or continuous-process technologies and with new flexible manufacturing systems. Use a mechanistic structure with mass-production technologies.

EXHIBIT 7.3

Woodward's Classification of 100 British Firms According to Their Systems of Production



Source: Adapted from Joan Woodward, Management and Technology (London: Her Majesty's Stationery Office, 1958). Used with permission of Her Britannic Majesty's Stationery Office.

by aerospace companies, defense contractors, and the U.S. military. The company's workforce is divided into manufacturing cells, some of which produce only ten units a day. In one plant, 140 workers build Joint Tactical Information Distribution Systems, for managing battlefield communications from a circling plane, at a rate of ten a month.¹²

- Group II: Large-batch and mass production. Large-batch production is a manufacturing process characterized by long production runs of standardized parts.
 Output often goes into inventory from which orders are filled, because customers do not have special needs. Examples include traditional assembly lines, such as for automobiles.
- Group III: Continuous-process production. In continuous-process production, the entire process is mechanized. There is no starting and stopping. This represents mechanization and standardization one step beyond those in an assembly line. Automated machines control the continuous process, and outcomes are highly predictable. Examples would include chemical plants, oil refineries, liquor producers, pharmaceuticals, and nuclear power plants.

Using this classification of technology, Woodward's data made sense. A few of her key findings are given in Exhibit 7.4. The number of management levels and the manager-to-total personnel ratio, for example, show definite increases as technical complexity increases from unit production to continuous process. This indicates that greater management intensity is needed to manage complex technology. The direct-to-indirect labor ratio decreases with technical complexity because more indirect workers are required to support and maintain complex machinery. Other characteristics, such as span of control, formalized procedures, and centralization, are high for mass-production technology because the work is standardized, but low for other technologies. Unit-production and continuous-process technologies require highly skilled workers to run the machines and verbal communication to adapt to changing conditions. Mass production is standardized and routinized, so few exceptions occur, little verbal communication is needed, and employees are less skilled.

Overall, the management systems in both unit-production and continuous-process technology are characterized as organic, as defined in Chapter 4. They are more free-flowing and adaptive, with fewer procedures and less standardization. Mass production, however, is mechanistic, with standardized jobs and formalized procedures. Woodward's discovery about technology thus provided substantial new insight into the causes of organization structure. In Joan Woodward's own words, "Different technologies impose different kinds of demands on individuals and organizations, and those demands had to be met through an appropriate structure." 13

Strategy, Technology, and Performance

Another portion of Woodward's study examined the success of the firms along dimensions such as profitability, market share, stock price, and reputation. As indicated in Chapter 2, the measurement of effectiveness is not simple or precise, but Woodward was able to rank firms on a scale of commercial success according to whether they displayed above-average, average, or below-average performance on strategic objectives.

EXHIBIT 7.4
Relationship between
Technical Complexity and
Structural Characteristics

	Technology		
Structural Characteristic	Unit Production	Mass Production	Continuous Process
Number of management levels	3	4	6
Supervisor span of control	23	48	15
Direct/indirect labor ratio	9:1	4:1	1:1
Manager/total personnel ratio	Low	Medium	High
Workers' skill level	High	Low	High
Formalized procedures	Low	High	Low
Centralization	Low	High	Low
Amount of verbal communication	High	Low	High
Amount of written communication	Low	High	Low
Overall structure	Organic	Mechanistic	Organic

Source: Joan Woodward, Industrial Organization: Theory and Practice (London: Oxford University Press, 1965). Used with permission.

Woodward compared the structure-technology relationship against commercial success and discovered that successful firms tended to be those that had complementary structures and technologies. Many of the organizational characteristics of the successful firms were near the average of their technology category, as shown in Exhibit 7.4. Below-average firms tended to depart from the structural characteristics for their technology type. Another conclusion was that structural characteristics could be interpreted as clustering into organic and mechanistic management systems, as defined in Chapter 4. Successful small-batch and continuous process organizations had organic structures, and successful mass-production organizations had mechanistic structures. Subsequent research has replicated her findings. 14

What this illustrates for today's companies is that strategy, structure, and technology need to be aligned, especially when competitive conditions change. 15 For example, some years ago, when Dell created a business model to build personal computers faster and cheaper, other computer manufacturers had to realign strategy, structure, and technology to stay competitive. Dell made PCs to order for each customer and sold most of them directly to consumers without the expense of distributors or retailers. Manufacturers such as IBM that once tried to differentiate their products and charge a premium price switched to a low-cost strategy, adopted new technology to enable them to customize PCs, revamped supply chains, and began outsourcing manufacturing to other companies that could do the job more efficiently.

Today, many U.S. manufacturers farm production out to other companies. Printronix, a publicly owned company in Irvine, California, however, has gone in the opposite direction and achieved success by carefully aligning technology, structure, and management processes to achieve strategic objectives.

When adopting a new technology, realign strategy, structure, and management processes to achieve top performance.

Briefcase

As an organization

manager, keep this

guideline in mind:

Printronix makes 60 percent of the electromechanical line printers used in the world's factories and warehouses. To maintain the reliability that makes Printronix prod-



ucts worth \$2,600 to \$26,000 each, the company does almost everything in-house—from design, to making hundreds of parts, to final assembly, to research on new materials. Printronix began in the 1970s by making a high-speed line printer that could run with the minicomputers then being used on factory floors.

The company started as a traditional mass-production operation, but managers faced a tremendous challenge in the late 1980s when factories began switching from minicomputers to personal computers and servers. Within two years, sales and profits plunged, and founder and CEO Robert A. Kleist realized Printronix needed new ideas, new technology, and new methods to adapt to a world where printers were no longer stand-alone products but parts of emerging enterprise networks. One change Kleist made was to switch from mass producing printers that were kept in inventory to a small-batch or unit production system that built printers to order. Products were redesigned and assembly work reorganized so that small groups of workers could configure each printer to a customer's specific needs. Many employees had to be trained in new skills and to take more responsibility than they had on the traditional assembly line. Highly skilled workers were needed to make some of the precision parts needed in the new machines as well. Besides internal restructuring, Kleist decided to pick up on the outsourcing trend and go after the computer industry's factory printer business, winning orders to produce under the labels of IBM, Hewlett-Packard, and Siemens. Kleist doubled the research and development (R&D) budget to be sure the company kept pace with **Printronix**

(continued)

new technological developments. In 2000, Printronix began building thermal printers as well as specialized laser printers that print adhesive bar-code labels at lightning speed.

By making changes in technology, design, and management methods, Printronix has continued to meet its strategic objective of differentiating its products from the competition. "The restructuring made us a stronger company in both manufacturing and engineering," says Kleist.¹⁶

Failing to adopt appropriate new technologies to support strategy, or adopting a new technology and failing to realign strategy to match it, can lead to poor performance.

BookMark 7.0 (HAVE YOU READ THIS BOOK?)

Inviting Disaster: Lessons from the Edge of TechnologyBy James R. Chiles



Dateline: Paris, France, July 25, 2000. Less than two minutes after Air France Concorde Flight 4590 departs Charles DeGaulle Airport, something goes horribly wrong. Trailing fire and billowing black smoke, the huge plane rolls left and crashes into a hotel, killing all 109 people aboard and four more on the ground. It's just one of the technological disasters James R. Chiles describes in his book, *Inviting Disaster:* Lessons from the Edge of Technology. One of Chiles's main points is that advancing technology makes possible the creation of machines that strain the human ability to understand and safely operate them. Moreover, he asserts, the margins of safety are drawing thinner as the energies we harness become more powerful and the time between invention and use grows shorter. Chiles believes that today, "for every twenty books on the pursuit of success, we need a book on how things fly into tiny pieces despite enormous effort and the very highest ideals." All complex systems, he reminds us, are destined to fail at some point.

HOW THINGS FLY INTO PIECES: EXAMPLES OF SYSTEM FRACTURES

Chiles uses historical calamities such as the sinking of the *Titanic* and modern disasters such as the explosion of the space shuttle *Challenger* to illustrate the dangers of system *fracture*, a chain of events that involves human error in response to malfunctions in complex machinery. Disaster begins when one weak point links up with others.

 Sultana (American steamboat on the Mississippi River near Memphis, Tennessee), April 25, 1865. The boat, designed to carry a maximum of 460 people, was carrying more than 2,000 Union ex-prisoners north—as well as 200 additional crew and passengers—when three of the four boilers exploded, killing 1,800 people. One of the boilers had been temporarily patched to cover a

- crack, but the patch was too thin. Operators failed to compensate by resetting the safety valve.
- Piper Alpha (offshore drilling rig in the North Sea), July 6, 1988. The offshore platform processed large volumes of natural gas from other rigs via pipe. A daytime work crew, which didn't complete repair of a gas-condensate pump, relayed a verbal message to the next shift, but workers turned the pump on anyway. When the temporary seal on the pump failed, a fire trapped crewmen with no escape route, killing 167 crew and rescue workers.
- Union Carbide (India) Ltd. (release of highly toxic chemicals into a community), Bhopal, Mahdya Pradesh, India, December 3, 1984. There are three competing theories for how water got into a storage tank, creating a violent reaction that sent highly toxic methyl isocyanate for herbicides into the environment, causing an estimated 7,000 deaths: (1) poor safety maintenance, (2) sabotage, or (3) worker error.

WHAT CAUSES SYSTEM FRACTURES?

There is a veritable catalog of causes that lead to such disasters, from design errors, insufficient operator training, and poor planning to greed and mismanagement. Chiles wrote this book as a reminder that technology takes us into risky locales, whether it be outer space, up a 2,000-foot tower, or into a chemical processing plant. Chiles also cites examples of potential disasters that were averted by quick thinking and appropriate response. To help prevent system fractures, managers can create organizations in which people throughout the company are expert at picking out the subtle signals of real problems—and where they are empowered to report them and take prompt action.

Inviting Disaster: Lessons from the Edge of Technology, by James R. Chiles, is published by HarperBusiness.

Today's increased global competition means more volatile markets, shorter product life cycles, and more sophisticated and knowledgeable consumers; and flexibility to meet these new demands has become a strategic imperative for many companies.¹⁷ Manufacturing companies can adopt new technologies to support the strategy of flexibility. However, organization structures and management processes must also be realigned, as a highly mechanistic structure hampers flexibility and prevents the company from reaping the benefits of the new technology.¹⁸ Managers should always remember that the technological and human systems of an organization are intertwined. This chapter's Book Mark provides a different perspective on technology by looking at the dangers of failing to understand the human role in managing technological advances.

CONTEMPORARY APPLICATIONS

In the years since Woodward's research, new developments have occurred in manufacturing technology. The factory of today is far different from the industrial firms Woodward studied in the 1950s. In particular, computers have revolutionized all types of manufacturing—small batch, large batch, and continuous process. At the Marion, North Carolina, plant of Rockwell Automation's Power Systems Division, for example, highly trained employees can quickly handle a build-on-demand unit of one thanks to computers, wireless technology, and radio-frequency identification (RFID) systems. In one instance, the Marion plant built, packaged, and delivered a replacement bearing for installation in an industrial air conditioning unit in Texas only 15 hours after the customer called for help. ¹⁹ An example in continuous process manufacturing comes from BP's Texas City, Texas, petrochemical plant. Technicians who once manually monitored hundreds of complex processes now focus their energy on surveying long-term production trends. Controlling the continuous production of petrochemicals today is handled faster, smarter, more precisely, and more economically by computer. Productivity at the Texas City plant has increased 55 percent. The plant uses 3 percent less electricity and 10 percent less natural gas, which amounts to millions of dollars in savings and fewer CO₂ emissions.²⁰

Mass production manufacturing has seen similar transformations. Two significant contemporary applications of manufacturing technology are flexible manufacturing systems and lean manufacturing.

Flexible Manufacturing Systems

Most of today's factories use a variety of new manufacturing technologies, including robots, numerically controlled machine tools, RFID, wireless technology, and computerized software for product design, engineering analysis, and remote control of machinery. The ultimate automated factories are referred to as **flexible manufacturing systems** (FMS).²¹ Also called *computer-integrated manufacturing*, *smart factories*, *advanced manufacturing technology, agile manufacturing*, or *the factory of the future*, FMS links together manufacturing components that previously stood alone. Thus, robots, machines, product design, and engineering analysis are coordinated by a single computer system.

The result has revolutionized the shop floor, enabling large factories to deliver a wide range of custom-made products at low mass-production costs.²² Flexible manufacturing is typically the result of three subcomponents:

• Computer-aided design (CAD). Computers are used to assist in the drafting, design, and engineering of new parts. Designers guide their computers to draw

- specified configurations on the screen, including dimensions and component details. Hundreds of design alternatives can be explored, as can scaled-up or scaled-down versions of the original.²³
- Computer-aided manufacturing (CAM). Computer-controlled machines in materials handling, fabrication, production, and assembly greatly increase the speed at which items can be manufactured. CAM also permits a production line to shift rapidly from producing one product to any variety of other products by changing the instruction tapes or software codes in the computer. CAM enables the production line to quickly honor customer requests for changes in product design and product mix.²⁴
- Integrated information network. A computerized system links all aspects of the firm—including accounting, purchasing, marketing, inventory control, design, production, and so forth. This system, based on a common data and information base, enables managers to make decisions and direct the manufacturing process in a truly integrated fashion.

The combination of CAD, CAM, and integrated information systems means that a new product can be designed on the computer and a prototype can be produced untouched by human hands. The ideal factory can switch quickly from one product to another, working fast and with precision, without paperwork or record keeping to bog down the system.²⁵

Some advanced factories have moved to a system called *product life-cycle management* (PLM). PLM software can manage a product from idea through development, manufacturing, testing, and even maintenance in the field. The PLM software provides three primary advantages for product innovation. PLM (1) stores data on ideas and products from all parts of the company; (2) links product design to all departments (and even outside suppliers) involved in new product development; and (3) provides three-dimensional images of new products for testing and maintenance. PLM has been used to coordinate people, tools, and facilities around the world for the design, development, and manufacture of products as diverse as roller skates produced by GID of Yorba Linda, California, product packaging for Procter & Gamble consumer products, and Boeing's new 787 Dreamliner passenger jet.²⁶

Automakers provide good examples of the benefits of flexible manufacturing. Ford's Kansas City, Missouri, plant, one of the largest manufacturing facilities in the world, produces around 490,000 F-150s, Ford Escapes, and Mazda Tributes a year. With just a little tweaking, the assembly lines can be programmed to manufacture any kind of car or truck Ford makes. Robots in wire cages do most of the work, while people act as assistants, taking measurements, refilling parts, and altering the system if something goes wrong. Assembly is synchronized by computers, right down to the last rearview mirror. Ford's flexible manufacturing system is projected to save the company \$2 billion over the next 10 years.²⁷ Honda has achieved an even greater degree of flexibility at its plant in East Liberty, Ohio. Considered the most flexible auto manufacturer in North America, the Honda plant can switch from making Civic compacts to making the longer, taller CR-V crossover in as little as five minutes. Most of the company's vehicles are designed to be put together the same way, even if their parts are different. All that's needed to switch assembly from one type of vehicle to another is to put different "hands" on the robots to handle different parts. The ability to quickly adjust inventory levels of different types of vehicles has



been a key strategic advantage for Honda in an era of volatile gasoline prices and shifting vehicle popularity.²⁸

Lean Manufacturing

Flexible manufacturing reaches its ultimate level to improve quality, customer service, and cost cutting when all parts are used interdependently and combined with flexible management processes in a system referred to as lean manufacturing. **Lean manufacturing** uses highly trained employees at every stage of the production process, who take a painstaking approach to details and problem solving to cut waste and improve quality. In a recent survey by *Industry Week* and the Manufacturing Performance Institute asking 745 manufacturers which improvement programs they used, lean manufacturing was by far the most common answer, with more than 40 percent reporting the use of lean manufacturing techniques.²⁹

Lean manufacturing incorporates technological elements, such as CAD/CAM and PLM, but the heart of lean manufacturing is not machines or software, but people. Lean manufacturing requires changes in organizational systems, such as decision-making processes and management processes, as well as an organizational culture that supports active employee participation, a quality perspective, and focus on the customer. Employees are trained to attack waste and strive for continuous improvement in all areas.³⁰ One lesson of lean manufacturing is that there is always room for improvement. Consider the example of Matsushita Electric Industrial Company's factory in Saga, Japan.

To an outsider, Matsushita Electric Company's Saga plant looked pretty lean. Over a four-year period, the facility had doubled productivity and could pump out cordless



phones, security cameras, and fax machines in record time. But for plant managers Hitoshi Hirata and Hirofumi Tsuru, that wasn't good enough.

So, the plant recently ripped out miles of conveyor belts and replaced them with clusters of robots, controlled by software that synchronizes production so that there's no downtime. If one robot breaks down, work can quickly be routed to another. One outcome is a dramatic increase in speed. "It used to be $2\frac{1}{2}$ days into a production run before we had our first finished product. But now the first is done in 40 minutes," says Hirata. The Saga plant can churn out 500 phones, for example, every eight-hour shift, which means it produces twice as many phones per week as it could before the changes. That also significantly cuts inventory costs because components spend less time in the factory waiting to be used.

Are Saga's plant managers satisfied with the reinvention? Well, sort of. They know their factory is at the forefront of Matsushita's efforts to counter low-cost rivals by doing things better, faster, and cheaper. But they're also continually striving to take efficiency to new heights. "Next year," says Hirata, "we'll try to shorten the cycle even more." ■

Japanese companies such as Matsushita have long been global leaders in lean manufacturing. Another Japanese company, Toyota Motor Corporation, is often considered the premier manufacturing organization in the world. The famed Toyota Production System combines techniques such as just-in-time inventory, product life-cycle

Matsushita Electric Industrial Company management, continuous-flow production, quick changeover of assembly lines, continuous improvement, and preventive maintenance with a management system that encourages employee involvement and problem solving. Any employee can stop the production line at any time to solve a problem. In addition, designing equipment to stop automatically so that a defect can be fixed is a key element of the system.³²

Many North American organizations have studied the Toyota Production System and seen dramatic improvements in productivity, inventory reduction, and quality. "We're not trying to be Toyota," says Kristen Workman, manufacturing engineering manager at Schneider Electric's Peru, Indiana, facility, "but we can take their ideas and try to make them work in our own way." Since implementing lean ideas, Schneider's Peru operations have reduced waste significantly and increased productivity by 30 percent. Even with 85 percent of the 2,200 or so lighting and power panelboards the plant assembles and ships each day being custom orders, the facility has a 97 percent on-time delivery rate.³³

ASSESS YOUR ANSWER

Lean manufacturing is a super-efficient form of manufacturing that produces products of top quality.

ANSWER: Agree. Lean manufacturing techniques have been implemented in hundreds of organizations all over the world and have led to dramatic improvements in quality, productivity, and efficiency. Lean manufacturing continues to be an important tool for manufacturing firms, and smart managers in service firms are also learning to benefit from lean thinking.

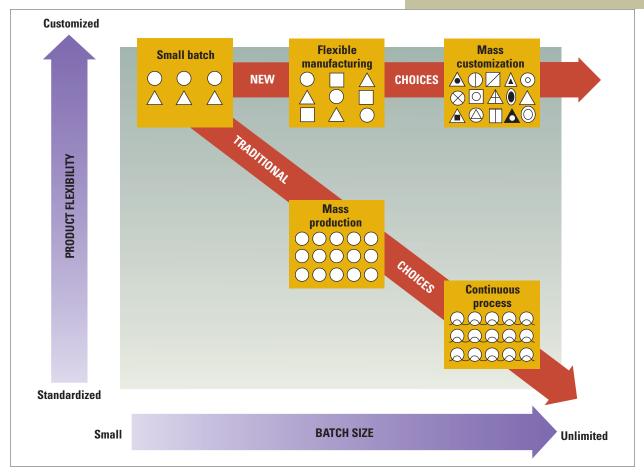
Lean manufacturing and flexible manufacturing systems have paved the way for mass customization, which refers to using mass-production technology to quickly and cost-effectively assemble goods that are uniquely designed to fit the demands of individual customers.³⁴ Mass customization has been applied to products as diverse as farm machinery, water heaters, clothing, computers, and industrial detergents.³⁵ Oshkosh Truck Company has thrived during an industrywide slump in sales by offering customized fire, cement, garbage, and military trucks. Firefighters often travel to the plant to watch their new vehicle take shape, sometimes bringing paint chips to customize the color of their fleet.³⁶ Auto manufacturers, too, are moving toward mass customization. Sixty percent of the cars BMW sells in Europe are built to order.³⁷

Performance and Structural Implications

The awesome advantage of flexible manufacturing is that products of different sizes, types, and customer requirements freely intermingle on the assembly line. Computerized machines can make instantaneous changes—such as putting a larger screw in a different location—without slowing the production line. A manufacturer can turn out an infinite variety of products in unlimited batch sizes, as illustrated in Exhibit 7.5. In traditional manufacturing systems studied by Woodward, choices were limited to the diagonal. Small batch allowed for high product flexibility and custom orders, but because of the "craftsmanship" involved in custom-making

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EXHIBIT 7.5Relationship of Flexible Manufacturing Technology to Traditional Technologies



Source: Based on Jack Meredith, "The Strategic Advantages of New Manufacturing Technologies for Small Firms," Strategic Management Journal 8 (1987), 249–258; Paul Adler, "Managing Flexible Automation," California Management Review (Spring 1988), 34–56; and Otis Port, "Custom-made Direct from the Plant," BusinessWeek/21st Century Capitalism (November 18, 1994), 158–159.

products, batch size was necessarily small. Mass production could have large batch size, but offered limited product flexibility. Continuous process could produce a single standard product in unlimited quantities. Flexible manufacturing systems allow plants to break free of this diagonal and to increase both batch size and product flexibility at the same time. When taken to its ultimate level, FMS allows for mass customization, with each specific product tailored to customer specification. This high-level use of FMS has been referred to as *computer-aided craftsmanship*.³⁸

Studies suggest that with FMS, machine utilization is more efficient, labor productivity increases, scrap rates decrease, and product variety and customer satisfaction increase.³⁹ Many U.S. manufacturing companies are reinventing the factory using FMS and lean manufacturing systems to increase productivity.

Research into the relationship between FMS and organizational characteristics has discovered the organizational patterns summarized in Exhibit 7.6. Compared with traditional mass-production technologies, FMS has a narrow span of control,



EXHIBIT 7.6

Comparison of Organizational Characteristics Associated with Mass Production and Flexible Manufacturing Systems

Characteristic	Mass Production	FMS
Structure		
Span of control	Wide	Narrow
Hierarchical levels	Many	Few
Tasks	Routine, repetitive	Adaptive, craftlike
Specialization	High	Low
Decision making	Centralized	Decentralized
Overall	Bureaucratic, mechanistic	Self-regulating, organic
Human Resources		
Interactions	Standalone	Teamwork
Training	Narrow, one time	Broad, frequent
Expertise	Manual, technical	Cognitive, social
		Solve problems
Interorganizational		
Customer demand	Stable	Changing
Suppliers	Many, arm's length	Few, close relationships

Source: Based on Patricia L. Nemetz and Louis W. Fry, "Flexible Manufacturing Organizations: Implications for Strategy Formulation and Organization Design," *Academy of Management Review* 13 (1988), 627–638; Paul S. Adler, "Managing Flexible Automation," *California Management Review* (Spring 1988), 34–56; and Jeremy Main, "Manufacturing the Right Way," *Fortune* (May 21, 1990) 54–64.

few hierarchical levels, adaptive tasks, low specialization, and decentralization, and the overall environment is characterized as organic and self-regulative. Employees need the skills to participate in teams; training is broad (so workers are not overly specialized) and frequent (so workers are up to date). Expertise tends to be cognitive so workers can process abstract ideas and solve problems. Interorganizational relationships in FMS firms are characterized by changing demand from customers—which is easily handled with the new technology—and close relationships with a few suppliers that provide top-quality raw materials.⁴⁰

Technology alone cannot give organizations the benefits of flexibility, quality, increased production, and greater customer satisfaction. Research suggests that FMS can become a competitive burden rather than a competitive advantage unless organizational structures and management processes are redesigned to take advantage of the new technology.⁴¹ When top managers make a commitment to implement new structures and processes that empower workers and support a learning and knowledge-creating environment, FMS can help companies be more competitive.⁴²

CORE ORGANIZATION SERVICE TECHNOLOGY

Another big change occurring in the technology of organizations is the growing service sector. A large percentage of the U.S. workforce is employed in services, such as hospitals, hotels, package delivery, online services, or telecommunications. Service

technologies are different from manufacturing technologies and, in turn, require a different organization design.

Service Firms

Definition. Whereas manufacturing organizations achieve their primary purpose through the production of products, service organizations accomplish their primary purpose through the production and provision of services, such as education, health care, transportation, banking, and hospitality. Studies of service organizations have focused on the unique dimensions of service technologies. The characteristics of **service technology** are compared to those of manufacturing technology in Exhibit 7.7.

The most obvious difference is that service technology produces an *intangible output*, rather than a tangible product, such as a refrigerator produced by a manufacturing firm. A service is abstract and often consists of knowledge and ideas rather than a physical product. Thus, whereas manufacturers' products can be inventoried for later sale, services are characterized by *simultaneous production and consumption*. A client meets with a doctor or attorney, for example, and students and teachers come together in the classroom or over the Internet. A service is an intangible product that does not exist until it is requested by the customer. It cannot be stored, inventoried, or viewed as a finished good. If a service is not consumed immediately upon production, it disappears.⁴³ This typically means that service firms are *labor*

EXHIBIT 7.7Differences between Manufacturing and Service Technologies

Manufacturing Technology 1. Tangible product 2. Products can be inventoried for later consumption Service Technology Capital asset-intensive 1. Intangible output Little direct customer interaction 2. Production and consumption take place 5. Human element may be less important simultaneously 3. Labor- and knowledge-intensive Quality is directly measured 4. Customer interaction generally high Longer response time is acceptable 5. Human element very important 8. Site of facility is moderately important 6. Quality is perceived and difficult to measure 7. Rapid response time is usually necessary 8. Site of facility is extremely important Service **Product and Service Product** Airlines Fast-food outlets Soft drink companies Hotels Cosmetics Steel companies Consultants Real estate Automobile manufacturers Health care Stockbrokers Mining corporations Law firms Retail stores Food processing plants

Source: Based on F. F. Reichheld and W. E. Sasser, Jr., "Zero Defections: Quality Comes to Services," *Harvard Business Review* 68 (September–October 1990), 105–111; and David E. Bowen, Caren Siehl, and Benjamin Schneider, "A Framework for Analyzing Customer Service Orientations in Manufacturing," *Academy of Management Review* 14 (1989), 75–95.



guidelines in mind:

Use the concept of service technology to evaluate the production process in nonmanufacturing firms. Service technologies are intangible and must be located close to the customer. Hence, service organizations may have an organization structure with fewer boundary roles, greater geographical dispersion, decentralization. highly skilled employees in the technical core, and generally less control than in manufacturing organizations.

and knowledge intensive, with many employees needed to meet the needs of customers, whereas manufacturing firms tend to be *capital intensive*, relying on mass production, continuous process, and flexible manufacturing technologies.⁴⁴

Direct interaction between customer and employee is generally very high with services, while there is little direct interaction between customers and employees in the technical core of a manufacturing firm. This direct interaction means that the human element (employees) becomes extremely important in service firms. Whereas most people never meet the workers who manufactured their cars, they interact directly with the salesperson who sold them their Honda Civic or Ford F-150. The treatment received from the salesperson—or from a doctor, lawyer, or hairstylist—affects the perception of the service received and the customer's level of satisfaction. The quality of a service is perceived and cannot be directly measured and compared in the same way that the quality of a tangible product can. Another characteristic that affects customer satisfaction and perception of quality service is rapid response time. A service must be provided when the customer wants and needs it. When you take a friend to dinner, you want to be seated and served in a timely manner; you would not be very satisfied if the host or manager told you to come back tomorrow when there would be more tables or servers available to accommodate you.

The final defining characteristic of service technology is that *site selection is often much more important* than with manufacturing. Because services are intangible, they have to be located where the customer wants to be served. Services are dispersed and located geographically close to customers. For example, fast-food franchises usually disperse their facilities into local stores. Most towns of even moderate size today have two or more McDonald's restaurants rather than one large one, for example, in order to provide service where customers want and need it.

In reality, it is difficult to find organizations that reflect 100 percent service or 100 percent manufacturing characteristics. Some service firms take on characteristics of manufacturers, and vice versa. Many manufacturing firms are placing a greater emphasis on customer service to differentiate themselves and be more competitive. In addition, manufacturing organizations have departments such as purchasing, HR, and marketing that are based on service technology. On the other hand, organizations such as gas stations, stockbrokers, retail stores, and restaurants belong to the service sector, but the provision of a product is a significant part of the transaction. The vast majority of organizations involve some combination of products and services. The important point is that all organizations can be classified along a continuum that includes both manufacturing and service characteristics, as illustrated in Exhibit 7.7. This chapter's "How Do You Fit the Design?" questionnaire will give you some insight into whether you are better suited to be a manager in a service organization or a manufacturing firm.

New Directions in Services. Service firms have always tended toward providing *customized output*—that is, providing exactly the service each customer wants and needs. When you visit a hairstylist, you don't automatically get the same cut the stylist gave the three previous clients. The stylist cuts your hair the way you request it. However, customer expectations of what constitutes good service are rising. Service companies such as the Ritz-Carlton Hotels, Vanguard, and Progressive Insurance use new technology to keep customers coming back. All Ritz-Carlton hotels are linked to a database filled with the preferences of half a million guests, allowing any desk clerk or bellhop to find out what your favorite wine is, whether you're allergic to feather pillows, and how many extra towels you want in your room.⁴⁵

At Vanguard, customer service reps teach customers how to effectively use the company's website. That means customers needing simple information now get it quickly and easily over the Web, and reps have more time to help clients with complicated questions. The new approach has had a positive impact on Vanguard's customer retention rate. 46

The expectation for better service has also pushed service firms in industries from package delivery to health care to take a lesson from manufacturing.⁴⁷ Japan Post, under pressure to cut a \$191 million loss on operations, hired Toyota's Toshihiro Takahashi to help apply the Toyota Production System to the collection, sorting, and delivery of mail. In all, Takahashi's team came up with 370 improvements and reduced the post office's person-hours by 20 percent. The waste reduction is expected to cut costs by around \$350 million a year.⁴⁸ Numerous other service



The questions that follow ask you to describe your behavior. For each question, check the answer that best describes you.

- **1.** I am usually running late for class or other appointments:
 - a. Yes
 - **b.** No
- 2. When taking a test I prefer:
 - a. Subjective questions (discussion or essay)
 - **b.** Objective questions (multiple choice)
- 3. When making decisions, I typically:
 - a. Go with my gut-what feels right
 - b. Carefully weigh each option
- **4.** When solving a problem, I would more likely:
 - a. Take a walk, mull things over, then discuss
 - **b.** Write down alternatives, prioritize them, then pick the best
- 5. I consider time spent daydreaming as:
 - a. A viable tool for planning my future
 - **b.** A waste of time.
- 6. To remember directions, I typically:
 - a. Visualize the information
 - b. Make notes
- **7.** My work style is mostly:
 - **a.** Juggle several things at once.
 - b. Concentrate on one task at a time until complete

- 8. My desk, work area, or laundry area are typically:
 - a. Cluttered
 - b. Neat and organized

Scoring: Count the number of checked "a" items and "b" items. Each "a" represents right-brain processing, and each "b" represents left-brain processing. If you scored 6 or higher on either, you have a distinct processing style. If you checked fewer than 6 for either, you probably have a balanced style.

Interpretation: People have two thinking processes—one visual and intuitive in the right half of the brain, and the other verbal and analytical in the left half of the brain. The thinking process you prefer predisposes you to certain types of knowledge and information—technical reports, analytical information, and quantitative data (left brain) vs. talking to people, thematic impressions, and personal intuition (right brain)—as effective input to your thinking and decision making. Manufacturing organizations typically use left-brain processing to handle data based on physical, measurable technology. Service organizations typically use right-brain processing to interpret less tangible situations and serve people in a direct way. Left-brain processing has been summarized as based on logic; right-brain processing has been summarized as based on love.

Source: Adapted from Carolyn Hopper, *Practicing Management Skills* (Houghton Mifflin, 2003); and Jacquelyn Wonder and Priscilla Donovan, "Mind Openers," *Self* (March 1984).

firms, in the United States as well as in other countries, have also applied lean principles in recent years.

Designing the Service Organization

The feature of service technologies with a distinct influence on organizational structure and control systems is the need for technical core employees to be close to the customer.⁴⁹ The differences between service and product organizations necessitated by customer contact are summarized in Exhibit 7.8.

The impact of customer contact on organization structure is reflected in the use of boundary roles and structural disaggregation.⁵⁰ Boundary roles are used extensively in manufacturing firms to handle customers and to reduce disruptions for the technical core. They are used less in service firms because a service is intangible and cannot be passed along by boundary spanners, so service customers must interact directly with technical employees, such as doctors or brokers.

A service firm deals in information and intangible outputs and does not need to be large. Its greatest economies are achieved through disaggregation into small units that can be located close to customers. Stockbrokers, doctors' clinics, consulting firms, and banks disperse their facilities into regional and local offices. Manufacturing firms, on the other hand, tend to aggregate operations in a single area that has raw materials and an available workforce. A large manufacturing firm can take advantage of economies derived from expensive machinery and long production runs.

Service technology also influences internal organization characteristics used to direct and control the organization. For one thing, the skills of technical core employees typically need to be higher. These employees need enough knowledge and awareness to handle customer problems rather than just enough to perform mechanical tasks. Employees need social and interpersonal skills as well as technical skills.⁵¹ Because of higher skills and structural dispersion, decision making often tends to be decentralized in service firms, and formalization tends to be low. Although some service organizations, such as many fast-food chains, have set rules and procedures for customer service, employees in service organizations typically

EXHIBIT 7.8

Configuration and Structural Characteristics of Service Organizations versus Product Organizations

Structural Characteristic	Service	Product
Separate boundary roles Geographical diaparaian	Few Much	Many Little
2. Geographical dispersion3. Decision making	Decentralized	Centralized
4. Formalization	Lower	Higher
Human Resources		
1. Employee skill level	Higher	Lower
2. Skill emphasis	Interpersonal	Technical

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have more freedom and discretion on the job. Managers at Home Depot have learned that how employees are managed has a great deal to do with the success of a service organization.

Home Depot grew to the world's largest home improvement retailer largely on the strength of its employees. Many people hired to work in the stores were former plumbers,



carpenters, or other skilled tradesmen who understood the products and took pride in helping do-it-yourselfers find the right tools and supplies and know how to use them.

However, to cut costs in recent years, the company began hiring more part-time employees and instituted a salary cap that made jobs less appealing to experienced workers. As a further way to reduce costs, managers began measuring every aspect of the stores' productivity, such as how long it took to unload shipments of goods or how many extended warranties each employee sold per week. What got overlooked, though, was how well employees were providing service. Customers began complaining that they could never find anyone to assist them—and even when they did, many employees didn't have the knowledge and experience to be of much help. Some customers took their business elsewhere, even if it meant going to small shops where they would pay higher prices but get better service.

Now managers are working hard to get things back on track. The stores are hiring more full-timers again, instituting new training programs, and looking for other ways to make sure employees are knowledgeable and helpful. The CEO even reached out to the company's founders, Bernie Marcus and Arthur Blank, for advice on how to put the shine back on Home Depot's customer service reputation.⁵²

Managers at Home Depot can use an understanding of the nature of service technology to help them align strategy, structure, and management processes and make the retailer more effective. Service technologies require structures and systems that are quite different from those for a traditional manufacturing technology. For example, the concept of separating complex tasks into a series of small jobs and exploiting economies of scale is a cornerstone of traditional manufacturing, but researchers have found that applying it to service organizations often does not work so well. Some service firms have redesigned jobs to separate low— and high-customer-contact activities, with more rules and standardization in the low-contact jobs. High-touch service jobs, like those on the Home Depot sales floor, need more freedom and less control to satisfy customers.

2 The best way for a company to provide good service is to have abundant and clear rules and procedures and make sure everyone follows them to the letter.

ANSWER: *Disagree.* Service employees need good interpersonal skills and a degree of autonomy to be able to satisfy each customer's specific needs. Although many service organizations have some standard procedures for serving customers, service firms are typically low on both centralization and formalization. Abundant rules can take away both personal autonomy and the personal touch.

Home Depot Inc.

ASSESS YOUR ANSWER Now let's turn to another perspective on technology, that of production activities within specific organizational departments. Departments often have characteristics similar to those of service technology, providing services to other departments within the organization.

NON-CORE DEPARTMENTAL TECHNOLOGY

This section shifts to the department level of analysis for departments not necessarily within the technical core. Each department in an organization has a production process that consists of a distinct technology. A company such as Tenneco, a maker of auto parts, for example, might have departments for engineering, research and development, human resources, marketing, quality control, finance, and dozens of other functions. This section analyzes the nature of departmental technology and its relationship with departmental structure.

The framework that has had the greatest impact on the understanding of departmental technologies was developed by Charles Perrow.⁵⁴ Perrow's model has been useful for a broad range of technologies, which made it ideal for research into departmental activities.

Variety

Perrow specified two dimensions of departmental activities that were relevant to organization structure and process. The first is the number of exceptions in the work. This refers to task variety, which is the frequency of unexpected and novel events that occur in the conversion process. Task variety concerns whether work processes are performed the same way every time or differ from time to time as employees transform the organization's inputs into outputs.⁵⁵ When individuals encounter a large number of unexpected situations, with frequent problems, variety is considered high. When there are few problems, and when day-to-day job requirements are repetitious, technology contains little variety. Variety in departments can range from repeating a single act, such as on a traditional assembly line, to working on a series of unrelated problems, such as in a hospital emergency room.

Analyzability

The second dimension of technology concerns the **analyzability** of work activities. When the conversion process is analyzable, the work can be reduced to mechanical steps and participants can follow an objective, computational procedure to solve problems. Problem solution may involve the use of standard procedures, such as instructions and manuals, or technical knowledge, such as that in a textbook or handbook. On the other hand, some work is not analyzable. When problems arise, it is difficult to identify the correct solution. There is no store of techniques or procedures to tell a person exactly what to do. The cause of or solution to a problem is not clear, so employees rely on accumulated experience, intuition, and judgment. The final solution to a problem is often the result of wisdom and experience and not the result of standard procedures. For example, Philippos Poulos, a tone regulator at

Steinway & Sons, has an unanalyzable technology. Tone regulators carefully check each piano's hammers to ensure they produce the proper "Steinway sound." These quality-control tasks require years of experience and practice. Standard procedures will not tell a person how to do such tasks.

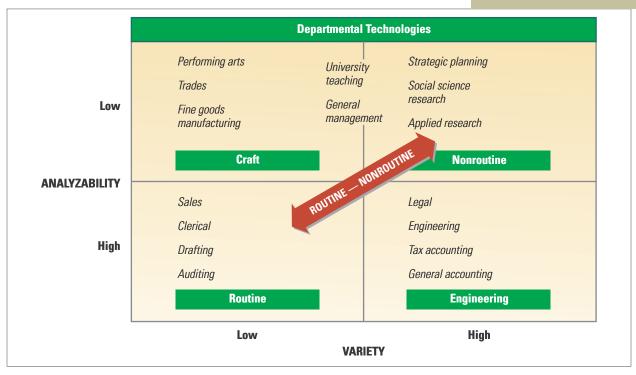
Framework

The two dimensions of technology and examples of departmental activities on Perrow's framework are shown in Exhibit 7.9. The dimensions of variety and analyzability form the basis for four major categories of technology: routine, craft, engineering, and nonroutine.

Categories of Technology. Routine technologies are characterized by little task variety and the use of objective, computational procedures. The tasks are formalized and standardized. Examples include an automobile assembly line and a bank teller department.

Craft technologies are characterized by a fairly stable stream of activities, but the conversion process is not analyzable or well understood. Tasks require extensive training and experience because employees respond to intangible factors on the basis of wisdom, intuition, and experience. Although advances in machine technologies

EXHIBIT 7.9
Framework for
Department Technologies



Source: California Management Review by Daft and Macintosh. Copyright 1978 by California Management Review. Reproduced with permission of California Management Review via Copyright Clearance Center.

seem to have reduced the number of craft technologies in organizations, craft technologies are still important. For example, steel furnace engineers continue to mix steel based on intuition and experience, pattern makers at fashion houses such as Louis Vuitton, Zara, or H&M convert rough designers' sketches into salable garments, and teams of writers for television series such as *House* or *Grey's Anatomy* convert ideas into story lines.

Engineering technologies tend to be complex because there is substantial variety in the tasks performed. However, the various activities are usually handled on the basis of established formulas, procedures, and techniques. Employees normally refer to a well-developed body of knowledge to handle problems. Engineering and accounting tasks usually fall in this category.

Nonroutine technologies have high task variety, and the conversion process is not analyzable or well understood. In nonroutine technology, a great deal of effort is devoted to analyzing problems and activities. Several equally acceptable options typically can be found. Experience and technical knowledge are used to solve problems and perform the work. Basic research, strategic planning, and other work that involves new projects and unexpected problems are nonroutine. The blossoming biotechnology industry also represents a nonroutine technology. Breakthroughs in understanding metabolism and physiology at a cellular level depend on highly trained employees who use their experience and intuition as well as scientific knowledge.⁵⁷

Routine versus Nonroutine. Exhibit 7.9 also illustrates that variety and analyzability can be combined into a single dimension of technology. This dimension is called *routine versus nonroutine technology*, and it is the diagonal line in Exhibit 7.9. The analyzability and variety dimensions are often correlated in departments, meaning that technologies high in variety tend to be low in analyzability, and technologies low in variety tend to be analyzable. Departments can be evaluated along a single dimension of routine versus nonroutine that combines both analyzability and variety, which is a useful shorthand measure for analyzing departmental technology.

The following questions show how departmental technology can be analyzed for determining its placement on Perrow's technology framework in Exhibit 7.9.⁵⁸ Employees normally circle a number from 1 to 7 in response to each question.

Variety:

- 1. To what extent would you say your work is routine?
- 2. Does most everyone in this unit do about the same job in the same way most of the time?
- 3. Are unit members performing repetitive activities in doing their jobs?

Analyzability:

- 1. To what extent is there a clearly known way to do the major types of work you normally encounter?
- 2. To what extent is there an understandable sequence of steps that can be followed in doing your work?
- 3. To do your work, to what extent can you actually rely on established procedures and practices?

If answers to the preceding questions indicate high scores for analyzability and low scores for variety, the department would have a routine technology. If the opposite occurs, the technology would be nonroutine. Low variety and low analyzability

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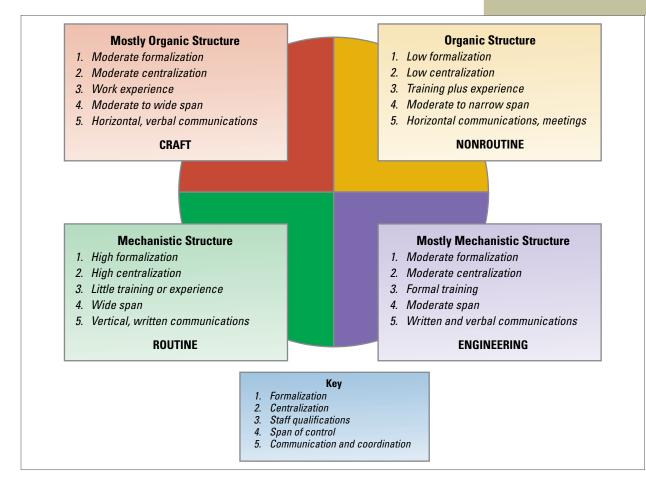
indicate a craft technology, and high variety and high analyzability indicate an engineering technology. As a practical matter, most departments fit somewhere along the diagonal and can be most easily characterized as routine or nonroutine.

DEPARTMENT DESIGN

Once the nature of a department's technology has been identified, the appropriate structure can be determined. Department technology tends to be associated with a cluster of departmental characteristics, such as the skill level of employees, formalization, and methods of communication. Definite patterns exist in the relationship between work unit technology and structural characteristics, which are associated with departmental performance.⁵⁹ Key relationships between technology and other dimensions of departments are described in this section and are summarized in Exhibit 7.10.

EXHIBIT 7.10

Relationship of Department Technology to Structural and Management Characteristics



The overall structure of departments may be characterized as either organic or mechanistic. Routine technologies are associated with a mechanistic structure and processes, with formal rules and rigid management processes. Nonroutine technologies are associated with an organic structure, and department management is more flexible and free-flowing. The specific design characteristics of formalization, centralization, worker skill level, span of control, and communication and coordination vary, depending on work unit technology.

ASSESS YOUR ANSWER

The design characteristics and management processes that are effective for a television station's sales department probably would not work so well for the news department.

ANSWER: Agree. The news department has a nonroutine technology compared to the sales department. No one knows what newsworthy events are going to happen during the day, when or where they will happen, or how they will need to be covered. Sales tasks, particularly telephone sales to repeat customers involving standard rates for advertising, can be performed using standard procedures, but gathering and reporting news events can't be standardized. A sales department would be characterized as routine because there is little variety and tasks are well understood.

- 1. Formalization. Routine technology is characterized by standardization and division of labor into small tasks that are governed by formal rules and procedures. For nonroutine tasks, the structure is less formal and less standardized. When variety is high, as in a research department, fewer activities are covered by formal procedures.⁶⁰
- 2. Decentralization. In routine technologies, most decision making about task activities is centralized to management. In engineering technologies, employees with technical training tend to acquire moderate decision authority because technical knowledge is important to task accomplishment. Production employees who have years of experience obtain decision authority in craft technologies because they know how to respond to problems. Decentralization to employees is greatest in nonroutine settings, where many decisions are made by employees.
- 3. Worker skill level. Work staff in routine technologies typically require little education or experience, which is congruent with repetitious work activities. In work units with greater variety, staff are more skilled and often have formal training in technical schools or universities. Training for craft activities, which are less analyzable, is more likely to be through job experience. Nonroutine activities require both formal education and job experience.⁶²
- 4. *Span of control*. Span of control is the number of employees who report to a single manager or supervisor. This characteristic is normally influenced by departmental technology. The more complex and nonroutine the task, the more problems arise in which the supervisor becomes involved. Although the span of control may be influenced by other factors, such as skill level of employees, it typically should be smaller for complex tasks because on such tasks the supervisor and subordinate must interact frequently.⁶³

As an organization manager, keep these guidelines in mind:

Use the two dimensions of variety and analyzability to discover whether the work in a department is routine or nonroutine. If the work in a department is routine, use a mechanistic structure and process. If the work in a department is nonroutine, use an organic management process.



5. Communication and coordination. Communication activity and frequency increase as task variety increases.⁶⁴ Frequent problems require more information sharing to solve problems and ensure proper completion of activities. The direction of communication is typically horizontal in nonroutine work units and vertical in routine work units.⁶⁵ The form of communication varies by task analyzability.⁶⁶ When tasks are highly analyzable, statistical and written forms of communication (memos, reports, rules, and procedures) are frequent. When tasks are less analyzable, information typically is conveyed face-to-face, over the telephone, or in group meetings.

Two important points are reflected in Exhibit 7.10. First, departments differ from one another and can be categorized according to their workflow technology. ⁶⁷ Second, structural and management processes differ based on departmental technology. Managers should design their departments so that requirements based on technology can be met. Design problems are most visible when the design is clearly inconsistent with technology. Studies have found that when structure and communication characteristics did not reflect technology, departments tended to be less effective. ⁶⁸ Employees could not communicate with the frequency needed to solve problems.

WORKFLOW INTERDEPENDENCE AMONG DEPARTMENTS

So far, this chapter has explored how organization and department technologies influence structural design. The final characteristic of technology that influences structure is called interdependence. **Interdependence** means the extent to which departments depend on each other for resources or materials to accomplish their tasks. Low interdependence means that departments can do their work independently of each other and have little need for interaction, consultation, or exchange of materials. High interdependence means departments must constantly exchange resources.

Types

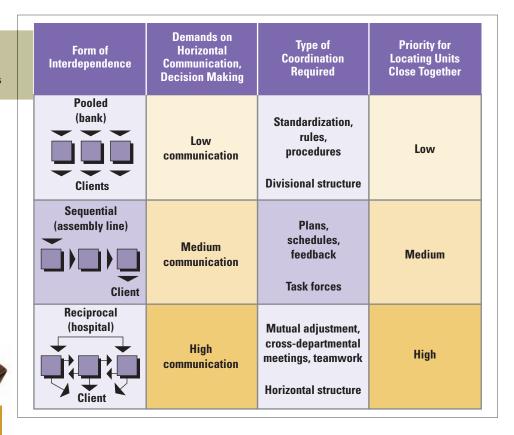
James Thompson defined three types of interdependence that influence organization structure.⁶⁹ These interdependencies are illustrated in Exhibit 7.11 and are discussed in the following sections.

Pooled. Pooled interdependence is the lowest form of interdependence among departments. In this form, work does not flow between units. Each department is part of the organization and contributes to the common good of the organization, but works independently. Subway restaurants or Bank of America branches are examples of pooled interdependence. An outlet in Chicago need not interact with an outlet in Urbana. Pooled interdependence may be associated with the relationships within a *divisional structure*, defined in Chapter 3. Divisions or branches share financial resources from a common pool, and the success of each division contributes to the success of the overall organization.

Thompson proposed that pooled interdependence would exist in firms with what he called a mediating technology. A **mediating technology** provides products or

EXHIBIT 7.11

Thompson's Classification of Interdependence and Management Implications



Briefcase

As an organization manager, keep these guidelines in mind:

Evaluate the interdependencies among organizational departments. Use the general rule that, as interdependencies increase, mechanisms for coordination must also increase. Consider a divisional structure for pooled interdependence. For sequential interdependence, use task forces and integrators for greater horizontal coordination. At the highest level of interdependence (reciprocal interdependence), a horizontal structure may be appropriate.

services that mediate or link clients from the external environment and, in so doing, allows each department to work independently. Banks, brokerage firms, and real estate offices all mediate between buyers and sellers, but the offices work independently within the organization.

The management implications associated with pooled interdependence are quite simple. Thompson argued that managers should use rules and procedures to standardize activities across departments. Each department should use the same procedures and financial statements so the outcomes of all departments can be measured and pooled. Very little day-to-day coordination is required among units.

Sequential. When interdependence is of serial form, with parts produced in one department becoming inputs to another department, it is called **sequential interdependence**. The first department must perform correctly for the second department to perform correctly. This is a higher level of interdependence than pooled interdependence, because departments exchange resources and depend on others to perform well. Sequential interdependence creates a greater need for horizontal mechanisms such as integrators or task forces.

Sequential interdependence occurs in what Thompson called **long-linked technology**, which "refers to the combination in one organization of successive stages of production; each stage of production uses as its inputs the production of the preceding stage and produces inputs for the following stage." An example of sequential interdependence comes from the shipbuilding industry. Until recently, ship designers made patterns and molds out of paper and plywood, which were passed on to assembly.

The cutting department depended on accurate measurements from the designers, and the assembly department depended on accurate parts from the cutting department. This sequential interdependence meant that mistakes in measurements or pattern mix-ups often caused errors in the cutting and assembly process, leading to delays and increased costs. Naval architect Filippo Cali created a complex software program that computerizes the process of making patterns and molds, thus eliminating many of the problems between design and assembly.⁷¹ Another example of sequential interdependence would be an automobile assembly line, which must have all the parts it needs, such as engines, steering mechanisms, and tires, to keep production rolling.

The management requirements for sequential interdependence are more demanding than those for pooled interdependence. Coordination among the linked plants or departments is required. Since the interdependence implies a one-way flow of materials, extensive planning and scheduling are generally needed. Department B needs to know what to expect from Department A so both can perform effectively. Some day-to-day communication among plants or departments is also needed to handle unexpected problems and exceptions that arise.

Reciprocal. The highest level of interdependence is **reciprocal interdependence**. This exists when the output of operation A is the input to operation B, and the output of operation B is the input back again to operation A. The outputs of departments influence those departments in reciprocal fashion.

Reciprocal interdependence tends to occur in organizations with what Thompson called **intensive technologies**, which provide a variety of products or services in combination to a client. A firm developing new products provides an example of reciprocal interdependence. Intense coordination is needed between design, engineering, manufacturing, and marketing to combine all their resources to suit the customer's product need. Hospitals are also an excellent example because they provide coordinated services to patients, as illustrated by the following story.

The Great Ormond Street Hospital is known for its expertise in infant heart surgery, where a lot can go wrong. One of the most dangerous phases of the procedure comes



during the "handoff," that is, transferring the patient from surgery to intensive care. If an infant is transferred to ICU and the ventilator isn't ready, for instance, it could be disastrous. Thousands of similar handoffs occur in hospitals all over the world every day, and devastating mistakes can happen if coordination is sloppy or weak. Studies have found that 70 percent of preventable hospital mistakes occur because of communication breakdowns, and at least half of those breakdowns come during the critical handoff phase—transferring a patient from one department to another or to a new team during a shift change.

Hospitals all over the world are borrowing ideas from other industries skilled in the process of high-risk handoffs. Great Ormond's smooth handoff system is based partly on the pit-stop techniques of Italy's Ferrari racing team. Kaiser Permanente of California uses a handoff procedure based on the change-of-command system developed for nuclear submarines. A Saint Joseph's Health System facility has a handoff system called "Ticket to Ride," which is a series of questions about the patient's medications, infections, and other medical issues that have to be asked of a person transferring a patient from one department to another. Health care providers and hospital managers are looking for any approach that will improve coordination between departments and prevent deadly mistakes. ⁷²

Great Ormond
Street Hospital
for Children

Reciprocal interdependence such as that at hospitals like Great Ormond requires that departments work together intimately and be tightly coordinated. A recent study of top management teams confirms that effective performance of teams characterized by high interdependence depends on good communication and close coordination. With reciprocal interdependence, the structure must allow for frequent horizontal communication and adjustment, perhaps using cross-functional teams or a horizontal structure. Extensive planning is required, but plans will not anticipate or solve all problems. Daily interaction and mutual adjustment among departments are required. Managers from several departments are jointly involved in face-to-face coordination, teamwork, and decision making. Reciprocal interdependence is the most complex interdependence for organizations to handle and the most challenging for managers in designing the organization.

Structural Priority

As indicated in Exhibit 7.11, because decision making, communication, and coordination problems are greatest for reciprocal interdependence, reciprocal interdependence should receive first priority in organization structure. New product development is one area of reciprocal interdependence that is of growing concern to managers as companies face increasing pressure to get new products to market fast. Many firms are revamping the design-manufacturing relationship by closely integrating CAD and CAM technologies discussed earlier in this chapter.⁷⁴ Activities that are reciprocally interdependent should be grouped close together in the organization so managers have easy access to one another for mutual adjustment. These units should report to the same person on the organization chart and should be physically close so the time and effort for coordination can be minimized. A horizontal structure, with linked sets of teams working on core processes, can provide the close coordination needed to support reciprocal interdependence. Poor coordination will result in poor performance for the organization. If reciprocally interdependent units are not located close together, the organization should design mechanisms for coordination, such as daily meetings between departments or an intranet to facilitate communication. The next priority is given to sequential interdependencies, and finally to pooled interdependencies.

This strategy of organizing keeps the communication channels short where coordination is most critical to organizational success. For example, Boise Cascade Corporation experienced poor service to customers because customer-service reps located in New York City were not coordinating with production planners in Oregon plants. Customers couldn't get delivery as needed. Boise was reorganized, and the two groups were consolidated under one roof, reporting to the same supervisor at division headquarters. Now customer needs are met because customer-service reps work with production planning to schedule customer orders.

Structural Implications

Most organizations experience various levels of interdependence, and structure can be designed to fit these needs, as illustrated in Exhibit 7.12.⁷⁵ In a manufacturing firm, new product development entails reciprocal interdependence among the design, engineering, purchasing, manufacturing, and sales departments. Perhaps a horizontal structure or cross-functional teams could be used to handle the backand-forth flow of information and resources. Once a product is designed, its actual manufacture would be sequential interdependence, with a flow of goods from one

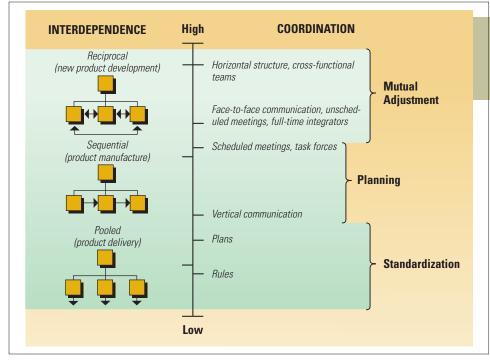


EXHIBIT 7.12

Primary Means to Achieve Coordination for Different Levels of Task Interdependence in a Manufacturing Firm

Source: Adapted from Andrew H. Van de Ven, Andre Delbecq, and Richard Koenig, "Determinants of Communication Modes within Organizations," *American Sociological Review* 41 (1976), 330.

department to another, such as among purchasing, inventory, production control, manufacturing, and assembly. The actual ordering and delivery of products is pooled interdependence, with warehouses working independently. Customers could place an order with the nearest facility, which would not require coordination among warehouses, except in unusual cases such as a stock outage.

The three levels of interdependence are illustrated by a study of athletic teams that examined interdependency among players and how it influences other aspects of baseball, football, and basketball teams.

A major difference among baseball, football, and basketball is the interdependence among players. Baseball is low in interdependence, football is medium, and basket-



ball represents the highest player interdependence. The relationships among interdependence and other characteristics of team play are illustrated in Exhibit 7.13.

Pete Rose said, "Baseball is a team game, but nine men who reach their individual goals make a nice team." In baseball, interdependence among team players is low and can be defined as pooled. Each member acts independently, taking a turn at bat and playing his or her own position. When interaction does occur, it is between only two or three players, as in a double play. Players are physically dispersed, and the rules of the game are the primary means of coordinating players. Players practice and develop their skills individually, such as by taking batting practice and undergoing physical conditioning. Management's job is to select good players. If each player is successful as an individual, the team should win.

(continued)

Athletic Teams



EXHIBIT 7.13

Relationships among Interdependence and Other Characteristics of Team Play

	Baseball	Football	Basketball
Interdependence Physical dispersion of players	Pooled High	Sequential Medium	Reciprocal Low
Coordination	Rules that govern the sport	Game plan and position roles	Mutual adjustment and shared responsibility
Key management job	Select players and develop their skills	Prepare and execute game	Influence flow of game

Source: Based on William Pasmore, Carol E. Francis, and Jeffrey Haldeman, "Sociotechnical Systems: A North American Reflection on the Empirical Studies of the 70s," *Human Relations* 35 (1982), 1179–1204.

In football, interdependence among players is higher and tends to be sequential. The line first blocks the opponents to enable the backs to run or pass. Plays are performed sequentially from first down to fourth down. Physical dispersion is medium, which allows players to operate as a coordinated unit. The primary mechanism for coordinating players is developing a game plan along with rules that govern the behavior of team members. Each player has an assignment that fits with other assignments, and management designs the game plan to achieve victory.

In basketball, interdependence tends to be reciprocal. The game is free-flowing, and the division of labor is less precise than in other sports. Each player is involved in both offense and defense, handles the ball, and attempts to score. The ball flows back and forth among players. Team members interact in a dynamic flow to achieve victory. Management skills involve the ability to influence this dynamic process, either by substituting players or by working the ball into certain areas. Players must learn to adapt to the flow of the game and to one another as events unfold.

Interdependence among players is a primary factor explaining the difference among the three sports. Baseball is organized around an autonomous individual, football around groups that are sequentially interdependent, and basketball around the free flow of reciprocal players.⁷⁶

IMPACT OF TECHNOLOGY ON JOB DESIGN

So far, this chapter has described models for analyzing how manufacturing, service, and department technologies influence structure and management processes. The relationship between a new technology and the organization seems to follow a pattern, beginning with immediate effects on the content of jobs followed (after a longer period) by impact on design of the organization. The ultimate impact of technology on employees can be partially understood through the concepts of job design and sociotechnical systems.

Job Design

Job design includes the assignment of goals and tasks to be accomplished by employees. Managers may consciously change job design to improve productivity

or worker motivation. However, managers may also unconsciously influence job design through the introduction of new technologies, which can change how jobs are done and the very nature of jobs.⁷⁷ Managers should understand how the introduction of a new technology may affect employees' jobs. The common theme of new technologies in the workplace is that they in some way substitute machinery for human labor in transforming inputs into outputs. Automated teller machines (ATMs) have replaced thousands of human bank tellers, for example. Robots used in flexible manufacturing systems are replacing laborers on the production line.

In addition to actually replacing human workers, technology may have several different effects on the human jobs that remain. Research has indicated that massproduction technologies tend to produce job simplification, which means that the variety and difficulty of tasks performed by a single person are reduced. The consequence is boring, repetitive jobs that generally provide little satisfaction. Sometimes, managers introduce job rotation, which means moving employees from job to job to give them a greater variety of tasks. More advanced technology, on the other hand, tends to cause **job enrichment**, meaning that the job provides greater responsibility, recognition, and opportunities for growth and development. Advanced technologies create a greater need for employee training and education because workers need higher-level skills and greater competence to master their tasks. For example, ATMs took most of the routine tasks (deposits and withdrawals) away from bank tellers and left them with the more complex tasks that require higher-level skills. Studies of flexible manufacturing found that it produces three noticeable results for employees: more opportunities for intellectual mastery and enhanced cognitive skills for workers; more worker responsibility for results; and greater interdependence among workers, enabling more social interaction and the development of teamwork and coordination skills.78 Flexible manufacturing technology may also contribute to job enlargement, which is an expansion of the number of different tasks performed by an employee. Fewer workers are needed with the new technology, and each employee has to be able to perform a greater number and variety of tasks.

With advanced technology, workers have to keep learning new skills because technology changes so rapidly. Advances in *information technology*, to be discussed in detail in the next chapter, are having a significant effect on jobs in the service industry, including doctors' offices and medical clinics, law firms, financial planners, and libraries. Workers may find that their jobs change almost daily because of new software programs, changes in use of the Internet, and other advances in information technology.

Advanced technology does not always have a positive effect on employees, but research findings in general are encouraging, suggesting that jobs for workers are enriched rather than simplified, engaging their higher mental capacities, offering opportunities for learning and growth, and providing greater job satisfaction.

Sociotechnical Systems

The **sociotechnical systems approach** recognizes the interaction of technical and human needs in effective job design, combining the needs of people with the organization's need for technical efficiency. The *socio* portion of the approach refers to the people and groups that work in organizations and how work is organized and coordinated. The *technical* portion refers to the materials, tools, machines, and processes used to transform organizational inputs into outputs.

Exhibit 7.14 illustrates the three primary components of the sociotechnical systems model.⁷⁹ The *social system* includes all human elements—such as individual and

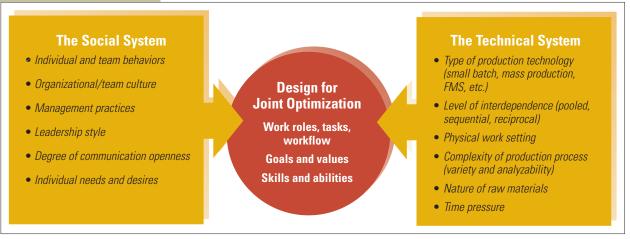
Briefcase

As an organization manager, keep these guidelines in mind:

Be aware that the introduction of a new technology has significant impact on job design. Consider using the sociotechnical systems approach to balance the needs of workers with the requirements of the new technological system.



EXHIBIT 7.14Sociotechnical Systems
Model



Sources: Based on T. Cummings, "Self-Regulating Work Groups: A Socio-Technical Synthesis," *Academy of Management Review* 3 (1978), 625–634; Don Hellriegel, John W. Slocum, and Richard W. Woodman, *Organizational Behavior*, 8th ed. (Cincinnati, Ohio: South-Western, 1998), 492; and Gregory B. Northcraft and Margaret A. Neale, *Organizational Behavior: A Management Challenge*, 2nd ed. (Fort Worth, Tex.: The Dryden Press, 1994), 551.

team behaviors, organizational culture, management practices, and degree of communication openness—that can influence the performance of work. The *technical system* refers to the type of production technology, the level of interdependence, the complexity of tasks, and so forth. The goal of the sociotechnical systems approach is to design the organization for **joint optimization**, which means that an organization functions best when the social and technical systems are designed to fit the needs of one another. Designing the organization to meet human needs while ignoring the technical systems, or changing technology to improve efficiency while ignoring human needs, may inadvertently cause performance problems. The sociotechnical systems approach attempts to find a balance between what workers want and need and the technical requirements of the organization's production system.⁸⁰

One example comes from a museum that installed a closed-circuit television system. Rather than having several guards patrolling the museum and grounds, the television could easily be monitored by a single guard. Although the technology saved money because only one guard was needed per shift, it led to unexpected performance problems. Guards had previously enjoyed the social interaction provided by patrolling; monitoring a closed-circuit television led to alienation and boredom. When a federal agency did an 18-month test of the system, only 5 percent of several thousand experimental covert intrusions were detected by the guard.⁸¹ The system was inadequate because human needs were not taken into account.

Sociotechnical principles evolved from the work of the Tavistock Institute, a research organization in England, during the 1950s and 1960s. Examples of organizational change using sociotechnical systems principles have occurred in numerous organizations, including General Motors, Volvo, the Tennessee Valley Authority (TVA), and Procter & Gamble. Although there have been failures, in many of these applications, the joint optimization of changes in technology and structure to meet the needs of people as well as efficiency improved performance, safety, quality, absenteeism, and

turnover. In some cases, work design was not the most efficient based on technical and scientific principles, but worker involvement and commitment more than made up for the difference. Thus, once again research shows that new technologies need not have a negative impact on workers, because the technology often requires higher-level mental and social skills and can be organized to encourage the involvement and commitment of employees, thereby benefiting both the employee and the organization.

The sociotechnical systems principle that people should be viewed as resources and provided with appropriate skills, meaningful work, and suitable rewards becomes even more important in today's world of growing technological complexity. 84 One study of paper manufacturers found that organizations that put too much faith in machines and technology and pay little attention to the appropriate management of people do not achieve advances in productivity and flexibility. Today's most successful companies strive to find the right mix of machines, computer systems, and people and the most effective way to coordinate them. 85

Although many principles of sociotechnical systems theory are still valid, current scholars and researchers are also arguing for an expansion of the approach to capture the dynamic nature of today's organizations, the chaotic environment, and the shift from routine to nonroutine jobs brought about by advances in technology.⁸⁶

DESIGN ESSENTIALS

- Several important ideas in the technology literature stand out. The first is Woodward's research into manufacturing technology. Woodward went into organizations and collected practical data on technology characteristics, organization structure, and management systems. She found clear relationships between technology and structure in high-performing organizations. Her findings are so clear that managers can analyze their own organizations on the same dimensions of technology and structure. In addition, technology and structure can be co-aligned with organizational strategy to meet changing needs and provide new competitive advantages.
- The second important idea is that service technologies differ in a systematic way from manufacturing technologies. Service technologies are characterized by intangible outcomes and direct client involvement in the production process. Service firms do not have the fixed, machine-based technologies that appear in manufacturing organizations; hence, organization design often differs as well.
- A third significant idea is Perrow's framework applied to department technologies. Understanding the variety and analyzability of a technology tells one about the management style, structure, and process that should characterize that department. Routine technologies are characterized by mechanistic structure and nonroutine technologies by organic structure. Applying the wrong management system to a department will result in dissatisfaction and reduced efficiency.
- The fourth important idea is interdependence among departments. The extent to which departments depend on each other for materials, information, or other resources determines the amount of coordination required between them. As interdependence increases, demands on the organization for coordination increase. Organization design must allow for the correct amount of communication and coordination to handle interdependence across departments.

- The fifth idea is that new flexible manufacturing systems and lean manufacturing are being adopted by organizations and having impact on organization design. For the most part, the impact is positive, with shifts toward more organic structures both on the shop floor and in the management hierarchy. These technologies replace routine jobs, give employees more autonomy, produce more challenging jobs, encourage teamwork, and let the organization be more flexible and responsive. The new technologies are enriching jobs to the point where organizations are happier places to work.
- Several principles of sociotechnical systems theory, which attempts to design the technical and human aspects of an organization to fit one another, are increasingly important as advances in technology alter the nature of jobs and social interaction in today's companies.

Key Concepts

analyzability
continuous-process production
core technology
craft technologies
engineering technologies
flexible manufacturing systems
intensive technologies
interdependence
job design
job enlargement
job enrichment

job rotation job simplification joint optimization large-batch production lean manufacturing long-linked technology mass customization mediating technology non-core technology nonroutine technologies pooled interdependence reciprocal interdependence routine technologies sequential interdependence service technology small-batch production sociotechnical systems approach technical complexity technology variety

Discussion Questions

- 1. Where would your university or college department be located on Perrow's technology framework? Would a department devoted exclusively to teaching be in a different quadrant from a department devoted exclusively to research?
- 2. Explain Thompson's levels of interdependence. What is the level of interdependence among departments (finance, marketing) in a business school? What kinds of coordination mechanisms might be used to handle that interdependence?
- 3. What relationships did Woodward discover between supervisor span of control and technological complexity?
- 4. How do flexible manufacturing and lean manufacturing differ from other manufacturing technologies? Why are these new approaches needed in today's environment?
- 5. What is a service technology? Are different types of service technologies likely to be associated with different structures? Explain.
- 6. Mass customization of products has become a common approach in manufacturing organizations. Discuss

- ways in which mass customization can be applied to service firms as well.
- 7. In what primary ways does the design of service firms typically differ from that of product firms? Why?
- 8. A top executive claimed that top-level management is a craft technology because the work contains intangibles, such as handling personnel, interpreting the environment, and coping with unusual situations that have to be learned through experience. If this is true, is it appropriate to teach management in a business school? Does teaching management from a textbook assume that the manager's job is analyzable, and hence that formal training rather than experience is most important?
- 9. To what extent does the development of new technologies simplify and routinize the jobs of employees? Can you give an example? How can new technology lead to job enlargement? Discuss.
- 10. Describe the sociotechnical systems model. Why might some managers oppose a sociotechnical systems approach?

Chapter 7 Workbook: Bistro Technology*

You will be analyzing the technology used in three different restaurants—McDonald's, Subway, and a typical family restaurant. Your instructor will tell you whether to do this assignment as individuals or in a group.

You must visit all three restaurants and infer how the work is done, according to the following criteria. You are not allowed to interview any employees, but instead you will be an observer. Take lots of notes when you are there.

	McDonald's	Subway	Family Restaurant
Organization goals: Speed, service, atmosphere, etc.			
Authority structure			
Type of technology using Woodward's model			
Organization structure: Mechanistic or organic?			
Team versus individual: Do people work together or alone?			
Interdependence: How do employees depend on each other?			
Tasks: Routine versus nonroutine			
Specialization of tasks by employees			
Standardization: How varied are tasks and products?			
Expertise required: Technical versus social			
Decision making: Centralized versus decentralized			

Questions

- 1. Is the technology used the best one for each restaurant, considering its goals and environment?
- 2. From the preceding data, determine if the structure and other characteristics fit the technology.
- 3. If you were part of a consulting team assigned to improve the operations of each organization, what recommendations would you make?
- *Adapted loosely by Dorothy Marcic from "Hamburger Technology," in Douglas T. Hall et al., *Experiences in Management and Organizational Behavior*, 2nd ed. (New York: Wiley, 1982), 244–247, as well as "Behavior, Technology, and Work Design" in A. B. Shani and James B. Lau, *Behavior in Organizations* (Chicago: Irwin, 1996), M16–23 to M16–26.

Case for Analysis: Acetate Department*

The acetate department's product consisted of about twenty different kinds of viscous liquid acetate used by another department to manufacture transparent film to be left clear or coated with photographic emulsion or iron oxide.

Before the change: The department was located in an old four-story building as in Exhibit 7.15. The workflow was as follows:

- 1. Twenty kinds of powder arrived daily in 50-pound paper bags. In addition, storage tanks of liquid would be filled weekly from tank trucks.
- 2. Two or three acetate helpers would jointly unload pallets of bags into the storage area using a lift truck.
- 3. Several times during a shift, the helpers would bring the bagged material up in the elevator to the third floor, where it would be temporarily stored along the walls.
- 4. Mixing batches was under the direction of the group leader and was rather like baking a cake. Following a prescribed formula, the group leader, mixers, and helpers operated valves to feed in the proper solvent and manually dump in the proper weight and mixture of solid material. The glob would be mixed by giant eggbeaters and heated according to the recipe.
- 5. When the batch was completed, it was pumped to a finished-product storage tank.
- After completing each batch, the crew would thoroughly clean the work area of dust and empty bags,

because cleanliness was extremely important to the finished product.

To accomplish this work, the department was structured as in Exhibit 7.16.

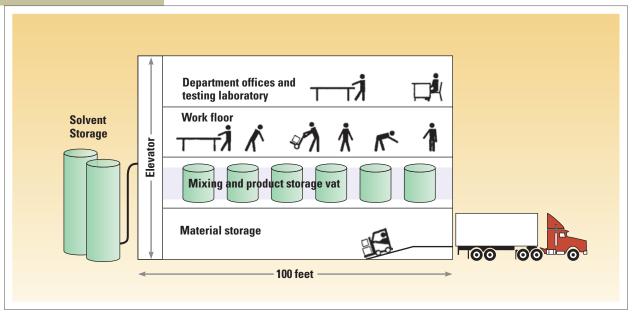
The helpers were usually young men 18 to 25 years of age; the mixers, 25 to 40; and the group leaders and foremen, 40 to 60. Foremen were on salary; group leaders, mixers, and helpers were on hourly pay.

To produce 20 million pounds of product per year, the department operated 24 hours a day, 7 days a week. Four crews rotated shifts: for example, shift foreman A and his two group leaders and crews would work two weeks on the day shift (8:00 A.M. to 4:00 P.M.), then two weeks on the evening shift (4:00 P.M. to midnight), then two weeks on the night shift (midnight to 8:00 A.M.). There were two days off between shift changes.

During a typical shift, a group leader and his crew would complete two or three batches. A batch would frequently be started on one shift and completed by the next shift crew. There was slightly less work on the evening and night shifts because no deliveries were made, but these crews engaged in a little more cleaning. The shift foreman would give instructions to the two group leaders at the beginning of each shift as to the status of batches in process, batches to be mixed, what deliveries were expected, and what cleaning was to be done. Periodically throughout

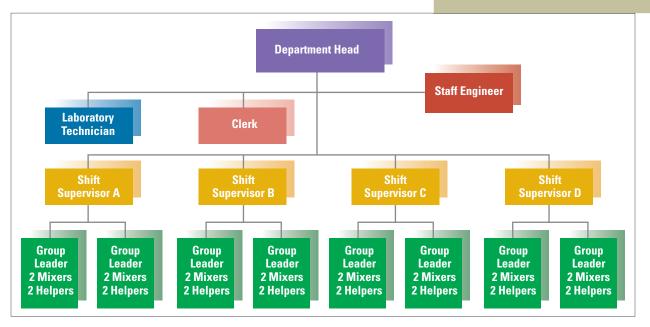
EXHIBIT 7.15

Elevation View of Acetate Department before Change



Source: Hampton, Organizational Behavior Practice Management, 4th Edition, Copyright 1982. pp. 751–755. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

EXHIBIT 7.16Organizational Chart of Acetate Department before Change



the shift, the foreman would collect samples in small bottles, which he would leave at the laboratory technicians' desk for testing.

The management and office staff (department head, staff engineer, lab technician, and department clerk) worked only on the day shift, although if an emergency arose on the other shifts, the foreman might call.

All in all, the department was a pleasant place in which to work. The work floor was a little warm, but well lit, quiet, and clean. Substantial banter and horseplay occurred when the crew wasn't actually loading batches, particularly on the evening and night shifts. The men had a dartboard in the work area and competition was fierce and loud. Frequently a crew would go bowling right after work, even at 1:00 A.M., because the community's alleys were open 24 hours a day. Department turnover and absenteeism were low. Most employees spent their entire career with the company, many in one department. The corporation was large, paternalistic, and well paying and offered attractive fringe benefits including large, virtually automatic bonuses for all. Then came the change.

The new system: To improve productivity, the acetate department was completely redesigned; the technology changed from batches to continuous processing. The basic building was retained but substantially modified as in Exhibit 7.17. The modified workflow is as follows:

1. Most solid raw materials are delivered via trucks in large aluminum bins holding 500 pounds.

- 2. One handler (formerly helper) is on duty at all times on the first floor to receive raw materials and to dump the bins into the semiautomatic screw feeder.
- 3. The head operator (former group leader) directs the mixing operations from his control panel on the fourth floor located along one wall across from the department offices. The mixing is virtually an automatic operation once the solid material has been sent up the screw feed; a tape program opens and closes the necessary valves to add solvent, heat, mix, and so on. Sitting at a table before his panel, the head operator monitors the process to see that everything is operating within specified temperatures and pressures.

This technical change allowed the department to greatly reduce its workforce. The new structure is illustrated in Exhibit 7.18. One new position was created, that of a pump operator who is located in a small, separate shack about 300 feet from the main building. He operates the pumps and valves that move the finished product among various storage tanks.

Under the new system, production capacity was increased to 25 million pounds per year. All remaining employees received a 15 percent increase in pay. Former personnel not retained in the acetate department were transferred to other departments in the company. No one was dismissed.

Unfortunately, actual output has lagged well below capacity in the several months since the construction work

EXHIBIT 7.17Elevation View of Acetate Department after Change

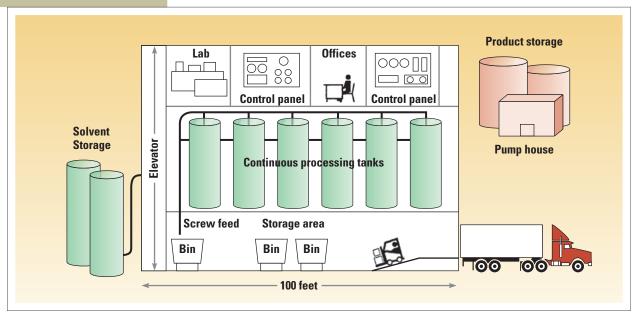
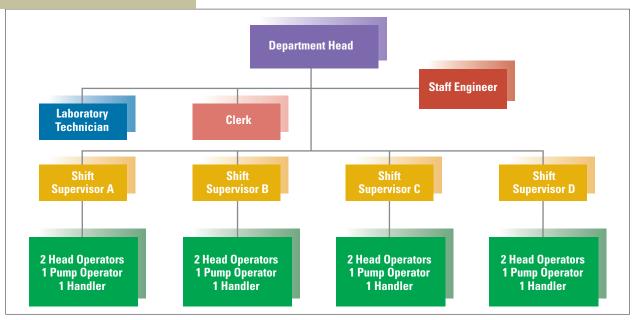


EXHIBIT 7.18Organizational Chart of Acetate
Department after Change



and technical training were completed. Actual production is virtually identical with that under the old technology. Absenteeism has increased markedly, and several judgmental errors by operators have resulted in substantial losses.

*From "Redesigning the Acetate Department," by David L. Hampton, Charles E. Summer, and Ross A. Webber, Organizational Behavior and the Practice of Management (Glenview, Ill.: Scott Foresman and Co., 1982), 751–755. Used with permission.

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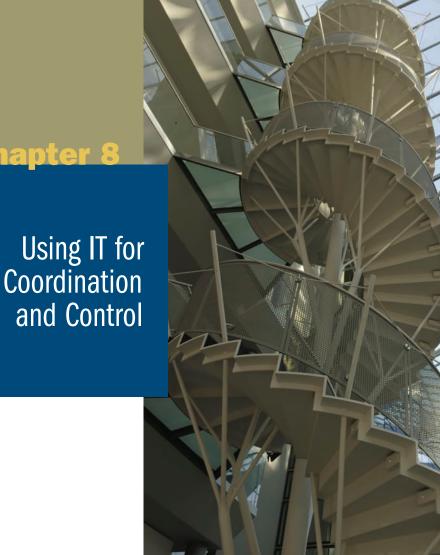
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Information Technology Evolution

Information for Decision Making and Control

Organizational Decision-Making Systems · Feedback Control Model · Management Control Systems

The Level and Focus of Control Systems

Organization Level: The Balanced Scorecard · Department Level: Behavior versus Outcome Control

Adding Strategic Value: Strengthening Internal Coordination

Intranets \cdot Web 2.0 Tools \cdot Knowledge Management \cdot Enterprise Resource Planning

Adding Strategic Value: Strengthening External Coordination

The Integrated Enterprise · Customer Relationships

E-Business Organization Design

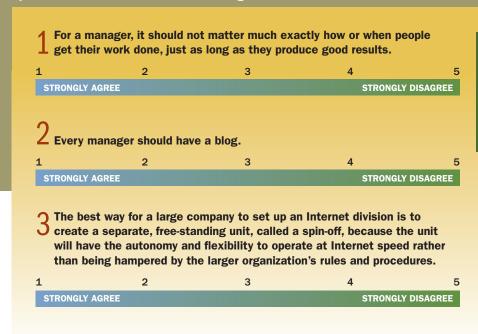
In-House Division • Spin-Off • Strategic Partnership

IT Impact on Organization Design

Design Essentials

Chapter 8

Before reading this chapter, please circle your opinion below for each of the following statements:



Wood Flooring International (WFI), based in Delran, New Jersey, uses a sophisticated Internet-based system to manage every link of its supply chain, from vendors all the way through to its customers' customers. The small company buys exotic wood overseas, mostly from small, family-owned mills in Latin America, turns the wood into floorboards, and sells the flooring to distributors. Whenever WFI takes an order, the vendor can see an update instantly on the website and adjust its production levels accordingly. The mills can also check real-time reports of their sales histories, check whether their shipments have arrived, and ensure that WFI's accounting squares with their own. Olive Garden, a restaurant chain, uses computerized systems to measure and control everything from bathroom cleanliness to food preparation time. And Memorial Health Services in Long Beach, California, uses medical identification cards (available over the Internet) that can be swiped into a computer to speed registration and give emergency room personnel immediate access to vital patient information, which means better care and fewer errors. On the property of the property of the patient information, which means better care and fewer errors.

As these examples illustrate, many organizations have been transformed by information technology (IT). Effectively using IT in knowledge-based firms such as consulting firm KPMG, Amerex Energy, a brokerage firm specializing in energy resources, and Business Wire, which provides business and corporate information, has long been fundamental. Today, IT has become a crucial factor helping companies in all industries maintain a competitive edge in the face of growing global competition and rising customer demands for speed, convenience, quality, and value. The primary benefits of IT for organizations include its potential for improving decision making as well as for enhancing coordination and control of the organization internally and with external partners and customers. Some organization theorists argue that IT is gradually replacing the traditional hierarchy in coordinating and controlling organizational activities.³

Even fast-food franchisees are finding highly creative uses for IT. If you've ever ordered a Big Mac at the McDonald's off Interstate 55 near Cape Girardeau, Missouri, you probably had no idea that the order taker was located in a call center

Managing

by Design

Questions

more than 900 miles away, in Colorado Springs, Colorado. A customer's order traverses two states and bounces back to Cape Girardeau over high-speed data lines before the customer even pulls up to the pickup window. In a business where time is money, shaving even 5 seconds off order processing time makes a difference. The call center approach cuts order time in most restaurants that use it by 30 seconds to 1 minute, as well as improves the accuracy of orders.⁴

Purpose of This Chapter

Managers spend at least 80 percent of their time actively exchanging information. They need this information to hold the organization together. For example, the vertical and horizontal information linkages described in Chapter 3 are designed to provide managers with relevant information for decision making, coordination, evaluation, and control. It isn't just facilities, equipment, or even products and services that define organization success, but rather the information managers have and how they use it. Highly successful organizations today are typically those that most effectively apply information technology.

This chapter examines the evolution of IT. The chapter begins by looking at IT systems applied to organizational operations and then examines how IT is used for decision making and control of the organization. The next sections consider how IT can add strategic value through the use of internal coordination applications such as intranets, enterprise resource planning, and knowledge management systems, as well as applications for external coordination and collaboration, such as extranets, customer-relationship systems, e-business, and the integrated enterprise. The final section of the chapter presents an overview of how IT affects organization design and interorganizational relationships.

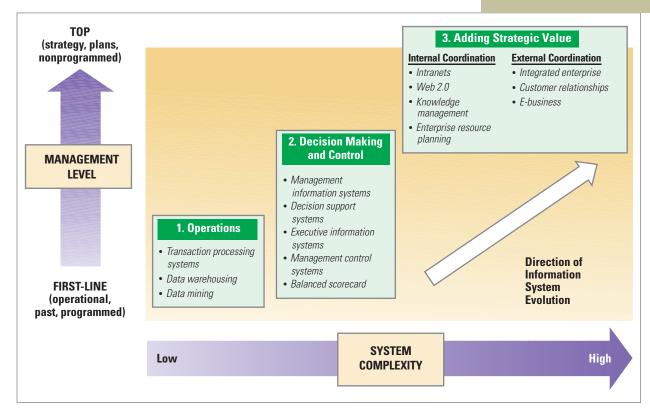
INFORMATION TECHNOLOGY EVOLUTION

Exhibit 8.1 illustrates the evolution of IT. First-line management is typically concerned with well-defined problems about operational issues and past events. Top management, by contrast, deals mostly with uncertain, ambiguous issues, such as strategy and planning. As computer-based IT systems have grown increasingly sophisticated, applications have grown to support effective management coordination, control, and decision making about complex and uncertain problems.

Initially, IT systems in organizations were applied to operations. These initial applications were based on the notion of machine-room efficiency—that is, current operations could be performed more efficiently with the use of computer technology. The goal was to reduce labor costs by having computers take over some tasks. These systems became known as **transaction processing systems** (TPS), which automate the organization's routine, day-to-day business transactions. A TPS collects data from transactions such as sales, purchases from suppliers, and inventory changes, and stores them in a database. For example, at Enterprise Rent-a-Car, a computerized system keeps track of the 1.4 million transactions the company logs every hour. The system can provide front-line employees with up-to-the-minute information on car availability and other data, enabling them to provide exceptional customer service.⁵

In recent years, the use of data warehousing and business intelligence software has expanded the usefulness of these accumulated data. **Data warehousing** is the use

EXHIBIT 8.1
Evolution of
Organizational
Applications of IT



of huge databases that combine all of a company's data and allow users to access the data directly, create reports, and obtain responses to what-if questions. Building a database at a large corporation is a huge undertaking that includes defining hundreds of gigabytes of data from many existing systems, providing a means of continually updating the data, making it all compatible, and linking it to software that makes it possible for users to search and analyze the data and produce helpful reports. Software for business intelligence helps users make sense of all these data. **Business intelligence** refers to the high-tech analysis of a company's data in order to make better strategic decisions. Sometimes referred to as *data mining*, business intelligence means searching out and analyzing data from multiple sources across the enterprise, and sometimes from outside sources as well, to identify patterns and relationships that might be significant.

By collecting the right data and using business intelligence software to analyze it and spot trends and patterns, managers can make smarter decisions. Thus, IT has evolved to more complex systems for managerial decision making and control of the organization, the second stage illustrated in Exhibit 8.1. Further advancements have led to the use of IT to add strategic value by providing tight coordination both internally and with external customers, suppliers, and partners, the highest level of application shown in Exhibit 8.1. The remainder of this chapter will focus on these two higher-level stages in the evolution of IT.

INFORMATION FOR DECISION MAKING AND CONTROL

Through the application of more sophisticated computer-based systems, managers have tools to improve the performance of departments and the organization as a whole. These applications use information stored in corporate databases to help managers control the organization and make important decisions. Exhibit 8.2 illustrates the various elements of information systems used for decision making and control. Management information systems—including information reporting systems, decision support systems, and executive information systems—facilitate rapid and effective decision making. Elements for control include various management control systems, including executive dashboards, and a procedure known as the balanced scorecard. In an organization, these systems are interconnected, as illustrated by the dashed lines in Exhibit 8.2. The systems for decision making and control often share the same basic data, but the data and reports are designed and used for a primary purpose of decision making versus control.

Briefcase

As an organization manager, keep these guidelines in mind:

Improve the performance of the organization by using IT for better decision making. Implement management information systems, decision support systems, and information reporting systems to provide lower- and middlelevel managers with reports and information that support day-to-day decision making. Use executive information systems to facilitate better decision making at the highest levels of the organization.

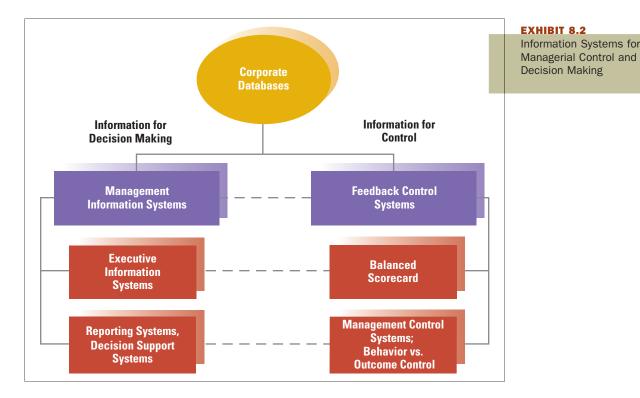
Organizational Decision-Making Systems

A management information system (MIS) is a computer-based system that provides information and support for managerial decision making. The MIS is supported by the organization's transaction processing systems and by organizational and external databases. The information reporting system, the most common form of MIS, provides mid-level managers with reports that summarize data and support day-to-day decision making. For example, when managers need to make decisions about production scheduling, they can review data on the anticipated number of orders within the next month, inventory levels, and availability of human resources.

At Harrah's casinos, an information reporting system keeps track of detailed information on each player and uses quantitative models to predict each customer's potential long-term value. The information helps managers create customized marketing plans, as well as provide customers just the right combination of services and rewards to keep them coming back rather than moving on to another casino. "Almost everything we do in marketing and decision making is influenced by technology," says Harrah's CEO Gary Loveman.⁷

An executive information system (EIS) is a higher-level application that facilitates decision making at the highest levels of management. These systems are typically based on software that can convert large amounts of complex data into pertinent information and provide that information to top managers in a timely fashion. For example, Motorola's Semiconductor Products Sector, based in Austin, Texas, had massive amounts of stored data, but managers couldn't find what they needed. The company implemented an EIS using online analytical processing software so that more than a thousand senior executives, as well as managers and project analysts in finance, marketing, sales, and accounting departments around the world, could quickly and easily get information about customer buying trends, manufacturing, and so forth, right from their desktop computers, without having to learn complex and arcane search commands.⁸

A **decision support system** (DSS) provides specific benefits to managers at all levels of the organization. These interactive, computer-based systems rely on decision models



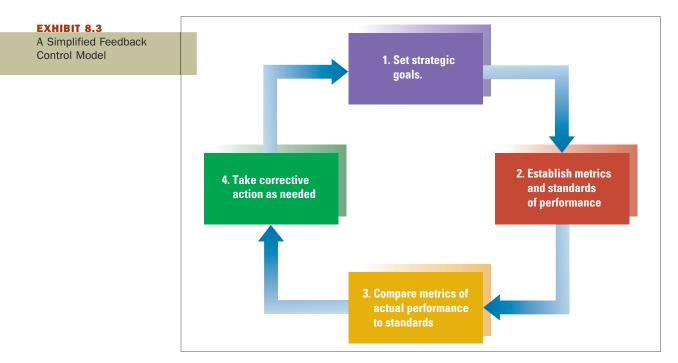
and integrated databases. Using decision-support software, users can pose a series of what-if questions to test possible alternatives. Based on assumptions used in the software or specified by the user, managers can explore various alternatives and receive information to help them choose the alternative that will likely have the best outcome.

Wal-Mart uses an EIS and a DSS that rely on a massive database to make decisions about what to stock, how to price and promote it, and when to reorder. Information about what products are selling and what items are often purchased together is obtained at checkout scanners. Wireless handheld units operated by clerks and department managers help keep close tabs on inventory levels. All these data are sent to Wal-Mart's data warehouse in Bentonville, Arkansas, which has more than 460 terabytes of data. Wal-Mart uses its mountain of data to push for greater efficiency at all levels, as well as to forecast trends and do more business. For example, Wal-Mart managers in Florida know to have plenty of beer and Pop-Tarts stocked in the days preceding a hurricane. Managers might expect beer to sell out quickly, but why Pop-Tarts? By analyzing data with a decision support system using predictive technology, Wal-Mart learned that sales of strawberry Pop-Tarts zoom seven times their normal sales rate in the days ahead of a hurricane.

Feedback Control Model

Another primary use of information in organizations is for control. Effective control systems involve the use of feedback to determine whether organizational performance meets established standards to help the organization attain its goals. Managers set up systems for organizational control that consist of the four key steps in the **feedback control model** illustrated in Exhibit 8.3.





The cycle of control includes setting strategic goals for departments or the organization as a whole, establishing metrics and standards of performance, comparing metrics of actual performance to standards, and correcting or changing activities as needed. Feedback control helps managers make needed adjustments in work activities, standards of performance, or goals to help the organization be successful. Complete the questionnaire in the "How Do You Fit the Design?" box to see how effective you are at setting goals.

Managers carefully assess what they will measure and how they define it. British Airways, for example, measures its performance in key areas of customer service because its strategy is to compete on superior service in an industry dominated by companies that compete on price. Thus, British Airways measures and controls areas of service that have the greatest impact on a customer's experience, including in-flight service, meal rating, baggage claim, and executive club membership. ¹⁰ For pharmaceutical companies such as Wyeth, getting more productivity from research and development is a top priority, so Wyeth sets firm targets and measures how many compounds move forward at each stage of the drug development process. Most companies, like Wyeth and British Airways, use a number of different operational metrics to track performance and control the organization, rather than relying on financial measures alone. Managers track metrics in such areas as customer satisfaction, product quality, employee commitment and turnover, operational performance, innovation, and corporate social responsibility, for example, as well as financial results.

Management Control Systems

Management control systems are broadly defined as the formal routines, reports, and procedures that use information to maintain or alter patterns in organizational

activities.¹¹ These feedback control systems include the formalized information-based activities for planning, budgeting, performance evaluation, resource allocation, and employee rewards. Targets are set in advance, outcomes compared to targets, and variances reported to managers for corrective action. Exhibit 8.4 lists four control system elements that are often considered the core of management control systems: the budget and financial reports; periodic nonfinancial statistical reports; reward systems; and quality-control systems.¹²

The *budget* is typically used to set targets for the organization's expenditures for the year and then report actual costs on a monthly or quarterly basis. As a means of control, budgets report actual as well as planned expenditures for cash, assets, raw materials, salaries, and other resources so that managers can take action to correct variances. Sometimes, the variance between budgeted and actual amounts for each

How Do You Fit the Design? Is Goal-Setting Your Style?

How do your work habits fit with making plans and setting goals? Answer the following questions as they apply to your work or study behavior. Please answer whether each item is Mostly True or Mostly False for you.

		Mostly True	Mostly False
1.	I set clear, specific goals in more than one area of my work and life.		
2.	I have a definite outcome in life I want to achieve.		
3.	I prefer general to specific goals.		
4.	I work better without specific deadlines.		
5.	I set aside time each day or week to plan my work.		
6.	I am clear about the measures that indicate when I have achieved a goal.		
7.	I work better when I set more challenging goals for myself.		
8.	I help other people clarify and define their goals.		
9.	Trying for specific goals makes life more fun than being without goals.		

Scoring: Give yourself one point for each item you marked as Mostly True, except items 3 and 4. For items 3 and 4 give yourself one point for each one you marked Mostly False. If you scored 4 or less, goal-setting behavior may not be natural for you. A score of 6 or above suggests a positive level of goal-setting behavior and better preparation for a managerial role in an organization.

Interpretation: An important part of organization life is setting goals, measuring results, and reviewing progress for people and departments. Most organizations have goal-setting and review systems. The preceding questions indicate the extent to which you have already adopted the disciplined use of goals in your life and work. Research indicates that setting clear, specific, and challenging goals in key areas will produce better performance. Not everyone thrives under a disciplined goal-setting system, but as an organization manager, setting goals, assessing results, and holding people accountable will enhance your impact. Goal-setting can be learned.



EXHIBIT 8.4
Management Control
Systems

Subsystem	Content and Frequency
Budget, financial reports Statistical reports	Financial, resource expenditures, profit and loss; monthly Nonfinancial outputs; weekly or monthly, often computer-based
Reward systems	Evaluation of managers based on department goals and performance, set rewards; yearly
Quality control systems	Participation, benchmarking guidelines, Six Sigma goals; continuous

Source: Based on Richard L. Daft and Norman B. Macintosh, "The Nature and Use of Formal Control Systems for Management Control and Strategy Implementation," *Journal of Management* 10 (1984), 43–66.

line item is listed as a part of the budget. Managers also rely on a variety of other financial reports. The *balance sheet* shows a firm's financial position with respect to assets and liabilities at a specific point in time. An *income statement*, sometimes called a *profit and loss statement* ($P \not\subset L$), summarizes the company's financial performance for a given time interval, such as for the week, month, or year. This statement shows revenues coming into the organization from all sources and subtracts all expenses, such as cost of goods sold, interest, taxes, and depreciation. The *bottom line* indicates the net income—profit or loss—for the given time period.

Managers use periodic statistical reports to evaluate and monitor nonfinancial performance, such as customer satisfaction, employee performance, or rate of staff turnover. For e-commerce organizations, important measurements of nonfinancial performance include metrics such as *stickiness* (how much attention a site gets over time), the *conversion rate*, the ratio of buyers to site visitors, and *site performance data*, such as how long it takes to load a page or how long it takes to place an order.¹³ E-commerce managers regularly review reports on conversion rates, customer drop-off, and other metrics to identify problems and improve their business. For all organizations, nonfinancial reports typically are computer based and may be available daily, weekly, or monthly. The online auction company eBay provides a good illustration of using both financial and nonfinancial statistical reports for feedback control.



When Meg Whitman was CEO of eBay, her guiding mantra was "If you can't measure it, you can't control it." Whitman has moved on to other pursuits, but eBay is still a com-

eBav

pany that is obsessed with performance measurement. Top executives monitor performance metrics such as number of site visitors, percentage of new users, and time spent on the site, as well as profit and loss statements and the ratio of eBay's revenues to the value of goods traded. Managers throughout the company also monitor performance regularly. Category managers, for example, have clear standards of performance for their auction categories (such as sports memorabilia, jewelry and watches, health and beauty, etc.). They continuously measure, tweak, and promote their categories to meet or outperform their targets.

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Having a firm grip on performance measurement helps managers know where to spend money, where to assign more personnel, and which projects to promote or abandon. The more statistics that are available, the more early warnings managers have about problems and opportunities. But performance isn't just about numbers at eBay. Measuring customer (user) satisfaction requires a mix of methods, such as surveys, monitoring eBay discussion boards, and personal contact with customers at regular live conferences.

By defining standards and effectively using financial and statistical reports, eBay managers can identify trouble spots and move quickly to take corrective action when and where it is needed. 14

Managers at companies such as eBay, Oracle, Verizon, General Electric, and Microsoft often track both nonfinancial and financial data by means of an executive dashboard. Forrester Research Inc. estimated that 40 percent of the 2,000 largest companies were using dashboard technology by 2006, and that number has continued to grow.¹⁵ An **executive dashboard**, sometimes called a *business performance dashboard*, is a software program that presents key business information in graphical, easy-to-interpret form and alerts managers to any deviations or unusual patterns in the data. Dashboards pull data from a variety of organizational systems and databases; gauge the data against key performance metrics; and pull out the right nuggets of information to deliver to managers' laptops or PCs for analysis and action.¹⁶ Exhibit 8.5 shows an example of an executive dashboard. Managers can see at a glance key control indicators such as sales in relation to targets, fill rates on orders, number of products on back-order, production status, or percentage of customer service calls resolved, and then drill down for additional details.¹⁷

Dashboard systems coordinate, organize, and display the metrics that managers consider most important to monitor on a regular basis, with software automatically updating the figures. Managers at Erickson Retirement Communities use a dashboard to monitor and control costs in areas such as salaries and resident meals. At Verizon Communications, a dashboard system keeps track of more than 300 different measures of business performance in three broad categories: market pulse (including daily sales numbers and market share); customer service (for example, call center wait times and problems resolved on the first call); and cost drivers (such as number of repair trucks in the field). Managers in the various units choose which metrics their dashboard will display, based on what relates most to their unit.¹⁸

Other elements of the overall control system listed in Exhibit 8.4 are reward systems and quality control systems. Reward systems offer incentives for managers and employees to improve performance and meet departmental goals. Managers and employees evaluate how well previous goals were met, set new goals, and establish rewards for meeting the new targets. Rewards are often tied to the annual performance appraisal process, during which managers assess employee performance and provide feedback to help people improve performance and obtain rewards.

Quality-control systems involve training employees in quality-control methods, setting targets for employee participation, establishing benchmarking guidelines, and assigning and measuring *Six Sigma* goals. **Benchmarking** means the process of persistently measuring products, services, and practices against tough competitors or other organizations recognized as industry leaders. ¹⁹ **Six Sigma** specifically means a highly ambitious quality standard that specifies a goal of no more than 3.4 defects per million parts. However, it has deviated from that precise meaning to refer to a whole set of control procedures that emphasize the relentless pursuit of higher

Briefcase

As an organization manager, keep these guidelines in mind:

Devise control systems that consist of the four essential steps of the feedback control model: set goals, establish standards of performance, measure actual performance, and correct or change activities as needed. Use executive dashboards so managers can keep tabs on important performance metrics.

EXHIBIT 8.5An Executive Dashboard



Source: IBM Cognos BI and Performance Management Software; http://www.cognos.com/products/now/images/master_dashboard.jpg (accessed on November 12, 2008).

quality and lower costs.²⁰ The discipline is based on a methodology referred to as DMAIC (Define, Measure, Analyze, Improve, and Control, pronounced de-MAY-ick), which provides a structured way for organizations to approach and solve problems.²¹ Companies such as General Electric, ITT Industries, Dow Chemical, ABB Ltd., and 3M have saved millions of dollars by rooting out inefficiencies and waste through Six Sigma processes.²²

One finding from research into management control systems is that each of the four control systems listed in Exhibit 8.4 focuses on a different aspect of the production process. These four systems thus form an overall management control system that provides middle managers with control information about resource inputs, process efficiency, and outputs.²³ Moreover, the specific use of control systems depends on the strategic targets set by top management.

The budget is used primarily to allocate resource inputs. Managers use the budget for planning the future and reducing uncertainty about the availability of human and material resources needed to perform department tasks. Computer-based statistical reports are used to control outputs. These reports contain data about output volume and quality and other indicators that provide feedback to middle management about departmental results. The reward system and quality control system are directed at the production process. Quality control systems specify standards for employee participation, teamwork, and problem solving. Reward systems provide incentives to meet goals and can help guide and correct employee behavior. Managers may also use direct supervision to keep departmental work activities within desired limits.

THE LEVEL AND FOCUS OF CONTROL SYSTEMS

Managers consider both control of the overall organization and control of departments, teams, and individuals. Some control strategies apply to the top levels of an organization, where the concern is for the entire organization or major divisions. This chapter's Book Mark outlines five key principles top executives at winning organizations apply for effective performance management and control. Control is also an issue at the lower, operational level, where department managers and supervisors focus on the performance of teams and individual employees.

Organization Level: The Balanced Scorecard

As discussed earlier, most companies use a combination of metrics for measuring organizational performance and effectively controlling the organization. A recent control system innovation, introduced in Chapter 2, is to integrate internal financial measurements and statistical reports with a concern for markets and customers as well as employees. The **balanced scorecard (BSC)** is a comprehensive management control system that balances traditional financial measures with operational measures relating to a company's critical success factors.²⁴ A balanced scorecard contains four major perspectives, as illustrated in Exhibit 8.6: financial performance, customer service, internal business processes, and the organization's capacity for learning and growth.²⁵ Within these four areas, managers identify key performance indicators the organization will track. The *financial perspective* reflects a concern that the organization's activities contribute to improving short- and long-term financial

Briefcase

As an organization manager, keep these guidelines in mind:

Use a balanced scorecard to integrate various control dimensions and get a more complete picture of organizational performance. Select indicators in the areas of financial performance, customer service, internal processes, and learning and growth, and consider a strategy map to visualize how outcomes are linked.



BookMark 8.0 (HAVE YOU READ THIS BOOK?)

Five Key Principles of Corporate Performance ManagementBy Bob Paladino



In his book Five Key Principles of Corporate Performance Management, Bob Paladino provides practical advice and a valuable framework for managers seeking to achieve optimal organization control over performance. Based on his own real-world experiences in business management, as well as research into the best practices of award winning companies, Paladino describes a list of performance management principles that make up a "winning company DNA."

WHAT THE WINNERS DO

What guides outsized performance at companies that win awards such as the Deming Quality Award, U.S. President's National Malcolm Baldrige Award, and Kaplan and Norton's Global Balanced Scorecard Hall of Fame Award? Based on his research, Paladino says high-performing enterprises practice these five principles:

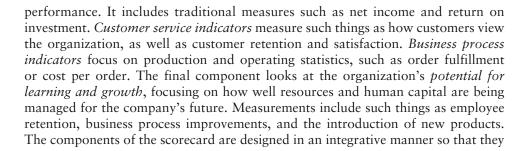
- Establish and deploy a CPM Office and officer. Put a sharp
 focus on performance by appointing a high-level CPM
 officer who reports directly to the CEO. The CPM officer
 should have a small senior-level team experienced and
 skilled in change programs, collaborative relationships,
 and industry knowledge. Open-mindedness and the ability to learn and adapt are also key qualifications for CPM
 officers and team members.
- Refresh and communicate strategy. This includes practices such as strengthening the strategic planning process to understand changing market conditions, developing a comprehensive strategic plan, and creating strategy maps. Equally important is to implement a comprehensive communications plan to make sure everyone in the organization understands the strategy and goals.
- Cascade and manage strategy. This is where strategy is translated into specific balanced scorecard (BSC) performance targets and measures, with one or two key metrics

- defined for each strategy map objective and the goals and metrics at various levels aligned. Managers define personal measures and performance incentives for teams and individuals that align with higher-level BSC metrics.
- Improve performance. This principle means managers initiate and prioritize improvement projects, such as developing and applying new processes to understand changing customer needs, gathering customer and competitor intelligence, leveraging process improvement methods, using benchmarking, and creating a performance improvement culture.
- Manage and leverage knowledge. The fifth principle involves developing processes and technology for knowledge management, such as using systems to capture performance best practices, implementing an employee skills inventory that can optimize human capital, using knowledge management systems to communicate best practice innovations, and maintaining a virtual network of experts to optimize knowledge resources.

A FRESH APPROACH

Paladino's book offers a fresh approach for top executives to integrate multiple methods of performance management and control in order to optimize business results. Each principle is explored and explained in-depth, along with a case study of how it is put into practice at an award winning organization. Paladino also provides ample exhibits to illustrate the use of process maps, balanced scorecards, strategy maps, comparative tables, and other tools. In a final chapter, he offers a self-diagnostic approach, along with additional research resources on various performance management methods.

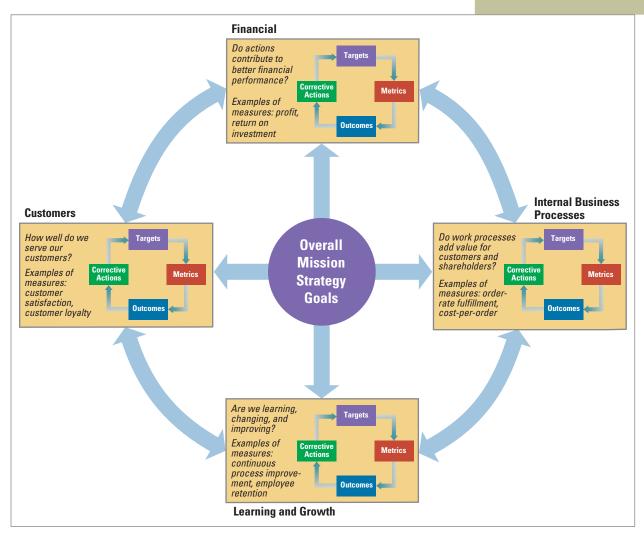
Five Key Principles of Corporate Performance Management, by Bob Paladino, is published by John Wiley & Sons Inc.



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EXHIBIT 8.6

Major Perspectives of the Balanced Scorecard



Source: Based on Robert S. Kaplan and David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," *Harvard Business Review* (January–February 1996), 75–85; Chee W. Chow, Kamal M. Haddad, and James E. Williamson, "Applying the Balanced Scorecard to Small Companies," *Management Accounting* 79, no. 2 (August 1997), 21–27; and Cathy Lazere, "All Together Now," *CFO* (February 1998), 28–36.

reinforce one another and link short-term actions with long-term strategic goals, as illustrated in Exhibit 8.6. Managers can use the scorecard to set goals, allocate resources, plan budgets, and determine rewards.

Executive information systems and dashboards facilitate use of the balanced scorecard by enabling top managers to easily track metrics in multiple areas, rapidly analyze the data, and convert huge amounts of data into clear information reports. The scorecard has become the core management control system for many organizations, including Hilton Hotels, Allstate, British Airways, and Cigna Insurance. British Airways clearly ties its use of the balanced scorecard to the feedback control model shown earlier in Exhibit 8.3. Scorecards serve as the agenda for monthly management meetings, where managers evaluate performance, discuss what corrective actions need to be taken, and set new targets for the various BSC categories.²⁶

In recent years, the balanced scorecard has evolved into a system that helps managers see how organizational performance results from cause-effect relationships among these four mutually supportive areas. Overall effectiveness is a result of how well these four elements are aligned, so that individuals, teams, and departments are working in concert to attain specific goals that cause high organizational performance.²⁷

The cause-effect control technique is the strategy map. A **strategy map** provides a visual representation of the key drivers of an organization's success and shows how specific outcomes in each area are linked.²⁸ The strategy map is a powerful way for managers to see the cause-and-effect relationships among various performance metrics. The simplified strategy map in Exhibit 8.7 illustrates the four key areas that contribute to a firm's long-term success—learning and growth, internal processes, customer service, and financial performance—and how the various outcomes in one area link directly to performance in another area. The idea is that effective performance in terms of learning and growth serves as a foundation to help achieve excellent internal business processes. Excellent business processes, in turn, enable the organization to achieve high customer service and satisfaction, which enables the organization to reach its financial goals and optimize its value to all stakeholders.

In the strategy map shown in Exhibit 8.7, the organization has learning and growth goals that include employee training and development, continuous learning and knowledge sharing, and building a culture of innovation. Achieving these will help the organization build efficient internal business processes that promote good relationships with suppliers and partners, improve the quality and flexibility of operations, and excel at developing innovative products and services. Accomplishing internal process goals, in turn, enables the organization to maintain strong relationships with customers, be a leader in quality and reliability, and provide innovative solutions to emerging customer needs. At the top of the strategy map, the accomplishment of these lower-level goals helps the organization increase revenues in existing markets, reduce costs through better productivity and efficiency, and grow by selling new products and services in new market segments.

In a real-life organization, the strategy map would typically be more complex and would state concrete, specific goals, desired outcomes, and metrics relevant to the particular business. However, the generic map in Exhibit 8.7 gives an idea of how managers can use strategy maps to set goals, track metrics, assess performance, and make changes as needed.

Department Level: Behavior versus Outcome Control

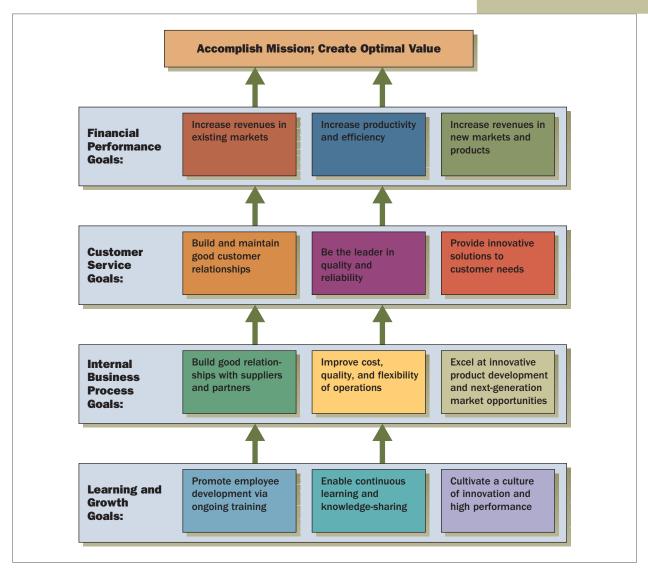
The balanced scorecard and strategy map are techniques used primarily by top and upper-level managers. Lower level managers focus on the performance of people at the department level, who must meet goals and standards if the organization is to attain its overall goals. Although lower-level managers may use any of the control systems listed earlier in Exhibit 8.4, the reward system is often of paramount concern at the supervisory level.

There are two different approaches to evaluating and controlling team or individual performance and allocating rewards. One approach focuses primarily on *how* people do their jobs, whereas the other focuses primarily on the *outcomes* people produce.²⁹ **Behavior control** is based on manager observation of employee actions to see whether the individual follows desired procedures and performs tasks as instructed. Do people get to work on time? Do they stay focused on their tasks or spend a lot of time socializing with colleagues? Do they dress appropriately for



of behavior control.
Set some reasonable guidelines for behavior and work activities, but emphasize outcome control by focusing on results and allowing employees some discretion and autonomy about how they accomplish outcomes.

A Strategy Map for Performance Management



Source: Based on Robert S. Kaplan and David P. Norton, "Mastering the Management System," *Harvard Business Review* (January 2008), 63–77; and R. S. Kaplan and D. P. Norton, "Having Trouble with Your Strategy? Then Map It," *Harvard Business Review* (September–October 2000), 167–176.

the job? Do they perform their jobs according to established methods or supervisor instructions? With behavior control, managers provide heavy supervision and monitoring, pay attention to the methods people use to accomplish their jobs, and evaluate and reward people based on specific criteria, which might include areas such as appearance, punctuality, skills, activities, and so forth.

Information technology has increased the potential for managers to use behavior control. Managers in many companies monitor employees' e-mail and other online activities, for example. Retailers such as Saks and Sunglass Hut use cash-register management software that monitors cashiers' activities in real-time. Managers at Verizon call centers screen representatives' interactions with customers to make sure they hit on the dozens of different points that are required for every customer contact. Some trucking companies track trucks by computer to monitor driver behavior.³⁰

A second approach to control is to pay less attention to what people *do* than to what they *accomplish*. **Outcome control** is based on monitoring and rewarding results, and managers might pay little attention to how those results are obtained. With outcome control, managers don't supervise employees in the traditional sense. People have a great deal of autonomy in terms of how they do their jobs—and sometimes in terms of where and when they do their jobs—as long as they produce desired outcomes. Rather than monitoring how many hours an employee works, for example, managers focus on how much work the employee accomplishes. The Results-Only Work Environment program at Best Buy provides an illustration of outcome control carried to the extreme.

PRACTICE

When Best Buy managers noticed an alarming increase in turnover of headquarters employees, they began looking for ways to reverse the trend. They realized that the

Best Buy culture that emphasized long hours, mandatory procedures, and managers "acting like hall monitors" was no longer working. So, what was the best approach to keep talented people from reaching burnout?

The answer turned out to be an innovative initiative known as ROWE (Results-Only Work Environment), which lets people work when and where they want as long as they get the job done. The experiment started in one department, where morale had reached a dismal low. Under the ROWE system, claims processors and data entry clerks now focus on how many forms they can process in a week rather than how many hours they put in each day or how many keystrokes it takes to complete a form. The program worked so well that it quickly spread to other departments.

The results? From 2005 to 2007, the turnover rate in departments using ROWE decreased nearly 90 percent, while productivity shot up 41 percent. Managers have now implemented ROWE throughout corporate headquarters. There are no set working hours, no mandatory meetings, and no managers keeping tabs on employees' activities. Senior vice-president John Thompson, who was at first skeptical of ROWE, became a strong believer when he saw the results. "For years I had been focused on the wrong currency," Thompson says. "I was always looking to see if people were here. I should have been looking at what they were getting done." ³¹

Switching from behavior control to outcome control had significant positive effects at Best Buy headquarters, and managers are now trying to implement a form of the ROWE system in the retail stores. However, outcome control is not necessarily the best for all situations. In some cases, behavior control is more appropriate and effective, but in general, managers in successful organizations are moving away from closely monitoring and controlling behavior toward allowing employees more discretion and autonomy in how they do their jobs. In most organizations, managers use both behavior and outcome control.

Best Buy

1 For a manager, it should not matter much exactly how or when people get their work done, just as long as they produce good results.

ANSWER: Agree. Focusing on results, or outcomes, can be a highly effective approach to department level control in many organizations. Employees resent being micromanaged and don't like being treated like children. Most managers find it necessary to set some reasonable boundaries for correct behavior, with most control emphasis placed on outcome control to achieve highest performance.

ASSESS YOUR ANSWER

With outcome control, IT is used not to monitor and control individual employee behavior but rather to assess performance outcomes. For example, at Best Buy, the manager of the online orders department can use IT to measure how many orders per hour his team processes, even if one team member is working down the hall, one working from home, one taking the afternoon off, and another working from her vacation cabin 400 miles away.³² Good performance metrics are key to making an outcome control system work effectively.

ADDING STRATEGIC VALUE: STRENGTHENING INTERNAL COORDINATION

Following the use of information systems for managerial decision making and control, IT has evolved further as a strategic tool for both internal and external coordination. This is the highest level of application, as illustrated in Exhibit 8.1 at the beginning of the chapter. Primary IT applications for internal coordination are intranets, Web 2.0 tools, knowledge-management systems, and enterprise resource planning (ERP). Coordination with external parties will be discussed in the next section.

Intranets

Networking, which links people and departments within a particular building or across corporate offices, enabling them to share information and cooperate on projects, has become an important strategic tool for many companies. For example, an online database called CareWeb that medical professionals access via a network at Beth Israel Deaconess Medical Center in Boston contains records of more than 9 million patients. Emergency room doctors can instantly review a patient's past medical history, saving seconds that could make a difference between life and death. By managing information and making it available to anyone who needs it across the organization, CareWeb enables Beth Israel to provide better care as well as maintain better cost control.³³

One prevalent form of corporate networking is an **intranet**, a private, companywide information system that uses the communications protocols and standards of the Internet and the World Wide Web but is accessible only to people within the company. To view files and information, users simply navigate the site with a standard Web browser, clicking on links.³⁴ Today, most companies with intranets have moved their management information systems, executive information systems, and so forth

Briefcase

As an organization manager, keep these guidelines in mind:

Improve internal coordination and information sharing with intranets, enterprise resource planning (ERP) systems, and knowledge management systems. Give people a way to easily communicate and collaborate through blogs, wikis, and social networking.

over to the intranet so they are accessible to anyone who needs them. In addition, having these systems as part of the intranet means new features and applications can easily be added and accessed through a standard browser. Intranets can improve internal communications and unlock hidden information. They enable employees to keep in touch with what's going on around the organization, quickly and easily find information they need, share ideas, and work on projects collaboratively.

Web 2.0 Tools

Companies are also tapping into the power of new IT applications such as Web services, group blogs, wikis, and social networking as powerful collaboration tools within organizations. These second-generation Internet technologies are often referred to collectively as Web 2.0. Web services refers to a variety of software that makes it easier for people to exchange information and conduct business transactions via the Internet.³⁵ A **blog** is a running Web log that allows an individual to post opinions and ideas about anything from work projects and processes to the weather and dating relationships. The simplicity and informality of blogs make them an easy and comfortable medium for people to communicate and share ideas. A wiki is similar to a blog and uses software to create a website that allows people to create, share, and edit content through a browser-based interface. Rather than simply sharing opinions and ideas as with a blog, wikis are free-form, allowing people to edit what they find on the site and add content.³⁶ Social networking, also referred to as social media or user generated content, is an extension of blogs and wikis.³⁷ Social networking sites provide an unprecedented peer-to-peer communication channel, where people interact in an online community, sharing personal data and photos, producing and sharing all sorts of information and opinions. Work networks on Facebook and MySpace are exploding, and some companies, including Dow Chemical, JPMorgan Chase, and Lockheed Martin, have started their own in-house social networks as a way to facilitate information sharing and collaboration.³⁸

A 2008 survey by *The McKinsey Quarterly* sheds some light on organizations' use of Web 2.0 technologies. Fifty-eight percent of responding companies said they are using Web services software, 34 percent report the use of blogs, 32 percent the use of wikis, and 28 percent the use of social networking. According to the survey, the top reasons organizations use these new technologies are to foster internal collaboration and to enhance knowledge management.³⁹

Knowledge Management

Knowledge management is a new way to think about organizing and sharing an organization's intellectual and creative resources. It refers to the efforts to systematically find, organize, and make available a company's intellectual capital and to foster a culture of continuous learning and knowledge sharing so that organizational activities build on what is already known.⁴⁰ The company's **intellectual capital** is the sum of its knowledge, experience, understanding, relationships, processes, innovations, and discoveries.

Companies need ways to transfer both explicit knowledge and implicit, or tacit, knowledge across the organization. ⁴¹ **Explicit knowledge** is formal, systematic knowledge that can be codified, written down, and passed on to others in documents or general instructions. Tacit knowledge, on the other hand, is often difficult to put into words. **Tacit knowledge** is based on personal experience, rules of thumb, intuition, and judgment. It includes professional know-how and expertise, individual insight and experience, and creative solutions that are difficult to communicate and pass



improve.

on to others. Explicit knowledge can easily be captured and shared in documents and through IT systems, but as much as 80 percent of an organization's valuable knowledge may be tacit knowledge that is not easily captured and transferred.⁴²

Two distinct approaches to knowledge management are outlined in Exhibit 8.8. The first approach deals primarily with the collection and sharing of explicit knowledge, largely through the use of sophisticated IT systems.⁴³ Explicit knowledge may include intellectual properties such as patents and licenses; work processes such as policies and procedures; specific information on customers, markets, suppliers, or competitors; competitive intelligence reports; benchmark data; and so forth. When an organization uses this approach, the focus is on collecting and codifying knowledge and storing it in databases where it can easily be accessed and reused by anyone in the organization. With this "people-to-documents" approach, knowledge is gathered from the individuals who possess it and is organized into documents that others can access and reuse.

The second approach focuses on leveraging individual expertise and know-how—tacit knowledge—by connecting people face-to-face or through interactive media. Tacit knowledge includes professional know-how, individual insights and creativity, and personal experience and intuition. With this approach, managers concentrate on developing personal networks that link people together for the sharing of tacit knowledge. The organization uses IT systems primarily for facilitating conversation and person-to-person sharing of experience, insight, and ideas. For example, intranets and other collaboration tools are important for helping employees, especially those who are geographically dispersed, share ideas and tap into expert knowledge throughout the organization.

Organizations typically combine several methods and technologies to facilitate the sharing and transfer of both explicit and tacit knowledge. Here's how ExactTarget Inc. hopes to handle the knowledge management challenge.

EXHIBIT 8.8

Two Approaches to

Knowledge Management

Explicit Tacit Provide high-quality, reliable, and fast information systems for Channel individual expertise to provide creative advice on access of codified, reusable knowledge strategic problems People-to-documents approach Person-to-person approach Knowledge Management Develop an electronic document system Develop networks for linking people so Strategy that codifies, stores, disseminates, and that tacit knowledge can be shared allows reuse of knowledge Invest moderately in information Invest heavily in information technology, technology, with a goal of facilitating Information Technology with a goal of connecting people with conversations and the personal Approach reusable, codified knowledge exchange of tacit knowledge

Source: Based on Morten T. Hansen, Nitin Nohria, and Thomas Tierney, "What's Your Strategy for Managing Knowledge?" Harvard Business Review (March–April 1999), 106–116.

PRACTICE

The problem started when sales began to zoom. That's when sales-support staff at software company ExactTarget became overwhelmed with requests from sales rep-

ExactTarget Inc.

resentatives for technical details or other information about products. Managers realized that the best source for some of the information people were seeking was often other salespeople who had dealt with the issues before.

The solution was to set up a knowledge management system that provides not only a way to search out explicit knowledge but also to encourage the more informal sharing of tacit knowledge among employees. Sales representatives use the system to answer each other's questions, share insights, or offer advice. All the questions and answers remain in the system so that people can easily search for them at a later date, and some reps subscribe to get e-mail alerts each time a new question is posted. In addition, sales reps post useful documents or helpful information they find in the field, and support staff post tools such as product details, online case studies, or training videos. The system allows people to rate each others' answers, identify the most useful posts, and flag inaccuracies.

Managers say there are still some kinks to work out in the system, but the early results seem to be paying off. For example, when Andy Skirvin, marketing development manager, was asked by a client how ExactTarget's product would work in connection with another customer-management technology, Skirvin was able to find an answer on the spot, rather than having to send a query to support staff and perhaps wait days for a response.⁴⁴ ■

Enterprise Resource Planning

Another recent approach to information and knowledge management pulls together various types of information to see how decisions and actions in one part of the organization affect other parts of the firm. A growing number of companies are using broad-scale information systems that take a comprehensive view of the organization's activities. These **enterprise resource planning** (ERP) systems collect, process, and provide information about a company's entire enterprise, including order processing, product design, purchasing, inventory, manufacturing, distribution, human resources (HR), receipt of payments, and forecasting of future demand.⁴⁵ ERP systems can be expensive and difficult to implement, but when applied successfully, an ERP system can serve as the backbone for an entire organization by integrating and optimizing all the various business processes across the entire firm.⁴⁶

Such a system links all of these areas of activity into a network, as illustrated in Exhibit 8.9. When a salesperson takes an order, the ERP system checks to see how the order affects inventory levels, scheduling, HR, purchasing, and distribution. The system replicates organizational processes in software, guides employees through the processes step by step, and automates as many of them as possible. For example, ERP software can automatically cut an accounts payable check as soon as a clerk confirms that goods have been received in inventory, send an online purchase order immediately after a manager has authorized a purchase, or schedule production at the most appropriate plant after an order is received.⁴⁷ In addition, because the system integrates data about all aspects of operations, managers and employees at all levels can see how decisions and actions in one part of the organization affect other parts, using this information to make better decisions. ERP can provide the kind of information furnished by transaction processing systems, as well as that provided by information reporting systems, decision support systems, or executive information

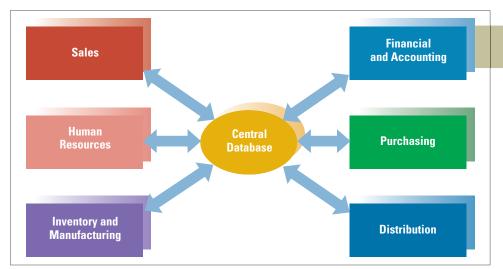


EXHIBIT 8.9
Example of an ERP
Network

systems. The key is that ERP weaves all of these systems together so people can see the big picture and act quickly, helping the organization be smarter and more effective. More recently, ERP has incorporated tools for supply chain management, so that coordination across organizational boundaries is strengthened as well.⁴⁸

ADDING STRATEGIC VALUE: STRENGTHENING EXTERNAL COORDINATION

External applications of IT for strengthening coordination with customers, suppliers, and partners include systems for supply chain management and the integrated enterprise, tools for enhancing customer relationships, and e-business organization design. One basic approach is to extend the corporate intranet to include customers and partners. An **extranet** is an external communications system that uses the Internet and is shared by two or more organizations. Each organization moves certain data outside of its private intranet, but makes the data available only to the other companies sharing the extranet.

The Integrated Enterprise

Extranets play a critical role in today's integrated enterprise. The **integrated enterprise** is an organization that uses advanced IT to enable close coordination within the company as well as with suppliers, customers, and partners. An important aspect of the integrated enterprise is using *supply chain management systems*, which manage the sequence of suppliers and purchasers covering all stages of processing from obtaining raw materials to distributing finished goods to consumers.⁴⁹

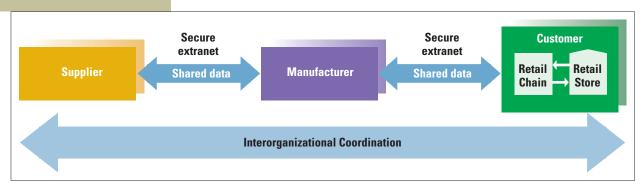
Information Linkages. Applying supply chain management systems enables organizations to achieve the right balance of low inventory levels and customer responsiveness. Exhibit 8.10 illustrates horizontal information linkages in the integrated enterprise. By establishing electronic linkages between the organization and key partners for the

Briefcase

As an organization manager, keep this guideline in mind:

Use IT applications such as extranets, supply chain management systems, and e-business systems to strengthen relationships with customers, suppliers, and business partners.

EXHIBIT 8.10The Integrated Enterprise



Source: Based on Jim Turcotte, Bob Silveri, and Tom Jobson, "Are You Ready for the E-Supply Chain?" APICS-The Performance Advantage (August 1998), 56-59.



guideline in mind:

Transform your organization into an integrated enterprise by establishing horizontal information linkages between the organization and key outsiders. Create a seamless, integrated line stretching from end consumers to raw materials suppliers that will meet customers' product and time demands.

sharing and exchange of data, the integrated enterprise creates a seamless, integrated line stretching from end consumers to raw materials suppliers. For example, in the exhibit, as consumers purchase products in retail stores, the data are automatically fed into the retail chain's information system. In turn, the chain gives access to this constantly updated data to the manufacturing company through a secure extranet. With knowledge of this demand data, the manufacturer can produce and ship products when needed. As products are made by the manufacturer, data about raw materials used in the production process, updated inventory information, and updated forecasted demand are electronically provided to the manufacturer's suppliers, and the suppliers automatically replenish the manufacturer's raw materials inventory as needed.

Horizontal Relationships. The purpose of integrating the supply chain is for everyone to work closely together, moving in lockstep to meet customers' product and time demands. Honeywell Garrett Engine Boosting Systems, which makes turbochargers for cars, trucks, and light aircraft, uses an extranet to give suppliers access to its inventory and production data so they can respond rapidly to the manufacturer's need for parts. Honeywell is also working with big customers such as Ford and Volkswagen to integrate their systems so the company will have better information about turbocharger demands from customers as well. "Our goal," says Honeywell's Paul Hopkins, "is seamless value-chain connectivity from customer demand to suppliers." Another organization that has made superb use of technology to forge integrated horizontal relationships is Corrugated Supplies.

PRACTICE

You might not expect a cardboard manufacturer to be on the cutting edge of information technology, but Rick Van Horne transformed Corrugated Supplies into one of the world's

Corrugated Supplies

first completely Web-based production plants. The plant's equipment continually feeds data to the Internet, where the rest of the company, as well as suppliers and customers, can keep track of what's happening on the factory floor in real time. Using a password, customers call up Corrugated's production schedules to see exactly where their orders are in the process and when they will arrive. Suppliers tap into the system to manage inventory.

Text not available due to copyright restrictions

Exhibit 8.11 illustrates how the system works for a customer placing an order: The customer logs onto the website and types in an order for corrugated paper precisely cut and folded for 20,000 boxes. The order is downloaded into the database and computers at Corrugated's factory determine the best way to blend that order with numerous other orders ranging from a few dozen boxes to 50,000. The computer comes up with the optimum schedule—that is, the one that gets the most orders out of a single roll with little leftover paper. A human operator checks the schedule on one of the numerous linked computer screens scattered around the plant and hits the Send button. Computer software directs the massive corrugators, trimmers, slitters, and other equipment, which begin spewing out paper orders at 800 feet per minute. Computer-controlled conveyor belts carry the order to the loading dock, where forklifts equipped with wireless PCs take the load to the designated trailer. Truck drivers log on to the website and are told which trailer to haul to maximize their trip's efficiency. The order is usually delivered to the customer the very next day.

About 70 percent of Corrugated's orders are submitted via the Internet and routed electronically to the plant floor. The system saves time and money for Corrugated by automatically scheduling special-order details and cutting out paper waste. For customers, it means faster service and fewer mix-ups. One customer, Gene Mazurek, co-owner of Suburban Corrugated Box Co., says it is "the best thing that's ever happened.... It's like Rick put his corrugating machine right inside my plant." 52

For the integrated enterprise to work, horizontal relationships such as those between Corrugated and its suppliers and customers get more emphasis than vertical relationships. Enterprise integration can create a level of cooperation not previously imaginable if managers approach the practice with an attitude of trust and partnership, as in the interorganizational relationships described in Chapter 5.

Customer Relationships

Strengthening customer relationships is of particular concern to many organizations, and managers apply a variety of IT tools to this purpose. One approach is the use of customer relationship management (CRM) systems. These systems help companies track customers' interactions with the firm and allow employees to call up a customer's past sales and service records, outstanding orders, or unresolved problems.⁵³ CRM stashes in a database all the customer information that a smalltown store owner would keep in his or her head—the names of customers, what they bought, what problems they've had with purchases, and so forth. The system helps coordinate sales, marketing, and customer service departments so that all are smoothly working together. Companies are also applying Web 2.0 technologies such as Web services, blogs, wikis, and social networking, as described earlier, to enhance customer relationships. In McKinsey's survey, respondents say they use these new Web 2.0 tools for improving customer service, developing new markets, getting customer participation in product development, and offering opportunities for customers to interact with one another.⁵⁴ Disney, for example, revamped its website with a goal of making it a social networking destination for kids and preteens.⁵⁵

ASSESS YOUR ANSWER

2 Every manager should have a blog.

ANSWER: *Disagree.* Blogs are an increasingly popular way for managers to communicate, both with employees and with customers. Many people think that within a few years blogging will be as common for managers as using e-mail is today. But blogs are not yet appropriate for many managers in many work environments.

Blogs in particular are an increasingly popular customer-facing technology. One estimate is that around 12 percent of *Fortune* 500 companies, including General Electric, Boeing, Marriott, and Wal-Mart, use blogs to keep in touch with stakeholders, and the number is growing fast. ⁵⁶ Blogs give organizations a human voice, enable companies to influence opinion, and provide an easy way to share company news directly with outsiders. "When I blog, I'm talking to the world," says Jonathan Schwartz, CEO of Sun Microsystems. Schwartz believes that, within ten years, most CEOs "will communicate directly with customers, employees, and the broader business community through blogs. For executives, having a blog is not going to be a matter of choice, any more than email is today." ⁵⁷

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E-BUSINESS ORGANIZATION DESIGN

E-business can be defined as any business that takes place by digital processes over a computer network rather than in physical space. Thus, all of the computer-based technologies we have discussed so far are aspects of e-business. However, e-business most commonly refers to electronic linkages over the Internet with customers, partners, suppliers, employees, or other key constituents.

Many traditional organizations have set up Internet operations to strengthen and improve these external relationships, but managers have to make a decision about how best to integrate *bricks and clicks*—that is, how to blend their traditional operations with an Internet initiative. In the early days of e-business, many companies set up dot-com initiatives with little understanding of how those activities could and should be integrated with the overall business. As the reality of e-business has evolved, companies have gained valuable lessons in how to merge online and offline activities.⁵⁸

The range of basic strategies for setting up an Internet operation is illustrated in Exhibit 8.12. At one end of the spectrum, companies can set up an in-house division that is closely integrated with the traditional business. The opposite approach is to create a spin-off company that is totally separate from the traditional organization. Many companies take a middle road by forging strategic partnerships with other organizations for their Internet initiative. Each of these options presents distinct advantages and disadvantages.⁵⁹

In-House Division

An in-house division offers tight integration between the Internet operation and the organization's traditional operation. The organization creates a separate unit within the company that functions within the structure and guidance of the traditional organization. For example, WalMart.com is totally operated and controlled by Wal-Mart, and Disney.com is a division under the guidance and control of the Walt Disney Company. *The New York Times* embraced the Web early on with an in-house division that today provides a growing percentage of the newspaper outfit's business and advertising revenue. The in-house approach gives the new division several advantages by piggybacking on the established company. These include brand recognition, purchasing leverage with suppliers, shared customer information and marketing opportunities, and distribution efficiencies. A potential problem with an in-house division, however, is that the new operation doesn't have the flexibility needed to move quickly in the Internet world.

Spin-Off

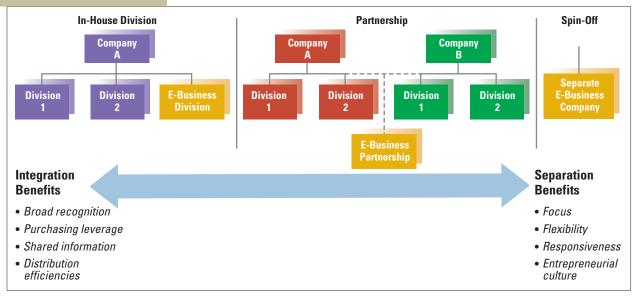
To give the Internet operation greater autonomy, flexibility, and focus, some organizations choose to create a separate spin-off company. Advantages of a spin-off include faster decision making, increased flexibility and responsiveness to changing market conditions, an entrepreneurial culture, and management that is totally focused on the success of the online operation. Potential disadvantages are the loss of brand recognition and marketing opportunities, higher start-up costs, and loss of leverage with suppliers. For example, CVS.com was launched in August 1999 as a spin-off of drug store retailer CVS and gained an early advantage over competitors such as Walgreens. However, Walgreens' in-house division eventually overtook CVS because the in-house approach enabled greater efficiencies. CVS managers began

Briefcase

As an organization manager, keep these guidelines in mind:

- Use an in-house e-business division to provide tight integration between the Internet operation and the traditional operation and leverage the brand name, customer information, suppliers, and marketing muscle of the parent company.
- Create a spin-off company if the e-business unit needs greater autonomy and flexibility to adapt to rapidly changing market conditions.
- Consider a strategic partnership as a middle ground, but remember that partnerships involve dependency on other firms and require greater time spent managing relationships and resolving potential conflicts.

EXHIBIT 8.12
The Range of Strategies for Integrating Bricks and Clicks



Source: Based on Ranjay Gulati and Jason Garino, "Get the Right Mix of Bricks and Clicks," Harvard Business Review (May-June 2000), 107-114.

re-integrating online operations so that functions such as marketing, merchandising, and purchasing could be handled more efficiently in-house. The autonomy, flexibility, and focus of the spin-off was an advantage during the start-up phase, but the organization later on gained efficiencies by bringing the Web business back in-house for better coordination with other departments.⁶¹

Strategic Partnership

Partnerships offer a middle ground, enabling organizations to attain some of the advantages and overcome some of the disadvantages of the purely in-house or spinoff options. For example, when J&R Electronics, a Manhattan store with limited national reach, decided to go online, managers quickly realized that J&R didn't have the resources needed to build a solid online business. The company partnered with Amazon.com to capitalize on the advantages of both integration and separation. Amazon invests around \$200 million a year in technology and site content, something that a small retailer like J&R simply couldn't do. The partnership approach gave J&R access to Amazon's millions of customers and allowed the firm to build its online identity and reputation. Managers at J&R agree with the advice of Drew Sharma, managing director of Internet marketing agency Mindfire Interactive, for smaller companies going online: "If you can stand on the shoulders of giants, then why not?"62 The biggest disadvantages of partnerships include the time required to manage relationships, potential conflicts between partners, and a possibility that one company will fail to deliver as promised or go out of business. For example, if Amazon.com should fail, it would take J&R's online business with it and damage the company's reputation with Internet customers.

The best way for a large company to set up an Internet division is to create a separate, free-standing unit, called a spin-off, because the unit will have the autonomy and flexibility to operate at Internet speed rather than being hampered by the larger organization's rules and procedures.

ANSWER: Disagree. Each approach to creating an e-business operation has advantages and disadvantages. Creating a free-standing spin-off can give the new unit greater autonomy and flexibility, but it can also reduce efficiency and require higher start-up costs. Managers carefully consider whether to use an in-house division, a spin-off, or a strategic partnership, any of which may work out best depending on the organization's circumstances.

ASSESS YOUR ANSWER

IT IMPACT ON ORGANIZATION DESIGN

Managers and organization theorists have been studying the relationship between technology and organization design and functioning for more than half a century. In recent years, the advances in information technology have had the greatest impact in most organizations.⁶³ Some specific implications of these advances for organization design are smaller organizations, decentralized structures, improved internal and external coordination, and new network organization structures.

- 1. Smaller organizations. Some Internet-based businesses exist almost entirely in cyberspace; there is no formal organization in terms of a building with offices, desks, and so forth. One or a few people may maintain the site from their homes or a rented work space. Even for traditional businesses, new IT enables the organization to do more work with fewer people. Customers can buy insurance, clothing, tools and equipment, and practically anything else over the Internet without ever speaking to an agent or salesperson. In addition, ERP and other IT systems automatically handle many administrative duties within organizations, reducing the need for clerical staff. The Michigan Department of Transportation (MDOT) used to need an army of workers to verify contractors' work. Large projects often required as many as twenty inspectors on-site every day to keep track of thousands of work items. Today, MDOT rarely sends more than one field technician to a site. The employee enters data into a laptop computer using road construction management software tied to computers at headquarters. The system can automatically generate payment estimates and handle other administrative processes that used to take hours of labor. 64 Thanks to IT, today's companies can also outsource many functions and thus use fewer in-house resources.
- 2. Decentralized organization structures. Although management philosophy and corporate culture have a substantial impact on whether IT is used to decentralize information and authority or to reinforce a centralized authority structure, 65 most organizations today use technology to further decentralization. With IT, information that may have previously been available only to top managers at headquarters can be quickly and easily shared throughout the organization, even across great geographical distances. Managers in varied business divisions or offices have the information they need to make important decisions quickly

Briefcase

As an organization manager, keep this guideline in mind:

With greater use of IT, consider smaller organizational units, decentralized structures, improved internal coordination, and greater interorganizational collaboration, including the possibility of outsourcing or a network structure.

EXHIBIT 8.13

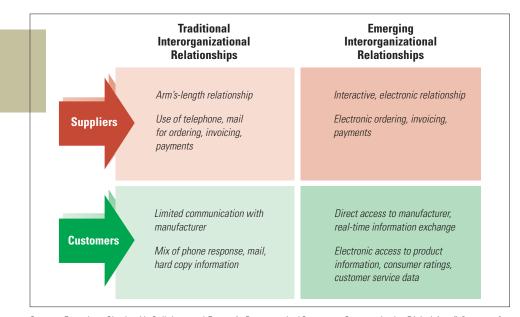
of Traditional

versus Emerging Interorganizational Relationships

Key Characteristics

rather than waiting for decisions from headquarters. Technologies that enable people to meet, coordinate, and collaborate online facilitate communication and decision making among distributed, autonomous groups of workers, such as in virtual teams. In addition, technology allows for telecommuting, whereby individual workers can perform work that was once done in the office from their computers at home or other remote locations. Margaret Hooshmand moved to Texas, but she still works as an executive assistant to Cisco Senior Vice President Marthin De Beer in California. Hooshmand reports to work virtually, appearing each morning on a 65-inch high-definition plasma screen that faces De Beer's office. She fields his calls, arranges meeting, and can see and hear what's going on in the Silicon Valley hallways.⁶⁶

- 3. *Improved horizontal coordination*. Perhaps one of the greatest outcomes of IT is its potential to improve coordination and communication within the firm. IT applications can connect people even when their offices, factories, or stores are scattered around the world. IBM, for example, makes extensive use of virtual teams, whose members use a wide variety of IT tools to easily communicate and collaborate. One team made up of members in the United States, Germany, and the United Kingdom used collaboration software as a virtual meeting room to solve a client's technical problem resulting from Hurricane Katrina within the space of just a few days.⁶⁷ Siemens uses a global intranet that connects 450,000 employees around the world to share knowledge and collaborate on projects.⁶⁸ Xerox set up a knowledge management system to connect 25,000 field service representatives as if they were gathered around a virtual water cooler. The ability of service reps to share "war stories" and repair tips cut average repair time by 50 percent.⁶⁹
- 4. *Improved interorganizational relationships*. IT can also improve horizontal coordination and collaboration with external parties such as suppliers, customers, and partners. Exhibit 8.13 shows differences between traditional interorganizational



Source: Based on Charles V. Callahan and Bruce A. Pasternack, "Corporate Strategy in the Digital Age," *Strategy & Business*, Issue 15 (Second Quarter 1999), 10–14.

relationship characteristics and emerging relationship characteristics. Traditionally, organizations had an arm's-length relationship with suppliers. However, as we discussed in Chapter 5, suppliers are becoming closer partners, tied electronically to the organization for orders, invoices, and payments.

Studies have shown that interorganizational information networks tend to heighten integration, blur organizational boundaries, and create shared strategic contingencies among firms. One good example of interorganizational collaboration is the PulseNet alliance, sponsored by the Centers for Disease Control and Prevention (CDC). The PulseNet information network uses collaborative technology to help U.S. state and federal agencies anticipate, identify, and prevent food-borne disease outbreaks. Through more frequent communication and real-time information sharing, rich relationships among the various agencies have evolved. State health labs and the CDC once had infrequent contact but are now involved in joint strategic planning regarding the PulseNet project. The project of the p

5. Enhanced network structures. The high level of interorganizational collaboration needed in a network organization structure, described in Chapter 3, would not be possible without the use of advanced IT. In the business world, these are also sometimes called *modular structures* or *virtual organizations*. Outsourcing has become a major trend, thanks to computer technology that can tie companies together into a seamless information flow. For example, Hong Kong's Li & Fung is one of the biggest providers of clothing for retailers such as Abercrombie & Fitch, Guess, Ann Taylor, the Limited, and Disney, but the company doesn't own any factories, machines, or fabrics. Li & Fung specializes in managing information, relying on an electronically connected web of 7,500 partners in thirtyseven countries to provide raw materials and assemble the clothes. Using an extranet allows Li & Fung to stay in touch with worldwide partners and move items quickly from factories to retailers. It also lets retailers track orders as they move through production and make last-minute changes and additions.⁷² With a network structure, most activities are outsourced, so that different companies perform the various functions needed by the organization. The speed and ease of electronic communication makes the network structure a viable option for companies that want to keep costs low but expand activities or market presence.

DESIGN ESSENTIALS

- Today's most successful organizations are generally those that most effectively apply information technology. IT systems have evolved to a variety of applications to meet organizations' information needs. Operations applications are applied to well-defined tasks at lower organization levels and help improve efficiency. These include transaction processing systems, data warehousing, and data mining.
- Advanced computer-based systems are also used for better decision making, coordination, and control of the organization. Decision-making systems include management information systems, reporting systems, decision support systems, and executive information systems, which are typically used at middle and upper levels of the organization. Management control systems include budgets and

financial reports, periodic nonfinancial statistical reports, reward systems, and quality control systems.

- At the organization level of control, an innovation called the *balanced score-card* provides managers with a balanced view of the organization by integrating traditional financial measurements and statistical reports with a concern for markets, customers, and employees. Managers also use strategy maps to see the cause-effect relationships among these critical success factors. At the department level, managers use behavior control or outcome control. Behavior control involves close monitoring of employee activities, whereas outcome control measures and rewards results. Most managers use a combination of behavior and outcome control, with a greater emphasis on outcome control because it leads to better performance and higher motivation.
- Today, all the various computer-based systems have begun to merge into an overall IT system that adds strategic value by enabling close coordination internally and with outside parties. Intranets, Web 2.0 tools, knowledge management systems, and ERP are used primarily to support greater internal coordination and flexibility. Systems that support and strengthen external relationships include extranets and supply chain management systems, customer relationship systems, and e-business. The integrated enterprise uses advanced IT to enable close coordination among a company and its suppliers, partners, and customers. To establish an e-business, companies can choose among an in-house division, a spin-off, or a strategic partnership. Each has strengths and weaknesses.
- Advanced IT is having a significant impact on organization design, and some experts suggest that it will eventually replace traditional hierarchy as a primary means of coordination and control. Technology has enabled creation of the network organization structure, in which a company subcontracts most of its major functions to separate companies. In addition, most other organizations are also rapidly evolving toward greater interorganizational collaboration. Other specific implications of advanced IT for organization design include smaller organizations, decentralized organization structures, and improved internal and external coordination.

Key Concepts

balanced scorecard behavior control benchmarking blog business intelligence customer relationship management data warehousing decision support system e-business enterprise resource planning executive dashboard
executive information system
explicit knowledge
extranet
feedback control model
information reporting system
integrated enterprise
intellectual capital
intranet
knowledge management

management control systems
management information system
networking
outcome control
Six Sigma
social networking
strategy map
tacit knowledge
transaction processing systems
wiki

Discussion Questions

- Do you think technology will eventually enable top managers to do their jobs with little face-to-face communication? Discuss.
- 2. What types of information technology do you as a student use on a regular basis? How might your life be different if this technology were not available to you?
- 3. How might an enterprise resource planning system be used to improve the management of a manufacturing organization?
- 4. Discuss some ways a large insurance company such as Allstate, Progressive, or State Farm might use Web 2.0 tools such as blogs, wikis, or social networking. Do you think these tools are more applicable to a service company than to a manufacturing organization? Discuss.
- 5. Describe how the four balanced scorecard components discussed in the chapter might be used for feedback control within organizations. Which of these components is more similar to outcome control? Behavior control?

- 6. Describe your use of explicit knowledge when you research and write a term paper. Do you also use tacit knowledge regarding this activity? Discuss.
- 7. Why is knowledge management particularly important to a company that wants to learn and change continuously rather than operate at a stable state?
- 8. What is meant by the *integrated enterprise*? Describe how organizations can use extranets to extend and enhance horizontal relationships required for enterprise integration.
- 9. What are some competitive issues that might lead a company to take a partnership approach to e-business rather than setting up an in-house Internet division? What are the advantages and disadvantages of each approach?
- 10. Why does the application of advanced IT typically lead to greater decentralization? Could it also be used for greater centralization in some organizations? Explain.

Chapter 8 Workbook: Balanced Scorecard Exercise

Read the measures and objectives listed below for a business firm and a healthcare organization. Make a check for each objective/measure in the correct balanced scorecard

column. If you think an objective/measure fits into two balanced scorecard categories, write the numbers 1 and 2 for your first vs. second preference.

	Financial	Customers	Business Processes	Learning & Growth
Business Firm			ı	1
Return on capital employed (ROCE)				
Build employee recreation venue by December 2012				
Develop new products within a time period of 8 months				
Provide team leader training program by July 2010				
Achieve 98% customer satisfaction by December 2012				
Number of monthly customer complaints				
Reduce cost per unit sold by 10%				
Increase customer retention by 15%				
Improve employee satisfaction scores by 20%				
Lead market in speed of delivery by 2011				
Lowest industry cost by 2012				
Improve profits by 12% over next year				
Budget forecast accuracy				
Introduce three new products by December 2011				
Percent training completed				
Number of leaders ready for promotion				
Completed succession plan				

(continued)

	Financial	Customers	Business Processes	Learning & Growth
Percentage of employees part-time				
Sales growth to increase 1% monthly				
Number of employee grievances				
Employee engagement scores				
Number of employee terminations				
Policy implementation time lag				
Vendor on-time delivery rate				
Total annual revenues				
Utility consumption costs				
Workers compensation claims				
EBITDA				
Healthcare Organization				
Fundraising targets				
Patient satisfaction				
Appointments accomodated on time				
Percentage of patients restored to full functioning				
Number of patients wanting service				
Percentage clinical support staff				
Nurse satisfaction				
Length of physician employment				
Patient satisfaction with scheduling				
Wait time satisfaction				
Patient perception of quality				
Cost of patient care				
Profitability				
-				
Staff compliance with privacy regulations Bed utilization rate				
Falls per 100 patients				
Percentage of nurse master's degrees				
Speed of patient admissions & discharge				
Education for family member care giving				
Quality of pain control				
Percentage of medicines filled accurately				
Nurse turnover rate				
Nurse shortage rate				
Completion rate of prescribed services				
Total labor costs				
Operating margins				
Amount of charity care				
Unpaid cost of public programs				
Smoking cessation program effectiveness				
Medicare reimbursement audit results				
Education completion rate				

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Case for Analysis: Century Medical*

Sam Nolan clicked the mouse for one more round of solitaire on the computer in his den. He'd been at it for more than an hour, and his wife had long ago given up trying to persuade him to join her for a movie or a rare Saturday night on the town. The mind-numbing game seemed to be all that calmed Sam enough to stop thinking about work and how his job seemed to get worse every day.

Nolan was chief information officer at Century Medical, a large medical products company based in Connecticut. He had joined the company four years ago, and since that time Century had made great progress integrating technology into its systems and processes. Nolan had already led projects to design and build two highly successful systems for Century. One was a benefits-administration system for the company's HR department. The other was a complex Web-based purchasing system that streamlined the process of purchasing supplies and capital goods. Although the system had been up and running for only a few months, modest projections were that it would save Century nearly \$2 million annually.

Previously, Century's purchasing managers were bogged down with shuffling paper. The purchasing process would begin when an employee filled out a materials request form. Then the form would travel through various offices for approval and signatures before eventually being converted into a purchase order. The new Web-based system allowed employees to fill out electronic request forms that were automatically e-mailed to everyone whose approval was needed. The time for processing request forms was cut from weeks to days or even hours. When authorization was complete, the system would automatically launch a purchase order to the appropriate supplier. In addition, because the new system had dramatically cut the time purchasing managers spent shuffling paper, they now had more time to work collaboratively with key stakeholders to identify and select the best suppliers and negotiate better deals.

Nolan thought wearily of all the hours he had put in developing trust with people throughout the company and showing them how technology could not only save time and money but also support team-based work and give people more control over their own jobs. He smiled briefly as he recalled one long-term HR employee, 61-year-old Ethel Moore. She had been terrified when Nolan first began showing her the company's intranet, but she was now one of his biggest supporters. In fact, it had been Ethel who had first approached him with an idea about a Web-based job posting system. The two had pulled together a team and

developed an idea for linking Century managers, internal recruiters, and job applicants using artificial intelligence software on top of an integrated Web-based system. When Nolan had presented the idea to his boss, executive vice president Sandra Ivey, she had enthusiastically endorsed it, and within a few weeks the team had authorization to proceed with the project.

But everything began to change when Ivey resigned her position six months later to take a plum job in New York. Ivey's successor, Tom Carr, seemed to have little interest in the project. During their first meeting, Carr had openly referred to the project as a waste of time and money. He immediately disapproved several new features suggested by the company's internal recruiters, even though the project team argued that the features could double internal hiring and save millions in training costs. "Just stick to the original plan and get it done. All this stuff needs to be handled on a personal basis anyway," Carr countered. "You can't learn more from a computer than you can talking to real people—and as for internal recruiting, it shouldn't be so hard to talk to people if they're already working right here in the company." Carr seemed to have no understanding of how and why technology was being used. He became irritated when Ethel Moore referred to the system as "Web-based." He boasted that he had never visited Century's intranet site and suggested that "this Internet fad" would eventually blow over anyway. Even Ethel's enthusiasm couldn't get through to him. She tried to show him some of the HR resources available on the intranet and explain how it had benefited the department and the company, but he waved her away. "Technology is for those people in the IT department. My job is people, and yours should be too." Ethel was crushed, and Nolan realized it would be like beating his head against a brick wall to try to persuade Carr to the team's point of view. Near the end of the meeting, Carr even jokingly suggested that the project team should just buy a couple of filing cabinets and save everyone some time and money.

Just when the team thought things couldn't get any worse, Carr dropped the other bomb. They would no longer be allowed to gather input from users of the new system. Nolan feared that without the input of potential users, the system wouldn't meet their needs, or even that users would boycott the system because they hadn't been allowed to participate. No doubt that would put a great big "I told you so" smile right on Carr's face.

Nolan sighed and leaned back in his chair. The project had begun to feel like a joke. The vibrant and innovative HR

department his team had imagined now seemed like nothing more than a pipe dream. But despite his frustration, a new thought entered Nolan's mind: "Is Carr just stubborn and narrow-minded or does he have a point that HR is a people business that doesn't need a high-tech job-posting system?" *Based on Carol Hildebrand, "New Boss Blues," CIO Enterprise, Section 2 (November 15, 1998), 53–58; and Megan Santosus, "Advanced Micro Devices' Web-Based Purchasing System," CIO, Section 1 (May 15, 1998), 84.

Case for Analysis: Product X*

Several years ago the top management of a multibillion-dollar corporation decided that Product X was a failure and should be disbanded. The losses involved exceeded \$100 million. At least five people knew that Product X was a failure six years before the decision was made to stop producing it. Three of those people were plant managers who lived daily with the production problems. The other two were marketing officials who realized that the manufacturing problems were not solvable without expenditures that would raise the price of the product to the point where it would no longer be competitive in the market.

There are several reasons why this information did not get to the top sooner. At first, the subordinates believed that with exceptionally hard work they might turn the errors into successes. But the more they struggled, the more they realized the massiveness of the original error. The next task was to communicate the bad news upward so that it would be heard. They knew that in their company bad news would not be well received at the upper levels if it was not accompanied with suggestions for positive action. They also knew that the top management was enthusiastically describing Product X as a new leader in its field. Therefore, they spent much time composing memos that would communicate the realities without shocking top management.

Middle management read the memos and found them too open and forthright. Since they had done the production and marketing studies that resulted in the decision to produce Product X, the memos from lower-level management questioned the validity of their analysis. They wanted time to really check these gloomy predictions and, if they were accurate, to design alternative corrective strategies. If the pessimistic information was to be sent upward, middle management wanted it accompanied with optimistic action alternatives. Hence further delay.

Once middle management was convinced that the gloomy predictions were valid, they began to release some

of the bad news to the top—but in carefully measured doses. They managed the releases carefully to make certain they were covered if top management became upset. The tactic they used was to cut the memos drastically and summarize the findings. They argued that the cuts were necessary because top management was always complaining about receiving long memos; indeed, some top executives had let it be known that good memos were memos of one page or less. The result was that top management received fragmented information underplaying the intensity of the problem (not the problem itself) and overplaying the degree to which middle management and the technicians were in control of the problem.

Top management therefore continued to speak glowingly about the product, partially to ensure that it would get the financial backing it needed from within the company. Lower-level management became confused and eventually depressed because they could not understand this continued top management support, nor why studies were ordered to evaluate the production and marketing difficulties that they had already identified. Their reaction was to reduce the frequency of their memos and the intensity of their alarm, while simultaneously turning over the responsibility for dealing with the problem to middle-management people. When local plant managers, in turn, were asked by their foremen and employees what was happening, the only response they gave was that the company was studying the situation and continuing its support. This information bewildered the foremen and led them to reduce their own concern.

*Excerpted from C. Argyris and D. Schon, Organizational Learning: A Theory of Action Perspective. Argyris/Schon, Organizational Learning, © 1978, Addison-Wesley Publishing Co., Inc., Reading, Massachusetts. Pages 1–2. Reprinted with permission. Case appeared in Gareth Morgan, Creative Organization Theory (1989), Sage Publications.

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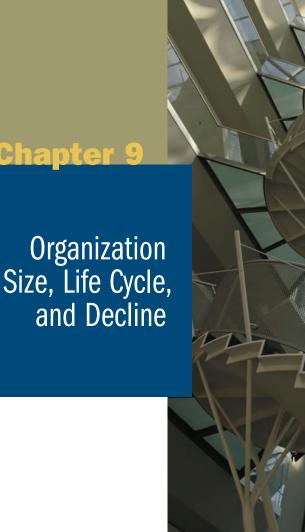
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Chapter

Organization Size: Is Bigger Better?

Pressures for Growth · Dilemmas of Large Size

Organizational Life Cycle

Stages of Life Cycle Development · Organizational Characteristics during the Life Cycle

Organizational Size, Bureaucracy, and Control

What Is Bureaucracy? · Size and Structural Control

Bureaucracy in a Changing World

Organizing Temporary Systems · Other Approaches to Busting Bureaucracy

Bureaucracy versus Other Forms of Control

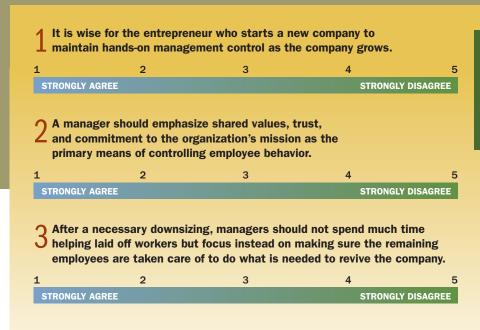
Bureaucratic Control · Market Control · Clan Control

Organizational Decline and Downsizing

Definition and Causes · A Model of Decline Stages · Downsizing Implementation

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements.



In the world of advertising, Crispin Porter & Bogusky is a bit of a maverick. The agency's unusual ads and innovative techniques have been successful in an environment in which consumers are viewing media and looking at advertising in new ways. But Crispin managers now face a challenge: how to make sure the hotshot agency stays hot as it copes with rapid growth and huge international accounts. They know that many creative upstarts have faltered, failed, or been swallowed up by larger firms as they try to make the transition to ad industry titans. As organizations like Crispin Porter & Bogusky grow large and complex, they need more complex systems and procedures for guiding and controlling the organization. Many entrepreneurs have trouble taking their companies through the growing pains. Moreover, the addition of more complex systems and procedures can also cause problems of inefficiency, rigidity, and slow response time, meaning the company has a hard time adapting quickly to client or customer needs.

Every organization—from locally owned restaurants and auto body shops to large international firms such as Coca-Cola and law-enforcement agencies such as the CIA and Interpol—wrestles with questions about organizational size, bureaucracy, and control. During the twentieth century, large organizations became widespread, and bureaucracy has become a major topic of study in organization theory.² Most large organizations have bureaucratic characteristics, which can be very effective. These organizations provide us with abundant goods and services and accomplish astonishing feats—explorations of Mars, overnight delivery of packages to any location in the world, the scheduling and coordination of thousands of airline flights a day—that are testimony to their effectiveness. On the other hand, bureaucracy is also accused of many sins, including inefficiency, rigidity, and demeaning routinized work that alienates both employees and the customers an organization tries to serve.

Managing by Design Questions

Purpose of This Chapter

In this chapter, we explore the question of large versus small organizations and how size relates to structure and control. Organization size is a contextual variable that influences organization design and functioning just as do the contextual variables—technology, environment, goals—discussed in previous chapters. In the first section, we look at the advantages of large versus small size. Then, we explore what is called an organization's life cycle and the structural characteristics at each stage. Next, we examine the historical need for bureaucracy as a means to control large organizations and compare bureaucratic control to various other control strategies. Finally, the chapter looks at the causes of organizational decline and discusses some methods for dealing with downsizing. By the end of this chapter, you should be able to recognize when bureaucratic control can make an organization effective and when other types of control are more appropriate.

ORGANIZATION SIZE: IS BIGGER BETTER?

The question of big versus small begins with the notion of growth and the reasons so many organizations feel the need to grow large.

Pressures for Growth

Do you ever dream of starting a small company? Many people do, and entrepreneurial start-ups are the lifeblood of the U.S. economy. Yet the hope of practically every entrepreneur is to have his or her company grow fast and grow large, maybe even to eventually make the *Fortune* 500 list.³ Sometimes this goal is more urgent than to make the best products or show the greatest profits. However, there are some thriving companies where managers have resisted the pressure for endless growth to focus instead on different goals, as discussed in this chapter's Book Mark.

Recent economic woes and layoffs at many large firms have spurred budding entrepreneurs to take a chance on starting their own company or going it alone in a sole proprietorship. Yet despite the proliferation of new, small organizations, the giants such as Procter & Gamble, General Electric, Toyota, and Wal-Mart have continued to grow. For example, Wal-Mart's employee base is almost as big as the population of the city of Houston, Texas. The combined square footage of Home Depot's retail stores is about the same as 92,564 average-sized U.S. homes. Verizon's fiber-optic cable for its Internet network would reach around the world 18 times.⁴

Companies in all industries, from retail, to aerospace, to media, strive for growth to acquire the size and resources needed to compete on a global scale, to invest in new technology, and to control distribution channels and guarantee access to markets.⁵ There are a number of other pressures for organizations to grow. Many executives have found that firms must grow to stay economically healthy. To stop growing is to stagnate. To be stable means that customers may not have their demands fully met or that competitors will increase market share at the expense of your company. At Wal-Mart, managers have vowed to continue an emphasis on growth even though it means a decreasing return on investment (ROI). They are ingrained with the idea that to stop growing is to stagnate and die. As chief financial officer Tom Schoewe put it, even if the ROI could "come down a bit and we could grow faster, that would be just fine by me."



Decide whether your organization should act like a large or small company. To the extent that economies of scale, global reach, and complexity are important, introduce greater bureaucratization as the organization increases in size. As it becomes necessary, add rules and regulations, written documentation, job specialization, technical competence in hiring and promotion, and decentralization.

BookMark 9.0 (HAVE YOU READ THIS BOOK?)

Small Giants: Companies That Choose to Be Great Instead of Big By Bo Burlingham



The conventional business mind-set is to equate growth with success. But Bo Burlingham, an editor-at-large at *Inc.* magazine, reminds us that there is a different class of great companies that focus not on getting bigger, but on getting better. He calls them *Small Giants*. In his book of the same name, Burlingham looks at fourteen small companies that are admired in their industries and recognized for their accomplishments—and in which managers have made a conscious decision not to significantly expand, go public, or become part of a larger firm.

WHAT GIVES SMALL GIANTS THEIR MOJO?

The companies Burlingham profiles come from a wide range of industries and vary a great deal in terms of number of employees, corporate structure, management approach, and stage of the life cycle. What makes them similar? Burlingham describes seven shared characteristics that give these companies an almost magical quality. Here are three of them:

The founders and leaders made a mindful choice to build the kind of business they wanted to "live in," rather than accommodating to a business shaped by outside forces. Danny Meyer, owner of the Union Square Café, says he "earned more money by choosing the right things to say no to than by choosing things to say yes to." Fritz Maytag of Anchor Brewery, content to limit his distribution to northern California, even helped rival brewers develop their skills to accommodate growing demand for his kind of beer.

- Each of the small giants is intimately connected with the community in which it does business. CitiStorage, the premier independent records-storage company in the United States, built its warehouse in a depressed inner-city neighborhood to save money. But it quickly bonded with the community by hiring local residents, opening the facility for community events, and making generous donations to the local school.
- Their leaders have a passion for the business. Whether
 it's making music, creating special effects, designing and
 manufacturing constant torque hinges, brewing beer, or
 planning commercial construction projects, the leaders
 of these companies show a true passion for the subject
 matter as well as a deep emotional commitment to the
 business and its employees, customers, and suppliers.

DO YOU WANT TO BUILD A SMALL GIANT?

One beneficial outcome of Burlingham's book has been to prove to new or aspiring entrepreneurs that better doesn't have to mean bigger. For some, this eases the urge to seize every opportunity to expand. But Burlingham warns that resisting the pressures for growth takes strength of character. This fun-to-read book provides great insight into some entrepreneurs and managers who summoned the fortitude to make the choices that were right for them.

Small Giants: Companies That Choose to Be Great Instead of Big, by Bo Burlingham, is published by Portfolio, a division of the Penguin Group.

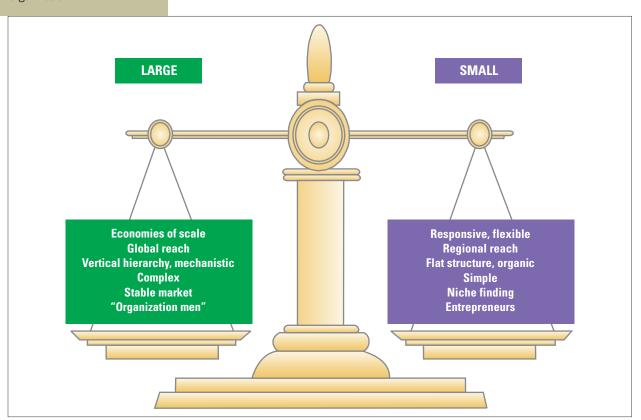
Large size enables companies to take risks that could ruin smaller firms, and scale is crucial to economic health in some industries. For marketing-intensive companies such as Coca-Cola, Procter & Gamble, and Anheuser-Busch, greater size provides power in the marketplace and thus increased revenues. Companies striving to develop renewable-energy technology have found that "the biggest bang for the buck is to go large," as entrepreneur Mark Rogers of the Cape Wind project in Massachusetts said. Many of the development costs for wind turbine and solar energy projects vary little whether the project is very large or very small, so increasing the size of the project makes it more cost-effective. In addition, growing organizations are vibrant, exciting places to work, which enables these companies to attract and keep quality employees. When the number of employees is expanding, the company can offer many challenges and opportunities for advancement.

Dilemmas of Large Size

Organizations feel compelled to grow, but how much and how large? What size organization is better poised to compete in a fast-changing global environment? The arguments are summarized in Exhibit 9.1.

Large. Huge resources and economies of scale are needed for many organizations to compete globally. Only large organizations can build a massive pipeline in Alaska. Only a large corporation like General Electric can afford to build ultraefficient \$2 million wind turbines that contain 8,000 different parts. Only a large Johnson & Johnson can invest hundreds of millions in new products such as bifocal contact lenses and a patch that delivers contraceptives through the skin. In addition, large organizations have the resources to be a supportive economic and social force in difficult times. In 2005, after Hurricane Katrina wiped out New Orleans and much of the Gulf Coast, Wal-Mart gave thousands of employees \$1,000 for emergency assistance, offered residents of the affected areas a free

EXHIBIT 9.1
Differences between
Large and Small
Organizations



Source: Based on John A. Byrne, "Is Your Company Too Big?" BusinessWeek (March 27, 1989), 84-94.

seven-day emergency supply of prescription drugs, shipped more than 100 truckloads of supplies to evacuation centers, and donated millions to relief organizations. ¹⁰ Similarly, following the 2001 terrorist attacks in the United States, American Express had the resources to help stranded customers get home and waive delinquent fees on late payments. ¹¹ Large organizations also are able to get back to business more quickly following a disaster, giving employees a sense of security and belonging during an uncertain time.

Large companies are standardized, often mechanistically run, and complex. The complexity offers hundreds of functional specialties within the organization to perform multifaceted tasks and to produce varied and complicated products. Moreover, large organizations, once established, can be a presence that stabilizes a market for years. Managers can join the company and expect a career reminiscent of the "organization men" of the 1950s and 1960s. The organization can provide longevity, raises, and promotions.

Small. The competing argument says small is beautiful because the crucial requirements for success in a global economy are responsiveness and flexibility in fast-changing markets. Small scale can provide significant advantages in terms of quick reaction to changing customer needs or shifting environmental and market conditions.¹² In addition, small organizations often enjoy greater employee commitment because it is easier for people to feel like part of a community. Employees typically work on a variety of tasks rather than narrow, specialized jobs. For many people, working in a small company is more exciting and fulfilling than working in a huge organization. Where would you be happier as a manager? Complete the questionnaire in this chapter's "How Do You Fit the Design?" box for some insight.

Many large companies have grown even larger through merger or acquisition in recent years, yet research indicates that few of these mergers live up to their expected performance levels. Studies by consulting firms such as McKinsey & Company, the Hay Group, and others suggest that performance declines in almost 20 percent of acquired companies after acquisition. By some estimates, 90 percent of mergers never live up to expectations.¹³ A look at ten of the biggest mergers of all time, including AOL/Time Warner, Glaxo/SmithKline, and Daimler/Chrysler, showed a significant decline in shareholder value for eight of the ten combined companies, as illustrated in Exhibit 9.2. Only two, Exxon/Mobil and Travelers/Citicorp, actually increased in value.¹⁴ Although there are numerous factors involved in the decline in value, many researchers and analysts agree that, frequently, bigness just doesn't add up to better performance.¹⁵

Despite the increasing size of many companies, the economic vitality of the United States, as well as most of the rest of the developed world, is tied to small and mid-sized businesses. There are an estimated 25 to 26 million small businesses in the United States, which account for a tremendous portion of goods and services provided. In addition, a large percentage of exporters are small businesses. The growth of the Internet and other information technologies has made it easier for small companies to compete with larger firms. And the growing service sector also contributes to a decrease in average organization size, as many service companies remain small to better serve customers.

Small organizations have a flat structure and an organic, free-flowing management style that encourages entrepreneurship and innovation. Today's leading biotechnology drugs, for example, were all discovered by small firms, such as Gilead

How Do You Fit the Design? What Size Organization for You?

How do your work preferences fit organization size? Answer the following questions as they reflect your likes and dislikes. Please answer whether each item is Mostly True or Mostly False for you.

		Mostly True	Mostly False
1.	I value stability and predictability in the organization I work for.		
2.	Rules are meant to be broken.		
3.	Years of service should be an important determinant of pay and promotion.		
4.	I generally prefer to work on lots of different things rather than specialize in a few things.		
5.	Before accepting a job, I would want to make sure the company had good benefits.		
6.	I would rather work on a team where managerial responsibility is shared than work in a department with a single manager.		
7.	I would like to work for a large, well-known company.		
8.	I would rather earn \$90,000 a year as a VP in a small company than earn \$100,000 a year as a middle manager in a big company.		

Scoring: Give yourself one point for each odd-numbered item you marked as Mostly True and one point for each even-numbered item you marked Mostly False.

Interpretation: Working in a large organization is a very different experience from working in a small organization. The large organization is well-established, has good benefits, is stable, and has rules, well-defined jobs, and a clear management hierarchy of authority. A small organization may be struggling to survive, has excitement, multitasking, risk, and sharing of responsibility. If you scored 6 or more, a large organization may be for you. If you scored 3 or less, you may be happier in a smaller, less structured organization.

Source: From Hellriegel/Jackson/Slocum. Managing, 11E. Copyright 2008 South-Western, a part of Cengage Learning, Inc. Reproduced by permission. http://www.cengage.com/permissions.

Sciences, which developed anti-retroviral drugs to treat HIV, rather than by huge pharmaceutical companies such as Merck.¹⁷ Moreover, the personal involvement of employees in small firms encourages motivation and commitment because employees personally identify with the company's mission. Based on studies of primitive societies, religious sects, military organizations, and some businesses, anthropologist Robin Dunbar proposed that 150 is the optimum size for any group trying to achieve a goal. Dunbar says beyond that size, the group's effectiveness wanes because of too many rules, procedures, and red tape that slows things down and saps group morale, enthusiasm, and commitment.¹⁸

EXHIBIT 9.2
Effect of Ten
Mega-Mergers on
Shareholder Wealth

Merger	Year of Deal	Value Created or Destroyed As of July 1, 2002
AOL/Time Warner Vodafone/Mannesmann Pfizer/Warner-Lambert	2001 2000 2000 2000	-\$148 billion -\$299 billion -\$78 billion
Glaxo/SmithKline Chase/J.P. Morgan Exxon/Mobil SBC/Ameritech	2000 2000 1999 1999	-\$40 billion -\$26 billion +\$8 billion -\$68 billion
WorldCom/MCI Travelers/Citicorp Daimler/Chrysler	1998 1998 1998	-\$94 billion +\$109 billion -\$36 billion

Source: Reported in Keith Hammonds, "Size Is Not a Strategy," Fast Company (September 2002), 78-86.

Big-Company/Small-Company Hybrid. The paradox is that the advantages of small companies sometimes enable them to succeed and, hence, grow large. Small companies can become victims of their own success as they grow, shifting to a mechanistic structure emphasizing vertical hierarchy and spawning "organization men" rather than entrepreneurs. Giant companies are "built for optimization, not innovation." ¹⁹ Big companies become committed to their existing products and technologies and have a hard time supporting innovation for the future.

The solution is what Jack Welch, retired chairman and CEO of General Electric, called the "big-company/small-company hybrid" that combines a large corporation's resources and reach with a small company's simplicity and flexibility. Full-service global firms need a strong resource base and sufficient complexity and hierarchy to serve clients around the world. Size is not necessarily at odds with speed and flexibility, but managers must find ways to encourage innovation and adapt quickly. The divisional structure, described in Chapter 3, is one way some large organizations attain a big-company/small-company hybrid. By reorganizing into groups of small companies, huge corporations such as Johnson & Johnson capture the mindset and advantages of smallness. Johnson & Johnson is actually a group of 250 separate companies operating in fifty-seven countries.²⁰

The development of new organizational forms, with an emphasis on decentralizing authority and cutting out layers of the hierarchy, combined with the increasing use of information technology described in Chapter 8, is making it easier than ever for companies to be simultaneously large and small, thus capturing the advantages of each. The shift can even be seen in the U.S. military. Unlike World War II, for example, which was fought with large masses of soldiers guided by decisions made at top levels, today's "war on terrorism" depends on decentralized decision making and smaller forces of highly skilled soldiers with access to up-to-the-minute information.²¹ Big companies also find a variety of ways to act both large and small. Retail giant Lowe's, for example, uses the advantage of size in areas such as advertising,

Briefc<u>ase</u>

As an organization manager, keep this guideline in mind:

If responsiveness, flexibility, simplicity, and niche finding are important, subdivide the organization into simple, autonomous divisions that have freedom and a small-company approach.

purchasing, and raising capital; however, executives give each individual store the autonomy needed to serve customers as if it were a small, hometown shop. To avoid the problem of isolated top managers, mutual fund manager Vanguard requires everyone—even the CEO—to spend some time each month manning the phones and talking directly to customers.²² The giant corporation Royal Dutch/Shell encourages innovation in its exploration-and-production division by setting aside 10 percent of the division's research budget for "crazy" ideas. Anyone can apply for the funds, and decisions are made not by managers but by a small group of nonconformist employees.²³ Small companies that are growing can also use these ideas to help their organizations retain the flexibility and customer focus that fueled their growth.

ORGANIZATIONAL LIFE CYCLE

A useful way to think about organizational growth and change is the concept of an organizational **life cycle**,²⁴ which suggests that organizations are born, grow older, and eventually die. Organization structure, leadership style, and administrative systems follow a fairly predictable pattern through stages in the life cycle. Stages are sequential and follow a natural progression.

Stages of Life Cycle Development

Research on organizational life cycle suggests that four major stages characterize organizational development.²⁵ Exhibit 9.3 illustrates these four stages along with the problems associated with transition to each stage. Growth is not easy. Each time an organization enters a new stage in the life cycle, it enters a whole new ball game with a new set of rules for how the organization functions internally and how it relates to the external environment.²⁶ For technology companies today, life cycles are getting shorter; to stay competitive, companies like eBay, Google, and MySpace have to successfully progress through stages of the cycle faster.

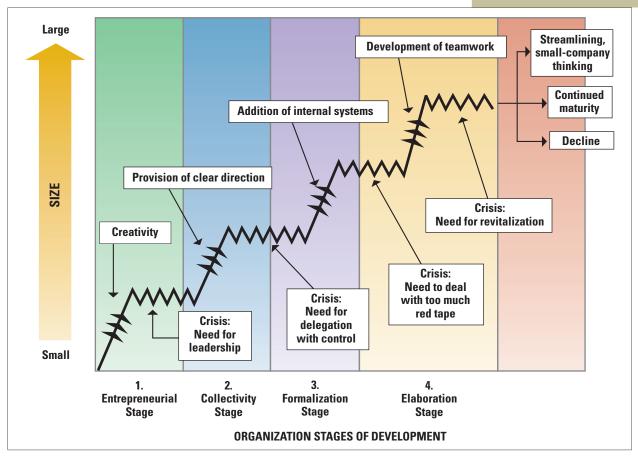
1. Entrepreneurial stage. When an organization is born, the emphasis is on creating a product or service and surviving in the marketplace. The founders are entrepreneurs, and they devote their full energies to the technical activities of production and marketing. The organization is informal and nonbureaucratic. The hours of work are long. Control is based on the owners' personal supervision. Growth is from a creative new product or service. For example, Jimmy Wales and Larry Sanger co-founded Wikipedia in 2001 based on the idea of an open source, collaborative encyclopedia, open to contributions by ordinary people. They personally provided oversight of the project during its early years, with Wales acting as visionary leader and Sanger focused primarily on developing the new service. Apple (originally Apple Computer) was in the entrepreneurial stage when it was created by Steve Jobs and Stephen Wozniak in Wozniak's parents' garage.

Crisis: Need for leadership. As the organization starts to grow, the larger number of employees causes problems. The creative and technically oriented owners are confronted with management issues, but they may prefer to focus their energies on making and selling the product or inventing new products and services. At this time of crisis, entrepreneurs must either adjust the structure of the organization to accommodate continued growth or else bring in strong managers who can do so. When Apple began a period of rapid growth, A. C. Markkula was



Grow when possible. With growth, you can provide opportunities for employee advancement and greater profitability and effectiveness. Apply new management systems and structural configurations at each stage of an organization's development. Interpret the needs of the growing organization and respond with the management and internal systems that will carry the organization through to the next stage of development.

EXHIBIT 9.3Organizational Life Cycle



Source: Adapted from Robert E. Quinn and Kim Cameron, "Organizational Life Cycles and Shifting Criteria of Effectiveness: Some Preliminary Evidence," *Management Science* 29 (1983), 33–51; and Larry E. Greiner, "Evolution and Revolution as Organizations Grow," *Harvard Business Review* 50 (July–August 1972), 37–46.

- brought in as a leader because neither Jobs nor Wozniak was qualified or cared to manage the expanding company.
- 2. Collectivity stage. If the leadership crisis is resolved, strong leadership is obtained and the organization begins to develop clear goals and direction. Departments are established along with a hierarchy of authority, job assignments, and a beginning division of labor. Social networking company Facebook moved quickly from the entrepreneurial to the collectivity stage. Twenty-three-year-old founder Mark Zuckerberg knows his company has to "grow up at Internet speed," so he recruited a top Google executive, Sheryl Sandberg, to serve as chief operating officer. Facebook also hired other skilled executives to manage various functions such as marketing, legal, communications and public relations, and finance.²⁸ In the collectivity stage, employees identify with the mission of the organization and spend long hours helping the organization succeed. Members feel part of a collective. Communication and control are mostly informal although a few formal systems begin to appear. Apple was in the

collectivity stage during the rapid growth years from 1978 to 1981. Jobs remained as CEO and visionary leader, although Markkula and other executives handled most of the management responsibilities. Employees threw themselves into the business as the major product line was established and more than 2,000 dealers signed on.

Crisis: Need for delegation. If the new management has been successful, lower-level employees gradually find themselves restricted by the strong top-down leadership. Lower-level managers begin to acquire confidence in their own functional areas and want more discretion. An autonomy crisis occurs when top managers, who were successful because of their strong leadership and vision, do not want to give up responsibility. Top managers want to make sure that all parts of the organization are coordinated and pulling together. The organization needs to find mechanisms to control and coordinate departments without direct supervision from the top.

ASSESS YOUR ANSWER

 It is wise for the entrepreneur who starts a new company to maintain hands-on management control as the company grows.

ANSWER: Disagree. Entrepreneurs typically enjoy using their creativity for making and selling a new product or service. Many stay hands-on too long because they have a hard time shifting to the role of managing other people and setting up procedures and systems the company needs as it grows. In most cases, successful entrepreneurs bring in skilled managers to run the business and take the organization to the next level.

3. Formalization stage. The formalization stage involves the installation and use of rules, procedures, and control systems. Communication is less frequent and more formal. Engineers, human resource specialists, and other staff may be added. Top management becomes concerned with issues such as strategy and planning and leaves the operations of the firm to middle management. Product groups or other decentralized units may be formed to improve coordination. Incentive systems based on profits may be implemented to ensure that managers work toward what is best for the overall company. When effective, the new coordination and control systems enable the organization to continue growing by establishing linkage mechanisms between top management and field units. Apple was in the formalization stage in the late 1980s.

Crisis: Too much red tape. At this point in the organization's development, the proliferation of systems and programs may begin to strangle middle-level executives. The organization seems bureaucratized. Middle management may resent the intrusion of staff. Innovation may be restricted. The organization seems too large and complex to be managed through formal programs. It was at this stage of Apple's growth that Jobs resigned from the company and a new CEO took control to face his own management challenges.

4. *Elaboration stage*. The solution to the red tape crisis is a new sense of collaboration and teamwork. Throughout the organization, managers develop skills for confronting problems and working together. Bureaucracy may have reached

its limit. Social control and self-discipline reduce the need for additional formal controls. Managers learn to work within the bureaucracy without adding to it. Formal systems may be simplified and replaced by manager teams and task forces. To achieve collaboration, teams are often formed across functions or divisions of the company. The organization may also be split into multiple divisions to maintain a small-company philosophy. Apple is currently in the **elaboration stage** of the life cycle, as are such large companies as General Electric, Caterpillar, and Motorola.

Crisis: Need for revitalization. After the organization reaches maturity, it may enter periods of temporary decline.²⁹ A need for renewal may occur every ten to twenty years. The organization shifts out of alignment with the environment or perhaps becomes slow moving and overbureaucratized and must go through a stage of streamlining and innovation. Top managers are often replaced during this period. At Apple, the top spot changed hands a number of times as the company struggled to revitalize. CEOs John Sculley, Michael Spindler, and Gilbert Amelio were each ousted by the board as Apple's problems deepened. Steve Jobs returned in mid-1997 to run the company he had founded nearly twenty-five years earlier. Jobs quickly reorganized the company, weeded out inefficiencies, and refocused Apple on innovative products for the consumer market. Jobs brought the entrepreneurial spirit back to Apple and moved the company into a whole new direction with the iPod music system and the iPhone. Sales and profits began to zoom.³⁰ In the years since he had left Apple, Jobs had gained management skills and experience, but he was also smart enough to bring in other skilled managers. For instance, Timothy D. Cook, hired by Jobs in 1998, has been referred to as "the story behind the story." Jobs provides vision and entrepreneurial spirit, but Cook, as chief operating officer and second-in-command, makes sure things run smoothly behind the scenes.³¹ Apple is hot right now, but it faces the problems all mature organizations deal with. All mature organizations have to go through periods of revitalization or they will decline, as shown in the last stage of Exhibit 9.3.

Summary. Eighty-four percent of businesses that make it past the first year still fail within five years because they can't make the transition from the entrepreneurial stage.³² The transitions become even more difficult as organizations progress through future stages of the life cycle. Organizations that do not successfully resolve the problems associated with these transitions are restricted in their growth and may even fail. From within an organization, the life cycle crises are very real. For example, some former employees as well as Wall Street analysts worry that Amazon CEO Jeff Bezos's leadership style has the company stuck at early stages of the life cycle.

Few people who know him deny that Jeff Bezos is brilliant. One former manager calls the Amazon.com founder and CEO "the smartest, best entrepreneur I've ever met

INPRACTIC

in my life." Others talk about his intelligence, his enthusiasm, and his ability to lead and inspire others.

Yet most of those people also admit that Bezos has a hard time delegating. He wants to be involved in every detail of the business and every decision that's made. One top technologist who worked with Amazon said Bezos wanted to have a say in everything, even if it (continued)

Amazon

was just changing the color of a tab on the website. The CEO's inability to delegate might be responsible for a high rate of manager turnover at the company. Bezos knew he needed to bring in experienced managers as Amazon grew, because he had little interest in dealing with issues such as human resources, legal, and accounting. However, his reluctance to share power doesn't sit well with many managers. When it comes to operations, Bezos seems to have a particularly hard time giving up control. Joseph Galli, hired as president and chief operations officer in 1999, lasted only thirteen months. Since then, Bezos himself has retained the title of president, CEO, and chairman, and the company has made do without a chief operations officer.

Bezos typically laughs at criticisms of his management style and points out that Amazon continues to grow and succeed. The CEO says he believes in focusing relentlessly on the customer, but observers say someone also needs to be focused on running the business.³³ ■

Can Amazon.com continue to progress successfully through the stages of the life cycle, or will Jeff Bezos's inability to delegate keep it stuck in a prolonged adolescence? Amazon.com might be considered as entering the formalization stage. By continuing to run Amazon like a young, entrepreneurial firm, Bezos might be hurting the company's ability to keep good managers and grow successfully.

Organizational Characteristics during the Life Cycle

As organizations evolve through the four stages of the life cycle, changes take place in structure, control systems, innovation, and goals. The organizational characteristics associated with each stage are summarized in Exhibit 9.4.

Entrepreneurial. Initially, the organization is small, nonbureaucratic, and a one-person show. The top manager provides the structure and control system. Organizational energy is devoted to survival and the production of a single product or service.

Collectivity. This is the organization's youth. Growth is rapid, and employees are excited and committed to the organization's mission. The structure is still mostly informal, although some procedures are emerging. Strong charismatic leaders like Jeff Bezos at Amazon.com provide direction and goals for the organization. Continued growth is a major goal.

Formalization. At this point, the organization is entering midlife. Bureaucratic characteristics emerge. The organization adds staff support groups, formalizes procedures, and establishes a clear hierarchy and division of labor. At the formalization stage, organizations may also develop complementary products to offer a complete product line. Innovation may be achieved by establishing a separate research and development (R&D) department. Major goals are internal stability and market expansion. Top management delegates, but it also implements formal control systems. This is the stage where Jeff Bezos of Amazon is having trouble managing the transition because he doesn't want to give up personal control.

Elaboration. The mature organization is large and bureaucratic, with extensive control systems, rules, and procedures. Organization managers attempt to develop a team orientation within the bureaucracy to prevent further bureaucratization. Top managers are concerned with establishing a complete organization. Organizational

EXHIBIT 9.4

Organization Characteristics during Four Stages of Life Cycle

	1. Entrepreneurial	2. Collectivity	3. Formalization	4. Elaboration
Characteristic	Nonbureaucratic	Prebureaucratic	Bureaucratic	Very Bureaucratic
Structure	Informal, one-person show	Mostly informal, some procedures	Formal procedures, division of labor, new specialties added	Teamwork within bureaucracy, small-company thinking
Products or services	Single product or service	Major product or service, with variations	Line of products or services	Multiple product or service lines
Reward and control systems	Personal, paternalistic	Personal, contribution to success	Impersonal, formal- ized systems	Extensive, tailored to product and department
Innovation	By owner-manager	By employees and managers	By separate innovation group	By institutionalized R&D department
Goal	Survival	Growth	Internal stability, market expansion	Reputation, complete organization
Top management style	Individualistic, entrepreneurial	Charismatic, direction-giving	Delegation with control	Team approach, attack bureaucracy

Source: Adapted from Larry E. Greiner, "Evolution and Revolution as Organizations Grow," *Harvard Business Review* 50 (July–August 1972), 37–46; G. L. Lippitt and W. H. Schmidt, "Crises in a Developing Organization," *Harvard Business Review* 45 (November–December 1967), 102–112; B. R. Scott, "The Industrial State: Old Myths and New Realities," *Harvard Business Review* 51 (March–April 1973), 133–148; and Robert E. Quinn and Kim Cameron, "Organizational Life Cycles and Shifting Criteria of Effectiveness," *Management Science* 29 (1983), 33–51.

stature and reputation are important. Innovation is institutionalized through an R&D department. Management may attack the bureaucracy and streamline it.

Summary. Growing organizations move through stages of a life cycle, and each stage is associated with specific characteristics of structure, control systems, goals, and innovation. The life cycle phenomenon is a powerful concept used for understanding problems facing organizations and how managers can respond in a positive way to move an organization to the next stage.

ORGANIZATIONAL SIZE, BUREAUCRACY, AND CONTROL

As organizations progress through the life cycle, they usually take on bureaucratic characteristics as they grow larger and more complex. The systematic study of bureaucracy was launched by Max Weber, a sociologist who studied government organizations in Europe and developed a framework of administrative characteristics that would make large organizations rational and efficient.³⁴ Weber wanted

to understand how organizations could be designed to play a positive role in the larger society.

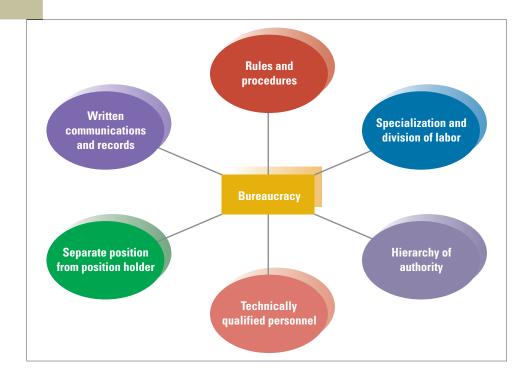
What Is Bureaucracy?

Although Weber perceived **bureaucracy** as a threat to basic personal liberties, he also recognized it as the most efficient possible system of organizing. He predicted the triumph of bureaucracy because of its ability to ensure more efficient functioning of organizations in both business and government settings. Weber identified a set of organizational characteristics, listed in Exhibit 9.5, that could be found in successful bureaucratic organizations.

Rules and standard procedures enabled organizational activities to be performed in a predictable, routine manner. Specialized duties meant that each employee had a clear task to perform. Hierarchy of authority provided a sensible mechanism for supervision and control. Technical competence was the basis by which people were hired rather than friendship, family ties, and favoritism. The separation of the position from the position holder meant that individuals did not own or have an inherent right to the job, which promoted efficiency. Written records provided an organizational memory and continuity over time.

Although bureaucratic characteristics carried to an extreme are widely criticized today, the rational control introduced by Weber was a significant idea and a new form of organization. Bureaucracy provided many advantages over organization forms based on favoritism, social status, family connections, or graft. Consider the

EXHIBIT 9.5Weber's Dimensions of Bureaucracy



situation in many Latin American countries, where graft, corruption, and nepotism are rampant throughout government and business institutions. In Brazil, for example, government officials have been accused of paying bribes to legislators for their support, favoring contractors who made clandestine campaign contributions, and using their influence to gain jobs or favorable circumstances for family members. The China, the tradition of giving government posts to relatives is still widespread, but China's emerging class of educated people doesn't like seeing the best jobs going to children and other relatives of officials. The United States, as well, sees its share of corruption, as evidenced by the recent case of Illinois Governor Rod Blagojevich, accused of a wide-ranging corruption that included trying to sell the Senate seat vacated by President Barack Obama. Dama. By comparison with these examples, the logical and rational form of organization described by Weber allows work to be conducted fairly, efficiently, and according to established rules.

A recent study of empirical organization research over four decades confirms the validity and persistence of Weber's model of bureaucracy, showing positive relationships among elements such as specialization, formalization, and standardization, as shown in Exhibit 9.5.³⁸ Bureaucratic characteristics can have a positive effect for many large organizations. Consider United Parcel Service (UPS), one of today's most efficient large organizations.

UPS, sometimes called *Big Brown* for the color of delivery trucks and employee uniforms, is the largest package-distribution company in the world, delivering over



15 million packages a day, and a global leader in supply chain, logistics, and information services. The company operates in more than 200 countries and territories around the world.

How did UPS become so successful? Many efficiencies were realized through adoption of the bureaucratic model of organization. UPS operates according to a mountain of rules and regulations. It teaches drivers an astounding 340 precise steps to correctly deliver a package. For example, it tells them how to load their trucks, how to fasten their seat belts, how to step off the truck, how to walk, and how to carry their keys. Strict dress codes are enforced—clean uniforms (called *browns*) every day, black or brown polished shoes with nonslip soles, no shirt unbuttoned below the first button, no hair below the shirt collar, no beards, no tattoos visible during deliveries, and so on. Before each shift, drivers conduct a "Z-scan," a Z-shaped inspection of the sides and front of their vehicles. There are safety rules for drivers, loaders, clerks, and managers. Employees are asked to clean off their desks at the end of each day so they can start fresh the next morning. Managers are given copies of policy books with the expectation that they will use them regularly, and memos on various policies and rules circulate by the hundreds every day.

Despite the strict rules and numerous policies, employees are satisfied and UPS has a high employee retention rate. Employees are treated well and paid well, and the company has maintained a sense of equality and fairness. Everyone is on a first-name basis. The policy book states, "A leader does not have to remind others of his authority by use of a title. Knowledge, performance, and capacity should be adequate evidence of position and leadership." Technical qualification, not favoritism, is the criterion for hiring and promotion. Top executives started at the bottom—former CEO James Kelly began his career as a temporary holiday-rush driver, and the recently retired CEO Michael Eskew started off at UPS by redesigning a parking lot to accommodate more trucks. The emphasis on equality, fairness, and a promote-from-within mentality inspires loyalty and commitment throughout the ranks.³⁹

United Parcel Service (UPS)



Guard against excessive overhead by

keeping administra-

tive, clerical, and support staff costs low.

UPS illustrates how bureaucratic characteristics increase with large size. UPS is so productive and dependable that it dominates the small package delivery market. As it expands and transitions into a global, knowledge-based logistics business, UPS managers may need to find effective ways to reduce the bureaucracy. New technology and new services place more demands on workers, who may need more flexibility and autonomy to perform well. Now, let's look at some specific ways size affects organization structure and control.

Size and Structural Control

In the field of organization theory, organization size has been described as an important variable that influences structural design and methods of control. Should an organization become more bureaucratic as it grows larger? In what size organizations are bureaucratic characteristics most appropriate? More than 100 studies have attempted to answer these questions. 40 Most of these studies indicate that large organizations are different from small organizations along several dimensions of bureaucratic structure, including formalization, centralization, and personnel ratios.

Formalization and Centralization. Formalization, as described in Chapter 1, refers to rules, procedures, and written documentation, such as policy manuals and job descriptions, that prescribe the rights and duties of employees. The evidence supports the conclusion that large organizations are more formalized, as at UPS. The reason is that large organizations rely on rules, procedures, and paperwork to achieve standardization and control across their large numbers of employees and departments, whereas top managers can use personal observation to control a small organization. For example, a locally-owned coffee shop in a small town doesn't need the detailed manuals, policies, and procedures that Starbucks uses to standardize and control its operations around the world.

Centralization refers to the level of hierarchy with authority to make decisions. In centralized organizations, decisions tend to be made at the top. In decentralized organizations, similar decisions would be made at a lower level.

Decentralization represents a paradox because, in the perfect bureaucracy, all decisions would be made by the top administrator, who would have perfect control. However, as an organization grows larger and has more people and departments, decisions cannot be passed to the top because senior managers would be overloaded. Thus, the research on organization size indicates that larger organizations permit greater decentralization.⁴³ In small start-up organizations, on the other hand, the founder or top executive can effectively be involved in every decision, large and small.

Personnel Ratios. Another characteristic of bureaucracy relates to **personnel ratios** for administrative, clerical, and professional support staff. The most frequently studied ratio is the administrative ratio.⁴⁴ Two patterns have emerged. The first is that the ratio of top administration to total employees is actually smaller in large organizations,⁴⁵ indicating that organizations experience administrative economies as they grow larger. The second pattern concerns clerical and professional support staff ratios.⁴⁶ These groups tend to *increase* in proportion to organization size. The clerical ratio increases because of the greater communication and reporting requirements needed as organizations grow larger. The professional staff ratio increases because of the greater need for specialized skills in larger, complex organizations.

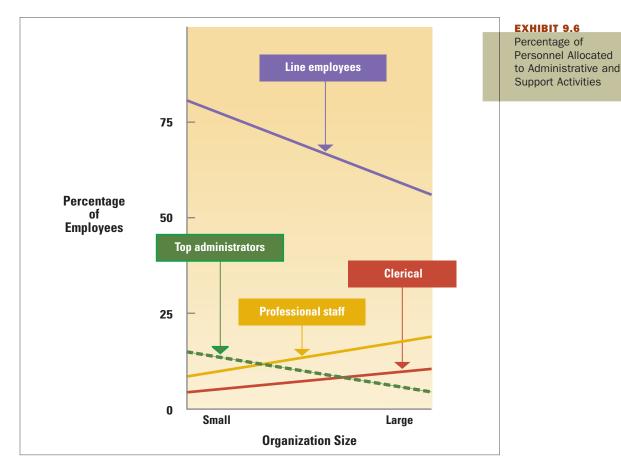


Exhibit 9.6 illustrates administrative and support ratios for small and large organizations. As organizations increase in size, the administrative ratio declines and the ratios for other support groups increase.⁴⁷ The net effect for direct workers is that they decline as a percentage of total employees. In summary, whereas top administrators do not make up a disproportionate number of employees in large organizations, the idea that proportionately greater overhead is required in large organizations is supported. Although large organizations reduced overhead during the difficult economic years of the 1980s, overhead costs for many American corporations began creeping back up again as revenues soared during the late 1990s.⁴⁸ With the declining U.S. economy, many companies have again been struggling to cut overhead costs. Keeping costs for administrative, clerical, and professional support staff low represents an ongoing challenge for large organizations.

BUREAUCRACY IN A CHANGING WORLD

Weber's prediction of the triumph of bureaucracy proved accurate. Bureaucratic characteristics have many advantages and have worked extremely well for many of the needs of the industrial age.⁴⁹ By establishing a hierarchy of authority and specific rules and procedures, bureaucracy provided an effective way to bring order to large

groups of people and minimize abuses of power. Impersonal relationships based on roles rather than people reduced the favoritism and nepotism characteristic of many preindustrial organizations. Bureaucracy also provided for systematic and rational ways to organize and manage tasks too complex to be understood and handled by a few individuals, thus greatly improving the efficiency and effectiveness of large organizations.

Today's world is in constant flux, however, and the machinelike bureaucratic system of the industrial age no longer works so well as organizations face new challenges and need to respond quickly. Consider Microsoft, which some current and former employees complain has become slow and muscle-bound by heavy bureaucracy in recent years. Almost every significant action requires a lawyer's signature, they say, and getting approval for even routine matters can take weeks. One employee left the company because he was tired of being inundated with paperwork. "The smallest issue would balloon into a nightmare of a thousand e-mails," he says.⁵⁰ Managers are trying to find ways to cut the bureaucracy so people can do their jobs more effectively and help Microsoft stay competitive against nimbler rivals such as Google. Like Microsoft, many organizations are fighting against increasing formalization and professional staff ratios. ConAgra Foods, for instance, implemented an initiative called RoadMap, which brings together people from all across the company to simplify and streamline processes for reporting, planning, performance management, and so forth. The simplified processes cut overhead costs as well as improved the quality and speed of communication and decision making.⁵¹

The problems caused by over-bureaucratization are evident in the inefficiencies of some large U.S. government organizations. Some agencies have so many clerical staff members and confusing job titles that no one is really sure who does what. Richard Cavanagh, once an aide to President Jimmy Carter, reports his favorite federal title as the "administrative assistant to the assistant administrator for administration of the General Services Administration."52 Some critics have blamed government bureaucracy for intelligence, communication, and accountability failures related to the 2001 terrorist attacks, the Columbia space shuttle disaster, the abuses at Abu Ghraib prison, and a slow response to the 2005 Hurricane Katrina devastation. "Every time you add a layer of bureaucracy, you delay the movement of information up the chain of command . . . And you dilute the information because at each step some details are taken out," says Richard A. Posner, a federal appeals court judge who has written a book on intelligence reform.⁵³ Many business organizations, too, need to reduce formalization and bureaucracy. Narrowly defined job descriptions and excessive rules, for example, tend to limit the creativity, flexibility, and rapid response needed in today's knowledge-based organizations.

Organizing Temporary Systems

How can organizations overcome the problems of bureaucracy in rapidly changing environments? Some are implementing innovative structural solutions. One structural concept is to use temporary systems or structures to respond to an emergency or crisis situation. This approach is often used by organizations such as police and fire departments or other emergency management agencies to maintain the efficiency and control benefits of bureaucracy yet prevent the problem of slow response.⁵⁴ The approach is being adapted by other types of organizations to help them respond quickly to new opportunities, unforeseen competitive threats, or organizational crises.

The basic idea is that the organization can glide smoothly between a highly formalized, hierarchical structure that is effective during times of stability and a more flexible, loosely structured one needed to respond well to unexpected and demanding environmental conditions. The hierarchical side with its rules, procedures, and chain of command helps maintain control and ensure adherence to rules that have been developed and tested over many years to cope with well-understood problems and situations. However, during times of high uncertainty, the most effective structure is one that loosens the lines of command and enables people to work across departmental and hierarchical lines to anticipate, avoid, and solve unique problems within the context of a clearly understood mission and guidelines. The approach can be seen in action at the Salvation Army, which has been called "the most effective organization in the world."

The Salvation Army provides day-to-day assistance to the homeless and economically disadvantaged. In addition, the organization rushes in whenever there is a major



Salvation Army

disaster—whether it be a tornado, flood, hurricane, airplane crash, or terrorist attack—to network with other agencies to provide disaster relief. The Army's management realizes that emergencies demand high flexibility. At the same time, the organization must have a high level of control and accountability to ensure its continued existence and meet its day-to-day responsibilities. As a former national commander puts it, "We have to have it both ways. We can't choose to be flexible and reckless or to be accountable and responsive . . . We have to be several different kinds of organization at the same time."

In the early emergency moments of a crisis, the Salvation Army deploys a temporary organization that has its own command structure. People need to have a clear sense of who's in charge to prevent the rapid response demands from degenerating into chaos. For example, if the Army responds to a flood in Tennessee or a tornado in Oklahoma, manuals clearly specify in advance who is responsible for talking to the media, who is in charge of supply inventories, who liaises with other agencies, and so forth. This model for the temporary organization keeps the Salvation Army responsive and consistent. However, in the later recovery and rebuilding phases of a crisis, supervisors frequently give people general guidelines and allow them to improvise the best solutions. There isn't time for supervisors to review and sign off on every decision that needs to be made to get families and communities reestablished.

Thus, the Salvation Army actually has people simultaneously working in all different types of structures, from traditional vertical command structures, to horizontal teams, to a sort of network form that relies on collaboration with other agencies. Operating in such a fluid way enables the organization to accomplish amazing results. In one year, the Army assisted more than 2.3 million people caught in disasters in the United States, in addition to many more served by regular day-to-day programs. It has been recognized as a leader in putting money to maximal use, meaning donors are willing to give because they trust the organization to be responsible and accountable at the same time it is flexible and innovative in meeting human needs. ⁵⁵

Other Approaches to Busting Bureaucracy

Organizations are taking a number of other, less dramatic steps to reduce bureaucracy. Many are cutting layers of the hierarchy, keeping headquarters staff small, and



temporary systems approach to maintain the efficiency and control benefits of bureaucracy but prevent the problem of slow response to rapid environmental change. Enable the organization to glide smoothly from a formalized system during times of stability to a more flexible, loosely structured one when facing threats, crises, or unexpected environmental changes.

giving lower-level workers greater freedom to make decisions rather than burdening them with excessive rules and regulations. Consider the following examples:

- Executives at Sun Microsystems found that after a period of rapid growth, the organization had become too top-heavy, with too many hierarchical layers impeding communication and slowing decision making. They reorganized to a flatter, more streamlined organization, with typically no more than three or four levels between any employee and the CEO.⁵⁶
- Centex Corporation, which has annual revenues of about \$3.8 billion, is run from a modest headquarters in Dallas by a staff of less than 100. Centex decentralizes authority and responsibility to the operating divisions.⁵⁷ The point is to not overload headquarters with lawyers, accountants, and financial analysts who inhibit the flexibility and autonomy of divisions.
- At the London-based pharmaceuticals company GlaxoSmithKline PLC, frontline scientists, not top executives or a research committee, set priorities and allocate resources for drugs in development. The shift in who decides which drug research projects to fund has brought an entrepreneurial spirit to the giant firm similar to that of a small biotechnology company.⁵⁸

Another attack on bureaucracy is from the increasing professionalism of employees. *Professionalism* is defined as the length of formal training and experience of employees. More employees need college degrees, MBAs, and other professional degrees to work as attorneys, researchers, or doctors at Nortel, Zurich Financial Services, or GlaxoSmithKline. In addition, Internet-based companies may be staffed entirely by well-educated knowledge workers. Studies of professionals show that formalization is not needed because professional training regularizes a high standard of behavior for employees, which acts as a substitute for bureaucracy. Companies enhance this trend when they provide ongoing training for *all* employees, from the front office to the shop floor, in a push for continuous individual and organizational learning. Increased training substitutes for bureaucratic rules and procedures that can constrain the creativity of employees in solving problems, in addition to enhancing individual and organizational capability.

A form of organization called the *professional partnership* has emerged that is made up completely of professionals. These organizations include accounting firms, medical practices, law firms, and consulting firms. The general finding concerning professional partnerships is that branches have substantial autonomy and decentralized authority to make necessary decisions. They work with a consensus orientation rather than the top-down direction typical of traditional business and government organizations. Thus, the trend of increasing professionalism combined with rapidly changing environments is leading to less bureaucracy in corporate North America.

BUREAUCRACY VERSUS OTHER FORMS OF CONTROL

Even though many organizations are trying to reduce bureaucracy and streamline rules and procedures that constrain employees, every organization needs systems for guiding and controlling the organization. Employees may have more freedom in today's companies, but control is still a major responsibility of management.

Managers at the top and middle levels of an organization can choose among three overall control strategies. These strategies come from a framework for organizational

EXHIBIT 9.7Three Organizational Control Strategies

Туре	Requirements	
Bureaucracy	Rules, standards, hierarchy, legitimate authority	
Market	Prices, competition, exchange relationship	
Clan	Tradition, shared values and beliefs, trust	

Source: Based on William G. Ouchi, "A Conceptual Framework for the Design of Organizational Control Mechanisms," *Management Science* 25 (1979), 833–848.

control proposed by William Ouchi of the University of California at Los Angeles. Ouchi suggested three control strategies that organizations could adopt—bureaucratic, market, and clan.⁶¹ Each form of control uses different types of information. However, all three types may appear simultaneously in an organization. The requirements for each control strategy are given in Exhibit 9.7.

Bureaucratic Control

Bureaucratic control is the use of rules, policies, hierarchy of authority, written documentation, standardization, and other bureaucratic mechanisms to standardize behavior and assess performance. Bureaucratic control uses the bureaucratic characteristics defined by Weber and illustrated in the UPS case. The primary purpose of bureaucratic rules and procedures is to standardize and control employee behavior.

Recall that as organizations progress through the life cycle and grow larger, they become more formalized and standardized. Within a large organization, thousands of work behaviors and information exchanges take place both vertically and horizontally. Rules and policies evolve through a process of trial and error to regulate these behaviors. Some degree of bureaucratic control is used in virtually every organization. Rules, regulations, and directives contain information about a range of behaviors.

To make bureaucratic control work, managers must have the authority to maintain control over the organization. Weber argued that legitimate, rational authority granted to managers was preferred over other types of control (e.g., favoritism or payoffs) as the basis for organizational decisions and activities. Within the larger society, however, Weber identified three types of authority that could explain the creation and control of a large organization.⁶²

Rational-legal authority is based on employees' belief in the legality of rules and the right of those elevated to positions of authority to issue commands. Rational-legal authority is the basis for both creation and control of most government organizations and is the most common base of control in organizations worldwide. Traditional authority is the belief in traditions and in the legitimacy of the status of people exercising authority through those traditions. Traditional authority is the basis for control for monarchies, churches, and some organizations in Latin America and the Persian Gulf. Charismatic authority is based on devotion to the exemplary character or to the heroism of an individual person and the order defined by him or her. Revolutionary military organizations are often based on the leader's charisma, as are North American organizations led by charismatic individuals such as Steve Jobs of Apple, Tom Anderson of MySpace, or Oprah Winfrey of Harpo Productions. The organization reflects the personality and values of the leader.



Implement one of the three basic choices bureaucratic, clan, market—as the primary means of organizational control. Use bureaucratic control when organizations are large, have a stable environment, and use routine technology. Use clan control in small, uncertain departments. Use market control when outputs can be priced and when competitive bidding is available.

More than one type of authority—such as long tradition and the leader's special charisma—may exist in organizations, but rational-legal authority is the most widely used form to govern internal work activities and decision making, particularly in large organizations.

Market Control

Market control occurs when price competition is used to evaluate the output and productivity of an organization or its major departments and divisions. The idea of market control originated in economics.⁶³ A dollar price is an efficient form of control, because managers can compare prices and profits to evaluate the efficiency of their corporation. Top managers nearly always use the price mechanism to evaluate performance in their corporations. Corporate sales and costs are summarized in a profit-and-loss statement that can be compared against performance in previous years or with that of other corporations.

The use of market control requires that outputs be sufficiently explicit for a price to be assigned and that competition exist. Without competition, the price does not accurately reflect internal efficiency. Even some government and traditionally nonprofit organizations are turning to market control. For example, the U.S. Federal Aviation Administration took bids to operate its payroll computers. The Department of Agriculture beat out IBM and two other private companies to win the bid.⁶⁴ The city of Indianapolis requires all its departments to bid against private company on a contract to fill potholes, the city's union workers made a counterproposal that involved eliminating most of the department's middle managers and reengineering union jobs to save money. Eighteen supervisors were laid off, costs were cut by 25 percent, and the department won the bid.⁶⁵

Market control was once used primarily at the level of the entire organization, but it is increasingly used in product divisions or individual departments. Profit centers are self-contained product divisions, such as those described in Chapter 3. Each division contains resource inputs needed to produce a product. Each division can be evaluated on the basis of profit or loss compared with other divisions. Asea Brown Boveri (ABB), a multinational electrical contractor and manufacturer of electrical equipment, includes three different types of profit centers, all operating according to their own bottom line and all interacting through buying and selling with one another and with outside customers. The network organization, also described in Chapter 3, illustrates market control as well. Different companies compete on price to provide the functions and services required by the hub organization. The organization typically contracts with the company that offers the best price and value.

Clan Control

Clan control is the use of social characteristics, such as shared values, commitment, traditions, and beliefs, to control behavior. Organizations that use clan control have strong cultures that emphasize shared values and trust among employees.⁶⁷ Clan control is important when ambiguity and uncertainty are high. High uncertainty means the organization cannot put a price on its services, and things change so fast that rules and regulations are not able to specify every correct behavior. Under clan control, people may be hired because they are committed to the organization's

purpose, such as in a religious organization or an organization focused on a social mission. New employees are typically subjected to a long period of socialization to gain acceptance by colleagues. There is strong pressure to conform to group norms, which govern a wide range of employee behaviors. Managers act primarily as mentors, role models, and agents for transmitting values.⁶⁸

2 A manager should emphasize shared values, trust, and commitment to the organization's mission as the primary means of controlling employee behavior.

ANSWER: Agree or disagree. Clan control, which relies on culture, trust, commitment, and shared values and traditions, can be highly effective and is particularly useful in departments or organizations experiencing high uncertainty or environmental turbulence. However, other forms of control, such as bureaucratic or market control, are also effective and appropriate under the right circumstances.

ASSESS YOUR ANSWER

Traditional control mechanisms based on strict rules and close supervision are ineffective for controlling behavior in conditions of high uncertainty and rapid change.⁶⁹ In addition, the growing use of computer networks and the Internet, which often leads to a democratic spread of information throughout the organization, is influencing companies to depend less on bureaucratic control and more on shared values that guide individual actions for the corporate good.⁷⁰ Clan control is most often used in small, informal organizations where people are strongly committed to the organization's purpose, or in certain departments or divisions of larger organizations. One company that has succeeded with clan control even as it grew large is Southwest Airlines.

In a tough environment of exorbitant fuel costs and declining business, Southwest was one of the few airlines that didn't ask for wage and benefit concessions from employ-



ees. At Southwest, people are viewed as the airline's "greatest competitive weapon," says CEO Gary Kelly. Employees have sometimes voluntarily given up vacation pay or contributed in other ways to help the airline pay for rising costs. When founder and former CEO Herb Kelleher asked employees several years ago to find a way to help the company save \$5 a day, one employee began taking the stairs instead of the elevator to save electricity. Loyalty, commitment, and peer pressure are strong components of control at Southwest Airlines, where a "we're all family" culture spurs employees to give their best and make sure others do too.

New hires are selected carefully to fit in with the culture, and each employee goes through a long period of socialization and training. The peer pressure to work hard and help the company cut costs and boost productivity is powerful. Employees routinely challenge each other on matters such as questionable sick-day calls or overuse of office supplies. People frequently go above and beyond the call of duty. Flight attendants who are traveling off-duty pitch in to help clean planes. Pilots help ramp agents load bags to keep flights on time.

(continued)

Southwest Airlines The strong culture and clan control helped Southwest grow into the world's third largest airline and remain profitable for thirty-five consecutive years. In 2007, Southwest was tops among the ten biggest carriers in on-time arrivals, had the fewest customer complaints, and posted the biggest profits. However, as the company grows larger and faces new competitive pressures, the culture is showing signs of strain. Revenues have slowed, costs have mounted, new low-cost carriers are snatching business, and larger rivals have grown leaner and more competitive. Southwest has lost its underdog status and the motivation it provided for employees to work hard and conquer new territory. Labor negotiations with unions have been significantly less amicable than in the past as well.⁷¹

Despite these tensions, clan control still works at Southwest. Leaders are trying to reinforce the family-like culture to ensure that heavy bureaucratic controls are not needed. Southwest's story illustrates that large size increases the demands on managers to maintain strong cultural values that support this type of control. Today's companies that are trying to become learning organizations often use clan control or *self-control* rather than relying on rules and regulations. Self-control is similar to clan control, but whereas clan control is a function of being socialized into a group, self-control stems from individual values, goals, and standards. The organization attempts to induce a change such that individual employees' own internal values and work preferences are brought in line with the organization's values and goals.⁷² With self-control, employees generally set their own goals and monitor their own performance, yet companies relying on self-control need strong leaders who can clarify boundaries within which people exercise their own knowledge and discretion.

Clan control or self-control may also be used in some departments, such as strategic planning, where uncertainty is high and performance is difficult to measure. Managers of departments that rely on these informal control mechanisms must not assume that the absence of written, bureaucratic control means no control is present. Clan control is invisible yet very powerful. One study found that the actions of employees were controlled even more powerfully and completely with clan control than with a bureaucratic hierarchy.⁷³ When clan control works, bureaucratic control is not needed.

ORGANIZATIONAL DECLINE AND DOWNSIZING

Earlier in the chapter, we discussed the organizational life cycle, which suggests that organizations are born, grow older, and eventually die. Size can become a burden for many organizations. For example, General Motors is collapsing under its own weight. Not only is the company laboring under a financial burden of huge pension and health care obligations, but its cumbersome bureaucracy has made it hard for GM to connect with the needs of consumers. Regional managers say their ideas and suggestions for product changes or advertising approaches never reach decision makers or fall on deaf ears.⁷⁴ Every organization goes through periods of temporary decline. Even the storied General Electric is facing problems related to huge size, which have been compounded by the global financial crisis. By the time GE decided to sell off its private-label credit card business and the lightbulb division, for instance, no one was buying.⁷⁵ In addition, a reality in today's environment is that for some companies, continual growth and expansion may not be possible.

All around, we see evidence that some organizations have stopped growing, and many are declining. Huge financial services firms, such as Lehman Brothers and Bear Stearns, collapsed partly as a result of unfettered growth and ineffective control. Starbucks had to bring its period of rampant expansion to an end when it became clear that it was cannibalizing sales and threatening the chain's success. In mid-2008, Starbucks announced that it would close 500 of its U.S. stores. Local governments have been forced to close schools and lay off teachers as tax revenues have declined. Many big organizations, including Siemens, Sprint, American Airlines, Nissan, Yahoo!, and even the American Red Cross, have had significant job cuts in recent years.

In this section, we examine the causes and stages of organizational decline and then discuss how leaders can effectively manage the downsizing that is a reality in today's companies.

Definition and Causes

The term **organizational decline** is used to define a condition in which a substantial, absolute decrease in an organization's resource base occurs over time.⁷⁷ Organizational decline is often associated with environmental decline in the sense that an organizational domain experiences either a reduction in size (such as shrinkage in customer demand or erosion of a city's tax base) or a reduction in shape (such as a shift in customer demand). In general, three factors are considered to cause organizational decline.

- 1. Organizational atrophy. Atrophy occurs when organizations grow older and become inefficient and overly bureaucratized. The organization's ability to adapt to its environment deteriorates. Often, atrophy follows a long period of success, because an organization takes success for granted, becomes attached to practices and structures that worked in the past, and fails to adapt to changes in the environment. Some warning signals for organizational atrophy include excess administrative and support staff, cumbersome administrative procedures, lack of effective communication and coordination, and outdated organizational structure.
- 2. Vulnerability. Vulnerability reflects an organization's strategic inability to prosper in its environment. This often happens to small organizations that are not yet fully established. They are vulnerable to shifts in consumer tastes or in the economic health of the larger community. Small e-commerce companies that had not yet become established were the first to go out of business when the technology sector began to decline. Some organizations are vulnerable because they are unable to define the correct strategy to fit the environment. Vulnerable organizations typically need to redefine their environmental domain to enter new industries or markets.
- 3. Environmental decline or competition. Environmental decline refers to reduced energy and resources available to support an organization. When the environment has less capacity to support organizations, the organization has to either scale down operations or shift to another domain. 80 This is the problem managers face at the American Red Cross. The 126-year-old organization has struggled with fund-raising for several years and now finds itself in a position of spending more than it is bringing in. Steep drops in the stock market, rising prices, and general pessimism about the U.S. economy are creating a tough fund-raising

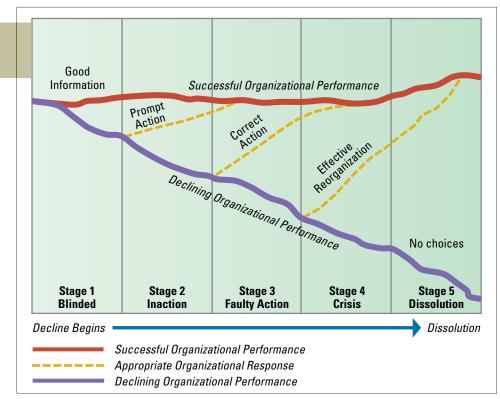
EXHIBIT 9.8Stages of Decline and the Widening Performance Gap

environment for all nonprofits.⁸¹ New competition can also be a problem, especially for small organizations. Consider what's happening to U.S. toolmakers, the companies that make the dies, molds, jigs, fixtures, and gauges used on factory floors to manufacture everything from car doors to laser-guided bombs. Hundreds of these companies—including one of only two firms in the United States capable of making tools used to build components of stealth aircraft—have gone out of business in recent years, unable to compete with the super-low prices their counterparts in China are offering. As more and more toolmakers go out of business, the National Tooling and Machining Association has urged Congress to pass legislation that would "level the playing field" and enable these small firms to stay competitive with Chinese companies.⁸²

A Model of Decline Stages

Based on an extensive review of organizational decline research, a model of decline stages has been proposed and is summarized in Exhibit 9.8. This model suggests that decline, if not managed properly, can move through five stages resulting in organizational dissolution.⁸³

1. *Blinded stage*. The first stage of decline is the internal and external change that threatens long-term survival and may require the organization to tighten up.



Source: American Science Quarterly. "Decline in Organizations: A Literature Integration and Extension," by William Weitzel and Ellen Jonsson, vol. 34, pp. 99–109, March 1989. Reprinted by permission.

The organization may have excess personnel, cumbersome procedures, or lack of harmony with customers. Leaders often miss the signals of decline at this point, and the solution is to develop effective scanning and control systems that indicate when something is wrong. With timely information, alert executives can bring the organization back to top performance.

- 2. *Inaction stage*. The second stage of decline is called *inaction* in which denial occurs despite signs of deteriorating performance. Leaders may try to persuade employees that all is well. "Creative accounting" may make things look fine during this period. The solution is for leaders to acknowledge decline and take prompt action to realign the organization with the environment. Leadership actions may include new problem-solving approaches, increasing decision-making participation, and encouraging expression of dissatisfaction to learn what is wrong.
- 3. Faulty action stage. In the third stage, the organization is facing serious problems, and indicators of poor performance cannot be ignored. Failure to adjust to the declining spiral at this point can lead to organizational failure. Leaders are forced by severe circumstances to consider major changes. Actions may involve retrenchment, including downsizing personnel. Leaders should reduce employee uncertainty by clarifying values and providing information. A major mistake at this stage decreases the organization's chance for a turnaround.
- 4. *Crisis stage*. In the fourth stage, the organization still has not been able to deal with decline effectively and is facing a panic. The organization may experience chaos, efforts to go back to basics, sharp changes, and anger. It is best for managers to prevent a stage-4 crisis; at this stage, the only solution is major reorganization. The social fabric of the organization is eroding, and dramatic actions, such as replacing top administrators and revolutionary changes in structure, strategy, and culture, are necessary. Workforce downsizing may be severe.
- 5. *Dissolution stage*. This stage of decline is irreversible. The organization is suffering loss of markets and reputation, the loss of its best personnel, and capital depletion. The only available strategy is to close down the organization in an orderly fashion and reduce the separation trauma of employees.

The following example shows how good managers take action to reverse the course of decline and position the organization for future success.

It was late 2001 when Brian Walker confronted Herman Miller CEO Michael Volkema and the rest of the top executive team. Walker (who was then president of Herman

IN PRACTICE

(continued)

Miller North America and today serves as CEO of the company) told the team they needed to stop hoping for a quick turnaround and start planning for brutal cutbacks to help the company survive. After years of success, the maker of office furniture such as the stylish, ergonomically engineered Aeron chair was suffering "an industry heart attack," with sales dropping drastically after the collapse of the dot-com boom.

Managers noticed the decline, but they kept thinking it would be short-lived. Walker, though, believed it was just the beginning of a long and painful downturn. He was right; by 2003, the company's business had dropped 45 percent. Fortunately, the executive team had listened and taken action. The plan involved some painful decisions and some risky ones. First, the team cut 4,500 jobs—nearly 38 percent of the workforce, sold off more than

Briefcase

As an organization manager, keep these guidelines in mind:

Understand the causes and stages of decline. Be vigilant to detect signs of decline in the organization and take action as quickly as possible to reverse course. Quick action in the early stages prevents the organization from deteriorating to a stage-4 crisis, when a turnaround becomes much more difficult.

Herman Miller

a million square feet of prime real estate, and slashed some promising new businesses, such as a ready-to-assemble line of furniture sold over the Internet. However, managers knew that cutting back wasn't enough to ensure that the company would survive over the long term. Looking at the industry environment, the economy, and international competition, the team believed volatility in their business would increase rather than decrease in the future. Therefore, they made a risky decision to invest millions in research and development of highly innovative ideas that might not pay off for years—if ever.

The decisions about what to cut and what to fund were made thoughtfully after much debate and discussion. With the current economic environment, Herman Miller is still facing challenges, but the most recent fiscal year's profits exceeded forecasts and new products, such as a new-generation cubicle that promises a sense of privacy with openness, are showing promise. The company began hiring more workers in mid-2008, and a \$1,595 "environmentally friendly" executive chair named the Embody was touted by *Fortune* magazine as "the new throne of the techie." Moreover, the company is building business by creating innovative hospital furniture, such as a chair designed to help patients recovering from surgery.⁸⁴

Properly managing organizational decline is necessary if an organization is to avoid dissolution. Leaders have a responsibility to detect the signs of decline, acknowledge them, implement necessary action, and reverse course. Some of the most difficult decisions pertain to **downsizing**, which refers to intentionally reducing the size of a company's workforce.

Downsizing Implementation

The economic downturn has made downsizing a common practice in America's corporations. In addition, downsizing is a part of many change initiatives in today's organizations. Reengineering projects, mergers and acquisitions, global competition, and the trend toward outsourcing have all led to job reductions. 86

Some researchers have found that massive downsizing has often not achieved the intended benefits and in some cases has significantly harmed the organization.⁸⁷ Nevertheless, there are times when downsizing is a necessary part of managing organizational decline. A number of techniques can help smooth the downsizing process and ease tensions for employees who leave and for those who remain.⁸⁸

1. Communicate more, not less. Some managers seem to think the less that's said about a pending layoff, the better. Not so. Rumors can be much more damaging than open communication. At 3Com Corporation, managers drew up a three-stage plan as they prepared for layoffs. First, they warned employees several months ahead that layoffs were inevitable. Soon thereafter, they held on-site presentations at all locations to explain to employees why the layoffs were needed and to provide as much information as they could about what employees should expect. Employees being cut were given a full sixty days' notice (now required by U.S. regulations). Managers should remember that it is impossible to "overcommunicate" during turbulent times. Remaining employees need to know what is expected of them, whether future layoffs are a possibility, and what the organization is doing to help co-workers who have lost their jobs.

Briefcase

As an organization manager, keep these guidelines in mind:

When layoffs are necessary, handle them with care. Treat departing employees humanely, communicate with employees and provide as much information as possible, provide assistance to displaced workers, and remember the emotional needs of remaining employees.

- 2. Provide assistance to displaced workers. The organization has a responsibility to help displaced workers cope with the loss of their jobs and get reestablished in the job market. The organization can provide training, severance packages, extended benefits, and outplacement assistance. Ford Motor Company runs internal job fairs for laid-off employees. Kaiser-Hill, a company running the cleanup and dismantling of the Rocky Flats nuclear site in Colorado, set up a Workforce Transition Program, sponsors an online job bank, and funds grants for entrepreneurs. Because Kaiser-Hill has to motivate employees to work themselves out of a job in a couple of years, it knows people need the security of feeling that they can provide for their families when the job is over. 90 In addition, counseling services for both employees and their families can ease the trauma associated with a job loss. A growing number of companies are giving laid-off workers continued access to employee assistance programs to help them cope with stress, depression, and other problems.⁹¹ Another key step is to allow employees to leave with dignity, giving them an opportunity to say goodbye to colleagues and meet with leaders to express their hurt and anger.
- 3. Help the survivors thrive. There has been much research on the "layoff survivor syndrome." Many people experience guilt, anger, confusion, and sadness after the loss of colleagues, and leaders should acknowledge these feelings. Survivors also might be concerned about losing their own jobs, lose confidence in company management, and grow depressed and cynical. People sometimes have difficulty adapting to the changes in job duties, responsibilities, and reporting relationships after a downsizing. The state of Oregon hired consultant Al Siebert to help employees adapt following the elimination of more than a thousand jobs. Most people "just aren't emotionally prepared to handle major disruptions," Siebert says. Through a series of workshops, Siebert helped people acknowledge their anger and unhappiness and then helped them become "change-resilient" by developing coping skills such as flexibility, curiosity, and optimism. 93

After a necessary downsizing, managers should not spend much time helping laid-off workers but focus instead on making sure the remaining employees are taken care of to do what is needed to revive the company.

ANSWER: *Disagree.* The way to take care of remaining employees after a down-sizing is to take care of the people who were laid off. Helping laid-off employees sends a signal to remaining workers that the organization cares about the departed co-workers and friends, which helps get the company going again. Managing down-sizing means providing assistance to both departing and remaining workers.

ASSESS YOUR ANSWER

Even the best-managed organizations may sometimes need to lay off employees in a turbulent environment or to revitalize the organization and reverse decline. Leaders can attain positive results if they handle downsizing in a way that lets departing employees leave with dignity and enables remaining organization members to be motivated, productive, and committed to a better future.

DESIGN ESSENTIALS

- Organizations experience many pressures to grow, and large size is crucial to economic health in some industries. Size enables economies of scale, provides a wide variety of opportunities for employees, and allows companies to invest in expensive and risky projects. However, large organizations have a hard time adapting to rapid changes in the environment. Large organizations are typically standardized, mechanistically run, and complex. Small organizations typically have a flatter structure and an organic, free-flowing management. They can respond more quickly to environmental changes and are more suited to encouraging innovation and entrepreneurship. Managers in large or growing firms try to find mechanisms to make their organizations more flexible and responsive.
- Organizations evolve through distinct life-cycle stages as they grow and mature. Organization structure, internal systems, and management issues are different for each stage of development. Growth creates crises and revolutions along the way toward large size. A major task of managers is to guide the organization through the entrepreneurial, collectivity, formalization, and elaboration stages of development.
- As organizations progress through the life cycle and grow larger and more complex, they generally take on bureaucratic characteristics, such as rules, division of labor, written records, hierarchy of authority, and impersonal procedures. Bureaucracy is a logical form of organizing that lets firms use resources efficiently. However, in many large corporate and government organizations, bureaucracy has come under attack with attempts to decentralize authority, flatten organization structure, reduce rules and written records, and create a small-company mindset. These companies are willing to trade economies of scale for responsive, adaptive organizations. Many companies are subdividing to gain small-company advantages. Another approach to overcoming the problems of bureaucracy is to use temporary systems, enabling the organization to glide smoothly between a highly formalized, hierarchical style that is effective during times of stability and a more flexible, loosely structured one needed to respond to unexpected or volatile environmental conditions.
- All organizations, large and small, need systems for control. Managers can choose among three overall control strategies: market, bureaucratic, and clan. Bureaucratic control relies on standard rules and the rational-legal authority of managers. Market control is used where product or service outputs can be priced and competition exists. Clan control, and more recently self-control, are associated with uncertain and rapidly changing organization processes. They rely on commitment, tradition, and shared values for control. Managers may use a combination of control approaches to meet the organization's needs.
- Many organizations have stopped growing, and some are declining. Organizations go through stages of decline, and it is the responsibility of managers to detect the signs of decline, implement necessary action, and reverse course. One of the most difficult decisions pertains to downsizing the workforce. To smooth the downsizing process, managers can communicate with employees and provide as much information as possible, provide assistance to displaced workers, and remember to address the emotional needs of those who remain with the organization.



Key Concepts

bureaucracy bureaucratic control centralization charismatic authority clan control collectivity stage downsizing elaboration stage entrepreneurial stage formalization formalization stage life cycle market control organizational decline personnel ratios rational-legal authority traditional authority

Discussion Questions

- 1. Why do large organizations tend to have larger ratios of clerical and administrative support staff? Why are they typically more formalized than small organizations?
- 2. Apply the concept of life cycle to an organization with which you are familiar, such as a local business. What stage is the organization in now? How did the organization handle or pass through its life cycle crises?
- 3. Why do you think organizations feel pressure to grow? How do you think the companies described in the chapter Book Mark, *Small Giants*, resist that pressure?
- 4. Describe the three bases of authority identified by Weber. Is it possible for each of these types of authority to function at the same time within an organization? Discuss.
- 5. Look through several recent issues of a business magazine such as *Fortune*, *BusinessWeek*, or *Fast Company* and find examples of two companies that are using approaches to busting bureaucracy. Discuss the techniques these companies are applying.
- 6. In writing about types of control, William Ouchi said, "The Market is like the trout and the Clan like the salmon, each a beautiful highly specialized species

- which requires uncommon conditions for its survival. In comparison, the bureaucratic method of control is the catfish—clumsy, ugly, but able to live in the widest range of environments and ultimately, the dominant species." Discuss what Ouchi meant with that analogy.
- 7. Government organizations often seem more bureaucratic than for-profit organizations. Could this partly be the result of the type of control used in government organizations? Explain.
- 8. How does the Salvation Army manage to be "several different kinds of organization at the same time"? Does the Salvation Army's approach seem workable for a large media company like Time Warner or Disney that wants to reduce bureaucracy?
- 9. Numerous large financial institutions, including Lehman Brothers and Merrill Lynch, experienced significant decline or dissolution in recent years. Which of the three causes of organizational decline described in the chapter seems to apply most clearly to these firms?
- 10. Do you think a "no growth" philosophy of management should be taught in business schools? Discuss.

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Case for Analysis: Sunflower Incorporated*

Sunflower Incorporated is a large distribution company with more than 5,000 employees and gross sales of more than \$550 million (2003). The company purchases salty snack foods and liquor and distributes them to independent retail stores throughout the United States and Canada. Salty snack foods include corn chips, potato chips, cheese curls, tortilla chips, pretzels, and peanuts. The United States and Canada are divided into twenty-two regions, each with its own central warehouse, salespeople, finance department, and purchasing department. The company distributes national and local brands and packages some items under private labels. Competition in this industry is intense. The demand for liquor has been declining, and competitors like Procter & Gamble and Frito-Lay have developed new snack foods and low-carb options to gain market share from smaller companies like Sunflower. The head office encourages each region to be autonomous because of local tastes and practices. In the northeastern United States, for example, people consume a greater percentage of Canadian whiskey and American bourbon, whereas in the West, they consume more light liquors, such as vodka, gin, and rum. Snack foods in the Southwest are often seasoned to reflect Mexican tastes, and customers in the Northeast buy a greater percent of pretzels.

Early in 1998, Sunflower began using a financial reporting system that compared sales, costs, and profits across company regions. Each region was a profit center, and top management was surprised to learn that profits varied widely. By 2001, the differences were so great that management decided some standardization was necessary. Managers believed highly profitable regions were sometimes

using lower-quality items, even seconds, to boost profit margins. This practice could hurt Sunflower's image. Most regions were facing cutthroat price competition to hold market share. Triggered by price cuts by Anheuser-Busch Company's Eagle Snacks division, national distributors, such as Frito-Lay, Borden, Nabisco, Procter & Gamble (Pringles), and Standard Brands (Planters Peanuts), were pushing to hold or increase market share by cutting prices and launching new products. Independent snack food distributors had a tougher and tougher time competing, and many were going out of business.

As these problems accumulated, Joe Steelman, president of Sunflower, decided to create a new position to monitor pricing and purchasing practices. Loretta Williams was hired from the finance department of a competing organization. Her new title was director of pricing and purchasing, and she reported to the vice president of finance, Peter Langly. Langly gave Williams great latitude in organizing her job and encouraged her to establish whatever rules and procedures were necessary. She was also encouraged to gather information from each region. Each region was notified of her appointment by an official memo sent to the twenty-two regional directors. A copy of the memo was posted on each warehouse bulletin board. The announcement was also made in the company newspaper.

After three weeks on the job, Williams decided two problems needed her attention. Over the long term, Sunflower should make better use of information technology. Williams believed information technology could provide more information to headquarters for decision making. Top managers in the divisions were connected to headquarters by an intranet, but lower-level employees and

salespeople were not connected. Only a few senior managers in about half the divisions used the system regularly.

In the short term, Williams decided fragmented pricing and purchasing decisions were a problem and these decisions should be standardized across regions. This should be undertaken immediately. As a first step, she wanted the financial executive in each region to notify her of any change in local prices of more than 3 percent. She also decided that all new contracts for local purchases of more than \$5,000 should be cleared through her office. (Approximately 60 percent of items distributed in the regions were purchased in large quantities and supplied from the home office. The other 40 percent were purchased and distributed within the region.) Williams believed the only way to standardize operations was for each region to notify the home office in advance of any change in prices or purchases. She discussed the proposed policy with Langly. He agreed, so they submitted a formal proposal to the president and board of directors, who approved the plan. The changes represented a complicated shift in policy procedures, and Sunflower was moving into peak holiday season, so Williams wanted to implement the new procedures right away. She decided to send an e-mail message followed by a fax to the financial and purchasing executives in each region notifying them of the new procedures. The change would be inserted in all policy and procedure manuals throughout Sunflower within four months.

Williams showed a draft of the message to Langly and invited his comments. Langly said the message was a good idea but wondered if it was sufficient. The regions handled hundreds of items and were accustomed to decentralized decision making. Langly suggested that Williams ought to visit the regions and discuss purchasing and pricing policies with the executives. Williams refused, saying that such trips would be expensive and time consuming. She had so many things to do at headquarters that trips were impossible.

Langly also suggested waiting to implement the procedures until after the annual company meeting in three months, when Williams could meet the regional directors personally. Williams said this would take too long, because the procedures would then not take effect until after the peak sales season. She believed the procedures were needed now. The messages went out the next day.

During the next few days, e-mail replies came in from seven regions. The managers said they were in agreement and were happy to cooperate.

Eight weeks later, Williams had not received notices from any regions about local price or purchase changes. Other executives who had visited regional warehouses indicated to her that the regions were busy as usual. Regional executives seemed to be following usual procedures for that time of year. She telephoned one of the regional managers and discovered that he did not know who she was and had never heard of her position. Besides, he said, "we have enough to worry about reaching profit goals without additional procedures from headquarters." Williams was chagrined that her position and her suggested changes in procedure had no impact. She wondered whether field managers were disobedient or whether she should have used another communication strategy.

*This case was inspired by "Frito-Lay May Find Itself in a Competition Crunch," BusinessWeek (July 19, 1982), 186; Jim Bohman, "Mike-Sells Works to Remain on Snack Map," Dayton Daily News (February 27, 2005) D; "Dashman Company" in Paul R. Lawrence and John A. Seiler, Organizational Behavior and Administration: Cases, Concepts, and Research Findings (Homewood, Ill: Irwin and Dorsey, 1965), 16–17; and Laurie M. Grossman, "Price Wars Bring Flavor to Once Quiet Snack Market," The Wall Street Journal (May 23, 1991), B1, B3.

Chapter 9 Workshop: Windsock Inc.*

- 1. *Introduction*. Class is divided into four groups: Central Office, Product Design, Marketing/Sales, and Production. Central Office is a slightly smaller group. If groups are large enough, assign observers to each one. Central Office is given 500 straws and 750 pins. Each person reads *only* the role description relevant to that group. *Materials needed:* plastic milk straws (500) and a box of straight pins (750).
- 2. *Perform task*. Depending on length of class, step 2 may take 30 to 60 minutes. Groups perform functions and prepare for a 2-minute report for stockholders.
- 3. *Group reports*. Each group gives a 2-minute presentation to stockholders.
- 4. Observers' reports (optional). Observers share insights with subgroups.

- 5. Class discussion.
 - a. What helped or blocked intergroup cooperation and coordination?
 - b. To what extent was there open versus closed communication? What impact did that have?
 - c. What styles of leadership were exhibited?
 - d. What types of team interdependencies emerged?

Roles

Central Office

Your team is the central management and administration of Windsock Inc. You are the heart and pulse of the organization, because without your coordination and resource allocation, the organization would go under. Your task is to manage the operations of the organization, which is not an easy responsibility because you have to coordinate the activities of three distinct groups of personnel: the Marketing/Sales group, the Production group, and the Product Design group. In addition, you have to manage resources including materials (pins and straws), time deadlines, communications, and product requirements.

In this exercise, you are to do whatever is necessary to accomplish the mission and to keep the organization operating harmoniously and efficiently.

Windsock Inc. has a total of 30 minutes (more if instructor assigns) to design an advertising campaign and ad copy, to design the windmill, and to produce the first windmill prototypes for delivery. Good luck to you all.

Product Design

Your team is the research and product design group of Windsock Inc. You are the brain and creative aspect of the operation, because without an innovative and successfully designed product, the organization would go under. Your duties are to design products that compete favorably in the marketplace, keeping in mind function, aesthetics, cost, ease of production, and available materials.

In this exercise, you are to come up with a workable plan for a product that will be built by your production team. Your windmill must be light, portable, easy to assemble, and aesthetically pleasing. Central Office controls the budget and allocates material for your division.

Windsock Inc. as an organization has a total of 30 minutes (more if instructor assigns) to design an advertising campaign, to design the windmill (your group's task), and to produce the first windmill prototypes for delivery. Good luck to you all.

Marketing/Sales

Your team is the marketing/sales group of Windsock Inc. You are the backbone of the operation, because without customers and sales the organization would go under. Your task is to determine the market, develop an advertising campaign to promote your company's unique product, produce ad copy, and develop a sales force and sales

procedures for both potential customers and the public at large.

For the purpose of this exercise, you may assume that a market analysis has been completed. Your team is now in a position to produce an advertising campaign and ad copy for the product. To be effective, you have to become very familiar with the characteristics of the product and how it is different from those products already on the market. The Central Office controls your budget and allocates materials for use by your division.

Windsock Inc. has a total of 30 minutes (more if instructor assigns) to design an advertising campaign and ad (your group's task), to design the windmill, and to produce the first windmill prototypes for delivery. Good luck to you all.

Production

Your team is the production group of Windsock Inc. You are the heart of the operation, because without a group to produce the product, the organization would go under. You have the responsibility to coordinate and produce the product for delivery. The product involves an innovative design for a windmill that is cheaper, lighter, more portable, more flexible, and more aesthetically pleasing than other designs currently available in the marketplace. Your task is to build windmills within cost guidelines, according to specifications, and within a prescribed period, using predetermined materials.

For the purpose of this exercise, you are to organize your team, set production schedules, and build the windmills. Central Office controls your budget, materials, and specifications.

Windsock Inc. has a total of 30 minutes (more if instructor assigns) to design an advertising campaign, to design the windmill, and to produce the first windmill prototypes (your group's task) for delivery. Good luck to you all.

*Adapted by Dorothy Marcic from Christopher Taylor and Saundra Taylor in "Teaching Organizational Team-Building through Simulations," Organizational Behavior Teaching Review XI(3), 86–87.

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Part 5

Managing Dynamic Processes

Chapter 10

Organizational Culture and Ethical Values

Chapter 11

Innovation and Change

Chapter 12

Decision-Making Processes

Chapter 13

Conflict, Power, and Politics

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Chapter 10

Organizational Culture and Ethical Values



Organizational Culture

What Is Culture? $\boldsymbol{\cdot}$ Emergence and Purpose of Culture $\boldsymbol{\cdot}$ Interpreting Culture

Organization Design and Culture

The Adaptability Culture • The Mission Culture • The Clan Culture • The Bureaucratic Culture • Culture Strength and Organizational Subcultures

Organizational Culture, Learning, and Performance

Ethical Values and Social Responsibility

Sources of Individual Ethical Principles • Managerial Ethics • Corporate Social Responsibility • Does It Pay to Be Good?

How Leaders Shape Culture and Ethics

Values-Based Leadership • Formal Structure and Systems

Corporate Culture and Ethics in a Global Environment

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



Walk into the headquarters of Patagonia, and you will likely see people wearing flip flops and shorts. Why not? They might be going surfing later. The successful seller of outdoor clothing and equipment is guided by values of creativity, collaboration, and caring for the environment. Employees who are eligible can take off two months at full pay to work for environmental groups. The feeling inside headquarters is relaxed, yet vibrant; people work hard but they also have fun. Compare that to the headquarters at Exxon Mobil, where most employees are in conventional business attire and the atmosphere is tinged with competitiveness and a rigorous, analytical approach to taking care of business. "They're not in the fun business," said one oil industry analyst. "They're in the profit business." No surfing for these guys (or girls). As one investor said with admiration: "They never take a day off."

Patagonia and Exxon represent two very different corporate cultures. Yet both companies are successful, and both have employees who enjoy their jobs and generally like the way things are done at their company. Every organization, like Patagonia and Exxon, has a set of values that characterize how people behave and how the organization carries out everyday business. One of the most important jobs organizational leaders do is instill and support the kind of values needed for the company to thrive.

Strong cultures can have a profound impact on a company, which can be either positive or negative for the organization. At J. M. Smucker & Company, the first manufacturer ever to earn the top spot on *Fortune* magazine's list of "The 100 Best Companies to Work For," strong values of cooperation, caring for employees and customers, and an "all for one, one for all" attitude enable the company to consistently meet productivity, quality, and customer-service goals in the challenging environment of the food industry. Negative cultural norms, however, can damage a company just as powerfully as positive ones can strengthen it. Consider the case of Enron Corporation, where the corporate culture supported pushing everything to the limits: business practices, rules, personal behavior,

Managing

by Design Questions and laws. Executives drove expensive cars, challenged employees to participate in risky competitive behavior, and often celebrated big deals by heading off to a bar or dance club.³

A related concept concerning the influence of norms and values on how people work together and how they treat one another and customers is called *social capital*. **Social capital** refers to the quality of interactions among people and whether they share a common perspective. In organizations with a high degree of social capital, for example, relationships are based on trust, mutual understandings, and shared norms and values that enable people to cooperate and coordinate their activities to achieve goals. An organization can have either a high or a low level of social capital. One way to think of social capital is as *goodwill*. When relationships both within the organization and with customers, suppliers, and partners are based on honesty, trust, and respect, a spirit of goodwill exists and people willingly cooperate to achieve mutual benefits. A high level of social capital enables frictionless social interactions and exchanges that help to facilitate smooth organizational functioning. Relationships based on cutthroat competition, self-interest, and subterfuge can be devastating to a company. Social capital relates to both corporate culture and ethics, which is the subject matter of this chapter.

Purpose of This Chapter

This chapter explores ideas about corporate culture and associated ethical values and how these are influenced by organizations. The first section describes the nature of corporate culture, its origins and purpose, and how to identify and interpret culture by looking at the organization's rites and ceremonies, stories and myths, symbols, organization structures, power relationships, and control systems. We then examine how culture reinforces the strategy and structural design the organization needs to be effective in its environment and discuss the important role of culture in organizational learning and high performance. Next, the chapter turns to ethical values and corporate social responsibility. We consider how managers implement the structures and systems that influence ethical and socially responsible behavior. The chapter also discusses how leaders shape culture and ethical values in a direction suitable for strategy and performance outcomes. The chapter closes with a brief overview of the complex cultural and ethical issues that managers face in an international environment.

ORGANIZATIONAL CULTURE

The popularity of the corporate culture topic raises a number of questions. Can we identify cultures? Can culture be aligned with strategy? How can cultures be managed or changed? The best place to start is by defining culture and explaining how it is reflected in organizations.

What Is Culture?

Culture is the set of values, norms, guiding beliefs, and understandings that is shared by members of an organization and taught to new members as the correct way to think, feel, and behave.⁵ It represents the unwritten, feeling part of the

organization. Everyone participates in culture, but culture generally goes unnoticed. It is only when managers try to implement new strategies or programs that go against basic cultural norms and values that they come face to face with the power of culture.

Organizational culture exists at two levels, as illustrated in Exhibit 10.1. On the surface are visible artifacts and observable behaviors—the ways people dress and act, the type of control systems and power structures used by the company, and the symbols, stories, and ceremonies organization members share. The visible elements of culture, however, reflect deeper values in the minds of organization members. These underlying values, assumptions, beliefs, and thought processes operate unconsciously to define the true culture.⁶ For example, Steelcase built a new pyramid-shaped corporate development center that has scattered, open "thought stations" with white boards and other idea-inspiring features. There is an open atrium from ground floor to top, with a giant ticking pendulum. The new building is a visible symbol; the underlying values are an emphasis on openness, collaboration, teamwork, innovation, and constant change.⁷ The attributes of culture display themselves in many ways but typically evolve into a patterned set of activities carried out through social interactions.⁸ Those patterns can be used to interpret culture.

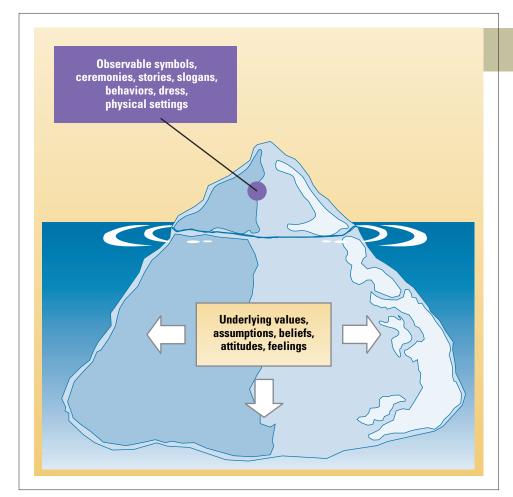


EXHIBIT 10.1Levels of Corporate Culture

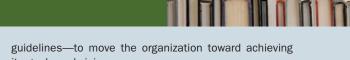
Emergence and Purpose of Culture

Culture provides people with a sense of organizational identity and generates in them a commitment to beliefs and values that are larger than themselves. Though ideas that become part of the culture can come from anywhere within the organization, an organization's culture generally begins with a founder or early leader who articulates and implements particular ideas and values as a vision, philosophy, or business strategy.

When these ideas and values lead to success, they become institutionalized, and an organizational culture emerges that reflects the vision and strategy of the founder or leader.9 For example, the culture at Whole Foods is based on the values and philosophy of founder and CEO John Mackey—a blend of libertarian politics,

BookMark 10.0 (HAVE YOU READ THIS BOOK?)

Good to Great: Why Some Companies Make the Leap . . . And Others Don't By Jim Collins



How and why do some companies move from merely good to truly great long-term performance, while others can't make the leap—or if they do, can't sustain it? This is the question Jim Collins set out to answer in a six-year study that culminated in the book Good to Great: Why Some Companies Make the Leap . . . And Others Don't. Collins identifies eleven great companies—those that averaged returns 6.9 times the general stock market over a fifteen-year period—and compares them to a group of companies that had similar resources but failed either to make the leap or to sustain it.

A CULTURE OF DISCIPLINE

Collins identifies a number of characteristics that define truly great companies. One aspect is a culture of discipline, in which everyone in the organization is focused on doing whatever is needed to keep the company successful. How is a culture of discipline built? Here are some of the key factors:

- Level 5 leadership. All good-to-great companies begin with a top leader who exemplifies what Collins calls Level 5 leadership. Level 5 leaders are characterized by an almost complete lack of personal ego, coupled with a strong will and ambition for the success of the organization. They develop a strong corps of leaders throughout the organization so that when they leave, the company can grow even more successful. Values of selfishness, greed, and arrogance have no place in a great company.
- The right values. Leaders build a culture based on values of individual freedom and responsibility, but within a framework of organizational purpose, goals, and systems. People have the autonomy to do whatever it takes within well-defined boundaries and clear, consistent

- its goals and vision.
- The right people in the right jobs. Leaders of good-to-great organizations look for self-disciplined people who embody values that fit the culture. These people are described using terms such as determined, diligent, precise, systematic, consistent, focused, accountable, and responsible. They are willing to go the extra mile to become the best they can be and help the organization continuously improve.
- Knowing where to go. Good-to-great companies base their success on a deep understanding throughout the organization of three essential ideas, conceptualized as three intersecting circles: what they can be the best in the world at, what they are deeply passionate about, and what makes economic sense for the organization. This understanding is translated into a vision and strategy that guides all actions.

THE FLYWHEEL CONCEPT

No company makes the leap from good to great in one fell swoop. The process is one of buildup followed by breakthrough, similar to pushing a giant flywheel in one direction, turn after turn, building momentum until a breakthrough is reached. Once leaders get the right people in the right jobs, support the right values, and focus on activities that fit within the three intersecting circles, people begin to see positive results, which pushes the flywheel to full momentum. As success builds on success, the organization makes the move from good to great.

Good to Great: Why Some Companies Make the Leap . . . And Others Don't, by Jim Collins, is published by HarperBusiness.

a commitment to selling healthy foods and ensuring compassionate treatment of animals, openness and trust among organization members, and a desire for growth. The culture is encapsulated in the firm's "Declaration of Independence," which concludes with the statement, "Whole Foods . . . spurs people toward creating a better person, company, and world." ¹⁰

Cultures serve two critical functions in organizations: (1) to integrate members so that they know how to relate to one another, and (2) to help the organization adapt to the external environment. **Internal integration** means that members develop a collective identity and know how to work together effectively. It is culture that guides day-to-day working relationships and determines how people communicate within the organization, what behavior is acceptable or not acceptable, and how power and status are allocated. **External adaptation** refers to how the organization meets goals and deals with outsiders. Culture helps guide the daily activities of workers to meet certain goals. It can help the organization respond rapidly to customer needs or the moves of a competitor. As discussed in this chapter's Book Mark, the right culture can help transform an organization's performance from average to truly great.

The organization's culture also guides employee decision making in the absence of written rules or policies.¹¹ Thus, both functions of culture are related to building the organization's social capital, by forging either positive or negative relationships both within the organization and with outsiders.

Interpreting Culture

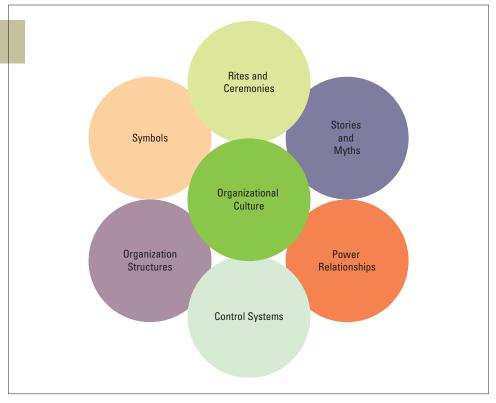
To identify and interpret culture requires that people make inferences based on observable artifacts. Artifacts can be studied but are hard to decipher accurately. An award ceremony in one company may have a different meaning than in another company. To understand what is really going on in an organization requires detective work and probably some experience as an insider. Exhibit 10.2 shows some important observable aspects of organizational culture. These include rites and ceremonies, stories and myths, symbols, organization structures, power relationships, and control systems.¹²

Rites and Ceremonies. Cultural values can typically be identified in **rites and ceremonies**, the elaborate, planned activities that make up a special event and are often conducted for the benefit of an audience. Managers hold rites and ceremonies to provide dramatic examples of what a company values. These are special occasions that reinforce specific values, create a bond among people for sharing an important understanding, and anoint and celebrate heroes and heroines who symbolize important beliefs and activities.¹³

For example, one type of rite that appears in organizations is a *rite of passage*, which facilitates the transition of employees into new social roles. Another type often used is a *rite of integration*, which creates common bonds and good feelings among employees and increases commitment to the organization. Consider the following examples:

 One major energy company hired new college graduates and enrolled them in a "cadet" training program. Each cadet was rotated on assignments through each of the company's major departments, such as marketing, human resources, etc. At the successful conclusion of each rotation, the cadets were invited to have

EXHIBIT 10.2Observable Aspects of Organizational Culture



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lunch with senior executives at the "BUG" club, an invitation-only club where senior managers frequently ate lunch. 14 This is a rite of passage.

• Whenever a Wal-Mart executive visits one of the stores, he or she leads employees in the Wal-Mart cheer: "Give me a W! Give me an A! Give me an L! Give me a squiggly! (All do a version of the twist.) Give me an M! Give me an A! Give me an R! Give me a T! What's that spell? Wal-Mart! What's that spell? Wal-Mart! Who's No. 1? THE CUSTOMER!" The cheer strengthens bonds among employees and reinforces their commitment to common goals. ¹⁵ This is a rite of integration.

Stories and Myths. Stories are narratives based on true events that are frequently shared among employees and told to new employees to inform them about an organization. Many stories are about company **heroes** who serve as models or ideals for serving cultural norms and values. Some stories are considered **legends** because the events are historic and may have been embellished with fictional details. Other stories are **myths**, which are consistent with the values and beliefs of the organization but are not supported by facts. ¹⁶ Stories keep alive the primary values of the organization and provide a shared understanding among all employees. Examples of how stories shape culture are as follows:

A story is told at Ritz-Carlton hotels about a beach attendant who was stacking
chairs for the evening when a guest asked if he would leave out two chairs. The
guest wanted to return to the beach in the evening and propose to his girlfriend.
Although the attendant was going off duty, he not only left out the chairs, he
stayed late, put on a tuxedo, and escorted the couple to their chairs, presenting

them with flowers and champagne and lighting candles at their table. The story is firmly entrenched in Ritz-Carlton's folklore and symbolizes the value of going above and beyond the call of duty to satisfy guests.¹⁷

• Employees at IBM often hear a story about the female security guard who challenged IBM's chairman. Although she knew who he was, the guard insisted that the chairman could not enter a particular area because he wasn't carrying the appropriate security clearance. Rather than getting reprimanded or fired, the guard was praised for her diligence and commitment to maintaining the security of IBM's buildings. By telling this story, employees emphasize both the importance of following the rules and the critical contributions of every employee from the bottom to the top of the organization.

Symbols. Another tool for interpreting culture is the **symbol**. A symbol is something that represents another thing. In one sense, ceremonies, stories, and rites are all symbols because they symbolize deeper values. Another symbol is a physical artifact of the organization. Physical symbols are powerful because they focus attention on a specific item. Examples of physical symbols are as follows:

- At the headquarters of Mother, a small London-based advertising agency known for its strong culture and offbeat ads, there are no private offices. In fact, except for the restrooms, there are no doors in the whole place. This headquarters design symbolizes and reinforces the cultural values of open communication, collaboration, creativity, and equality.¹⁹
- Symbols can also represent negative elements of corporate culture. At Enron, premium parking spots were symbols of power, wealth, and winning at any cost. At the company's London office, executives submitted blind e-mail bids for the limited spaces. One top manager paid more than \$6,000 to use a well-placed company spot for a year.²⁰

Organization Structures. A strong reflection of the culture is how the organization is designed. Does it have a rigid *mechanistic* structure or a flexible *organic* structure, as described in Chapter 4? Is there a tall or a flat hierarchy, as discussed in Chapter 3? The way in which people and departments are arranged into a whole, and the degree of flexibility and autonomy people have, tells a lot about which cultural values are emphasized in the organization. Here are a couple of examples:

- Nordstrom's structure reflects the emphasis the department store chain puts on empowering and supporting lower-level employees. Nordstrom is known for its extraordinary customer service. Its organization chart, shown in Exhibit 10.3, symbolizes that managers are to support the employees who give the service rather than exercise tight control over them.²¹
- Steelmaker Nucor pushes work that is typically done by supervisors down to line workers and work that is typically done by plant managers down to the supervisors, thus keeping levels of the hierarchy to a minimum. This flat organization structure symbolizes Nucor's emphasis on a team-oriented, egalitarian culture.²²

Power Relationships. Looking at power relationships means deciphering who influences or manipulates or has the ability to do so. Which people and departments are the key power holders in the organization? In some companies, finance people are quite powerful, whereas in others engineers and designers have the most power. Another aspect is considering whether power relationships are formal or informal, such as whether people have power based primarily on their position in the

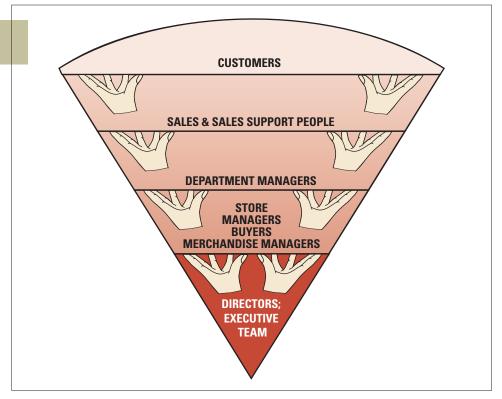
Briefcase

As an organization manager, keep these guidelines in mind:

Pay attention to corporate culture. Understand the underlying values, assumptions, and beliefs on which culture is based as well as its observable manifestations. **Evaluate corporate** culture based on rites and ceremonies, stories and myths. symbols, and the structures, control systems and power relationships you can observe in the organization.

EXHIBIT 10.3

Organization Chart for Nordstrom Inc.



Source: Used with permission of Nordstrom, Inc.

hierarchy or based on other factors, such as their expertise or admirable character. Consider these examples:

- An investment firm in Atlanta, Georgia, has an "inner sanctum" with special offices, restrooms, and a dining room for senior executives. The entry door has an electronic lock which only members can access. Mid-level managers hold the title of "director" and eat in a separate dining room. First-level supervisors and other employees share a general cafeteria. Dining facilities and titles signal who has more power in the vertical hierarchy of the organization.
- At W. L. Gore, few people have titles, and no one has a boss. Rather than people having power based on their position, leaders emerge based on who has a good idea and can recruit people to work on it.²³

Control Systems. The final element shown in Exhibit 10.2 relates to control systems, or the inner workings of how the organization controls people and operations. This includes looking at such things as how information is managed, whether managers apply behavior or outcome control related to employee activities, quality control systems, methods of financial control, reward systems, and how decisions are made. Two examples of how control systems reflect culture are:

At InBev NV, the Belgian-Brazilian brewing giant that recently purchased U.S.-based Anheuser-Busch, distribution center managers frequently start the day with a sort of pep rally reviewing the day's sales targets and motivating people to get out and sell more beer. The company's incentive-based compensation

- system and its focus on increasing sales while relentlessly cutting costs are key elements of a highly competitive corporate culture.²⁴
- Netflix lets employees make most of their own choices—even in how to compensate themselves and how much vacation to take. This freedom combined with responsibility reflects what marketing manager Heather McIlhany refers to as a tough, fulfilling, "fully-formed adult" culture.²⁵

Recall that culture exists at two levels—the underlying values and assumptions and the visible artifacts and observable behaviors. The rites and ceremonies, stories, symbols, organization structures, power relationships, and control systems just described are visible manifestations of underlying company values. These visible artifacts and behaviors can be used to interpret culture, but they are also used by managers to shape company values and to strengthen the desired corporate culture. Thus, the summary of cultural artifacts shown in Exhibit 10.2 can serve as both a mechanism for interpretation and a guideline for action when managers need to change or strengthen cultural values.²⁶

ORGANIZATION DESIGN AND CULTURE

Managers want a corporate culture that reinforces the strategy and structural design that the organization needs to be effective within its environment. For example, if the external environment requires flexibility and responsiveness, such as the environment for Internet-based companies like Twitter, Netflix, Facebook, or Flickr, the culture should encourage adaptability. The correct relationship among cultural values, organizational strategy and structure, and the environment can enhance organizational performance.²⁷

Cultures can be assessed along many dimensions, such as the extent of collaboration versus isolation among people and departments, the importance of control and where control is concentrated, or whether the organization's time orientation is short range or long range.²⁸ Here, we will focus on two specific dimensions: (1) the extent to which the competitive environment requires flexibility or stability; and (2) the extent to which the organization's strategic focus and strength are internal or external. Four categories of culture associated with these differences, as illustrated in Exhibit 10.4, are adaptability, mission, clan, and bureaucratic.²⁹ These four categories relate to the fit among cultural values, strategy, structure, and the environment. Each can be successful, depending on the needs of the external environment and the organization's strategic focus.

1 Top managers typically should focus their energy more on strategy and structure than on corporate culture.

ANSWER: Disagree. Smart top managers know that for the organization to be successful, the right culture has to support and reinforce the strategy and structure to be effective in its environment. Someone once said, "Culture eats strategy for lunch." Managers can invest all the time and resources they have in defining a killer strategy, but if the cultural values are out of line, implementing it will be impossible.

ASSESS YOUR ANSWER

The Adaptability Culture

The **adaptability culture** is characterized by strategic focus on the external environment through flexibility and change to meet customer needs. The culture encourages entrepreneurial values, norms, and beliefs that support the capacity of the organization to detect, interpret, and translate signals from the environment into new behavior responses. This type of company, however, doesn't just react quickly to environmental changes—it actively creates change. Innovation, creativity, and risk taking are valued and rewarded.

A good illustration of the adaptability culture is Google, a company whose values promote individual initiative, experimentation, risk-taking, and entrepreneurship.

PRACTICE

Google founders Sergey Brin and Larry Page famously wrote, "Google is not a conventional company." Indeed it isn't. For example, every bathroom stall at Google's corporate head-

quarters has a Japanese high-tech commode with a heated seat. Then there's the flier posted on the door, titled "Testing on the Toilet," that offers a quiz designed to challenge the brains of software engineers (the quiz changes every few weeks).

It is just another way Google keeps people thinking in unconventional ways to help the company keep innovating. Another way is by putting a premium on success but seeming to shrug off mistakes and failure. Consider what happened when vice president Sheryl Sandberg committed a mistake that cost the company several million dollars. After Page accepted her apology, he said, "I'm so glad you made this mistake. . . . If we don't have any of these mistakes, we're just not taking enough risk." Fortune magazine called it "chaos by design." The Washington Post referred to it as a "culture of fearlessness." Whatever you call it, Google's culture works.

The atmosphere inside Google feels like a university, where brainy graduate students have fun, work long and hard, and engage in academic debates about ideas that are treated like matters of global importance. They can bring their dogs to work, do their laundry on site, work out in the gym, study Mandarin, Japanese, Spanish, or French, and eat at any of eleven free gourmet cafeterias. Engineers, the "big men" (and women) on campus, spend 20 percent of their time working on their own ideas. Everyone is encouraged to propose outrageously ambitious ideas often, and teams are assigned to explore whether they will work. A lot of them don't, but some take off spectacularly. The innovative culture is visible throughout the campus. Glass-walled workrooms are jammed with groups of people, and whiteboards line the hallways so employees can scribble random thoughts.

The hiring process is designed to find out if the candidate is "Googley." "It's an ill-defined term," says chief culture officer Stacy Sullivan, but it basically means "not someone too traditional or stuck in ways done traditionally by other companies."³⁰ ■

With rapid growth, Google's culture is beginning to show signs of strain. The company zoomed from a few hundred people at headquarters to more than 20,000 in locations scattered around the world, and the processes needed to manage a large corporation hinder some of its creativity and flexibility. In addition, a global economic downturn has led to stronger top-down management and more control of risks and costs. Leaders are scaling back the anything-goes culture as they look for ways to ensure the company continues to thrive during hard times. Nevertheless, they are also consciously trying to keep the heart of the culture intact. As one said,

Google

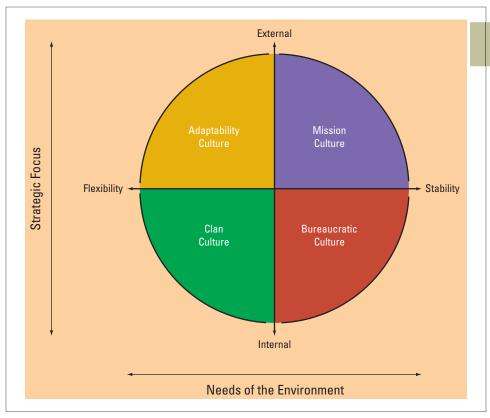


EXHIBIT 10.4
Four Types of
Organizational Culture

Source: Based on Daniel R. Denison and Aneil K. Mishra, "Toward a Theory of Organizational Culture and Effectiveness," *Organization Science* 6, no. 2 (March–April 1995), 204–223; R. Hooijberg and F. Petrock, "On Cultural Change: Using the Competing Values Framework to Help Leaders Execute a Transformational Strategy," *Human Resource Management* 32 (1993), 29–50; and R. E. Quinn, *Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High Performance* (San Francisco: Jossey-Bass, 1988).

"Our unique culture is part of what makes Google Google." Most Internet-based companies, like Google, use the adaptability type of culture, as do many companies in the marketing, electronics, and cosmetics industries, because they must move quickly to satisfy customers.

The Mission Culture

An organization concerned with serving specific customers in the external environment, but without the need for rapid change, is suited to the mission culture. The **mission culture** is characterized by emphasis on a clear vision of the organization's purpose and on the achievement of goals, such as sales growth, profitability, or market share, to help achieve the purpose. Individual employees may be responsible for a specified level of performance, and the organization promises specified rewards in return. Managers shape behavior by envisioning and communicating a desired future state for the organization. Because the environment is stable, they can translate the vision into measurable goals and evaluate employee performance for meeting them. In some cases, mission cultures reflect a high level of competitiveness and a profit-making orientation.

InBev, mentioned earlier in the chapter, reflects a mission culture. Professionalism, ambition, and aggressiveness are key values. Managers keep employees focused on

achieving high sales and profit levels, and those who meet the demanding goals are handsomely rewarded. Bonuses and promotions are based on performance, not seniority, and top executives are unapologetic about giving special treatment to high achievers.³²

The Clan Culture

The **clan culture** has a primary focus on the involvement and participation of the organization's members and on rapidly changing expectations from the external environment. This culture is similar to the clan form of control described in Chapter 9. More than any other, this culture focuses on meeting the needs of employees as the route to high performance. Involvement and participation create a sense of responsibility and ownership and, hence, greater commitment to the organization.

In a clan culture, an important value is taking care of employees and making sure they have whatever they need to help them be satisfied as well as productive. Companies in the fashion and retail industries often adopt this culture because it releases the creativity of employees to respond to rapidly changing tastes. Wegmans, a family-run chain of seventy-one supermarkets, has succeeded with a clan culture. Employee commitment and satisfaction is considered key to success, and Wegmans invests heavily in employee development and support programs. The company pays good wages, sends employees on learning trips, and offers college scholarships for both full- and part-time employees. Employees are empowered to use their own initiative and creativity in serving customers.³³

The Bureaucratic Culture

The **bureaucratic culture** has an internal focus and a consistency orientation for a stable environment. This type of culture supports a methodical approach to doing business. Symbols, heroes, and ceremonies reinforce the values of cooperation, tradition, and following established policies and practices as ways to achieve goals. Personal involvement is somewhat lower here, but that is outweighed by a high level of consistency, conformity, and collaboration among members. This organization succeeds by being highly integrated and efficient.

Today, most managers are shifting away from bureaucratic cultures because of a need for greater flexibility. However, Pacific Edge Software (now part of Serena Software) successfully implemented elements of a bureaucratic culture to ensure that all its projects stayed on time and on budget. The husband-and-wife co-founders, Lisa Hjorten and Scott Fuller, intentionally implanted a culture of order, discipline, and control. This emphasis on order and focus meant employees generally went home by 6:00 P.M. rather than working all night to finish an important project. Although sometimes being careful means being slow, Pacific Edge managed to keep pace with the demands of the external environment.³⁴

Some people like the order and predictability of a bureaucratic culture, whereas other people would feel stifled and constrained by too much discipline and would be happier working in some other type of culture. Complete the questionnaire in the "How Do You Fit the Design?" box to get an idea of which type of culture—adaptability, mission, clan, or bureaucratic—you would be most comfortable and successful working in.



culture is consistent with strategy and the environment. Culture can be shaped to fit the needs of both. Four types of culture are adaptability culture, mission culture, clan culture, and bureaucratic culture.



The fit between a manager or employee and corporate culture can determine both personal success and satisfaction. To understand your culture preference, rank the following items from 1 to 8 based on the strength of your preference (1 = highest preference; 8 = lowest preference).

- **1.** The organization is very personal, much like an extended family. ____
- The organization is dynamic and changing, where people take risks.
- **3.** The organization is achievement oriented, with the focus on competition and getting jobs done.
- The organization is stable and structured, with clarity and established procedures.
- **5.** Management style is characterized by teamwork and participation.
- **6.** Management style is characterized by innovation and risk-taking.
- Management style is characterized by high performance demands and achievement.
- Management style is characterized by security and predictability.

Scoring: To compute your preference for each type of culture, add together the scores for each set of two questions as follows:

Clan culture—total for questions 1, 5:_____
Adaptability culture—total for questions 2, 6:_____
Mission culture—total for questions 3, 7_____
Bureaucratic culture—total for questions 4, 8:____

Interpretation: Each of the preceding questions pertains to one of the four types of culture in Exhibit 10.4. A lower score means a stronger preference for that specific culture. You will likely be more comfortable and more effective as a manager in a corporate culture that is compatible with your personal preferences. A higher score means the culture would not fit your expectations, and you would have to change your style to be effective. Review the text discussion of the four culture types. Do your cultural preference scores seem correct to you? Can you think of companies that would fit your culture preference?

Source: Adapted from Kim S. Cameron and Robert E. Quinn, *Diagnosing and Changing Organizational Culture* (Reading, Massachusetts: Addison-Wesley, 1999).

Culture Strength and Organizational Subcultures

Culture strength refers to the degree of agreement among members of an organization about the importance of specific values. If widespread consensus exists about the importance of those values, the culture is cohesive and strong; if little agreement exists, the culture is weak.³⁵

A strong culture is typically associated with the frequent use of ceremonies, symbols, and stories, as described earlier, and managers align structures and processes to support the cultural values. These elements increase employee commitment to the values and strategy of a company. However, culture is not always uniform throughout the organization, particularly in large companies. Even in organizations that have strong cultures, there may be several sets of subcultures. **Subcultures** develop to reflect the common problems, goals, and experiences that members of a team, department,

or other unit share. An office, branch, or unit of a company that is physically separated from the company's main operations may also take on a distinctive subculture.

For example, although the dominant culture of an organization may be a mission culture, various departments may also reflect characteristics of adaptability, clan, or bureaucratic cultures. The manufacturing department of a large organization may thrive in an environment that emphasizes order, efficiency, and obedience to rules, whereas the research and development (R&D) department may be characterized by employee empowerment, flexibility, and customer focus. This is similar to the concept of differentiation described in Chapter 4, where employees in manufacturing, sales, and research departments studied by Paul Lawrence and Jay Lorsch³⁶ developed different values with respect to time horizon, interpersonal relationships, and formality in order to perform the job of each particular department most effectively. Consider how the credit division of Pitney Bowes, a huge corporation that manufactures postage meters, copiers, and other office equipment, developed a distinctive subculture to encourage innovation and risk taking.

PRACTICE rate environment and an orderly culture with

Pitney Bowes, a maker of postage meters and other office equipment, has long thrived in an environment of order and predictability. Its headquarters reflects a typical corpo-

Pitney
Bowes Credit
Corporation

rate environment and an orderly culture with its blank walls and bland carpeting. But step onto the third floor of the Pitney Bowes building in Shelton, Connecticut, and you might think you're at a different company. The domain of Pitney Bowes Credit Corporation (PBCC) looks more like an indoor theme park, featuring cobblestone-patterned carpets, faux gas lamps, and an ornate town square-style clock. It also has a French-style café, a 1950s-style diner, and the "Cranial Kitchen," where employees sit in cozy booths to surf the Internet or watch training videos. The friendly hallways encourage impromptu conversations, where people can exchange information and share ideas they wouldn't otherwise share.

PBCC traditionally helped customers finance their business with the parent company. However, Matthew Kisner, PBCC's president and CEO, has worked with other managers to redefine the division as a *creator* of services rather than just a provider of services. Rather than just financing sales and leasing of existing products, PBCC now creates new services for customers to buy. For example, Purchase Power is a revolving line of credit that helps companies finance their postage costs. It was profitable within nine months and now has more than 400,000 customers. When PBCC redefined its job, it began redefining its subculture to match, by emphasizing values of teamwork, risk taking, and creativity. "We wanted a fun space that would embody our culture," Kisner says. "No straight lines, no linear thinking. Because we're a financial services company, our biggest advantage is the quality of our ideas." So far, PBCC's new approach is working. In one year, the division, whose 600 employees make up less than 2 percent of Pitney Bowes' total workforce, generated 36 percent of the company's net profits.³⁷ ■

Subcultures typically include the basic values of the dominant organizational culture plus additional values unique to members of the subculture. However, subcultural differences can sometimes lead to conflicts between departments, especially in organizations that do not have strong overall corporate cultures. When subcultural values become too strong and outweigh the corporate cultural values, conflicts may emerge and hurt organizational performance. Conflict will be discussed in detail in Chapter 13.

ORGANIZATIONAL CULTURE, LEARNING, AND PERFORMANCE

Culture can play an important role in creating an organizational climate that enables learning and innovative response to challenges, competitive threats, or new opportunities. A strong culture that encourages adaptation and change enhances organizational performance by energizing and motivating employees, unifying people around shared goals and a higher mission, and shaping and guiding behavior so that everyone's actions are aligned with strategic priorities. Thus, creating and influencing an adaptive culture is one of a manager's most important jobs. The right culture can drive high performance.³⁸

A number of studies have found a positive relationship between culture and performance.³⁹ In *Corporate Culture and Performance*, Kotter and Heskett provided evidence that companies that intentionally managed cultural values outperformed similar companies that did not. Some companies have developed systematic ways to measure and manage the impact of culture on organizational performance. At Caterpillar, leaders used a tool called the Cultural Assessment Process (CAP), which gave top executives hard data documenting millions of dollars in savings they could attribute directly to cultural factors.⁴⁰ Even the U.S. federal government is recognizing the link between culture and effectiveness. The U.S. Office of Personnel Management created its Organizational Assessment Survey as a way for federal agencies to measure culture factors and shift values toward high performance.⁴¹

Strong cultures that don't encourage adaptation, however, can hurt the organization. A danger for many successful organizations is that the culture becomes set and the company fails to adapt as the environment changes. When organizations are successful, the values, ideas, and practices that helped attain success become institutionalized. As the environment changes, these values may become detrimental to future performance. Many organizations become victims of their own success, clinging to outmoded and even destructive values and behaviors. Thus, the impact of a strong culture is not always positive. Typically, healthy cultures not only provide for smooth internal integration but also encourage adaptation to the external environment. Nonadaptive cultures encourage rigidity and stability. Strong adaptive cultures often incorporate the following values:

- 1. The whole is more important than the parts, and boundaries between parts are minimized. People are aware of the whole system, how everything fits together, and the relationships among various organizational parts. All members consider how their actions affect other parts and the total organization. This emphasis on the whole reduces boundaries both within the organization and with other companies. Although subcultures may form, everyone's primary attitudes and behaviors reflect the organization's dominant culture. The free flow of people, ideas, and information allows coordinated action and continuous learning.
- 2. Equality and trust are primary values. The culture creates a sense of community and caring for one another. The organization is a place for creating a web of relationships that allows people to take risks and develop to their full potential. The emphasis on treating everyone with care and respect creates a climate of safety and trust that allows experimentation, frequent mistakes, and learning. Managers emphasize honest and open communications as a way to build trust.
- 3. *The culture encourages risk taking, change, and improvement.* A basic value is to question the status quo. Constant questioning of assumptions opens the gates

Briefcase

As an organization manager, keep this guideline in mind:

Consciously manage culture to shift values toward high performance and goal accomplishment.

Briefcase

As an organization manager, keep these guidelines in mind:

To support a learning orientation, emphasize cultural values of openness and collaboration, equality and trust, continuous improvement, and risk taking. Build a strong internal culture that encourages adaptation to changing environmental conditions.

EXHIBIT 10.5

Adaptive versus Nonadaptive Corporate Cultures

	Adaptive Corporate Cultures	Nonadaptive Corporate Cultures
Core Values	Managers care deeply about customers, stockholders, and employees. They also strongly value people and processes that can create useful change (for example, leadership initiatives up and down the management hierarchy).	Managers care mainly about themselves, their immediate work group, or some product (or technology) associated with that work group. They value the orderly and risk-reducing management process much more highly than leadership initiatives.
Common Behavior	Managers pay close attention to all their constituencies, especially customers, and initiate change when needed to serve their legitimate interests, even if it entails taking some risks.	Managers tend to be somewhat isolated, political, and bureaucratic. As a result, they do not change their strategies quickly to adjust to or take advantage of changes in their business environments.

Source: Adapted and reprinted with the permission of The Free Press, a division of Simon & Schuster Adult Publishing Group, from Corporate Culture and Performance by John P. Kotter and James L. Heskett. Copyright © 1992 by Kotter Associates, Inc. and James L. Heskett.

to creativity and improvement. The culture rewards and celebrates the creators of new ideas, products, and work processes. To symbolize the importance of taking risks, an adaptive culture may also reward those who fail in order to learn and grow.

As illustrated in Exhibit 10.5, adaptive corporate cultures have different values and behavior patterns than nonadaptive cultures. ⁴² In adaptive cultures, managers are concerned with customers and employees as well as with the internal processes and procedures that bring about useful change. Behavior is flexible, and managers initiate change when needed, even if it involves risk. In unadaptive cultures, managers are more concerned about themselves or their own special projects, and their values discourage risk taking and change. Thus, strong, healthy cultures help organizations adapt to the external environment, whereas strong, unhealthy cultures can encourage organizations to march resolutely in the wrong direction. A strong, adaptive culture has been a competitive weapon for biotechnology firm Genentech since it was founded in the mid-1970s.



Genentech, the world's first biotechnology company, seemed to come out of nowhere to become a major force in the pharmaceuticals industry. Founded in 1976, Genentech

Genentech

became profitable three years later and has remained so ever since. The secret ingredient, most people agree, is the corporate culture. When Art Levinson became CEO, he set about strengthening Genentech's adaptive culture through a series of moves, such as persuading the board to invest 50 percent of revenues back into research, focusing the company on "meeting significant unmet needs," and breaking down boundaries by insisting that fiefdoms like product development and basic research work closely together. He also did away with projects and people that didn't fit the strategy and values.

People at Genentech feel less like employees and more like partners in a great cause. Employees don't get work assignments, they get "appointments." Every milestone is celebrated with a party, and people are encouraged to goof off and have fun. However, scientists and researchers also go through a rigorous process of defending their work before a review board in order to uncover flaws, avoid dead ends, sift out politics and favoritism, and hold people accountable.

Genentech is characterized by values of collaboration, accountability, creativity, and egalitarianism. There are no special dining rooms or assigned parking spaces. Everyone in the company is considered vital to success. Job candidates often go through as many as twenty interviews because Genentech wants to be sure it gets people with the right values. "We're extremely non-hierarchical," says Levinson. "We're not wearing ties. People don't call us doctor." Candidates who ask too many questions about salary, title, and personal advancement are quickly weeded out. Genentech wants people who care about the science and about the company's mission to find drugs for curing big diseases like cancer. Status is conveyed not by fancy offices or titles, but rather by taking big chances in the name of "making drugs that matter."

ETHICAL VALUES AND SOCIAL RESPONSIBILITY

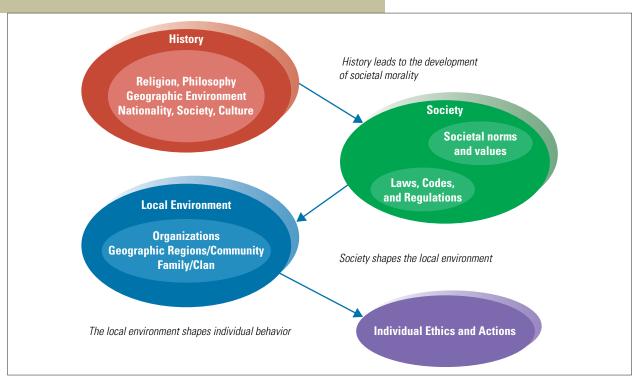
Of the values that make up an organization's culture, ethical values are now considered among the most important. Widespread corporate accounting scandals and ethical lapses among leaders in business and government have filled the news in recent years. A study of business news related to the 100 largest U.S. corporations found that a whopping 40 percent of them have recently been involved in activities that can be considered unethical.⁴⁴ And the problem isn't limited to the United States. Business leaders in countries such as Germany and Japan have also been reeling in recent years from one headline-grabbing scandal after another.⁴⁵ Top corporate managers are under scrutiny from the public as never before, and even small companies are finding a need to put more emphasis on ethics to restore trust among their customers and the community.

Sources of Individual Ethical Principles

Ethics refers to the code of moral principles and values that governs the behaviors of a person or group with respect to what is right or wrong. Ethical values set standards as to what is good or bad in conduct and decision making.⁴⁶ Ethics are personal and unique to each individual, although in any given group, organization, or society there are many areas of consensus about what constitutes ethical behavior. Exhibit 10.6 illustrates the varied sources of individual ethical principles.⁴⁷ Each person is a creation of his or her time and place in history. National culture, religious heritage, historical background, and so forth lead to the development of societal morality, or society's view of what is right and wrong. Societal morality is often reflected in norms of behavior and values about what makes sense for an orderly society. Some principles are codified into laws and regulations, such as laws against drunk driving, robbery, or murder.

These laws, as well as unwritten societal norms and values, shape the local environment within which each individual acts, such as a person's community, family, and place of work. Individuals absorb the beliefs and values of their family, community,

EXHIBIT 10.6Sources of Individual Ethical Principles and Actions



Thanks to Susan H. Taft and Judith White for providing this exhibit, based on their article, "Ethics Education: Using Inductive Reasoning to Develop Individual, Group, Organizational, and Global Perspectives," *Journal of Management Education* 31, no. 5 (October 2007): 614–646.

culture, society, religious community, and geographic environment, typically discarding some and incorporating others into their own personal ethical standards. Each person's ethical stance is thus a blending of his or her historical, cultural, societal, and family backgrounds and influences, as illustrated in Exhibit 10.6.

It is important to look at individual ethics because ethics always involve an individual action, whether it be a decision to act or the failure to take action against wrongdoing by others. In organizations, an individual's ethical stance may be affected by peers, subordinates, and supervisors, as well as by the organizational culture. Organizational culture often has a profound influence on individual choices and can support and encourage ethical actions or promote unethical and socially irresponsible behavior.

Managerial Ethics

Many of the recent scandals in the news have dealt with people and corporations that broke the law. But it is important to remember that ethical decisions go far beyond behaviors governed by law.⁴⁸ The **rule of law** arises from a set of codified principles and regulations that describe how people are required to act, that are generally accepted in society, and that are enforceable in the courts.⁴⁹

The relationship between ethical standards and legal requirements is illustrated in Exhibit 10.7. Ethical standards for the most part apply to behavior not covered

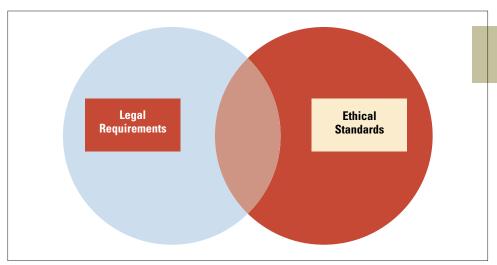


EXHIBIT 10.7

Relationship between the Rule of Law and Ethical Standards

Source: LaRue Tone Hosmer, The Ethics of Management, 2nd ed. (Homewood, III.: Irwin, 1991).

by the law, and the rule of law applies to behaviors not necessarily covered by ethical standards. Current laws often reflect combined moral judgments, but not all moral judgments are codified into law. The morality of aiding a drowning person, for example, is not specified by law, and driving on the right-hand side of the road has no moral basis; but in acts such as robbery or murder, rules and moral standards overlap. Many people believe that if you are not breaking the law, then you are behaving in an ethical manner, but this is not always true. Many behaviors have not been codified, and managers must be sensitive to emerging norms and values about those issues.

Managerial ethics are principles that guide the decisions and behaviors of managers with regard to whether they are right or wrong. Examples of the need for managerial ethics are as follows:⁵⁰

- Top executives are considering promoting a rising sales manager who consistently brings in \$70 million a year and has cracked open new markets in places like Brazil and Turkey that are important for international growth. However, female employees have been complaining for years that the manager is verbally abusive to them, tells offensive jokes, and throws temper tantrums if female employees don't do exactly as he says.
- The manager of a beauty supply store is told that she and her salespeople can receive large bonuses for selling a specified number of boxes of a new product, a permanent-wave solution that costs nearly twice as much as what most of her salon customers typically use. She orders her salespeople to store the old product in the back and tell customers there's been a delay in delivery.
- A North American manufacturer operating abroad was asked to make cash payments (a bribe) to government officials and was told it was consistent with local customs, despite being illegal in North America.

As these examples illustrate, ethics is about making decisions. Managers make choices every day about whether to be honest or deceitful with customers and suppliers, treat employees with respect or disdain, and be a good or a harmful corporate citizen. Some issues are exceedingly difficult to resolve and often represent ethical



Take control of ethical values in the organization and make a commitment to corporate social responsibility. Recognize that ethics is not the same as following the law, and help people learn how to make ethical decisions.

dilemmas. An **ethical dilemma** arises in a situation concerning right and wrong in which values are in conflict.⁵¹ Right or wrong cannot be clearly identified in such situations. For example, for a salesperson at the beauty supply store, the value conflict is between being honest with customers and adhering to the boss's expectations. The manufacturing manager may feel torn between respecting and following local customs in a foreign country or adhering to U.S. laws concerning bribes. Sometimes, each alternative choice or behavior seems undesirable. Ethical dilemmas are not easy to resolve, but top executives can aid the process by establishing organizational values that provide people with guidelines for making the best decision from a moral standpoint.

Corporate Social Responsibility

The notion of **corporate social responsibility (CSR)** is an extension of the idea of managerial ethics and refers to management's obligation to make choices and take action so that the organization contributes to the welfare and interest of all organizational stakeholders, such as employees, customers, shareholders, the community, and the broader society.⁵² Ninety percent of companies surveyed by McKinsey & Company in 2008 said they were doing more than they were five years earlier to incorporate social responsibility issues into their core strategies.⁵³

CSR was once seen as the purview of small, offbeat companies like Patagonia or The Body Shop, but it has moved firmly into the mainstream of organizational thinking and behavior. Ernst & Young lends out employees to provide free accounting services to nonprofit organizations or struggling small businesses around the world, paying their salaries and travel expenses. Burger King has made a commitment to begin buying eggs, pork, and poultry from companies that use humane methods of raising and slaughtering animals. Giant corporations from Wal-Mart to General Electric have announced ambitious environmental responsibility goals. More than 1,000 companies around the world have published reports proclaiming their concern for employees, the environment, and their local communities.⁵⁴

ASSESS YOUR ANSWER

2 Being ethical and socially responsible is not just the right thing for a corporation to do; it is a critical issue for business success.

ANSWER: Agree. Following years of scandal, employees and the public are demanding a more ethical and socially responsible approach to business. Businesses as well as nonprofits and governmental organizations are looking for ways to restore trust. A new generation of job seekers takes a company's social responsibility into account when considering job offers, so companies that want to hire the best are paying attention.

Does It Pay to Be Good?

Why are so many companies embracing CSR? For one thing, customers and the public are paying closer attention than ever before to what organizations do,

and managers recognize that being a good corporate citizen can enhance their firm's reputation and even its profitability.⁵⁵ The relationship of an organization's ethics and social responsibility to its performance concerns both managers and organization scholars. Studies have provided varying results but generally have found that there is a positive relationship between ethical and socially responsible behavior and financial results.⁵⁶ For example, one study of the financial performance of large U.S. corporations that are considered "best corporate citizens" found that they have both superior reputations and superior financial performance.⁵⁷ Similarly, Governance Metrics International, an independent corporate governance ratings agency, found that the stocks of companies run on more selfless principles perform better than those run in a self-serving manner. Top-ranked companies such as Pfizer, Johnson Controls, and Sunoco also outperformed lower-ranking firms on measures like return on assets, return on investment, and return on capital.⁵⁸

As discussed earlier in the chapter, long-term organizational success relies largely on social capital, which means companies need to build a reputation for honesty, fairness, and doing the right thing. There is evidence that people prefer to work for companies that demonstrate a high level of ethics and corporate social responsibility, so these companies can attract and retain high-quality employees. Sarah Antonette says she joined PNC Financial Services rather than two others companies that offered her a job because of PNC's strong employee volunteer program. One vice president at Timberland says she has turned down lucrative offers from other companies because she prefers to work at a company that puts ethics and social responsibility ahead of just making a profit. And a survey of 13-to-25-year-olds found that 79 percent say they want to work for a company that cares about how it affects or contributes to society.

Customers pay attention to a company's ethics and social responsibility too. A study by Walker Research indicates that, price and quality being equal, two-thirds of people say they would switch brands to do business with a company that makes a high commitment to ethics.⁶³ Another series of experiments by Remi Trudel and June Cotte of the University of Western Ontario's Ivey School of Business found that consumers were willing to pay slightly more for products they were told had been made using high ethical standards.⁶⁴

Companies that put ethics on the back burner in favor of fast growth and short-term profits ultimately suffer. To gain and keep the trust of employees, customers, investors, and the general public, organizations must put ethics and social responsibility first.

HOW LEADERS SHAPE CULTURE AND ETHICS

In a study of ethics policy and practice in successful, ethical companies such as Johnson & Johnson and General Mills, no point emerged more clearly than the role of top management in providing commitment, leadership, and examples for ethical behavior. The CEO and other top managers must be committed to specific ethical values and provide constant leadership in tending and renewing the values. Values can be communicated in a number of ways—speeches, company publications, policy statements, and, especially, personal actions. Top leaders are responsible for creating and sustaining a culture that emphasizes the importance of ethical behavior for every employee. When Vic Sarni was CEO of PPG Industries, he often called



Act as a leader for the internal culture and ethical values that are important to the organization. Treat people fairly, hold yourself and others to high ethical standards, and communicate a vision for putting ethics before short-term interests. Remember that actions speak louder than words.

himself the chief ethics officer. Sarni didn't believe in using special staff departments to investigate ethical complaints; instead, he personally headed the firm's ethics committee. This sent a powerful symbolic message that ethics was important in the organization. However, it is important to remember that employees are often influenced most by the managers and supervisors they work with closely, rather than by distant top leaders. Managers throughout the organizations need to espouse and model ethical values. Formal ethics programs are worthless if leaders do not live up to high standards of ethical conduct. The program is a supervisor of the conduct. The program is a supervisor of the conduct. The program is a supervisor of the conduct of the conduct. The program is a supervisor of the conduct of the

The following sections examine how managers signal and implement values through leadership as well as through the formal systems of the organization.

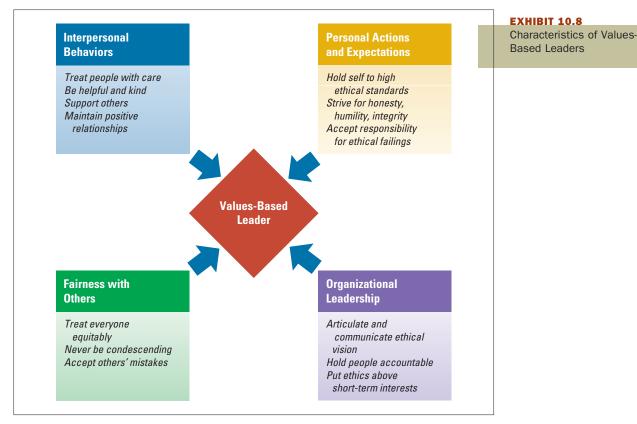
Values-Based Leadership

The underlying value system of an organization cannot be managed in the traditional way. Issuing an authoritative directive, for example, has little or no impact on an organization's value system. Organizational values are developed and strengthened primarily through **values-based leadership**, a relationship between a leader and followers that is based on shared, strongly internalized values that are advocated and acted upon by the leader.⁶⁸

Every act and statement of managers has an impact on culture and values. For example, a survey of readers of the magazine *The Secretary* found that employees are acutely aware of their bosses' ethical lapses. Something as simple as having a secretary notarize a document without witnessing the signature may seem insignificant, but it communicates that the manager doesn't value honesty.⁶⁹ Employees learn about values, beliefs, and goals from watching managers, just as students learn which topics are important for an exam, what professors like, and how to get a good grade from watching professors. Actions speak louder than words, so values-based leaders "walk their talk." Just saying you're ethical isn't very useful," says Charles O. Holliday Jr., chairman and CEO of DuPont. "You have to earn trust by what you do every day."

John Tu and David Sun, co-founders of Kingston Technology Company, illustrate values-based leadership in action. For them, business is not about money, it's about relationships. When the two sold 80 percent of Kingston to Softbank Corp. of Japan for \$1.5 billion, they set aside \$100 million of the proceeds for employee bonuses. Despite this amazing generosity, when employees talk about why they like working for Kingston, they rarely mention money and benefits. Instead, they talk about personal acts of gentleness or kindness performed by the two top leaders. There are many stories of these leaders quietly offering money, time, other resources—or just genuine concern—to employees who were dealing with family or personal troubles. This approach to leadership creates an emotional bond with employees that builds mutual trust and respect.⁷²

Employees learn from and model the behaviors of people they admire. In many cases, employees look up to their managers, so values-based leaders serve as ethical role models. For example, Kathryn Reimann, senior vice president of global compliance at American Express Company, says she learned how to be a values-based leader by watching the actions of a highly respected senior executive she worked with early in her career. When this executive learned that another senior manager was mistreating employees, he publicly fired him—even though the manager was a very strong performer and the company was facing a tough competitive situation. Reimann remembered his courage in firing such a high



Source: Based on Gary Weaver, Linda Klebe Treviño, and Bradley Agle, "'Somebody I Look Up To': Ethical Role Models in Organizations," Organizational Dynamics 34, no. 4 (2005), 313–330.

performer, even in bad times, and his behavior shaped her own ability to stand up and do the right thing.⁷³

Exhibit 10.8 outlines some of the characteristics that define values-based leaders. ⁷⁴ Values-based leaders treat others with care, are helpful and supportive of others, and put effort into maintaining positive interpersonal relationships. They treat everyone fairly and with respect. Values-based leaders accept others' mistakes and failures and are never condescending. They hold themselves to high ethical standards, continuously strive to be honest, humble, and trustworthy and to be consistently ethical in both their public and private lives. However, they are open about and accept responsibility for their own ethical failings.

Values-based leaders also clearly articulate and communicate an uncompromising vision for high ethical standards in the organization, and they institutionalize the vision by holding themselves and others accountable and by putting ethics above short-term personal or company interests. They continuously strengthen ethical values through everyday behaviors, rituals, ceremonies, and symbols, as well as through organizational systems and policies.

Formal Structure and Systems

Another set of tools leaders can use to shape cultural and ethical values is the formal structure and systems of the organization. These systems can be especially effective for influencing managerial ethics.



Use the formal systems of the organization to implement desired cultural and ethical values. These systems include an ethics committee, a chief ethics officer, disclosure mechanisms, a code of ethics, and ethics training programs.

Structure. Top executives can assign responsibility for ethical values to a specific position. This not only allocates organization time and energy to the problem but symbolizes to everyone the importance of ethics. One example is an **ethics committee**, which is a cross-functional group of executives who oversee company ethics. The committee provides rulings on questionable ethical issues and assumes responsibility for disciplining wrongdoers. By appointing top-level executives to serve on the committee, the organization signals the importance of ethics.

Today, many organizations are setting up ethics departments that manage and coordinate all corporate ethics activities. These departments are headed by a **chief ethics officer**, a high-level company executive who oversees all aspects of ethics, including establishing and broadly communicating ethical standards, setting up ethics training programs, supervising the investigation of ethical problems, and advising managers on the ethical aspects of corporate decisions.⁷⁵ The title of chief ethics officer was almost unheard of a decade ago, but recent ethical and legal problems have created a growing demand for these specialists. In the five years after the collapse of Enron, membership in the Ethics and Compliance Officers Association, a trade group based in Waltham, Massachusetts, soared 70 percent to 1,260 members.⁷⁶

Ethics offices sometimes also work as counseling centers to help employees resolve tricky ethical dilemmas. The focus is as much on helping employees make the right decisions as on disciplining wrongdoers. Most ethics offices have confidential **ethics hotlines** that employees can use to seek guidance as well as report questionable behavior. One organization calls its hotline a "Guide Line" to emphasize its use as a tool for making ethical decisions as well as reporting lapses. According to Gary Edwards, president of the Ethics Resource Center, between 65 and 85 percent of calls to hotlines in the organizations he advises are calls for counsel on ethical issues. Northrup Grumman's "Openline" fields about 1,400 calls a year, of which only one-fourth are reports of misdeeds.

Disclosure Mechanisms. A confidential hotline is also an important mechanism for employees to voice concerns about ethical practices. Holding organizations accountable depends to some degree on individuals who are willing to speak up if they suspect illegal, dangerous, or unethical activities. **Whistle-blowing** is employee disclosure of illegal, immoral, or illegitimate practices on the part of the organization.⁷⁹ As ethical problems in the corporate world increase, many companies are looking for ways to protect whistle-blowers. In addition, calls are increasing for stronger legal protection for those who report illegal or unethical business activities.⁸⁰ When there are no protective measures, whistle-blowers suffer, and the company may continue its unethical or illegal practices.

Many whistle-blowers suffer financial and personal loss to maintain their personal ethical standards. For example, in Japan, where there has been a rash of whistle-blowing disclosures in recent years, employees who speak out are frequently ostracized both at work and in their communities. Consider what happened to Masakatsu Yamada, a used car salesman who reported falsified sales records at his Toyota dealership. Yamada says he became a pariah among his colleagues and eventually felt that he had to leave his job. Unable to make mortgage payments, Yamada lost his house. The family is struggling to survive on his wife's salary as a part-time postal worker. "My life is all messed up," he says. "But society won't change unless average people like me stand up."

Many governments, including the United States and Japan, have passed laws aimed at protecting whistle-blowers. But that isn't enough. Enlightened companies strive to create a climate and a culture in which employees feel free to point out problems and managers take swift action to address concerns about unethical or illegal activities. Organizations can view whistle-blowing as a benefit to the company, helping to prevent the kind of disasters that hit companies such as Enron, Arthur Andersen, and WorldCom.

Code of Ethics. A code of ethics is a formal statement of the company's values concerning ethics and social responsibility; it clarifies to employees what the company stands for and its expectations for employee conduct. The code of ethics at Lockheed Martin, for example, states that the organization "aims to set the standard for ethical conduct" through adhering to the values of honesty, integrity, respect, trust, responsibility, and citizenship. The code specifies the types of behaviors expected to honor these values and encourages employees to use available company resources to help make ethical choices and decisions. Codes of ethics may cover a broad range of issues, including statements of the company's guiding values; guidelines related to issues such as workplace safety, the security of proprietary information, or employee privacy; and commitments to environmental responsibility, product safety, and other matters of concern to stakeholders.

Some companies use broader values statements within which ethics is a part. These statements define ethical values as well as corporate culture and contain language about company responsibility, quality of product, and treatment of employees. A formal statement of values can serve as a fundamental organizational document that defines what the organization stands for and clarifies the expected ethical behaviors and choices.⁸³

Although written codes of ethics and value statements are important, it is essential that top managers support and reinforce the codes through their actions, including rewards for compliance and discipline for violations. Otherwise, a code of ethics is nothing more than a piece of paper. Indeed, one study found that companies with a written code of ethics are just as likely as those without a code to be found guilty of illegal activities.⁸⁴ Enron is the perfect example of how a company can have a well-developed code of ethics, yet fail to embrace and live up to the stated values.⁸⁵

The single best way to make sure an organization stays on solid ethical ground is to have a strong code of ethics and make sure all employees are familiar with its guidelines.

ANSWER: *Disagree.* Having a strong code of ethics can be an important part of creating an ethical organization, but leaders' actions are more powerful in determining whether people live up to high ethical standards. If leaders are dishonest, unprincipled, or ruthless and create a culture that supports or ignores these behaviors in others, employees will put little stock in the formal ethics code.

ASSESS YOUR ANSWER **Training Programs.** To ensure that ethical issues are considered in daily decision making, many companies supplement a written code of ethics with employee training programs. At Citigroup, an online ethics training program is mandatory for all 300,000 employees worldwide. All Texas Instruments (TI) employees go through an eight-hour ethics training course that includes case examples giving people a chance to wrestle with ethical dilemmas. In addition, TI incorporates an ethics component into every training course it offers.

In an important step, some training programs also include frameworks for ethical decision making. Learning these frameworks helps employees act autonomously and still think their way through a difficult decision. In a few companies, managers are also taught about the stages of moral development, which helps to bring them to a high level of ethical decision making. This training has been an important catalyst for establishing ethical behavior and integrity as critical components of strategic competitiveness.⁸⁹

These formal systems and structures can be highly effective. However, they alone are not sufficient to build and sustain an ethical company. Leaders should integrate ethics into the organizational culture, as well as support and renew ethical values through their words and actions. Only when employees are convinced that ethical values play a key role in all management decisions and actions can they become committed to making them a part of their everyday behavior.

CORPORATE CULTURE AND ETHICS IN A GLOBAL ENVIRONMENT

Organizations operating on a global basis often face particularly tough ethical challenges because of the various cultural and market factors they must deal with. The greater complexity of the environment and organizational domain create a greater potential for ethical problems or misunderstandings. Ocnsider that in Europe, privacy has been defined as a basic human right and there are laws limiting the amount and kind of information companies can collect and governing how they may use it. In U.S. organizations, on the other hand, collecting data, trading it with partners, using it for marketing, and even selling it are all common practice.

Employees from different countries may have varied attitudes and beliefs that make it difficult to establish a sense of community and cohesiveness based on the corporate culture. In fact, research has indicated that national culture has a greater impact on employees than does corporate culture, and differences in national culture also create tremendous variance in ethical attitudes. So, how do managers translate the ideas for developing strong, ethical corporate cultures to a complex global environment?

Vijay Govindarajan, a professor of international business and director of the "Global Leadership 2020" management program at Dartmouth College, offers some guidance. His research indicates that, even though organizational cultures may vary widely, there are specific components that characterize a global culture. These include an emphasis on multicultural rather than national values, basing status on merit rather than nationality, being open to new ideas from other cultures, showing excitement rather than trepidation when entering new cultural

environments, and being sensitive to cultural differences without being limited by them.⁹³

Managers must also think more broadly in terms of ethical issues. Companies are using a wide variety of mechanisms to support and reinforce their ethics initiatives on a global scale. One of the most useful mechanisms for building global ethics is the **social audit**, which measures and reports the ethical, social, and environmental impact of a company's operations. ⁹⁴ Concerns about the labor practices and working conditions of many major U.S. corporations' overseas suppliers originally spurred the Council on Economic Priorities Accreditation Agency to propose a set of global social standards to deal with issues such as child labor, low wages, and unsafe working conditions. Today, the Social Accountability 8000, or SA 8000, is the only auditable social standard in the world. The system is designed to work like the ISO 9000 quality-auditing system. Many companies, such as Avon, Eileen Fisher, and Toys "R" Us, are taking steps to ensure that their factories and suppliers meet SA 8000 standards. ⁹⁵

In the coming years, organizations will continue to evolve in their ability to work with varied cultures, combine them into a cohesive whole, live up to high social and ethical standards worldwide, and cope with the conflicts that may arise when working in a multicultural environment.

DESIGN ESSENTIALS

- This chapter covered a range of material on corporate culture, the importance of cultural and ethical values, and techniques managers can use to influence these values. Cultural and ethical values help determine the organization's social capital, and the right values can contribute to organizational success.
- Culture is the set of key values, beliefs, and norms shared by members of an organization. Organizational cultures serve two critically important functions—to integrate members so that they know how to relate to one another and to help the organization adapt to the external environment. Culture can be interpreted by looking at the organization's rites and ceremonies, stories, symbols, structures, control systems, and power relationships. Managers can also use these elements to influence culture.
- Organizational culture should reinforce the strategy and structure that the organization needs to be successful in its environment. Four types of culture that may exist in organizations are adaptability culture, mission culture, clan culture, and bureaucratic culture. When widespread consensus exists about the importance of specific values, the organizational culture is strong and cohesive. However, even in organizations with strong cultures, several sets of subcultures may emerge, particularly in large organizations.
- Strong cultures can be either adaptive or nonadaptive. Adaptive cultures have different values and different behavior patterns than nonadaptive cultures. Strong but unhealthy cultures can be detrimental to a company's chances for success. On the other hand, strong adaptive cultures can play an important role in creating high performance and innovative responses to challenges, competitive threats, or new opportunities.

- An important aspect of organizational values is managerial ethics, which is the set of values governing behavior with respect to what is right or wrong. Corporate social responsibility (CSR) is an extension of managerial ethics and refers to management responsibility to make choices that contribute to the welfare of society as well as the organization. CSR has become a critical business issue for organizations.
- The chapter also discussed how leaders shape culture and ethics. One important idea is values-based leadership, which means leaders define a vision of proper values, communicate it throughout the organization, and institutionalize it through everyday behavior, rituals, ceremonies, and symbols. We also discussed formal systems that are important for shaping ethical values. Formal systems include an ethics committee, an ethics department, disclosure mechanisms for whistle-blowing, ethics training programs, and a code of ethics or values statement that specifies desired ethical values and behaviors.
- As business increasingly crosses geographical and cultural boundaries, leaders face difficult challenges in establishing strong cultural and ethical values with which all employees can identify and agree. Companies that develop global cultures emphasize multicultural values, base status on merit rather than nationality, are excited about new cultural environments, remain open to ideas from other cultures, and are sensitive to different cultural values without being limited by them. Social audits are important tools for companies trying to maintain high ethical standards on a global basis.

Key Concepts

adaptability culture bureaucratic culture chief ethics officer clan culture code of ethics corporate social responsibility (CSR) culture culture strength ethical dilemma ethics ethics committee ethics hotlines external adaptation heroes internal integration legends managerial ethics mission culture myths rites and ceremonies rule of law social audit social capital stories subcultures symbol values-based leadership whistle-blowing

Discussion Questions

- 1. How much do you think it is possible for an outsider to discern about the underlying cultural values of an organization by analyzing symbols, ceremonies, dress, or other observable aspects of culture, compared to an insider with several years of work experience? Specify a percentage (e.g., 10%, 70%) and discuss your reasoning.
- 2. Many of the companies on *Fortune* magazine's list of most admired companies are also on its list of most profitable ones. Some people say this proves that high social capital translates into profits. Other people suggest that high profitability is the primary reason the companies have a good culture and are admired in the

- first place. Discuss your thinking about these two differing interpretations.
- Can a strong bureaucratic culture also be an adaptive culture, as defined in the text and in Exhibit 10.5?
 Discuss.
- 4. Why is values-based leadership so important to the influence of culture? Does a symbolic act communicate more about company values than an explicit statement? Discuss.
- 5. Can you recall a situation in which either you or someone you know was confronted by an ethical dilemma, such as being encouraged to inflate an expense account or trade answers on a test? Do you think the decision was affected more by individual moral values or by the accepted values within the team or company? Explain.
- 6. In a survey of 20,000 people in sixteen European countries plus Russia, Turkey, and the United States,

- 55 percent of respondents said cheating in business is more common than it was ten years ago. Do you believe this is truly the case, or have new forms of media simply made cheating more visible? Discuss.
- 7. What importance would you attribute to leadership statements and actions for influencing ethical values and decision making in an organization?
- 8. Why has globalization contributed to more complex ethical issues? Do you think it's possible for a company operating in many different countries to have a cohesive corporate culture? To have uniform ethical values?
- 9. Codes of ethics have been criticized for transferring responsibility for ethical behavior from the organization to the individual employee. Do you agree? Do you think a code of ethics is valuable for an organization?

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Case for Analysis: Implementing Change at National Industrial Products*

Curtis Simpson sat staring out the window of his office. What would he say to Tom Lawrence when they met this afternoon? Tom had clearly met the challenge Simpson set for him when he hired him as president of National Industrial Products (National) a little more than a year ago, but the company seemed to be coming apart at the seams. As chairman and CEO of Simpson Industries, which had bought National several years ago, Simpson was faced with the task of understanding the problem and clearly communicating his ideas and beliefs to Lawrence.

National Industrial Products is a medium-sized producer of mechanical seals, pumps, and other flow-control products. When Simpson Industries acquired the company, it was under the leadership of Jim Carpenter, who had been CEO for almost three decades and was very well liked by employees. Carpenter had always treated

his employees like family. He knew most of them by name, often visited them in their homes if they were ill, and spent part of each day just chatting with workers on the factory floor. National sponsored an annual holiday party for its workers, as well as company picnics and other social events several times a year, and Carpenter was always in attendance. He considered these activities to be just as important as his visits with customers or negotiations with suppliers. Carpenter believed it was important to treat people right so they would have a sense of loyalty to the company. If business was slow, he would find something else for workers to do, even if it was just sweeping the parking lot, rather than lay people off. He figured the company couldn't afford to lose skilled workers who were so difficult to replace. "If you treat people right," he said, "they'll do a good job for you without your having to push them."

Carpenter had never set performance objectives and standards for the various departments, and he trusted his managers to run their departments as they saw fit. He offered training programs in communications and HR for managers and team leaders several times each year. Carpenter's approach had seemed to work quite well for much of National's history. Employees were very loyal to Carpenter and the company, and there were many instances in which workers had gone above and beyond the call of duty. For example, when two National pumps that supplied water to a U.S. Navy ship failed on a Saturday night just before the ship's scheduled departure, two employees worked throughout the night to make new seals and deliver them for installation before the ship left port. Most managers and employees had been with the company for many years, and National boasted the lowest turnover rate in the industry.

However, as the industry began to change in recent years, National's competitiveness began to decline. Four of National's major rivals had recently merged into two large companies that were better able to meet customer needs, which was one factor that led to National being acquired by Simpson Industries. Following the acquisition, National's sales and profits had continued to decline, while costs kept going up. In addition, Simpson Industries' top executives were concerned about low productivity at National. Although they had been happy to have Carpenter stay on through the transition, within a year they had gently pressured him into early retirement. Some of the top managers believed Carpenter tolerated poor performance and low productivity in order to maintain a friendly atmosphere. "In today's world, you just can't do that," one had said. "We've got to bring in someone who can implement change and turn this company around in a hurry, or National's going to go bankrupt." That's when Tom Lawrence was brought on board, with a mandate to cut costs and improve productivity and profits.

Lawrence had a growing reputation as a young, dynamic manager who could get things done fast. He quickly began making changes at National. First, he cut costs by discontinuing the company-sponsored social activities, and he even refused to allow the impromptu birthday celebrations that had once been a regular part of life at National. He cut the training programs in communications and HR, arguing that they were a waste of time and money. "We're not here to make people feel good," he told his managers. "If people don't want to work, get rid of them and find someone else who does." He often referred to workers who complained about the changes at National as "crybabies."

Lawrence established strict performance standards for his vice presidents and department managers and ordered them to do the same for their employees. He held weekly meetings with each manager to review department performance and discuss problems. All employees were now subject to regular performance reviews. Any worker who had substandard performance was to be given one warning and then fired if performance did not improve within two weeks. And, whereas managers and sales representatives had once been paid on a straight salary basis, with seniority being the sole criterion for advancement, Lawrence implemented a revised system that rewarded them for meeting productivity, sales, and profit goals. For those who met the standards, rewards were generous, including large bonuses and perks such as company cars and first-class air travel to industry meetings. Those who fell behind were often chided in front of their colleagues to set an example, and if they didn't shape up soon, Lawrence didn't hesitate to fire them.

By the end of Lawrence's first year as president of National, production costs had been reduced by nearly 20 percent, while output was up 10 percent and sales increased by nearly 10 percent as well. However, three experienced and well-respected National managers had left the company for jobs with competitors, and turnover among production workers had increased alarmingly. In the tight labor market, replacements were not easily found. Most disturbing to Simpson were the results of a survey he had commissioned by an outside consultant. The survey indicated that morale at National was in the pits. Workers viewed their supervisors with antagonism and a touch of fear. They expressed the belief that managers were obsessed with profits and quotas and cared nothing about workers' needs and feelings. They also noted that the collegial, friendly atmosphere that had made National a great place to work had been replaced by an environment of aggressive internal competition and distrust.

Simpson was pleased that Lawrence has brought National's profits and productivity up to the standards Simpson Industries expects. However, he was concerned that the low morale and high turnover would seriously damage the company in the long run. Was Lawrence correct that many of the employees at National are just being "crybabies?" Were they so accustomed to being coddled by Carpenter that they weren't willing to make the changes necessary to keep the company competitive? Finally, Simpson wondered if a spirit of competition can exist in an atmosphere of collegiality and cooperativeness such as that fostered by Carpenter.

*Based on Gary Yukl, "Consolidated Products," in Leadership in Organizations, 4th ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1998), 66–67; John M. Champion and John H. James, "Implementing Strategic Change," in Critical Incidents in Management: Decision and Policy Issues, 6th ed. (Homewood, Ill.: Irwin, 1989), 138–140; and William C. Symonds, "Where Paternalism Equals Good Business," *Business Week* (July 20, 1998), 16E4, 16E6.

Case for Analysis: Does This Milkshake Taste Funny?*

George Stein, a college student working for Eastern Dairy during the summer, was suddenly faced with an ethical dilemma. George had very little time to think about his choices, less than a minute. On the one hand, he could do what Paul told him to do, and his shift could go home on time. However, he found it tough to shake the gross mental image of all those innocent kids drinking milkshakes contaminated with pulverized maggots. If he chose instead to go against Paul, what would the guys say? He could almost hear their derisive comments already: "wimp... college kid..."

Background

George Stein had lived his entire life in various suburbs of a major city on the East Coast. His father's salary as a manager provided the family with a solid middle-class lifestyle. His mother was a homemaker. George's major interests in life were the local teenage gathering place—a drive-in restaurant—hot rod cars, and his girlfriend, Cathy. He had not really wanted to attend college, but relentless pressure by his parents convinced him to try it for a year. He chose mechanical engineering as his major, hoping there might be some similarity between being a mechanical engineer and being a mechanic. After one year of engineering school, however, he has not seen any similarity yet. Once again this summer, his parents had to prod and cajole him to agree to return to school in the fall. They only succeeded by promising to give their blessing to his marriage to Cathy following his sophomore year.

George had worked at menial jobs each of the last four summers to satisfy his immediate need for dating and car money. He did manage to put away a bit to be used for spending money during the school year. He had saved very little for the day that he and Cathy would start their life together, but they planned for Cathy to support them with her earnings as a customer service representative until George either finished or quit school.

The day after George returned home this summer, he heard that Eastern Dairy might hire summer help. He applied at the local plant the next day. Eastern Dairy was unionized, and the wages paid were more than twice the minimum wage George had been paid on previous jobs, so he was quite interested in a position.

Eastern Dairy manufactured milkshake and ice cream mix for a number of customers in the metropolitan area. It sold the ice cream mix in 5- and 10-gallon containers to other firms, which then added the flavoring ingredients (e.g., strawberries or blueberries), packaged and froze the mix, and sold the ice cream under their own brand names. Eastern Dairy sold the milkshake mix in 5-gallon cardboard cartons, which contained a plastic liner. These packages were delivered to many restaurants in the area. The

packaging was designed to fit into automatic milkshake machines used in many types of restaurants, including most fast-food restaurants and drive-ins.

George was elated when he received the call asking him to come to the plant on June 8. After a brief visit with the HR director, at which time George filled out the necessary employment forms, he was instructed to report for work at 11:00 P.M. that night. He was assigned to the night shift, working from 11:00 P.M. until 7:00 A.M. six nights per week—Sunday through Friday. With the regular wages paid at Eastern Dairy, supplemented by time-and-a-half pay for 8 hours of guaranteed overtime each week, George thought he could save a tidy sum before he had to return to school at the end of the first week in September.

When George reported to work, he discovered that there were no managers assigned to the night shift. The entire plant was run by a six-person crew of operators. One member of this crew, a young man named Paul Burnham, received each night's production orders from the day shift superintendent as the superintendent left for the day. Although Paul's status was no different from that of his five colleagues, the other crew members looked to him for direction. Paul passed the production orders to the mixer (who was the first stage of the production process) and kept the production records for the shift.

The production process was really quite simple. Mixes moved between various pieces of equipment (including mixing vats, pasteurizers, coolers, homogenizers, and filling machines) through stainless steel pipes suspended from the ceiling. All of the pipes had to be disassembled, thoroughly cleaned, and reinstalled by the conclusion of the night shift. This process took approximately one hour, so all the mix had to be run by 6:00 A.M. in order to complete the cleanup by the 7:00 A.M. quitting time. Paul and one other worker, Fred (the mixer), cleaned the giant mixing vats while the other four on the shift, including George, cleaned and reinstalled the pipes and filters.

George soon learned that Paul felt a sense of responsibility for completing all of the assigned work before the end of the shift. However, as long as that objective was achieved, he did not seem to care about what else went on during the shift. A great deal of story-telling and horseplay was the norm, but the work was always completed by quitting time. George was soon enjoying the easy camaraderie of the work group, the outrageous pranks they pulled on one another, and even the work itself.

George's position required that he station himself beside the conveyor in a large freezer room. He removed containers of mix as they came down the line and stacked them in the appropriate places. Periodically, Paul would decide that they had all worked hard enough and would shut down the line for a while so that they could engage in some nonwork activity like joke telling, hiding each other's lunch boxes, or "balloon" fights. The balloons were actually the 5-gallon, flexible liners for the cardboard boxes in which the mix was sold.

While George did not relish being hit by an exploding bag containing 5 gallons of heavy mix, he found it great fun to lob one at one of his co-workers. The loss of 10 to 40 gallons of mix on a shift did not seem to concern anyone, and these fights were never curtailed. George quickly learned that management had only two expectations of the night shift. First, the shift was expected to complete the production orders each night. Second, management expected the equipment, including the pipes, to be spotlessly clean at the conclusion of the shift. Paul told George that inspectors from the county health department would occasionally drop by unannounced at the end of the shift to inspect the vats and pipes after they had been disassembled and scrubbed. Paul also told George that management would be very upset if the inspectors registered any complaints about cleanliness.

George did join the union but saw very little evidence of its involvement in the day-to-day operations of the plant. Labor relations seemed quite amicable, and George thought of the union only when he looked at a pay stub and noticed that union dues had been deducted from his gross pay. The difference George noticed in working for Eastern Dairy compared to his previous employers was not the presence of the union but the absence of management.

The Current Situation

Things seemed to be going quite well for George on the job—until a few minutes ago. The problem first surfaced when the milkshake mix that was being run started spewing out of one of the joints in the overhead pipe network. The pumps were shut down while George disassembled the joint to see what the problem was. George removed the filter screen from the pipe at the leaking joint and saw that it was completely packed with solid matter. Closer inspection revealed that maggots were the culprits. George hurriedly took the filter to Paul to show him the blockage. Paul did not seem too concerned and told George to clean the filter and reassemble the joint. When George asked how this could have happened, Paul said maggots occasionally got into the bags of certain ingredients that were stored in a warehouse at the back of the lot. "But you don't have to worry," said Paul. "The filters will catch any solid matter."

Feeling somewhat reassured, George cleaned the filter and reassembled the pipe. But still, the image of maggots floating in a milkshake was hard to shake. And, unfortunately for George, that was not the end of it. Shortly after the pumps were restarted, the mix began to flow out of another joint. Once again, a filter plugged with maggots was found to be the cause.

For the second time, George cleaned the filter and reassembled the connection. This time Paul had seemed a bit more concerned as he noted that they barely had enough time to run the last 500 gallons remaining in the vats before they needed to clean up in preparation for the end of the shift.

Moments after the equipment was again restarted, another joint started to spew. When maggots were found to be clogging this filter, too, Paul called George over and told him to remove all five filters from the line so the last 500 gallons could be run without any filters. Paul laughed when he saw the shocked look on George's face.

"George," he said, "don't forget that all of this stuff goes through the homogenizer, so any solid matter will be completely pulverized. And when it's heated in the pasteurization process, any bacteria will be killed. No one will ever know about this, the company can save a lot of mix—that's money—and, most important, we can run this through and go home on time."

George knew that they would never get this lot packaged if they had to shut down every minute to clean filters, and there was no reason to believe it would not be this way for the rest of the run. The product had been thoroughly mixed in the mixing vats at the beginning of the process, which meant that contaminants would be distributed uniformly throughout the 500 gallons. George also knew that the 500 gallons of milkshake was very expensive. He did not think management would just want it dumped down the drain.

Finally, Paul was definitely right about one thing—removing all of the filters, a 10-minute job at most, would ensure that they could get everything cleaned up and be out on time.

As George walked to the first filter joint, he felt a knot forming in his stomach as he thought of kids drinking all of the milkshakes they were about to produce. He had already decided he would not have another milkshake for at least a month, in order to be absolutely sure that this batch was no longer being served at restaurants. After all, he did not know exactly which restaurants would receive this mix. As he picked up his wrench and approached the first pipe joint that contained a filter, he still could not help wondering if he should do or say something more.

Note: This case appeared in Paul F. Buller and Randall S. Schuler, *Managing Organizations and People*, South-Western © 2000.

*This case was prepared by Roland B. Cousins, LaGrange College, and Linda E. Benitz, InterCel, Inc., as a basis for class discussion and not to illustrate either effective or ineffective handling of an administrative situation. The names of the firm and individuals and the location involved

have been disguised to preserve anonymity. The situation reported is factual. The authors thank Anne T. Lawrence for her assistance in the development of this case.

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Chapter 10 Workshop: The Power of Ethics*

This exercise will help you to better understand the concept of ethics and what it means to you.

- Spend about 5 minutes individually answering the questions below.
- 2. Divide into groups of four to six members.
- 3. Have each group try to achieve consensus with answers to each of the four questions. For question 3, choose one scenario to highlight. You will have 20 to 40 minutes for this exercise, depending on the instructor.
- Have groups share their answers with the whole class, after which the instructor will lead a discussion on ethics and its power in business.

Questions

 In your own words, define the concept of ethics in one or two sentences.

- If you were a manager, how would you motivate your employees to follow ethical behavior? Use no more than two sentences.
- 3. Describe a situation in which you were faced with an ethical dilemma. What was your decision and behavior? How did you decide to do that? Can you relate your decision to any concept in the chapter?
- 4. What do you think is a powerful ethical message for others? Where did you get it from? How will it influence your behavior in the future?

*Adapted by Dorothy Marcic from Allayne Barrilleaux Pizzolatto's "Ethical Management: An Exercise in Understanding Its Power," *Journal of Management Education* 17, no. 1 (February 1993), 107–109.

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Chapter 11

Innovation and Change



The Strategic Role of Change

Innovate or Perish · Strategic Types of Change

Elements for Successful Change

Technology Change

The Ambidextrous Approach • Techniques for Encouraging Technology Change

New Products and Services

New Product Success Rate • Reasons for New Product Success • Horizontal Coordination Model • Achieving Competitive Advantage: The Need for Speed

Strategy and Structure Change

The Dual-Core Approach • Organization Design for Implementing Management Change

Culture Change

Forces for Culture Change $\,\cdot\,$ Organization Development Culture Change Interventions

Strategies for Implementing Change

Leadership for Change $\, \cdot \,$ Barriers to Change $\, \cdot \,$ Techniques for Implementation

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



Denise Chudy is a sales team leader at Google, and Aaron Lichtig is a brand manager at Procter & Gamble (P&G), but recently the two have been spending a lot of time together. They are among the two dozen or so Google and P&G employees who are involved in a job swapping program whereby they sit in on each other's staff training programs and participate in high-level business meetings. What's the point? The job swapping strategy is all in the name of spurring innovation. P&G, one of the most successful companies in the world at traditional marketing, knows it needs new approaches to reach a new generation of consumers, while Google knows it needs to find better ways of tapping into the advertising dollars of large, traditional companies like P&G.¹

Every company faces a challenge in keeping up with changes in the external environment. New discoveries, new inventions, and new approaches quickly replace standard ways of doing things. Organizations like Procter & Gamble, Google, Wal-Mart, UPS, Nokia, and MySpace are searching for any innovation edge they can find. The pace of change is revealed in the fact that the parents of today's college-age students grew up without iPods, video on demand, laser checkout systems, smartphones, TiVo, text messaging, and the Internet. The idea of communicating instantly with people around the world was unimaginable to many people as recently as a decade ago. High-tech industries seem to change every nanosecond, but companies in all industries face greater pressures for innovation today. Bob Jordon, head of technology and strategy at Southwest Airlines, spoke for managers all over the world when he said, "We have to change to survive."

Purpose of This Chapter

This chapter explores how organizations change and how managers direct the innovation and change process. First we look at the forces driving a need for change in today's organizations. The next section describes the four types of change—technology, product, structure, people—occurring in organizations, and how to

Managing

Ouestions

manage change successfully. The organization structure and management approach for facilitating each type of change is then discussed. Management techniques for influencing both the creation and implementation of change are also covered. The final section of the chapter looks at barriers to change and implementation techniques managers can use to overcome resistance.

THE STRATEGIC ROLE OF CHANGE

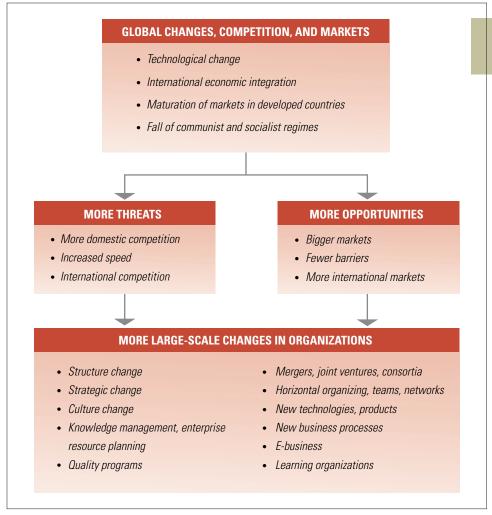
If there is one theme or lesson that emerges from previous chapters, it is that organizations must run fast to keep up with changes taking place all around them. Large organizations must find ways to act like small, flexible organizations. Manufacturing firms need to reach out for new, flexible manufacturing technology and service firms for new information technology (IT). Today's organizations must keep themselves open to continuous innovation, not only to prosper but merely to survive in a world of disruptive change and increasingly stiff competition.

Innovate or Perish

As illustrated in Exhibit 11.1, a number of environmental forces drive this need for major organizational change.² Powerful forces associated with advancing technology, international economic integration, the maturing of domestic markets, and the shift to capitalism in formerly communist regions have brought about a globalized economy that affects every business, from the largest to the smallest, creating more threats as well as more opportunities. To recognize and manage the threats and take advantage of the opportunities, today's companies are undergoing dramatic changes in all areas of their operations.

Many organizations are responding to global forces by adopting self-directed teams and horizontal structures that enhance communication and collaboration, streamlining supply and distribution channels, and overcoming barriers of time and place through IT and e-business. Others become involved in joint ventures or consortia to exploit opportunities and extend operations or markets internationally. Some adopt structural innovations such as the virtual network approach to focus on their core competencies while outside specialists handle other activities. In addition, today's organizations face a need for major strategic and cultural change and for rapid and continuous innovations in technology, services, products, and processes. For example, when the price of fuel spiked, Southwest Airlines looked for technology innovations to increase efficiency. The company was able to dramatically cut fuel usage by adding efficiency-boosting winglets on its aircraft. FedEx is continually introducing service innovations. It recently launched the Smart Package, used for transporting delicate goods like human organs. The Smart Package is wired so that shippers and recipients can not only track the package every step of the way but also monitor its temperature and humidity and get alerts if it is damaged.³

Change, rather than stability, is the norm today. Whereas change once occurred incrementally and infrequently, today it is dramatic and constant. A key element of the success of companies such as FedEx, Southwest Airlines, Apple, and Toyota has been their passion for creating change. On the other hand, U.S. auto companies are in dire straits largely because they have been slow to change.



Source: Based on John P. Kotter, *The New Rules: How to Succeed in Today's Post-Corporate World* (New York: The Free Press, 1995).

Strategic Types of Change

Managers can focus on four types of change within organizations to achieve strategic advantage. These four types of change are summarized in Exhibit 11.2 as technology, products and services, strategy and structure, and culture. We touched on overall leadership and organizational vision in Chapter 2 and in the previous chapter on corporate culture. These factors provide an overall context within which the four types of change serve as a competitive wedge to achieve an advantage in the international environment. Each company has a unique configuration of products and services, strategy and structure, culture, and technologies that can be focused for maximum impact upon the company's chosen markets.⁴

Technology changes are changes in an organization's production process, including its knowledge and skill base, that enable distinctive competence. These changes are designed to make production more efficient or to produce greater volume. Changes in technology involve the techniques for making products or services. They include work methods, equipment, and workflow. For



Forces Driving the Need for Major Organizational Change

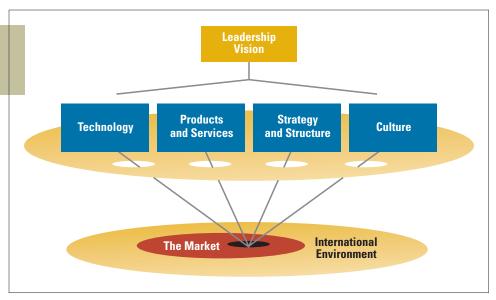


As an organization manager, keep this guideline in mind:

Recognize that the four types of change are interdependent and that changes in one area often require changes in others.

EXHIBIT 11.2

The Four Types of Change Provide a Strategic Competitive Wedge



Source: Academy of Management Executive: The Thinking Manager's Source by McCann. Copyright 1991 by Academy of Management (NY). Reproduced with permission of Academy of Management (NY) in the format Textbook via Copyright Clearance Center.

example, a technology change at GlaxoSmithKline was the development of software that helps researchers screen potential drugs for possible adverse medical reactions while the drugs are at the earliest stage of development. This means GlaxoSmithKline doesn't spend time and resources on promising drugs only to find out years down the road that they are potentially harmful and can't be marketed.⁵

Product and service changes pertain to the product or service outputs of an organization. New products include small adaptations of existing products or entirely new product lines. New products and services are normally designed to increase the market share or to develop new markets, customers, or clients. Toyota's Hilux truck was a new product designed to increase market share, whereas Apple's iPod was a new product that created a new market for the company. An example of a new service designed to reach new markets and customers comes from India's Tata Consultancy Services. The company's new mKrishi service delivers weather information and crop advice to farmers in rural India via cell phone. The service brings together existing technologies, such as remote sensors, voice-enabled text messaging, and camera phones, in a new way to serve a new market.⁶

Strategy and structure changes pertain to the administrative domain in an organization. The administrative domain involves the supervision and management of the organization. These changes include changes in organization structure, strategic management, policies, reward systems, labor relations, coordination devices, management information and control systems, and accounting and budgeting systems. Structure and system changes are usually top-down, that is, mandated by top management, whereas product and technology changes often come from the bottom up. A system change instituted by top management at 3M was the implementation of a Six Sigma program, a series of management techniques designed to cut defects and increase efficiency. The shift to self-directed teams at ICU Medical Inc. is an example of a top-down structure change. Dr. George Lopez, founder and CEO, made the decision and implemented it, even though some managers and employees at first hated the idea.⁷

Culture changes refer to changes in the values, attitudes, expectations, beliefs, abilities, and behavior of employees. Culture changes pertain to changes in how employees think; these are changes in mind-set rather than technology, structure, or products. Culture was discussed in detail in the previous chapter.

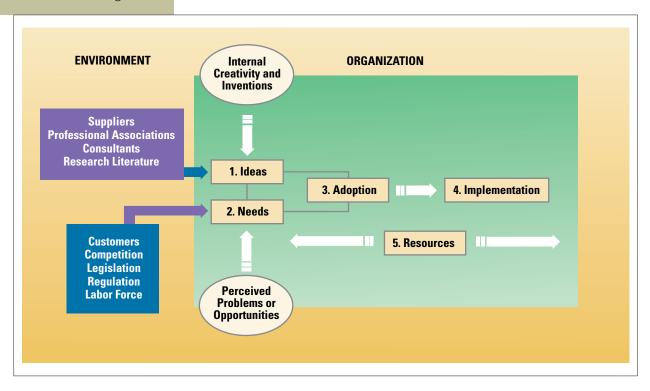
The four types of change in Exhibit 11.2 are interdependent—a change in one often means a change in another. A new product may require changes in the production technology, or a change in structure may require new employee skills. For example, when Shenandoah Life Insurance Company acquired new computer technology to process claims, the technology was not fully utilized until clerks were restructured into teams of five to seven members that were compatible with the technology. The structural change was an outgrowth of the technology change. Organizations are interdependent systems, and changing one part often has implications for other organization elements.

ELEMENTS FOR SUCCESSFUL CHANGE

Regardless of the type or scope of change, there are identifiable stages of innovation, which generally occur as a sequence of events, though innovation stages may overlap.8 In the research literature on innovation, organizational change is considered the adoption of a new idea or behavior by an organization. 9 Organizational innovation, in contrast, is the adoption of an idea or behavior that is new to the organization's industry, market, or general environment.¹⁰ The first organization to introduce a new product is considered the innovator, and organizations that copy it are considered to adopt changes. For purposes of managing change, however, the terms innovation and change will be used interchangeably because the change process within organizations tends to be identical whether a change is early or late with respect to other organizations in the environment. Innovations typically are assimilated into an organization through a series of steps or elements. Organization members first become aware of a possible innovation, evaluate its appropriateness, and then evaluate and choose the idea. 11 The required elements of successful change are summarized in Exhibit 11.3. For a change to be successfully implemented, managers must make sure each element occurs in the organization. If one of the elements is missing, the change process will fail.

1. Ideas. No company can remain competitive without new ideas; change is the outward expression of those ideas.¹² An idea is a new way of doing things. It may be a new product or service, a new management concept, or a new procedure for working together in the organization. Ideas can come from within or from outside the organization. Internal creativity is a dramatic element of organizational change. **Creativity** is the generation of novel ideas that may meet perceived needs or respond to opportunities. For example, an employee at Boardroom Inc., a publisher of books and newsletters, came up with the idea of cutting the dimensions of the company's books by a quarter inch. Managers learned that the smaller size would reduce postal rates, and implementation of the idea led to annual savings of more than \$500,000.13 Some techniques for spurring internal creativity are to increase the diversity within the organization, make sure employees have plenty of opportunities to interact with people different from themselves, give people time and freedom for experimentation, and support risk taking and making mistakes.¹⁴ Eli Lilly, the Indianapolis-based pharmaceutical company, holds "failure parties," to commemorate brilliant, efficient scientific work that nevertheless resulted in failure. The company's scientists

EXHIBIT 11.3Sequence of Elements for Successful Change



- are encouraged to take risks and look for alternative uses for failed drugs. Lilly's osteoporosis drug Evista was a failed contraceptive. Strattera, which treats attention deficit/hyperactivity disorder, had been unsuccessful as an antidepressant. The block-buster impotence drug Viagra was originally developed to treat severe heart pain.¹⁵
- 2. *Need.* Ideas are generally not seriously considered unless there is a perceived need for change. A perceived need for change occurs when managers see a gap between actual performance and desired performance in the organization. Managers try to establish a sense of urgency so that others will understand the need for change. Sometimes a crisis provides an undoubted sense of urgency. In many cases, however, there is no crisis, so managers have to recognize a need and communicate it to others. A study of innovativeness in industrial firms, for example, suggests that organizations that encourage close attention to customers and market conditions and actively support entrepreneurial activity produce more ideas and are more innovative. Managers at the Walt Disney Company are trying to create those conditions to keep Disney theme parks relevant to a new generation of digitally savvy visitors. They realized the company had lost touch with today's customers, providing ho-hum, passive rides in an era when people expect instant gratification and customized experiences. and a perceived needs of the company had lost touch with today's customers, providing ho-hum, passive rides in an era when
- 3. Adoption. Adoption occurs when decision makers choose to go ahead with a proposed idea. Key managers and employees need to be in agreement to support the change. For a major organizational change, the decision might require the signing of a legal document by the board of directors. For a small change, adoption might occur with informal approval by a middle manager.

- 4. *Implementation*. Implementation occurs when organization members actually use a new idea, technique, or behavior. Materials and equipment may have to be acquired, and workers may have to be trained to use the new idea. Implementation is a very important step because without it, previous steps are to no avail. Implementation of change is often the most difficult part of the change process. Until people use the new idea, no change has actually taken place.
- 5. Resources. Human energy and activity are required to bring about change. Change does not happen on its own; it requires time and resources, for both creating and implementing a new idea. Employees have to provide energy to see both the need and the idea to meet that need. Someone must develop a proposal and provide the time and effort to implement it. Most innovations go beyond ordinary budget allocations and require special funding. Some companies use task forces, as described in Chapter 3, to focus resources on a change. Others set up seed funds or venture funds that employees with promising ideas can tap into. At Eli Lilly, a "blue sky fund" pays researchers for working on projects that don't appear to make immediate commercial sense. 19

One point about Exhibit 11.3 is especially important. Needs and ideas are listed simultaneously at the beginning of the change sequence. Either may occur first. Many organizations adopted the computer, for example, because it seemed a promising way to improve efficiency. The search for a vaccine against the HIV virus, on the other hand, was stimulated by a severe need. Whether the need or the idea occurs first, for the change to be accomplished, each of the steps in Exhibit 11.3 must be completed.

Briefcase

As an organization manager, keep these guidelines in mind:

Make sure every change undertaken has a definite need, idea, adoption decision, implementation strategy, and resources. Avoid failure by not proceeding until each element is accounted for.

TECHNOLOGY CHANGE

In today's business world, any company that isn't continually developing, acquiring, or adapting new technology will likely be out of business in a few years. Managers can create the conditions to encourage technology changes. However, organizations face a contradiction when it comes to technology change, because the conditions that promote new ideas are not generally the best for implementing those ideas for routine production. An innovative organization is characterized by flexibility and empowered employees and the absence of rigid work rules.²⁰ As discussed earlier in this book, an organic, free-flowing organization is typically associated with change and is considered the best organization form for adapting to a chaotic environment. Complete the questionnaire in this chapter's "How Do You Fit the Design?" to see if you have characteristics associated with innovativeness.

The flexibility of an organic organization is attributed to people's freedom to be creative and introduce new ideas. Organic organizations encourage a bottom-up innovation process. Ideas bubble up from middle- and lower-level employees because they have the freedom to propose ideas and to experiment. A mechanistic structure, in contrast, stifles innovation with its emphasis on rules and regulations, but it is often the best structure for efficiently producing routine products. The challenge for managers is to create both organic and mechanistic conditions within the organization to achieve both innovation and efficiency. To attain both aspects of technological change, many organizations use an ambidextrous approach.



Think about your current life. Indicate whether each of the following items is Mostly True or Mostly False for you.

		Mostly True	Mostly False
1.	I am always seeking new ways to do things.		
2.	I consider myself creative and original in my thinking and behavior.		
3.	I rarely trust new gadgets until I see whether they work for people around me.		
4.	In a group or at work I am often skeptical of new ideas.		
5.	I typically buy new foods, gear, and other innovations before other people do.		
6.	I like to spend time trying out new things.		
7.	My behavior influences others to try new things.		
8.	Among my co-workers, I will be among the first to try out a new idea or method.		

Scoring: To compute your score on the Personal Innovativeness scale, add the number of Mostly True answers to items 1, 2, 5, 6, 7, 8 and the Mostly False answers to items 3 and 4 for your score.

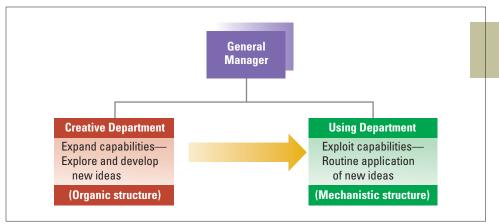
Interpretation: Personal Innovativeness reflects the awareness of a need to innovate and a readiness to try new things. Innovativeness is also thought of as the degree to which a person adopts innovations earlier than other people in the peer group. Innovativeness is considered a positive thing for people in creative companies, creative departments, venture teams, or corporate entrepreneurship. A score of 6–8 indicates that you are very innovative and likely are one of the first people to adopt changes. A score of 4–5 would suggest that you are average or slightly above average in innovativeness compared to others. A score of 0–3 means that you may prefer the tried and true and hence are not excited about new ideas or innovations. As a manager, a high score suggests you will emphasize innovation and change.

Source: Based on H. Thomas Hurt, Katherine Joseph, and Chester D. Cook, "Scales for the Measurement of Innovativeness," *Human Communication Research* 4, no. 1 (1977), 58–65; and John E. Ettlie and Robert D. O'Keefe, "Innovative Attitudes, Values, and Intentions in Organizations," *Journal of Management Studies* 19, no. 2 (1982), 163–182.

The Ambidextrous Approach

Recent thinking has refined the idea of organic versus mechanistic structures with respect to innovation creation versus innovation utilization. Organic characteristics such as decentralization and employee freedom are excellent for initiating ideas; but these same conditions often make it hard to implement a change because employees are less likely to comply. Employees can ignore the innovation because of decentralization and a generally loose structure.

How does an organization solve this dilemma? One remedy is for the organization to use an **ambidextrous approach**—to incorporate structures and management processes that are appropriate to both the creation and the implementation of innovation.²¹ Another way to think of the ambidextrous approach is to look at



the organization design elements that are important for *exploring* new ideas versus the design elements that are most suitable for *exploiting* current capabilities.²² Exploration means encouraging creativity and developing new ideas, whereas exploitation means implementing those ideas to produce routine products. The organization can be designed to behave in an organic way for exploring new ideas and in a mechanistic way to exploit and use the ideas. Exhibit 11.4 illustrates how one department is structured organically to explore and develop new ideas and another department is structured mechanistically for routine implementation of innovations. Research indicates that organizations that use an ambidextrous approach by designing for both exploration and exploitation perform better and are significantly more successful in launching innovative new products or services.²³

For example, a study of long-established Japanese companies such as Honda and Canon that have succeeded in breakthrough innovations found that these companies use an ambidextrous approach.²⁴ To develop ideas related to a new technology, the companies assign teams of young staff members who are not entrenched in the "old way of doing things" to work on the project. The teams are headed by an esteemed elder and are charged with doing whatever is needed to develop new ideas and products, even if it means breaking rules that are important in the larger organization for implementing the new ideas.

Techniques for Encouraging Technology Change

Some of the techniques used by companies to maintain an ambidextrous approach are switching structures, separate creative departments, venture teams, corporate entrepreneurship, and collaborative teams.

Switching Structures. Switching structures means an organization creates an organic structure when such a structure is needed for the initiation of new ideas.²⁵ Some of the ways organizations have switched structures to achieve the ambidextrous approach are as follows:

Philips Corporation, a building materials producer based in Ohio, each year creates up to 150 transient teams—made up of members from various departments—to develop ideas for improving Philips products and work methods. After five days of organic brainstorming and problem solving, the company reverts to a more mechanistic basis to implement the changes.²⁶

EXHIBIT 11.4

Division of Labor in the Ambidextrous Organization

Briefcase

As an organization manager, keep these guidelines in mind:

Facilitate frequent changes in internal technology by adopting an organic organizational structure. Give technical personnel freedom to analyze problems and develop solutions or create a separate, organically structured department or venture group to conceive and propose new ideas.

- Gardetto's, a family-run snack-food business, sends small teams of workers to Eureka Ranch, where they may engage in a Nerf gun battle to set the tone for fun and freedom and then participate in brainstorming exercises with the idea of generating as many new ideas as possible by the end of the day. After two and a half days, the group returns to the regular organizational structure to put the best of the ideas into action.²⁷
- The NUMMI plant, a Toyota subsidiary located in Fremont, California, creates a separate, organically organized, cross-functional subunit, called the Pilot Team, to design production processes for new car and truck models. When the model they are preparing moves into production, workers return to their regular jobs on the shop floor.²⁸

Each of these organizations found creative ways to be ambidextrous, establishing organic conditions for developing new ideas in the midst of more mechanistic conditions for implementing and using those ideas.

Creative Departments. In many large organizations the initiation of innovation is assigned to separate **creative departments**.²⁹ Staff departments, such as research and development (R&D), engineering, design, and systems analysis, create changes for adoption in other departments. Departments that initiate change are organically structured to facilitate the generation of new ideas and techniques. Departments that use those innovations tend to have a mechanistic structure more suitable for efficient production.

One example of a creative department is the research lab at Oksuka Pharmaceutical Company. To get the kind of creative spirit that is willing to try new things and look for the unexpected, Oksuka's president Tatsuo Higuchi says its research labs "put a high value on weird people." However, in the department that manufactures drugs, where routine and precision is important, a pharmaceutical company would prefer to have less-unusual people who are comfortable following rules and standard procedures.

Another type of creative department is the **idea incubator**, an increasingly popular way to facilitate the development of new ideas within the organization. An idea incubator provides a safe harbor where ideas from employees throughout the organization can be developed without interference from company bureaucracy or politics.³¹ Companies as diverse as Boeing, Adobe Systems, Yahoo!, Ziff-Davis, and UPS are using incubators to support the development of creative ideas.

Venture Teams. Venture teams are a technique used to give free rein to creativity within organizations. Venture teams are often given a separate location and facilities so they are not constrained by organizational procedures. A venture team is like a small company within a large company. Numerous organizations have used the venture team concept to free creative people from the bureaucracy of a large corporation. Texas Instruments (TI) has a loose, informal group of engineers, self-titled the Lunatic Fringe, who are given free rein to follow their curiosity wherever it goes. This approach, according to "lunatic" Gene Frantz, provides a "continuum between total chaos and total order. About 95 percent of the people in TI are total order," he says, "and I thank God for them every day because they create the products that allow me to spend money. I'm down here in total chaos, that total chaos of innovation." ³²

One type of venture team is called a *skunkworks*.³³ A **skunkworks** is a separate, small, informal, highly autonomous, and often secretive group that focuses on breakthrough ideas for the business. The original skunkworks was created by Lockheed Martin more than 50 years ago and is still in operation. The essence of a skunkworks is that highly talented people are given the time and freedom to let creativity reign.

A variation of the venture team concept is the **new-venture fund**, which provides financial resources for employees to develop new ideas, products, or businesses. In order to tap into its employees' entrepreneurial urges, Lockheed Martin allows workers to take up to two years' unpaid leave to explore a new idea, using company labs and equipment and paying company rates for health insurance. If the idea is successful, the corporation's venture fund invests in the start-up company. One successful start-up was Genase, which created an enzyme that "stone-washes" denim.³⁴

Corporate Entrepreneurship. Corporate entrepreneurship attempts to develop an internal entrepreneurial spirit, philosophy, and structure that will produce a higher-than-average number of innovations. Corporate entrepreneurship may involve the use of creative departments and new venture teams, but it also attempts to release the creative energy of all employees in the organization. Managers can create systems and structures that encourage entrepreneurship. For example, at the giant oil company BP, top executives establish contracts with the heads of all BP's business units. Unit managers can deliver on the contract in whatever way they see fit, within clearly identified constraints.³⁵

An important outcome of corporate entrepreneurship is to facilitate **idea champions**. These go by a variety of names, including *advocate*, *intrapreneur*, or *change agent*. Idea champions provide the time and energy to make things happen. They fight to overcome natural resistance to change and to convince others of the merit of a new idea.³⁶ The importance of the idea champion is illustrated by a fascinating fact discovered by Texas Instruments: When TI reviewed fifty successful and unsuccessful technical projects, it discovered that every failure was characterized by the absence of a volunteer champion. There was no one who passionately believed in the idea, who pushed the idea through every obstacle to make it work. TI took this finding so seriously that now its number-one criterion for approving new technical projects is the presence of a zealous champion.³⁷ Insisting on an idea champion is a guiding rule for many companies that successfully turn ideas into new products and services. This chapter's Book Mark further discusses key principles of highly innovative companies. Numerous studies support the importance of idea champions as a factor in the success of new products.³⁸

Companies encourage idea champions by providing freedom and slack time to creative people. Companies such as IBM, Texas Instruments, General Electric, and 3M allow employees to develop new technologies without company approval. Known as *bootlegging*, the unauthorized research often pays big dividends. The talking educational toy Speak & Spell was developed "under the table" at TI beginning in the 1970s. The product was a hit, but more importantly, it contained TI's first digital-signal processing-chip, which grew into a huge and very profitable business when cell phones and other portable devices came along years later.³⁹

Collaborative Teams. Although many individuals have creative ideas, most innovations are created through groups of people working together. Smart companies find



BookMark 11.0 (HAVE YOU READ THIS BOOK?)

Innovation: The Five Disciplines for Creating What Customers WantBy Curtis R. Carlson and William W. Wilmot



Why are some companies so good at cranking out hot new products and services while others struggle to find innovative ideas that connect in the marketplace? In *Innovation:* The Five Disciplines for Creating What Customers Want, Curtis Carlson and William Wilmot emphasize that successful innovation isn't the result of a "Eureka!" moment experienced by a lone, creative employee in a research lab, but rather the outcome of a disciplined approach that identifies and delivers the right products and services at the right time.

IT IS DISCIPLINE THAT MAKES CREATIVITY PAY

Carlson, CEO of contract research and development firm SRI International, and Wilmot, director of the Collaboration Institute, offer their five disciplines based on two decades of searching SRI and countless other companies for the best practices of innovation.

- Focus on Important Needs. The first step is to pick important, not just interesting, problems. Managers and employees have to be in close touch with the environment to know what the important needs are. "Get out of your office, hit the road," they write. "The best source of information . . . is your prospective customers and partners."
- Devise solutions that create value. For an idea to move forward, the new products or services to be produced must be ones that the customer wants, needs, and values. The authors also point out that value goes beyond price and quality. Consider the iPod, which added value by meeting consumer needs for simplicity and portability.

- Insist on an idea champion. "We have a saying at SRI," says Carlson. "No champion, no product, no exception."
 To be successful, the authors believe, every project requires a champion who is "insanely" committed to it and keeps it going in spite of roadblocks.
- Use multidisciplinary teams. Using teams of people from across the organization contributes to a continual sharing of information and continual improvement of ideas. The book outlines the role of team leader and how to shape team norms for innovation.
- Align the entire organization. The goal, say Carlson and Wilmot, is to align the organization for continuous value creation. Individuals, teams, and departments understand company goals and strategy and how their tasks and projects contribute, so that every part of the organization is dedicated to "creating the highest customer value in the shortest possible time."

PUT IT IN PRACTICE

A great deal of space is devoted to the idea of value creation, since it is crucial to successful innovation. Carlson and Wilmot outline tools and techniques for developing a value proposition and determining benefits and costs. The book also provides a number of other tools to help managers apply the five disciplines within their own organizations.

Innovation: The Five Disciplines for Creating What Customers Want, by Curtis Carlson and William Wilmot, is published by Crown Business.

ways to get people communicating and collaborating across boundaries. One large consumer products company, for example, had lots of employees capable of coming up with good ideas, but they still weren't innovating. To kick-start collaboration, the company held an off-site conference designed to get people from different specialties who had complementary skills and talents talking to one another. Everyone was given an electronic name tag which contained information about the person's skills and interests. When an employee approached someone with complementary skills, the badge would light up and flash a welcome such as "Hi Susan. We should be talking about biochemistry." Many of today's successful innovators even bring in people from outside the organization. For example, IBM held an online townhall style meeting, called the Innovation Jam, inviting employees as well as clients,

consultants, and employees' family members to an interactive online brainstorming session about new technology ideas.⁴¹

1 The most important aspect for creating an innovative company is requiring people to come up with new ideas.

ANSWER: Disagree. New ideas are essential for innovation, but managers can't simply issue directives ordering people to come up with new ideas. Managers create the conditions that are conducive to both the creation of new ideas and their implementation. Organizing to sustain innovation is as important as organizing to spur creativity.

ASSESS YOUR ANSWER

NEW PRODUCTS AND SERVICES

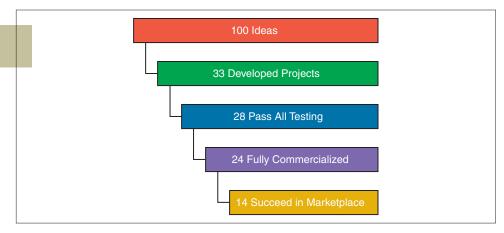
Although the concepts just discussed are important to product and service as well as technology changes, other factors also need to be considered. In many ways, new products and services are a special case of innovation because they are used by customers outside the organization. Since new products are designed for sale in the environment, uncertainty about the suitability and success of an innovation is very high.

New Product Success Rate

Research has explored the enormous uncertainty associated with the development and sale of new products. ⁴² To understand what this uncertainty can mean to organizations, consider such flops as RCA's VideoDisc player, which lost an estimated \$500 million, or Time Inc.'s *TV-Cable Week*, which lost \$47 million. Pfizer invested more than \$70 million in the development and testing of an anti-aging drug before it flopped in the final testing stages. ⁴³ Developing and producing products that fail is a part of business in all industries. U.S. food companies, for example, introduce approximately 5,000 new products into supermarkets each year, but the failure rate of new food products is 70 to 80 percent. ⁴⁴ Organizations take the risk because product innovation is one of the most important ways companies adapt to changes in markets, technologies, and competition. ⁴⁵

Although measuring the success of new products is tricky, a survey by the Product Development and Management Association (PDMA) sheds some light on the commercialization success rates of new products across a variety of industries. ⁴⁶ PDMA compiled survey results from over 400 PDMA members, most of whom work in new product development in various industries. The findings about success rates are given in Exhibit 11.5. On the average, only 28 percent of all projects undertaken in the R&D laboratories passed the testing stage, which means all technical problems were solved and the projects moved on to production. Less than one-fourth of all product ideas (24 percent) were fully marketed and commercialized, and only 14 percent achieved economic success. ⁴⁷





Source: Based on M. Adams and the Product Development and Management Association, "Comparative Performance Assessment Study 2004," available for purchase at http://www.pdma.org (search on CPAS). Results reported in Jeff Cope, "Lessons Learned—Commercialization Success Rates: A Brief Review," RTI Tech Ventures newsletter, 4, no. 4 (December 2007).

Reasons for New Product Success

The next question to be considered is, Why are some products more successful than others? Other studies indicate that innovation success is related to collaboration between technical and marketing departments. Successful new products and services seem to be technologically sound and also carefully tailored to customer needs.⁴⁸ A study called Project SAPPHO examined seventeen pairs of new product innovations, with one success and one failure in each pair, and concluded the following:

- 1. Successful innovating companies had a much better understanding of customer needs and paid much more attention to marketing.
- 2. Successful innovating companies made more effective use of outside technology and outside advice, even though they did more work in-house.
- 3. Top management support in the successful innovating companies was from people who were more senior and had greater authority.

Thus there is a distinct pattern of tailoring innovations to customer needs, making effective use of technology, and having influential top managers support the project. These ideas taken together indicate that the effective design for new product innovation is associated with horizontal coordination across departments.

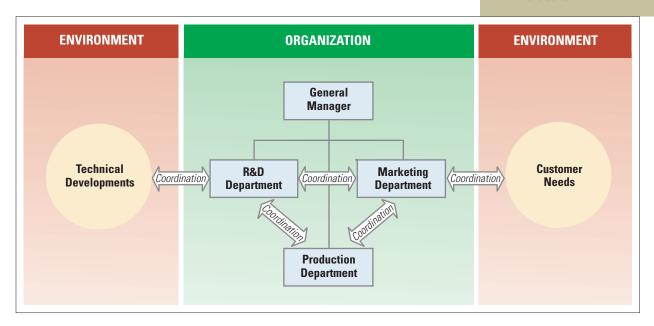
Horizontal Coordination Model

The organization design for achieving new product innovation involves three components—departmental specialization, boundary spanning, and horizontal coordination. These components are similar to the horizontal coordination mechanisms discussed in Chapter 3, such as teams, task forces, and project managers, and the differentiation and integration ideas discussed in Chapter 4. Exhibit 11.6 illustrates these components in the **horizontal coordination model**.

EXHIBIT 11.6

Horizontal Coordination

Model for New Product
Innovations



Specialization. The key departments in new product development are R&D, marketing, and production. The specialization component means that the personnel in all three of these departments are highly competent at their own tasks. The three departments are differentiated from each other and have skills, goals, and attitudes appropriate for their specialized functions.

Boundary Spanning. This component means each department involved with new products has excellent linkage with relevant sectors in the external environment. R&D personnel are linked to professional associations and to colleagues in other R&D departments. They are aware of recent scientific developments. Marketing personnel are closely linked to customer needs. They listen to what customers have to say, and they analyze competitor products and suggestions by distributors. For example, Kimberly-Clark had amazing success with Huggies Pull-Ups because marketing researchers worked closely with customers in their own homes and recognized the emotional appeal of pull-on diapers for toddlers. By the time competitors caught on, Kimberly-Clark was selling \$400 million worth of Huggies annually.⁴⁹

Horizontal Coordination. This component means that technical, marketing, and production people share ideas and information. Research people inform marketing of new technical developments to learn whether the developments are applicable to customers. Marketing people provide customer complaints and information to R&D to use in the design of new products. People from both R&D and marketing coordinate with production because new products have to fit within production capabilities so costs are not exorbitant. The decision to launch a new product is ultimately a joint decision



guidelines in mind:

Encourage marketing, research, and production departments to develop linkages to each other and to their environments when new products or services are needed. Consider bringing customers, suppliers, and others from outside the boundaries of the organization into the product development process.

among all three departments. Horizontal coordination, using mechanisms such as cross-functional teams, increases both the amount and the variety of information for new product development, enabling the design of products that meet customer needs and circumventing manufacturing and marketing problems.⁵⁰

Famous innovation failures—such as New Coke, Kellogg's Breakfast Mates, or the Susan B. Anthony Dollar—usually violate the horizontal linkage model. Employees fail to connect with customer needs and market forces or internal departments fail to adequately share needs and coordinate with one another. Research has confirmed a connection between effective boundary spanning that keeps the organization in touch with market forces, smooth coordination among departments, and successful product development.⁵¹

Many of today's successful companies are including customers, strategic partners, suppliers, and other outsiders directly in the product and service development process. One of the hottest trends is *open innovation*.⁵² In the past, most businesses generated their own ideas in-house and then developed, manufactured, marketed, and distributed them, a closed innovation approach. Today, though, forward-looking companies are trying a different method. **Open innovation** means extending the search for and commercialization of new products beyond the boundaries of the organization and even beyond the boundaries of the industry. In a survey conducted by IBM and *Industry Week* magazine, 40 percent of respondents identified collaborating with customers and suppliers as having the most significant impact on product development time-to-market.⁵³

Research findings show that collaboration with other firms and with customers can be a significant source of product innovation, and can even stimulate stronger internal coordination. Cooperating with external parties requires the involvement of people from different areas of the company, which in turn necessitates that organizations set up stronger internal coordination mechanisms.⁵⁴ Some companies, such as Threadless, dubbed the most innovative small company in America by *Inc.* magazine, take open innovation to the extreme.

PRACTICE

Threadless, founded by college dropout Jake Nickell and his partner Jacob DeHart, churns out dozens of new T-shirt designs a month and has never produced a flop. How

do they do it? By letting potential customers tell them precisely which shirts to make.

Threadless holds design competitions on an online social network, where hundreds of thousands of people socialize, blog, and discuss ideas. Members submit T-shirt designs by the hundreds each week and then vote on which ones they like best. People earn cash prizes for designs that are used, plus reprint fees, but the real appeal to young, unknown designers is the honor of getting their designs printed.

Rather than having the company create products and the customers buy them, the customers essentially *are* the company at Threadless. Threadless employs no professional designers, has no marketing department or sales force, does no advertising, and doesn't distribute through retailers. "[It] was a huge word-of-mouth thing," said one freelance designer. People aren't required to join the social network to buy shirts, but a survey indicates that about 95 percent of people visiting the site participate in talking about and voting on designs. This engagement led to four years of tremendous growth for Threadless, with membership increasing from about 70,000 in 2004 to more than 700,000 in 2008. Sales zoomed to \$30 million.

When asked about his company's success, Nickell says it just seems like common sense. "Why wouldn't you want to make the products that people want you to make?" he asks. ⁵⁵ ■

Threadless

Threadless is at the forefront of a movement to drastically rethink relationships with customers. Starbucks is applying a similar idea at MyStarbucks.com, where customers can make suggestions, then discuss and vote on them. Pitney Bowes is building an online social network for direct marketers who use its mail machines. A number of companies have sprung up to help organizations use the Internet to tap into the collective mind-power of a broad public. Web sites such as Kluster, InnoCentive, and Cambrian House let companies post questions or tasks and gather outside ideas. In addition, many major companies such as Procter & Gamble, W. L. Gore, and Boeing routinely turn to customers for advice. Gore worked with physicians to develop its thoracic graft, and with hunters to create Supprescent, a fabric intended to block human odors. During development of new planes, Boeing's engineers work closely with flight attendants, pilots, engineers from major airlines, suppliers, and even banks that finance aircraft purchases, to make sure the plane is designed for maximum functionality and compatibility with suppliers' capabilities and the airlines' needs.

2 Asking customers what they want is the best way to create new products that will be successful in the marketplace.

ANSWER: Agree or disagree. It depends on the organization. Bringing customers into the product development process has been highly beneficial for many companies. However, many products developed based on what customers say they want do not succeed. In addition, some highly innovative companies, like Apple, believe relying too much on customer input limits the pie-in-the-sky thinking needed to create truly breakthrough products.

ASSESS YOUR ANSWER

Achieving Competitive Advantage: The Need for Speed

Nine out of ten executives say speed and agility have become increasingly urgent concerns for their companies in recent years.⁶⁰ In particular, the rapid development of new products and services is becoming a major strategic weapon in an evershifting global marketplace.⁶¹ To remain competitive, companies are learning to turn ideas into new products and services incredibly fast.

Time-based competition means delivering products and services faster than competitors, giving companies a competitive edge. Clothing retailer Zara gets new styles into stores twice a week, for example. Russell Stover got a line of low-carb candies, called Net Carb, on store shelves within three months after perfecting the recipe, rather than the twelve months it usually takes candy companies to get a new product to market. Some companies use what are called *fast cycle teams* as a way to support highly important projects and deliver products and services faster than competitors. A fast cycle team is a multifunctional, and sometimes multinational, team that works under stringent timelines and is provided with high levels of company resources and empowerment to accomplish an accelerated product development project. Some

Another critical issue is designing products that can compete on a global scale and successfully marketing those products internationally. Companies such as Quaker Oats, Häagen Dazs, and Levi's are trying to improve horizontal communication and collaboration across geographical regions, recognizing that they can pick up winning product ideas from customers in other countries. Many new product

development teams today are global teams because organizations have to develop products that will meet diverse needs of consumers all over the world.⁶⁴

STRATEGY AND STRUCTURE CHANGE

The preceding discussion focused on new production processes and products, which are based in the technology of an organization. The expertise for such innovation lies within the technical core and professional staff groups, such as research and engineering. This section turns to an examination of strategy and structure changes.

All organizations need to make changes in their strategies, structures, management processes, and administrative procedures from time to time. In the past, when the environment was relatively stable, most organizations focused on small, incremental changes to solve immediate problems or take advantage of new opportunities. However, over the past decade, companies throughout the world have faced the need to make radical changes in strategy, structure, and management processes to adapt to new competitive demands. Many organizations are cutting out layers of management and decentralizing decision making. There is a strong shift toward more horizontal structures, with teams of front-line workers empowered to make decisions and solve problems on their own. Some companies are breaking totally away from traditional organization forms and shifting toward virtual network strategies and structures. Numerous companies are reorganizing and shifting their strategies to incorporate e-business. These types of changes are the responsibility of the organization's top managers, and the overall process of change is typically different from the process for innovation in technology or new products.

The Dual-Core Approach

The dual-core approach to organizational change compares management and technical changes. Management changes pertain to the design and structure of the organization itself, including restructuring, downsizing, teams, control systems, information systems, and departmental grouping. Research into management change suggests two things. First, management changes occur less frequently than do technical changes. Second, management changes occur in response to different environmental sectors and follow a different internal process than do technology-based changes. The dual-core approach to organizational change identifies the unique processes associated with management change.

Organizations—schools, hospitals, city governments, welfare agencies, government bureaucracies, and many business firms—can be conceptualized as having two cores: a *technical core* and a *management core*. Each core has its own employees, tasks, and environmental domain. Innovation can originate in either core.

The management core is above the technical core in the hierarchy. The responsibility of the management core includes the structure, control, and coordination of the organization itself and concerns the environmental sectors of government, financial resources, economic conditions, human resources, and competitors. The technical core is concerned with the transformation of raw materials into organizational products and services and involves the environmental sectors of customers and technology.⁶⁸

The point of the dual-core approach is that many organizations—especially nonprofit and government organizations—must adopt frequent management



by adopting a topdown approach. Use a mechanistic structure when the organization needs to adopt frequent management changes in a topdown fashion. changes and need to be structured differently from organizations that rely on frequent technical and product changes for competitive advantage.

Organization Design for Implementing Management Change

The findings from research comparing management and technical change suggest that a mechanistic organization structure is appropriate for frequent management changes, including changes in goals, strategy, structure, control systems, and human resources. Organizations that successfully adopt many management changes often have a larger administrative ratio, are larger in size, and are centralized and formalized compared with organizations that adopt many technical changes. The reason is the top-down implementation of changes in response to changes in the government, financial, or legal sectors of the environment. If an organization has an organic structure, lower-level employees have more freedom and autonomy and, hence, may resist top-down initiatives.

The innovation approaches associated with management versus technical change are summarized in Exhibit 11.7. Technical change, such as changes in production techniques and innovative technology for new products, is facilitated by an organic structure, which allows ideas to bubble upward from lower- and middle-level employees. Organizations that must adopt frequent management changes, in contrast, tend to use a top-down process and a mechanistic structure. For example, changes such as implementation of Six Sigma methods, application of the balanced scorecard, decentralization of decision making, or downsizing and restructuring are facilitated by a top-down approach.

Research into civil service reform found that the implementation of management innovation was extremely difficult in organizations that had an organic technical core. The professional employees in a decentralized agency could resist civil service changes. By contrast, organizations that were considered more bureaucratic and mechanistic in the sense of high formalization and centralization adopted management changes readily.⁷¹

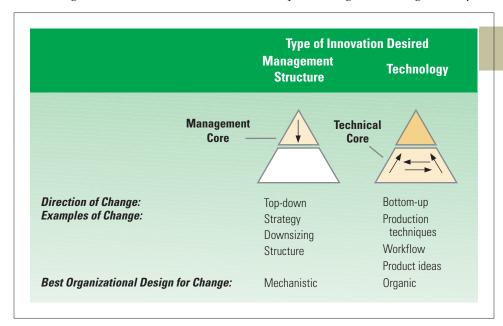


EXHIBIT 11.7Dual-Core Approach to Organization Change

What about business organizations that are normally technologically innovative in bottom-up fashion but suddenly face a crisis and need to reorganize? Or a technically innovative, high-tech firm that must reorganize frequently to accommodate changes in production technology or the environment? Technically innovative firms may suddenly have to restructure, reduce the number of employees, alter pay systems, disband teams, or form a new division.⁷² The answer is to use a top-down change process. The authority for strategy and structure change lies with top management, who should initiate and implement the new strategy and structure to meet environmental circumstances. Employee input may be sought, but top managers have the responsibility to direct the change. When Mark Hurd took over as CEO of Hewlett-Packard, he knew that strong, swift top-down change was needed to help the organization get back on track.

INPRACTICE

Mark Hurd began hearing complaints about the corporate sales function within weeks of taking over the top job at Hewlett-Packard. Some corporate customers were telling him

the company had so many confusing management layers that they never knew who to call. Others were saying they frequently got different price quotes from salespeople in different regions. Inside the company, people were complaining that they were so overwhelmed with administrative tasks that they had little time to spend serving customers.

Hurd took quick action. After digging into H-P's sales structure, he discovered that there were eleven layers of management between him and a customer. In addition, there were too many people assigned to support staff and management roles and too few assigned to work directly with customers, particularly corporate clients that provided 70 percent of the company's revenue. Hurd restructured workers among H-P's PC, printing, and corporate-technology groups so salespeople could master the products they were selling. He fired hundreds of underperformers and cut three layers of sales management. With top corporate clients, Hurd assigned just one salesperson so they would always know whom to contact. The restructuring also included changing the reward system for salespeople, tying commissions to revenue and profitability.

Hurd made a number of other management changes at H-P, including downsizing the overall workforce and giving divisions direct control over about 70 percent of their budgeted costs. Recent years have been tough for computer makers, especially with corporations decreasing their spending. However, H-P has made some impressive gains, significantly increasing its share of both consumer and corporate computer sales.⁷³

Some top-down changes, particularly those related to restructuring and downsizing, can be painful for employees, so top managers should move quickly and authoritatively to make them as humane as possible.⁷⁴ A study of successful corporate transformations, which frequently involve painful changes, found that managers followed a fast, focused approach. When top managers spread difficult changes such as downsizing over a long time period, employee morale suffers and the change is much less likely to lead to positive outcomes.⁷⁵

Top managers should also remember that top-down change means initiation of the idea occurs at upper levels and is implemented downward. It does not mean that lower-level employees are not educated about the change or allowed to participate in it.

Hewlett-Packard

CULTURE CHANGE

Organizations are made up of people and their relationships with one another. Changes in strategy, structure, technologies, and products do not happen on their own, and changes in any of these areas involve changes in people as well. Employees must learn how to use new technologies, or market new products, or work effectively in a team-based structure. Sometimes achieving a new way of thinking requires a focused change in the underlying corporate cultural values and norms. Changing corporate culture fundamentally shifts how work is done in an organization and can lead to renewed commitment and empowerment of employees, as well as a stronger bond between the company and its customers.⁷⁶

However, changing culture can be particularly difficult because it challenges people's core values and established ways of thinking and doing things. Mergers and acquisitions often illustrate how tough culture change can be. For example, the integration of FedEx and Kinko's has been rocky because of wildly disparate cultures. Kinko's always had a somewhat freewheeling culture, captured by a statement made by one former worker: "I had cornrows and green hair and no one seemed to mind." FedEx, on the other hand, has a culture based on structure, uniformity, and discipline. Five years after FedEx bought the copy-center company, managers are still struggling to implement the culture change they feel is needed at Kinko's.⁷⁷

Forces for Culture Change

A number of recent trends have contributed to a need for cultural makeovers at many companies. For example, reengineering and the shift to horizontal forms of organizing, which we discussed in Chapter 3, require greater focus on employee empowerment, collaboration, information sharing, and meeting customer needs, which means managers and employees need a new mind-set. Mutual trust, risk taking, and tolerance for mistakes become key cultural values in the horizontal organization.

Another force for culture change is the diversity of today's workforce. Diversity is a fact of life for today's organizations, and many are implementing new recruiting, mentoring, and promotion methods, diversity training programs, tough policies regarding sexual harassment and racial discrimination, and new benefits programs that respond to a more diverse workforce. However, if the underlying culture of an organization does not change, all other efforts to support diversity will fail.

Finally, a growing emphasis on learning and adaptation in organizations calls for new cultural values. Recall from Chapter 1 that shifting to a learning organization involves changes in a number of areas, such as more horizontal structures with empowered teams working directly with customers. There are few rules and procedures for performing tasks, and knowledge and control of tasks are located with employees rather than supervisors. Information is broadly shared, and employees, customers, suppliers, and partners all play a role in determining the organization's strategic direction. Clearly, all of these changes require new values, new attitudes, and new ways of thinking and working together.

ASSESS YOUR ANSWER

Changing a company's culture is probably one of the hardest jobs a manager can undertake.

ANSWER: Agree. Changing people and culture is typically much more difficult than changing any other aspect of the organization. Managers often underestimate the difficulty of changing culture and fail to appreciate that it takes a determined, consciously-planned effort over a long period of time.

Organization Development Culture Change Interventions

Managers use a variety of approaches and techniques for changing corporate culture, some of which we discussed in Chapter 10. One method of quickly bringing about culture change is known as **organization development** (OD), which focuses on the human and social aspects of the organization as a way to improve the organization's ability to adapt and solve problems. OD emphasizes the values of human development, fairness, openness, freedom from coercion, and individual autonomy that allows workers to perform the job as they see fit, within reasonable organizational constraints.⁷⁸ In the 1970s, OD evolved as a separate field that applied the behavioral sciences in a process of planned organization-wide change, with the goal of increasing organizational effectiveness. Today, the concept has been enlarged to examine how people and groups can change to an adaptive culture in a complex and turbulent environment. Organization development is not a step-by-step procedure to solve a specific problem but a process of fundamental change in the human and social systems of the organization, including organizational culture.⁷⁹

OD uses knowledge and techniques from the behavioral sciences to create a learning environment through increased trust, open confrontation of problems, employee empowerment and participation, knowledge and information sharing, the design of meaningful work, cooperation and collaboration between groups, and the full use of human potential.

OD interventions involve training of specific groups or of everyone in the organization. For OD interventions to be successful, senior management in the organization must see the need for OD and provide enthusiastic support for the change. Techniques used by many organizations for improving people skills through OD include the following.

Large Group Intervention. Most early OD activities involved small groups and focused on incremental change. However, in recent years, there has been growing interest in the application of OD techniques to large group settings, which are more attuned to bringing about radical or transformational change in organizations operating in complex environments. The large group intervention approach, sometimes referred to as "whole system in the room," The large group intervention approach, sometimes referred to as "whole system in the room," The large group intervention all parts of the organization—often including key stakeholders from outside the organization as well—in an off-site setting to discuss problems or opportunities and plan for change. A large group intervention might involve 50 to 500 people and last for several days. For example, the global furniture retailer IKEA recently used the large-group intervention approach to completely re-conceptualize how the company operates. During eighteen hours of meetings held over several days, fifty-two stakeholders created a new system for product design, manufacturing, and distribution,



Work with organization development consultants for largescale changes in the attitudes, values, or skills of employees, and when trying to change the overall culture toward a more adaptable one. which involved cutting layers of hierarchy and decentralizing the organization.⁸² All of the departments that had information, resources, or an interest in the design outcome worked together to create and implement the new system.

Using an off-site setting limits interference and distractions, enabling participants to focus on new ways of doing things. General Electric's "Work Out" program, an ongoing process of solving problems, learning, and improving, begins with large-scale off-site meetings that get people talking across functional, hierarchical, and organizational boundaries. Hourly and salaried workers come together from many different parts of the organization and join with customers and suppliers to discuss and solve specific problems. The process forces a rapid analysis of ideas, the creation of solutions, and the development of a plan for implementation. Over time, Work Out creates a culture where ideas are rapidly translated into action and positive business results. As

Team Building. Team building promotes the idea that people who work together can work as a team. A work team can be brought together to discuss conflicts, goals, the decision-making process, communication, creativity, and leadership. The team can then plan to overcome problems and improve results. Team-building activities are also used in many companies to train task forces, committees, and new product development groups. These activities enhance communication and collaboration and strengthen the cohesiveness of organizational groups and teams.

Interdepartmental Activities. Representatives from different departments are brought together in a mutual location to expose problems or conflicts, diagnose the causes, and plan improvements in communication and coordination. This type of intervention has been applied to union–management conflict, headquarters–field office conflict, interdepartmental conflict, and mergers.⁸⁵ One company that stores archived records for other organizations found interdepartmental meetings to be a key means of building a culture based on team spirit and customer focus. People from different departments met for hour-long sessions every two weeks and shared their problems, told stories about their successes, and talked about things they'd observed in the company. The meetings helped people understand the problems faced in other departments and see how everyone depended on each other to do their jobs successfully.⁸⁶

One current area in which OD can provide significant value is in spurring culture change toward valuing diversity.⁸⁷ In addition, today's organizations are continuously adapting to environmental uncertainty and increasing global competition, and OD interventions can respond to these new realities as companies strive to create greater capability for learning and growth.⁸⁸

STRATEGIES FOR IMPLEMENTING CHANGE

Managers and employees can think of inventive ways to improve the organization's technology, creative ideas for new products and services, fresh approaches to strategies and structures, or ideas for fostering adaptive cultural values, but until the ideas are put into action, they are worthless to the organization. Implementation is the most crucial part of the change process, but it is also the most difficult. Change is frequently disruptive and uncomfortable for managers as well as employees. Change is complex, dynamic, and messy, and implementation requires strong and persistent leadership. In this final section, we briefly discuss the role of leadership for change, some reasons for resistance to change, and techniques that managers can use to overcome resistance and successfully implement change.

Leadership for Change

A recent survey found that among companies that are successful innovators, 80 percent have top leaders who frequently reinforce the value and importance of innovation. These leaders think about innovation, demonstrate its importance through their actions, and follow through to make sure people are investing time and resources in innovation issues.⁸⁹ Philip A. Newbold, chief executive of Memorial Hospital in South Bend, Indiana, illustrates this type of leader.

PRACTICE

Sixty-year-old Philip Newbold has been chief of Memorial Hospital for more than twenty years, but he keeps his mind—and his organization—as fresh-thinking as a young

Memorial Hospital Silicon Valley entrepreneur. Newbold regularly visits innovative organizations in all industries, from retailers to furniture makers. He encourages his staff to have fun by making cardboard prototypes of project ideas. He holds regular brainstorming sessions, sometimes requiring everyone to stand for the entire twenty or so minutes to keep them thinking fast on their feet. Memorial was the first community hospital in the United States to have an innovation R&D budget. Part of the money goes for the Innovation Café, a unique teaching laboratory where people learn about the basic ingredients of innovation. "Good Try" rewards honor promising projects that failed, and staff members make presentations to senior executives about lessons learned from failure.

Newbold says he has stayed in one job for so long because of an insatiable interest in new ideas that keeps every day fresh. "In the hospital industry, he's way out front with his emphasis on an innovation culture," said one health industry observer. ⁹⁰ ■

Executives like Philip Newbold are innovation champions. The leadership style of the top executive sets the tone for how effective the organization is at continuous adaptation and innovation. One style of leadership, referred to as *transformational leadership*, is particularly suited for bringing about change. Top leaders who use a transformational leadership style enhance organizational innovation both directly, by creating a compelling vision, and indirectly, by creating an environment that supports exploration, experimentation, risk taking, and sharing of ideas.⁹¹

Successful change can happen only when employees are willing to devote the time and energy needed to reach new goals, as well as endure possible stress and hardship. Having a clearly communicated vision that embodies flexibility and openness to new ideas, methods, and styles sets the stage for a change-oriented organization and helps employees cope with the chaos and tension associated with change.⁹²

Leaders also build organization-wide commitment by taking employees through three stages of the change commitment process, illustrated in Exhibit 11.8.⁹³ In the first stage, *preparation*, employees hear about the change through memos, meetings, speeches, or personal contact and become aware that the change will directly affect their work. In the second stage, *acceptance*, leaders help employees develop an understanding of the full impact of the change and the positive outcomes of making the change. When employees perceive the change as positive, the decision to implement is made. In the third stage, the true *commitment* process begins. The commitment stage involves the steps of installation and institutionalization. Installation is a trial process for the change, which gives leaders an opportunity to discuss problems and employee concerns and build commitment to action. In the final step, *institutionalization*, employees view the change not as something new but as a normal and integral part of organizational operations.

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The pressures on organizations to change will probably increase over the next few decades. Leaders must develop the personal qualities, skills, and methods needed to help their companies remain competitive. Indeed, some management experts argue that to survive the upheaval of the early twenty-first century, managers must turn their organizations into *change leaders* by using the present to actually create the future—breaking industry rules, creating new market space, and routinely abandoning outmoded products, services, and processes to free up resources to build the future.⁹⁴

Barriers to Change

Visionary leadership is crucial for change; however, leaders should expect to encounter resistance as they attempt to take the organization through the three stages of the change commitment process. It is natural for people to resist change, and many barriers to change exist at the individual and organizational levels.⁹⁵

- 1. Excessive focus on costs. Management may possess the mind-set that costs are all-important and may fail to appreciate the importance of a change that is not focused on costs—for example, a change to increase employee motivation or customer satisfaction.
- 2. Failure to perceive benefits. Any significant change will produce both positive and negative reactions. Education may be needed to help managers and employees perceive more positive than negative aspects of the change. In addition, if the organization's reward system discourages risk taking, a change process might falter because employees think that the risk of making the change is too high.
- 3. Lack of coordination and cooperation. Organizational fragmentation and conflict often result from the lack of coordination for change implementation. Moreover, in the case of new technology, the old and new systems must be compatible.

- 4. *Uncertainty avoidance*. At the individual level, many employees fear the uncertainty associated with change. Constant communication is needed so that employees know what is going on and understand how it affects their jobs.
- 5. Fear of loss. Managers and employees may fear the loss of power and status—or even their jobs. In these cases, implementation should be careful and incremental, and all employees should be involved as closely as possible in the change process.

Implementation can typically be designed to overcome many of the organizational and individual barriers to change.

Techniques for Implementation

Top leaders articulate the vision and set the tone, but managers and employees throughout the organization are involved in the process of change. A number of techniques can be used to successfully implement change.⁹⁶

- 1. Establish a sense of urgency for change. Once managers identify a true need for change, they thaw resistance by creating a sense of urgency in others that the change is really needed. Organizational crises can help unfreeze employees and make them willing to invest the time and energy needed to adopt new techniques or procedures. When there is no public crisis, managers have to find creative ways to make others aware of the need for change.
- 2. Establish a coalition to guide the change. Effective change managers build a coalition of people throughout the organization who have enough power and influence to steer the change process. For implementation to be successful, there must be a shared commitment to the need and possibilities for change. Top management support is crucial for any major change project, and lack of top management support is one of the most frequent causes of implementation failure. In addition, the coalition should involve lower-level supervisors and middle managers from across the organization. For smaller changes, the support of influential managers in the affected departments is important.
- 3. Create a vision and strategy for change. Leaders who have taken their companies through major successful transformations often have one thing in common: They focus on formulating and articulating a compelling vision and strategy that will guide the change process. Even for a small change, a vision of how the future can be better and strategies to get there are important motivations for change.
- 4. Find an idea that fits the need. Finding the right idea often involves search procedures—talking with other managers, assigning a task force to investigate the problem, sending out a request to suppliers, or asking creative people within the organization to develop a solution. This is a good opportunity to encourage employee participation, because employees need the freedom to think about and explore new options. ALLTEL set up a program called Team Focus to gather input from all employees. In twenty group meetings over a period of two weeks, managers gathered 2,800 suggestions, which they then narrowed down to 170 critical action items that specifically addressed problems affecting employee morale and performance. 99
- 5. Develop plans to overcome resistance to change. Many good ideas are never used because managers failed to anticipate or prepare for resistance to change by consumers, employees, or other managers. No matter how impressive the performance characteristics of an innovation, its implementation will conflict with some interests and jeopardize some alliances in the organization. To increase the chance of successful implementation, managers acknowledge the

conflict, threats, and potential losses perceived by employees. Several strategies can be used by managers to overcome resistance:

- Alignment with needs and goals of users. The best strategy for overcoming resistance is to make sure change meets a real need. Employees in R&D often come up with great ideas that solve nonexistent problems. This happens because initiators fail to consult with the intended users. Resistance can be frustrating for managers, but moderate resistance to change is good for an organization. Resistance provides a barrier to frivolous changes and to change for the sake of change. The process of overcoming resistance to change normally requires that the change be good for its users. When David Zugheri wanted to switch to a primarily paperless system at First Houston Mortgage, he emphasized to employees that storing customer records electronically meant they could now work from home when they needed to care for a sick child, or take a vacation and still keep track of critical accounts. "I could literally see their attitudes change through their body language," Zugheri says. 100
- Communication and training. Communication means informing users about the need for change and the consequences of a proposed change, preventing rumors, misunderstanding, and resentment. In one study of change efforts, the most commonly cited reason for failure was that employees learned of the change from outsiders. Top managers concentrated on communicating with the public and shareholders but failed to communicate with the people who would be most intimately involved with and most affected by the change—their own employees. Open communication often gives management an opportunity to explain what steps will be taken to ensure that the change will have no adverse consequences for employees. Training is also needed to help employees understand and cope with their role in the change process.
- An environment that affords psychological safety. Psychological safety means that people feel a sense of confidence that they will not be embarrassed or rejected by others in the organization. People need to feel secure and capable of making the changes that are asked of them. Ochange requires that people be willing to take risks and do things differently, but many people are fearful of trying something new if they think they might be embarrassed by mistakes or failure. Managers support psychological safety by creating a climate of trust and mutual respect in the organization. Not being afraid someone is laughing at you helps you take genuine risks, says Andy Law, one of the founders of St. Luke's, an advertising agency based in London.
- Participation and involvement. Early and extensive participation in a change should be part of implementation. Participation gives those involved a sense of control over the change activity. They understand it better, and they become committed to its successful implementation. One study of the implementation and adoption of information technology systems at two companies showed a much smoother implementation process at the company that introduced the new technology using a participatory approach.¹⁰⁴ The team-building and large group intervention activities described earlier can be effective ways to involve employees in a change process.
- Forcing and coercion. As a last resort, managers may overcome resistance by threatening employees with the loss of jobs or promotions or by firing or transferring them. In other words, management power is used to overwhelm resistance. In most cases, this approach is not advisable because it leaves people angry at change managers, and the change may be sabotaged. However, this technique may be needed when speed is essential, such as when the organization

Briefcase

As an organization manager, keep these guidelines in mind:

Lead employees through the three stages of commitment to change preparation, acceptance, and commitment—and use techniques to achieve successful implementation. These include obtaining top management support, implementing the change in a series of steps, assigning change teams or idea champions, and overcoming resistance by actively communicating with workers and encouraging their participation in the change process.

faces a crisis. It may also be required for needed administrative changes that flow from the top down, such as downsizing the workforce. 105

- 6. *Create change teams*. Throughout this chapter the need for resources and energy to make change happen has been discussed. Separate creative departments, new-venture groups, and ad hoc teams or task forces are ways to focus energy on both creation and implementation. A separate department has the freedom to create a new technology that fits a genuine need. A task force can be created to see that implementation is completed. The task force can be responsible for communication, involvement of users, training, and other activities needed for change.
- 7. Foster idea champions. One of the most effective weapons in the battle for change is the idea champion. The most effective champion is a volunteer champion who is deeply committed to a new idea. The idea champion sees that all technical activities are correct and complete. An additional champion, such as a manager sponsor, may also be needed to persuade people about implementation, even using coercion if necessary.

Learning to manage change effectively, including understanding why people resist change and ways to overcome resistance, is crucial, particularly when top-down changes are needed. The failure to recognize and overcome resistance is one of the top reasons managers fail to implement new strategies that can keep their companies competitive.¹⁰⁶ Smart managers approach the change process mindfully and consistently, planning for implementation and preparing for resistance.

DESIGN ESSENTIALS

- Organizations face a dilemma. Managers prefer to organize day-to-day activities in a predictable, routine manner. However, change—not stability—is the natural order of things in today's global environment. Thus, organizations need to build in change as well as stability, to facilitate innovation as well as efficiency.
- Four types of change—technology, products and services, strategy and structure, and culture—may give an organization a competitive edge, and managers can make certain each of the necessary ingredients for change is present.
- For technology innovation, which is of concern to most organizations, an organic structure that encourages employee autonomy works best because it encourages a bottom-up flow of ideas. Other approaches are to establish a separate department charged with creating new technical ideas, establish venture teams or idea incubators, use collaborative teams, and encourage idea champions. New products and services generally require cooperation among several departments, so horizontal linkage is an essential part of the innovation process. The latest trend is open innovation, which brings customers, suppliers, and other outsiders directly into the search for and development of new products.
- For changes in strategy and structure, a top-down approach is typically best. These innovations are in the domain of top managers who take responsibility for restructuring, for downsizing, and for changes in policies, goals, and control systems.
- Culture changes are also generally the responsibility of top management. Some recent trends that may create a need for broad-scale culture change in the organization are reengineering, the shift to horizontal forms of organizing, greater organizational diversity, and the learning organization. All of these changes require significant shifts in employee and manager attitudes and ways of working together. One method for

- bringing about this level of culture change is organization development (OD). OD focuses on the human and social aspects of the organization and uses behavioral science knowledge to bring about changes in attitudes and relationships.
- Finally, the implementation of change can be difficult. Strong leadership is needed to guide employees through the turbulence and uncertainty and build organization-wide commitment to change. A number of barriers to change exist, including excessive focus on cost, failure to perceive benefits, lack of organizational coordination, and individual uncertainty avoidance and fear of loss. Managers can increase the likelihood of success by thoughtfully planning how to deal with resistance. Implementation techniques are to establish a sense of urgency that change is needed; create a powerful coalition to guide the change; formulate a vision and strategy to achieve the change; and overcome resistance by aligning with the needs and goals of users, including users in the change process, providing psychological safety, and, in rare cases, forcing the innovation if necessary.

Key Concepts

ambidextrous approach change process creative departments creativity culture changes dual-core approach horizontal coordination model idea champion idea incubator large group intervention new-venture fund open innovation organization development organizational change organizational innovation product and service changes skunkworks strategy and structure changes switching structures team building technology changes time-based competition venture teams

Discussion Questions

- 1. Why do you think open innovation has become popular in recent years? What steps might a company take to be more "open" with innovation? What might be some disadvantages of taking an open innovation approach?
- 2. Describe the dual-core approach. How does the process of management change normally differ from technology change? Discuss.
- 3. What does it mean to say managers should organize for both exploration and exploitation?
- 4. Do you think factory employees would typically be more resistant to changes in production methods, changes in structure, or changes in culture? Why? What steps could managers take to overcome this resistance?
- 5. "Change requires more coordination than does the performance of normal organizational tasks. Any time you change something, you discover its connections to other parts of the organization, which have to be changed as well." Discuss whether you agree or disagree with this quote, and why.
- 6. A noted organization theorist said, "Pressure for change originates in the environment; pressure for stability

- originates within the organization." Do you agree? Discuss.
- 7. Of the five elements in Exhibit 11.3 required for successful change, which element do you think managers are most likely to overlook? Discuss.
- 8. How do the underlying values of organization development compare to the values underlying other types of change? Why do the values underlying OD make it particularly useful in shifting to an adaptive culture as described in Chapter 10 (Exhibit 10.5)?
- 9. The manager of R&D for a drug company said that only 5 percent of the company's new products ever achieve market success. She also said the industry average is 10 percent and wondered how her organization might increase its success rate. If you were acting as a consultant, what advice would you give her about designing organization structure to improve market success?
- 10. Review the stages of commitment to change illustrated in Exhibit 11.8 and the seven techniques for implementing change discussed at the end of the chapter. At which stage of change commitment would each of the seven techniques most likely be used?

Chapter 11 Workbook: Innovation Climate*

In order to examine differences in the level of innovation encouragement in organizations, you will be asked to rate two organizations. The first should be an organization in which you have worked, or the university. The second should be someone else's workplace, that of a family mem-

ber, a friend, or an acquaintance. You will have to interview that person to answer the following questions. You should put your own answers in column A, your interviewee's answers in column B, and what you think would be the ideal in column C.

Innovation Measures

Item of Measure	A Your Organization	B Other Organization	C Your Ideal
Score items 1–5 on this scale:	Organization	Organization	Tour Idear
1 = don't agree at all to $5 = agree$ completely			
1. Creativity is encouraged here.			
2. People are allowed to solve the same prob- lems in different ways. [†]			
3. I get to pursue creative ideas.*			
4. The organization publicly recognizes and also rewards those who are innovative.†			
5. Our organization is flexible and always open to change.†			
Score items 6–10 on the opposite scale: 1 = agree completely to 5 = don't agree at all			
6. The primary job of people here is to follow orders that come from the top. [†]			
7. The best way to get along here is to think and act like the others. [†]			
8. This place seems to be more concerned with the status quo than with change.†			
People are rewarded more if they don't rock the boat.†			
10. New ideas are great, but we don't have enough people or money to carry them out.†			

[†] These items indicate the organization's innovation climate.

Questions

- 1. What comparisons in terms of innovation climates can you make between these two organizations?
- 2. How might productivity differ between a climate that supports innovation and a climate that does not?
- 3. Where would you rather work? Why?

*Adapted by Dorothy Marcic from Susanne G. Scott and Reginald A. Bruce, "Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace," *Academy of Management Journal* 37, no. 3 (1994), 580–607.

[†] These items show resource support.

Case for Analysis: Shoe Corporation of Illinois*

Shoe Corporation of Illinois (SCI) produces a line of women's shoes that sell in the lower-price market for \$27.99 to \$29.99 per pair. Profits averaged 30 cents to 50 cents per pair 10 years ago, but according to the president and the controller, labor and materials costs have risen so much in the intervening period that profits today average only 25 cents to 30 cents per pair.

Production at both the company's plants totals 12,500 pairs per day. The two factories are located within a radius of 60 miles of Chicago: one at Centerville, which produces 4,500 pairs per day, and the other at Meadowvale, which produces 8,000 pairs per day. Company headquarters is located in a building adjacent to the Centerville plant.

It is difficult to give an accurate picture of the number of items in the company's product line. Shoes change in style perhaps more rapidly than any other style product, including garments. This is chiefly because it is possible to change production processes quickly and because, historically, each company, in attempting to get ahead of competitors, gradually made style changes more frequently. At present, including both major and minor style changes, SCI offers 100 to 120 different products to customers each year.

A partial organizational chart, showing the departments involved in this case, appears in Exhibit 11.9.

Competitive Structure of the Industry

Very large general shoe houses, such as International and Brown, carry a line of women's shoes and are able to undercut prices charged by SCI, principally because of the policy in the big companies of producing large numbers of "stable" shoes, such as the plain pump and the loafer. They do not attempt to change styles as rapidly as their smaller competitors. Thus, without constant changes in production processes and sales presentations, they are able to keep costs substantially lower.

Charles F. Allison, the president of SCI, feels that the only way for a small independent company to be competitive is to change styles frequently, taking advantage of the flexibility of a small organization to create designs that appeal to customers. Thus, demand can be created and a price set high enough to make a profit. Allison, incidentally, appears to have an artistic talent in styling and a record of successful judgments in approving high-volume styles over the years.

Regarding how SCI differs from its large competitors, Allison has said:

You see, Brown and International Shoe Company both produce hundreds of thousands of the same pair of shoes. They store them in inventory at their factories. Their customers, the large wholesalers and retailers, simply know their line and send in orders. They do not have to change styles nearly

as often as we do. Sometimes I wish we could do that, too. It makes for a much more stable and orderly system. There is also less friction between people inside the company. The salespeople always know what they're selling; the production people know what is expected of them. The plant personnel are not shook up so often by someone coming in one morning and tampering with their machine lines or their schedules. The styling people are not shook up so often by the plant saying, "We can't do your new style the way you want it."

To help SCI be more competitive against larger firms, Allison recently created an e-commerce department. Although his main interest was in marketing over the Internet, he also hoped new technology would help reduce some of the internal friction by giving people an easier way to communicate. He invested in a sophisticated new computer system and hired consultants to set up a company intranet and provide a few days' training to upper and middle managers. Katherine Olsen came on board as director of e-commerce, charged primarily with coordinating Internet marketing and sales. When she took the job, she had visions of one day offering consumers the option of customized shoe designs. However, Olsen was somewhat surprised to learn that most employees still refused to use the intranet even for internal communication and coordination. The process for deciding on new styles, for example, had not changed since the 1970s.

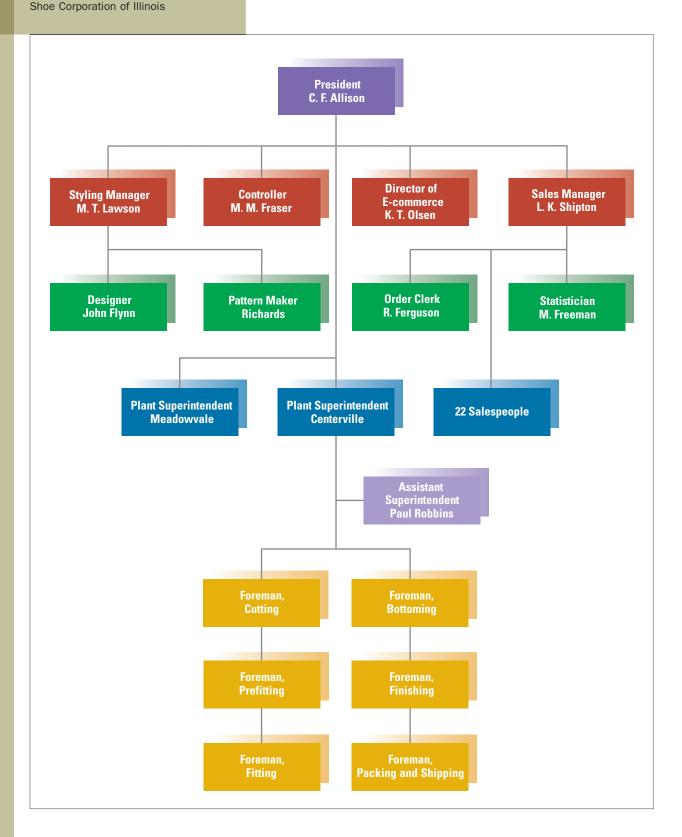
Major Style Changes

The decision about whether to put a certain style into production requires information from a number of different people. Here is what typically happens in the company. It may be helpful to follow the organization chart (see Exhibit 11.9) tracing the procedure.

M. T. Lawson, the styling manager, and his designer, John Flynn, originate most of the ideas about shape, size of heel, use of flat sole or heels, and findings (the term used for ornaments attached to, but not part of, the shoes—bows, straps, and so forth). They get their ideas principally from reading style and trade magazines or by copying top-flight designers. Lawson corresponds with publications and friends in large stores in New York, Rome, and Paris to obtain pictures and samples of up-to-the-minute style innovations. Although he uses e-mail occasionally, Lawson prefers telephone contact and receiving drawings or samples by overnight mail. Then, he and Flynn discuss various ideas and come up with design options.

When Lawson decides on a design, he takes a sketch to Allison, who either approves or disapproves it. If Allison approves, he (Allison) then passes the sketch on to L. K. Shipton, the sales manager, to find out what lasts (widths) should be chosen. Shipton, in turn, forwards

EXHIBIT 11.9Partial Organization Chart of



the design to Martin Freeman, a statistician in the sales department, who maintains summary information on customer demand for colors and lasts.

To compile this information, Freeman visits salespeople twice a year to get their opinions on the colors and lasts that are selling best, and he keeps records of shipments by color and by last. For these needs, he simply totals data that are sent to him by the shipping foreman in each of the two plants.

When Freeman has decided on the lasts and colors, he sends Allison a form that lists the colors and lasts in which the shoe should be produced. Allison, if he approves this list, forwards the information to Lawson, who passes it on to Jenna Richards, an expert pattern maker. Richards makes a paper pattern and then constructs a prototype in leather and paper. She sends this to Lawson, who in turn approves or disapproves it. He forwards any approved prototype to Allison. Allison, if he, too, approves, notifies Lawson, who takes the prototype to Paul Robbins, assistant to the superintendent of the Centerville plant. Only this plant produces small quantities of new or experimental shoe styles. This is referred to as a "pilot run" by executives at the plant.

Robbins then literally carries the prototype through the six production departments of the plant—from cutting to finishing—discussing it with each foreman, who in turn works with employees on the machines in having a sample lot of several thousand pairs made. When the finished lot is delivered by the finishing foreman to the shipping foreman (because of the importance of styling, Allison has directed that each foreman personally deliver styling goods in process to the foreman of the next department), the latter holds the inventory in storage and sends one pair each to Allison and Lawson. If they approve of the finished product, Allison instructs the shipping foreman to mail samples to each of the company's twenty-two salespeople throughout the country. Olsen also receives samples, photos, and drawings to post on the Web page and gauge customer interest.

Salespeople have instructions to take the samples immediately (within one week) to at least ten customers. Orders for already-established shoes are normally sent to Ralph Ferguson, a clerk in Shipton's office, who records them and forwards them to the plant superintendents for production. However, salespeople have found by experience that Martin Freeman has a greater interest in the success of new "trials," so they rush these orders to him by overnight mail, and he in turn places the first orders for a new style in the interoffice mail to the plant superintendents. He then sends off a duplicate of the order, mailed in by the salespeople, to Ferguson for entering in his statistical record of all orders received by the company.

Three weeks after the salespeople receive samples, Allison requires Ralph Ferguson to give him a tabulation of orders. At that time, he decides whether the salespeople and the Web page should push the item and the superintendents should produce large quantities, or whether he will tell them that although existing orders will be produced, the item will be discontinued in a short time.

The procedures outlined here have, according to Allison,

worked reasonably well. The average time from when Lawson decides on a design until we notify the Centerville plant to produce the pilot run is two weeks to a month. Of course, if we could speed that up, it would make the company just that much more secure in staying in the game against the big companies, and in taking sales away from our competitors. There seems to be endless bickering among people around here involved in the styling phase of the business. That's to be expected when you have to move fast—there isn't much time to stop and observe all of the social amenities. I have never thought that a formal organization chart would be good in this company—we've worked out a customary system here that functions well.

M. T. Lawson, manager of styling, said that within his department all work seems to get out in minimum time; he also stated that both Flynn and Richards are good employees and skilled in their work. He mentioned that Flynn had been in to see him twice in the last year

to inquire about his [Flynn's] future in the company. He is 33 years old and has three children. I know that he is eager to make money, and I assured him that over the years we can raise him right along from the \$60,000 we are now paying. Actually, he has learned a lot about shoe styles since we hired him from the design department of a fabric company six years ago.

John Flynn revealed:

I was actually becoming dissatisfied with this job. All shoe companies copy styles—it's a generally accepted practice within the industry. But I've picked up a real feel for designs, and several times I've suggested that the company make all its own original styles. We could make SCI a style leader and also increase our volume. When I ask Lawson about this, he says it takes too much time for the designer to create originals—that we have all we can handle to do research in trade magazines and maintain contracts feeding us the results of experts. Beside, he says our styles are standing the test of the marketplace.

Projects X and Y

Flynn also said that he and Martin Freeman had frequently talked about the styling problem. They felt that

Allison is really a great president, and the company surely would be lost without him. However, we've seen times when he lost a lot of money on bad judgments in styles. Not many times—perhaps six or seven times in the last eighteen months. Also, he is, of course, extremely busy as president of the corporation. He must look after everything from financing from the banks to bargaining with the union.

The result is that he is sometimes unavailable to do his styling approvals for several days, or even two weeks. In a business like this, that kind of delay can cost money. It also makes him slightly edgy. It tends, at times when he has many other things to do, to make him look quickly at the styles we submit, or the prototypes Richards makes, or even the finished shoes that are sent for approval by the shipping foreman. Sometimes I worry that he makes two kinds of errors. He simply rubber-stamps what we've done, which makes sending these things to him a waste of time. At other times he makes snap judgments of his own, overruling those of us who have spent so much time and expertise on the shoe. We do think he has good judgment, but he himself has said at times that he wishes he had more time to concentrate on styling and approval of prototypes and final products.

Flynn further explained (and this was corroborated by Freeman) that the two had worked out two plans, which they referred to as "project X" and "project Y." In the first, Flynn created an original design that was not copied from existing styles. Freeman then gave special attention to color and last research for the shoe and recommended a color line that didn't exactly fit past records on consumer purchases—but one he and Flynn thought would have "great consumer appeal." This design and color recommendation was accepted by Lawson and Allison; the shoe went into production and was one of the three top sellers during the calendar year. The latter two men did not know that the shoe was styled in a different way from the usual procedure.

The result of a second, similar project (Y) was put into production the next year, but this time sales were discontinued after three weeks.

Problem between Lawson and Robbins

Frequently, perhaps ten to twelve times a year, disagreement arises between Mel Lawson, manager of styling, and Paul Robbins, assistant to the superintendent of the Centerville plant. Robbins said,

The styling people don't understand what it means to produce a shoe in the quantities that we do, and to make the changes in production that we have to. They dream up a style quickly, out of thin air. They do not realize that we have a lot of machines that have to be adjusted and that some things they dream up take much longer on certain machines than others, thus creating a bottleneck in the production line. If they put a bow or strap in one position rather than another, it may mean we have to keep people idle on later machines while there is a pileup on the sewing machines on which this complicated little operation is performed. This costs the plant money. Furthermore, there are times when they get the prototype here late, and either the foremen and I work overtime or the trial run won't get through in time to have new production runs on new styles, to take the plant capacity liberated by our stopping production on old styles. Lawson doesn't know

much about production and sales and the whole company. I think all he does is to bring shoes down here to the plant, sort of like a messenger boy. Why should he be so hard to get along with? He isn't getting paid any more than I am, and my position in the plant is just as important as his.

Lawson, in turn, said that he has a difficult time getting along with Robbins:

There are many times when Robbins is just unreasonable. I take prototypes to him five or six times a month, and other minor style changes to him six or eight times. I tell him every time that we have problems in getting these ready, but he knows only about the plant, and telling him doesn't seem to do any good. When we first joined the company, we got along all right, but he has gotten harder and harder to get along with.

Other Problems

Ralph Ferguson, the clerk in the sales department who receives orders from salespeople and forwards totals for production schedules to the two plant superintendents, has complained that the salespeople and Freeman are bypassing him in their practice of sending experimental shoe orders to Freeman. He insisted that his job description (one of only two written descriptions in the company) gives him responsibility for receiving all orders throughout the company and for maintaining historical statistics on shipments.

Both the salespeople and Freeman, on the other hand, said that before they started the new practice (that is, when Ferguson still received the experimental shoe orders), there were at least eight or ten instances a year when these were delayed from one to three days on Ferguson's desk. They reported that Ferguson just wasn't interested in new styles, so the salespeople "just started sending them to Freeman." Ferguson acknowledged that there were times of short delay, but said that there were good reasons for them:

They [the salespeople and Freeman] are so interested in new designs, colors, and lasts that they can't understand the importance of a systematic handling of the whole order procedure, including both old and new shoe styles. There must be accuracy. Sure, I give some priority to experimental orders, but sometimes when rush orders for existing company products are piling up, and when there's a lot of planning I have to do to allocate production between Centerville and Meadowvale, I decide which comes first—processing of these, or processing the experimental shoe orders. Shipton is my boss, not the salespeople or Freeman. I'm going to insist that these orders come to me.

The Push for New Technology

Katherine Olsen believes many of these problems could be solved through better use of technology. She has approached Charles Allison several times about the need to make greater use of the expensive and sophisticated computer information systems he had installed. Although Allison always agrees with her, he has so far done nothing to help solve the problem. Olsen thinks the new technology could dramatically improve coordination at SCI.

Everyone needs to be working from the same data at the same time. As soon as Lawson and Flynn come up with a new design, it should be posted on the intranet so all of us can be informed. And everyone needs access to sales and order information, production schedules, and shipping deadlines. If everyone—from Allison down to the people in the production plants—was kept up to date throughout the entire process, we wouldn't have all this confusion and bickering. But no one around here wants to give up any control—they all have their own little operations and don't

want to share information with anyone else. For example, I sometimes don't even know there's a new style in the works until I get finished samples and photos. No one seems to recognize that one of the biggest advantages of the Internet is to help stay ahead of changing styles. I know that Flynn has a good feel for design, and we're not taking advantage of his abilities. But I also have information and ideas that could help this company keep pace with changes and really stand out from the crowd. I don't know how long we expect to remain competitive using this cumbersome, slow-moving process and putting out shoes that are already behind the times.

* Written by Charles E. Summer. Copyright 1978.

Case for Analysis: Southern Discomfort*

Jim Malesckowski remembered the call of two weeks ago as if he had just put down the telephone receiver: "I just read your analysis and I want you to get down to Mexico right away," Jack Ripon, his boss and chief executive officer, had blurted in his ear. "You know we can't make the plant in Oconomo work anymore—the costs are just too high. So go down there, check out what our operational costs would be if we move, and report back to me in a week."

As president of the Wisconsin Specialty Products Division of Lamprey Inc., Jim knew quite well the challenge of dealing with high-cost labor in a third-generation, unionized, U.S. manufacturing plant. And although he had done the analysis that led to his boss's knee-jerk response, the call still stunned him. There were 520 people who made a living at Lamprey's Oconomo facility, and if it closed, most of them wouldn't have a chance of finding another job in the town of 9,900 people.

Instead of the \$16-per-hour average wage paid at the Oconomo plant, the wages paid to the Mexican workers—who lived in a town without sanitation and with an unbelievably toxic effluent from industrial pollution—would amount to about \$1.60 an hour on average. That would be a savings of nearly \$15 million a year for Lamprey, to be offset in part by increased costs for training, transportation, and other matters.

After two days of talking with Mexican government representatives and managers of other companies in the town, Jim had enough information to develop a set of comparative figures of production and shipping costs. On the way home, he started to outline the report, knowing full well that unless some miracle occurred, he would be ushering in a blizzard of pink slips for people he had come to appreciate.

The plant in Oconomo had been in operation since 1921, making special apparel for people suffering from injuries

and other medical conditions. Jim had often talked with employees who would recount stories about their fathers or grandfathers working in the same Lamprey company plant—the last of the original manufacturing operations in town.

But friendship aside, competitors had already edged past Lamprey in terms of price and were dangerously close to overtaking it in product quality. Although both Jim and the plant manager had tried to convince the union to accept lower wages, union leaders resisted. In fact, on one occasion when Jim and the plant manager tried to discuss a cell manufacturing approach, which would cross-train employees to perform up to three different jobs, local union leaders could barely restrain their anger. Jim thought he sensed an underlying fear, meaning the union reps were aware of at least some of the problems, but he had been unable to get them to acknowledge this and move on to open discussion.

A week passed and Jim had just submitted his report to his boss. Although he didn't specifically bring up the point, it was apparent that Lamprey could put its investment dollars in a bank and receive a better return than what its Oconomo operation was currently producing.

The next day, he would discuss the report with the CEO. Jim didn't want to be responsible for the plant's dismantling, an act he personally believed would be wrong as long as there was a chance its costs can be lowered. "But Ripon's right," he said to himself. "The costs are too high, the union's unwilling to cooperate, and the company needs to make a better return on its investment if it's to continue at all. It sounds right but feels wrong. What should I do?"

*Doug Wallace, "What Would You Do?" *Business Ethics* (March/April 1996), 52–53. Reprinted with permission from *Business Ethics*, PO Box 8439, Minneapolis, MN 55408; phone: 612-879-0695.

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Chapter 12

Decision-Making Processes



Definitions

Individual Decision Making

Rational Approach · Bounded Rationality Perspective

Organizational Decision Making

Management Science Approach · Carnegie Model · Incremental Decision Model

Organizational Decisions and Change

Combining the Incremental and Carnegie Models • Garbage Can Model

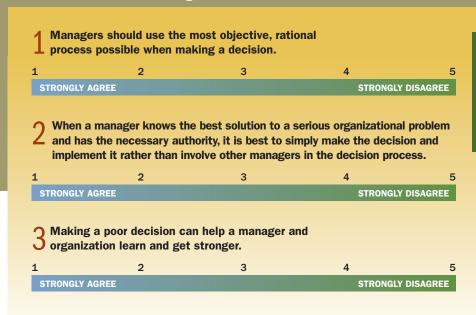
Contingency Decision-Making Framework

Problem Consensus • Technical Knowledge about Solutions • Contingency Framework

Special Decision Circumstances

 $\mbox{High-Velocity Environments} \cdot \mbox{Decision Mistakes and Learning} \cdot \mbox{Cognitive} \\ \mbox{Biases} \cdot \mbox{Overcoming Personal Biases}$

Design Essentials



Managing by Design Questions

What is one activity every manager—no matter what level of the hierarchy, what industry, or what size or type of organization—engages in every day? Decision making. Managers are often referred to as *decision makers*, and every organization grows, prospers, or fails as a result of the choices managers make. However, many decisions can be risky and uncertain, without any guarantee of success. Consider what happened at Merrill Lynch. The decision of top managers to invest heavily in the mortgage industry was paying off so well by the end of 2006 that they plunked down \$1.3 billion to buy First Franklin, a lender that specialized in making risky mortgages. Pushing further, managers significantly increased Merrill's involvement with exotic and complex derivatives tied to mortgages. The profit potential was huge, so Merrill jumped in even without a clear strategy or well-considered plans for managing this aspect of the business. When the mortgage meltdown began, Merrill was caught in the crossfire. In the first nine months of 2008, the firm recorded net losses of \$14.7 billion on its mortgage-related derivatives and the once-venerable firm was taken over by Bank of America.¹

Merrill Lynch is by no means the only firm that was devastated due to faulty decisions related to the mortgage industry, but it provides an illustration of the uncertainty that characterizes many manager decisions, especially at higher organizational levels. Decision making is done amid constantly changing factors, unclear information, and conflicting points of view, and even the best managers in the most successful companies sometimes make big blunders. Look at Starbucks. A few years ago, it seemed the company could do no wrong. But in an effort to meet dramatic growth goals, managers relaxed their rigorous standards for selecting new store locations and ended up opening many stores in locations that couldn't support them. In 2008, Starbucks began closing hundreds of underperforming stores, many of them opened less than two years earlier.²

Yet managers also make many successful decisions every day. Apple, which seemed all but dead in the mid-1990s, topped *Fortune* magazine's list of the world's most admired companies in 2008 thanks to decisions made by CEO Steve Jobs and other top managers.³ Managers at General Mills are known for making hundreds

of small decisions that add up big. For example, the decision to consolidate the purchases of items such as oils, flour, and sugar in the baking division saves the company \$12 billion a year.⁴

Purpose of This Chapter

At any time, an organization may be identifying problems and implementing alternatives for hundreds of decisions. Managers and organizations somehow muddle through these processes.⁵ The purpose here is to analyze these processes to learn what decision making is actually like in organizational settings. Decision-making processes can be thought of as the brain and nervous system of an organization. Decision making is the end use of the information and control systems described in Chapter 8.

First, the chapter defines decision making and the different types of decisions managers make. The next section describes an ideal model of decision making and then examines how individual managers actually make decisions. The chapter also explores several models of organizational decision making, each of which is appropriate in a different organizational situation. The next section combines the models into a single framework that describes when and how the various approaches should be used. Finally, the chapter discusses special issues related to decision making, such as high-velocity environments, decision mistakes and learning, and ways to overcome cognitive biases that hinder effective decision making.

DEFINITIONS

Organizational decision making is formally defined as the process of identifying and solving problems. The process has two major stages. In the **problem identification** stage, information about environmental and organizational conditions is monitored to determine if performance is satisfactory and to diagnose the cause of shortcomings. The **problem solution** stage is when alternative courses of action are considered and one alternative is selected and implemented.

Organizational decisions vary in complexity and can be categorized as programmed or nonprogrammed. Programmed decisions are repetitive and well defined, and procedures exist for resolving the problem. They are well structured because criteria of performance are normally clear, good information is available about current performance, alternatives are easily specified, and there is relative certainty that the chosen alternative will be successful. Examples of programmed decisions include decision rules, such as when to replace an office copy machine, when to reimburse managers for travel expenses, or whether an applicant has sufficient qualifications for an assembly-line job. Many companies adopt rules based on experience with programmed decisions. For example, a rule for large hotels staffing banquets is to allow one server per thirty guests for a sit-down function and one server per forty guests for a buffet.

Nonprogrammed decisions are novel and poorly defined, and no procedure exists for solving the problem. They are used when an organization has not seen a problem before and may not know how to respond. Clear-cut decision criteria do not exist. Alternatives are fuzzy. There is uncertainty about whether a proposed solution will solve the problem. Typically, few alternatives can be developed for a nonprogrammed decision, so a single solution is custom-tailored to the problem.

Many nonprogrammed decisions involve strategic planning, because uncertainty is great and decisions are complex. One example comes from Dell Inc., where founder Michael Dell has returned as CEO to try to revive the ailing company. Dell's low-cost



programmed and

nonprogrammed

decisions.

business model of selling PCs directly to consumers is no longer successful, but managers are having a hard time coming up with the right strategy to help the company move into a new era. Dell's recent decisions involve cost-cutting measures such as layoffs and selling off factories; investing in new products such as a portable music player and a mobile phone; and adding services such as running corporate in-house networks. However, these types of decisions are very complex, and there's no guarantee that a particular choice will succeed. The decision to enter the phone market, for instance, has been put on hold because of the high cost of development and the uncertain market.⁸

Particularly complex nonprogrammed decisions have been referred to as "wicked" decisions, because simply defining the problem can turn into a major task. Wicked problems are associated with manager conflicts over objectives and alternatives, rapidly changing circumstances, and unclear linkages among decision elements. Managers dealing with a wicked decision may hit on a solution that merely proves they failed to correctly define the problem to begin with. Under conditions of such extreme uncertainty, even a good choice can produce a bad outcome. Making the decision about how to turn around a company like Dell could be considered a wicked decision, as could decisions about how to revive the U.S. automakers.

Managers and organizations are dealing with a higher percentage of nonprogrammed decisions because of the rapidly changing business environment. As outlined in Exhibit 12.1, today's environment has increased both the number and complexity of decisions that have to be made and has created a need for new decision-making

Today's Business Environment

 Demands more large-scale change via new strategies, reengineering, restructuring, mergers, acquisitions, downsizing, new product or market development, and so on

Decisions Made Inside the Organization

- Are based on bigger, more complex, more emotionally charged issues
- Are made more quickly
- Are made in a less certain environment, with less clarity about means and outcomes
- Require more cooperation from more people involved in making and implementing decisions



A New Decision-Making Process

- Is required because no one individual has the information needed to make all major decisions
- Is required because no one individual has the time and credibility needed to convince lots of people to implement the decision
- Relies less on hard data as a basis for good decisions
- Is guided by a powerful coalition that can act as a team
- Permits decisions to evolve through trial and error and incremental steps as needed

EXHIBIT 12.1Decision Making in Today's Environment

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processes. Managers in rapidly changing e-business departments, for example, often have to make quick decisions based on very limited information. Another example is globalization. The trend toward moving production to low-wage countries has managers all over corporate America struggling with ethical decisions concerning working conditions in the Third World and the loss of jobs in small U.S. communities where there are few employment opportunities.¹¹

INDIVIDUAL DECISION MAKING

Individual decision making by managers can be described in two ways. First is the **rational approach**, which suggests an ideal method for how managers should try to make decisions. Second is the **bounded rationality perspective**, which describes how decisions actually have to be made under severe time and resource constraints. The rational approach is an ideal that managers may work toward but never reach.

Rational Approach

The rational approach to individual decision making stresses the need for systematic analysis of a problem followed by choice and implementation in a logical, step-by-step sequence. The rational approach was developed to guide individual decision making because many managers were observed to be unsystematic and arbitrary in their approach to organizational decisions.

Although the rational model is an ideal not fully achievable in the real world of uncertainty, complexity, and rapid change highlighted in Exhibit 12.1, the model does help managers think about decisions more clearly and rationally. Managers should use systematic procedures to make decisions whenever possible. When managers have a deep understanding of the rational decision-making process, it can help them make better decisions even when there is a lack of clear information. The authors of a popular book on decision making use the example of the U.S. Marines, who have a reputation for handling complex problems quickly and decisively. The Marines are trained to quickly go through a series of mental routines that help them analyze the situation and take action.¹²

According to the rational approach, decision making can be broken down into eight steps, as illustrated in Exhibit 12.2 and demonstrated by the department store Marshall Field's in the following discussion.¹³

- 1. Monitor the decision environment. In the first step, a manager monitors internal and external information that will indicate deviations from planned or acceptable behavior. He or she talks to colleagues and reviews financial statements, performance evaluations, industry indices, competitors' activities, and so forth. For example, during the pressure-packed five-week Christmas season, Linda Koslow, general manager of Marshall Field's Oakbrook, Illinois, store, checks out competitors around the mall, eyeing whether they are marking down merchandise. She also scans printouts of her store's previous day's sales to learn what is or is not moving.¹⁴
- 2. Define the decision problem. The manager responds to deviations by identifying essential details of the problem: where, when, who was involved, who was affected, and how current activities are influenced. For Koslow, this means defining whether store profits are low because overall sales are less than expected or because certain lines of merchandise are not moving as expected.
- 3. *Specify decision objectives*. The manager determines what performance outcomes should be achieved by a decision.



EXHIBIT 12.2
Steps in the Rational Approach to Decision Making

- 4. *Diagnose the problem.* In this step, the manager digs below the surface to analyze the cause of the problem. Additional data might be gathered to facilitate this diagnosis. Understanding the cause enables appropriate treatment. For Koslow at Marshall Field's, the cause of slow sales might be competitors' marking down of merchandise or Marshall Field's failure to display hot-selling items in a visible location.
- 5. Develop alternative solutions. Before a manager can move ahead with a decisive action plan, he or she must have a clear understanding of the various options available to achieve desired objectives. The manager may seek ideas and suggestions from other people. Koslow's alternatives for increasing profits could include buying fresh merchandise, running a sale, or reducing the number of employees.
- 6. *Evaluate alternatives*. This step may involve the use of statistical techniques or personal experience to gauge the probability of success. The merits of each alternative are assessed, as well as the probability that it will achieve the desired objectives.
- 7. Choose the best alternative. This step is when the manager uses his or her analysis of the problem, objectives, and alternatives to select a single alternative that has the best chance for success. At Marshall Field's, Koslow may choose to reduce the number of staff as a way to meet the profit goals rather than increase advertising or markdowns.

8. *Implement the chosen alternative*. Finally, the manager uses managerial, administrative, and persuasive abilities and gives directions to ensure that the decision is carried out, sometimes called *execution* of the decision. This might be considered the core of the decision process because any decision that isn't successfully implemented is a failed decision, no matter how good the chosen alternative might be.

Managers have to mobilize the people and resources to put the decision into action. Execution may be the hardest step of decision making. The monitoring activity (step 1) begins again as soon as the solution is implemented. For Linda Koslow, the decision cycle is a continuous process, with new decisions made daily based on monitoring her environment for problems and opportunities.

The first four steps in this sequence are the problem identification stage, and the next four steps are the problem solution stage of decision making, as indicated in Exhibit 12.2. A manager normally goes through all eight steps in making a decision, although each step may not be a distinct element. Managers may know from experience exactly what to do in a situation, so one or more steps will be minimized. The following "In Practice" illustrates how the rational approach is used to make a decision about a personnel problem.

PRACTICE 2. Define the decision problem. This is the form

- Monitor the decision environment. It is Monday morning, and Joe DeFoe, Saskatchewan Consulting's accounts receivable supervisor, is absent again.
- 2. Define the decision problem. This is the fourth consecutive Monday DeFoe has been absent.

 Company policy forbids unexcused absenteeism, and DeFoe has been warned about his excessive absenteeism on the last two occasions. A final warning is in order but can be delayed, if warranted.
 - 3. Specify decision objectives. DeFoe should attend work regularly and establish the invoice collection levels of which he is capable. The time period for solving the problem is two weeks.
 - 4. Diagnose the problem. Discreet discussions with DeFoe's co-workers and information gleaned from DeFoe indicate that DeFoe has a drinking problem. He apparently uses Mondays to dry out from weekend benders. Discussion with other company sources confirms that DeFoe is a problem drinker.
 - 5. Develop alternative solutions. (1) Fire DeFoe. (2) Issue a final warning without comment. (3) Issue a warning and accuse DeFoe of being an alcoholic to let him know you are aware of his problem. (4) Talk with DeFoe to see if he will discuss his drinking. If he admits he has a drinking problem, delay the final warning and suggest that he enroll in the company's new employee assistance program for help with personal problems, including alcoholism. (5) Talk with DeFoe to see if he will discuss his drinking. If he does not admit he has a drinking problem, let him know that the next absence will cost him his job.
 - 6. Evaluate alternatives. The cost of training a replacement is the same for each alternative. Alternative 1 ignores cost and other criteria. Alternatives 2 and 3 do not adhere to company policy, which advocates counseling where appropriate. Alternative 4 is designed for the benefit of both DeFoe and the company. It might save a good employee if DeFoe is willing to seek assistance. Alternative 5 is primarily for the benefit of the company. A final warning might provide some incentive for DeFoe to admit he has a drinking problem. If so, dismissal might be avoided, but further absences will no longer be tolerated.
 - 7. Choose the best alternative. DeFoe does not admit that he has a drinking problem. Choose alternative 5.
 - 8. Implement the chosen alternative. Write up the case and issue the final warning. 16

Saskatchewan Consulting

In the preceding example, issuing the final warning to Joe DeFoe was a programmed decision. The standard of expected behavior was clearly defined, information on the frequency and cause of DeFoe's absence was readily available, and acceptable alternatives and procedures were described. The rational procedure works best in such cases, when the decision maker has sufficient time for an orderly, thoughtful process. Moreover, Saskatchewan Consulting had mechanisms in place to successfully implement the decision once it was made.

When decisions are nonprogrammed, ill-defined, and piling on top of one another, the individual manager should still try to use the steps in the rational approach, but he or she often will have to take shortcuts by relying on intuition and experience. Deviations from the rational approach are explained by the bounded rationality perspective.

Bounded Rationality Perspective

The point of the rational approach is that managers should try to use systematic procedures to arrive at good decisions. When managers are dealing with well-understood issues, they generally use rational procedures to make decisions. Yet research into managerial decision making shows that managers often are unable to follow an ideal procedure. Many decisions must be made very quickly. Time pressure, a large number of internal and external factors affecting a decision, and the ill-defined nature of many problems make systematic analysis virtually impossible. Managers have only so much time and mental capacity and, hence, cannot evaluate every goal, problem, and alternative. The attempt to be rational is bounded (limited) by the enormous complexity of many problems. There is a limit to how rational managers can be.

To understand the bounded rationality approach, think about how most new managers select a job upon graduation from college. Even this seemingly simple decision can quickly become so complex that a bounded rationality approach is used. Graduating students typically will search for a job until they have two or three acceptable job offers, at which point their search activity rapidly diminishes. Hundreds of firms may be available for interviews, and two or three job offers are far short of the maximum number that would be possible if students made the decision based on perfect rationality.

Constraints and Tradeoffs. Not only are large organizational decisions too complex to fully comprehend, but several other constraints impinge on the decision maker, as illustrated in Exhibit 12.3. For many decisions, the organizational circumstances are ambiguous, requiring social support, a shared perspective on what happens, and acceptance and agreement. For example, consider the early U.S. decision to disband the Iraqi army and rebuild security forces from the ground up. Critics say the decision was pushed through by the senior civilian officer in Iraq without consulting military commanders and other U.S. officials who had different views of how to build the new Iraqi military. Disagreements over the momentous decision and ongoing recriminations made it much more difficult for the U.S. military to deal with the vast array of security problems that followed. Without any sizeable Iraqi force to subdue the growing violence, American troops became targets of attack and criticism. In addition, U.S. leaders' lack of agreement to use military force to stop the looting that occurred when troops first entered Iraq alienated many Iraqi citizens, allowed insurgents to gain strength, and made it more difficult to implement later

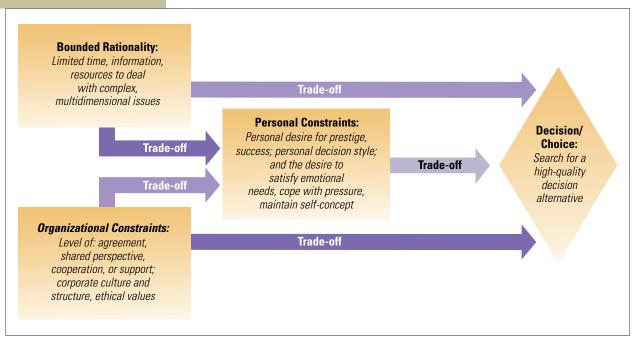
Briefcase

As an organization manager, keep these guidelines in mind:

Use rational decision processes when possible, but recognize that many constraints may impinge on decision makers and prevent a perfectly rational decision. Apply the bounded rationality perspective and use intuition and experience when confronting ill-defined, nonprogrammed decisions.

EXHIBIT 12.3

Constraints and Tradeoffs during Nonprogrammed Decision Making



Source: Adapted from Irving L. Janis, Crucial Decisions (New York: Free Press, 1989); and A. L. George, Presidential Decision Making in Foreign Policy: The Effective Use of Information and Advice (Boulder, Colo.: Westview Press, 1980).

police and military decisions. ¹⁸ Other organizational constraints on decision making outlined in Exhibit 12.3 include corporate culture and ethical values, as discussed in Chapter 10, and the organization's structure and design.

At the personal level, managers often make decisions within a context of trying to please upper managers, people who are perceived to have power within the organization, or others they respect and want to emulate.¹⁹ Personal constraints—such as decision style, work pressure, desire for prestige, or simple feelings of insecurity—may constrain either the search for alternatives or the acceptability of an alternative. All of these factors constrain a perfectly rational approach that should lead to an obviously ideal choice.²⁰

The Role of Intuition. The bounded rationality perspective is often associated with intuitive decision processes. In intuitive decision making, experience and judgment rather than sequential logic or explicit reasoning are used to make decisions. Go to the "How Do You Fit the Design?" box for some insight into your use of rationality versus intuition in making decisions. Intuition is not arbitrary or irrational because it is based on years of practice and hands-on experience, often stored in the subconscious. When managers use their intuition based on long experience with organizational issues, they more rapidly perceive and understand problems, and they develop a gut feeling or hunch about which alternative will solve a problem, speeding the decision-making process. The value of intuition for effective



How do you make important decisions? To find out, think about a time when you made an important career decision or made a major purchase or investment. To what extent does each of the following words describe how you reached the final decision? Please check five words that best describe how you made your final choice.

Logic_____
 Inner knowing____
 Data_____
 Felt sense_____
 Facts_____
 Instincts_____
 Concepts_____
 Hunch_____
 Reason_____
 Feelings

Scoring: Give yourself one point for each odd-numbered item you checked, and subtract one point for each even-numbered item you checked. The highest possible score is +5 and the lowest possible score is -5.

Interpretation: The odd-numbered items pertain to a linear decision style and the even-numbered items pertain to a nonlinear decision approach. Linear means using logical rationality to make decisions, which would be similar to the decision process in Exhibit 12.2. Nonlinear means to use primarily intuition to make decisions, as described in the text. If you scored from -3 to -5, then intuition and a satisficing model is your dominant approach to major decisions. If you score +3 to +5, then the rational model of decision making as described in the text is your dominant approach. The rational approach is taught in business schools, but many managers use intuition based on experience, especially at senior management levels when there is little tangible data to evaluate.

Source: Adapted from Charles M. Vance, Kevin S. Groves, Yongsun Paik, and Herb Kindler, "Understanding and Measuring Linear–Nonlinear Thinking Style for Enhanced Management Education and Professional Practice, Academy of Management Learning & Education, 6, no. 2 (2007), 167–185.

decision making is supported by a growing body of research from psychology, organizational science, and other disciplines.²³ Indeed, many universities are offering courses in creativity and intuition so business students can learn to use these processes effectively.

In a situation of great complexity or ambiguity, previous experience and judgment are needed to incorporate intangible elements at both the problem identification and problem solution stages.²⁴ A study of manager problem finding showed that thirty of thirty-three problems were ambiguous and ill-defined.²⁵ Bits and scraps of unrelated information from informal sources resulted in a pattern in the manager's mind. The manager could not prove a problem existed but knew intuitively that a certain area needed attention. A too-simple view of a complex problem is often associated with decision failure,²⁶ so managers learn to listen to their intuition rather than accepting that things are going okay.

Intuitive processes are also used in the problem solution stage. Executives frequently make decisions without explicit reference to the impact on profits or to other measurable outcomes.²⁷ As we saw in Exhibit 12.3, many intangible factors—such as a person's concern about the support of other executives, fear of failure, and social attitudes—influence selection of the best alternative. These factors cannot

be quantified in a systematic way, so intuition guides the choice of a solution. Managers may make a decision based on what they sense to be right rather than on what they can document with hard data. A survey of managers conducted by executive search firm Christian & Timbers found that 45 percent of corporate executives say they rely more on instinct than on facts and figures to make business decisions.²⁸

ASSESS YOUR ANSWER

Managers should use the most objective, rational process possible when making a decision.

ANSWER: *Disagree.* Striving for perfect rationality in decisions is ideal, but not realistic. Many complex decisions do not lend themselves to a step-by-step analytical process. There are also numerous constraints on decision makers. When making nonprogrammed decisions, managers may try to follow the steps in the rational decision making process, but they also have to rely on experience and intuition.

Stefan Pierer, CEO of KTM Fahrrad GmbH, a large manufacturer of motor-cycles with headquarters in Austria, considers intuition critical to good decision making. Two years after Pierer became CEO, he made a decision many thought was foolish: he moved KTM, a leader in the manufacture of off-road motorcycles, into the market for street bikes. Even though the company lacked technical know-how to make street bikes and had little access to this new market, Pierer's intuition told him it was the right move. It paid off. KTM quickly became Europe's second largest sport-motorcycle manufacturer, and by 2006, nearly 30 percent of revenues came from the street bike segment.²⁹ However, there are also many examples of intuitive decisions that turned out to be complete failures.³⁰ This chapter's Book Mark discusses how managers can give their intuition a better chance of leading to successful decisions.

Managers may walk a fine line between two extremes: on the one hand, making arbitrary decisions without careful study, and on the other, relying obsessively on numbers and rational analysis.³¹ Remember that the bounded rationality perspective and the use of intuition apply mostly to nonprogrammed decisions. The novel, unclear, complex aspects of nonprogrammed decisions mean hard data and logical procedures are not available. Studies of executive decision making find that managers simply cannot use the rational approach for nonprogrammed strategic decisions, such as whether to market a controversial new prescription drug, whether to invest in a complex new project, or whether a city has a need for and can reasonably adopt an enterprise resource planning system.³² For decisions such as these, managers have limited time and resources, and some factors simply cannot be measured and analyzed. Trying to quantify such information could cause mistakes because it may oversimplify decision criteria. Intuition can also balance and supplement rational analysis to help managers make better decisions.



BookMark 12.0 (HAVE YOU READ THIS BOOK?)

Blink: The Power of Thinking without Thinking
By Malcolm Gladwell

Snap decisions can be just as good as—and sometimes better than—decisions that are made cautiously and deliberately. Yet they can also be seriously flawed or even dangerously wrong. That's the premise of Malcolm Gladwell's *Blink: The Power of Thinking without Thinking*. Gladwell explores how our "adaptive unconscious" arrives at complex, important decisions in an instant—and how we can train it to make those decisions good ones.

SHARPENING YOUR INTUITION

Even when we think our decision making is the result of careful analysis and rational consideration, Gladwell says, most of it actually happens subconsciously in a split second. This process, which he refers to as "rapid cognition," provides room for both amazing insight and grave error. Here are some tips for improving rapid cognition:

- Remember that more is not better Gladwell argues that giving people too much data and information hampers their ability to make good decisions. He cites a study showing that emergency room doctors who are best at diagnosing heart attacks gather less information from their patients than other doctors do. Rather than overloading on information, search out the most meaningful parts.
- Practice thin-slicing The process Gladwell refers to as thin-slicing is what harnesses the power of the adaptive unconscious and enables us to make smart decisions with minimal time and information. Thin-slicing means focusing on a thin slice of pertinent data or information and allowing your intuition to do the work for you.

Gladwell cites the example of a Pentagon war game, in which an enemy team of commodities traders defeated a U.S. Army that had "an unprecedented amount of information and intelligence" and "did a thoroughly rational and rigorous analysis that covered every conceivable contingency." The commodities traders were used to making thousands of instant decisions an hour based on limited information. Managers can practice spontaneous decision making until it becomes second nature.

 Know your limits Not every decision should be based on intuition. When you have a depth of knowledge and experience in an area, you can put more trust in your gut feelings. Gladwell also cautions to beware of biases that interfere with good decision making. Blink suggests that we can teach ourselves to sort through first impressions and figure out which are important and which are based on subconscious biases such as stereotypes or emotional baggage.

PUT IT TO WORK

Blink is filled with lively and interesting anecdotes, such as how firefighters can "slow down a moment" and create an environment where spontaneous decision making can take place. Gladwell asserts that a better understanding of the process of split-second decision making can help people make better decisions in all areas of their lives, as well as help them anticipate and avoid miscalculations.

Blink: The Power of Thinking without Thinking, by Malcolm Gladwell, is published by Little, Brown.

ORGANIZATIONAL DECISION MAKING

Organizations are composed of managers who make decisions using both rational and intuitive processes; but organization-level decisions are not usually made by a single manager. Many organizational decisions involve several managers. Problem identification and problem solution involve many departments, multiple viewpoints, and even other organizations, which are beyond the scope of an individual manager.

The processes by which decisions are made in organizations are influenced by a number of factors, particularly the organization's own internal structures and the degree of stability or instability of the external environment.³³ Research into organization-level decision making has identified four primary types of organizational decision-making processes: the management science approach, the Carnegie model, the incremental decision model, and the garbage can model.

Management Science Approach

The management science approach to organizational decision making is the analog to the rational approach by individual managers. Management science came into being during World War II.³⁴ At that time, mathematical and statistical techniques were applied to urgent, large-scale military problems that were beyond the ability of individual decision makers.

Mathematicians, physicists, and operations researchers used systems analysis to develop artillery trajectories, antisubmarine strategies, and bombing strategies such as salvoing (discharging multiple shells simultaneously). Consider the problem of a battleship trying to sink an enemy ship several miles away. The calculation for aiming the battleship's guns should consider distance, wind speed, shell size, speed and direction of both ships, pitch and roll of the firing ship, and curvature of the earth. Methods for performing such calculations using trial and error and intuition are not accurate, take far too long, and may never achieve success.

This is where management science came in. Analysts were able to identify the relevant variables involved in aiming a ship's guns and could model them with the use of mathematical equations. Distance, speed, pitch, roll, shell size, and so on could be calculated and entered into the equations. The answer was immediate, and the guns could begin firing. Factors such as pitch and roll were soon measured mechanically and fed directly into the targeting mechanism. Today, the human element is completely removed from the targeting process. Radar picks up the target, and the entire sequence is computed automatically.

Management science yielded astonishing success for many military problems. This approach to decision making diffused into corporations and business schools, where techniques were studied and elaborated. Operations research departments use mathematical models to quantify relevant variables and develop a quantitative representation of alternative solutions and the probability of each one solving the problem. These departments also use such devices as linear programming, Bayesian statistics, PERT charts, and computer simulations.

Management science is an excellent device for organizational decision making when problems are analyzable and when the variables can be identified and measured. Mathematical models can contain a thousand or more variables, each one relevant in some way to the ultimate outcome. Management science techniques have been used to correctly solve problems as diverse as finding the right spot for a church camp, test-marketing the first of a new family of products, drilling for oil, and radically altering the distribution of telecommunications services.³⁵ Other problems amenable to management science techniques are the scheduling of ambulance technicians, turnpike toll collectors, and airline crew members.³⁶ United Airlines is also applying management science techniques to decide how to route planes most efficiently.



Use a rational decision approach—
computation, management science—when a problem situation is well understood and can be broken down into variables that can be measured and analyzed.

In the past, a United Airlines plane bound for Frankfurt from San Francisco would follow a standard path, flying over Montana, then northeast over Canada and Iceland.



But thanks to new route-mapping software, the plane can now stay in U.S. airspace until around Cleveland or Detroit. That cuts both United's fuel usage and its Canadian "overfly" fee (most countries charge a fee for using their airspace). Total savings: about \$1,400 per plane one way.

United Airlines

Airlines are desperate to cut expenses any way they can, and route-mapping software that helps pilots and dispatchers find the best balance of fuel usage, flight speed, and flight path is one of the newest approaches. United's computers track a massive amount of data, including overflight fees charged by various countries, up-to-the-minute wind and weather conditions, fuel costs, airport locations and available runways, weight and performance of each plane, temporarily blocked airspace, and the location of fixed air routes. The system evaluates multiple scenarios to determine the best solution for the maximum payload.

Before these sophisticated computer systems, dispatchers constructed flight paths manually, poring over manuals from the aircraft manufacturer, analyzing weather patterns and wind data, and so forth, to calculate fuel needs and plan routes. United estimates that the new computerized system will save more than \$20 million a year. Most of the major airlines, including Southwest, Lufthansa AG, Delta, Continental, Air Canada, American Airlines, British Airways, Singapore Airlines, and Northwest Airlines, use similar types of routing software. "In the operating world of an airline," said Captain Richard Sowden of Air Canada, "the flight-planning system is absolutely critical to cost control." "37

The airlines have long been big users of management science techniques because many of the problems they encounter are analyzable and measurable and can be structured in a logical way. Management science, especially with increasingly sophisticated computer technology and software, can accurately and quickly solve problems that have too many explicit variables for adequate human processing. Management science is covering a broader range of problems than ever before. For example, rather than relying on hunches, advertising firms like Efficient Frontier, a Silicon Valley startup, use software to optimize online ad campaigns. The software can easily calculate response rates and return on investment for every advertisement. Many retailers, including Home Depot, Bloomingdale's, and Gap, use software to analyze current and historical sales data and determine when, where, and how much to mark down prices. Food and beverage companies are using mathematical formulas to precisely study customer data and make decisions about which new products to develop and how to market them. Even doctors' offices are turning to management science to manage their practices more efficiently, such as by predicting demand for appointments based on the number of patients in their practice, the average no-show rate, and other factors.³⁸

One problem with the management science approach is that quantitative data are not rich and do not convey tacit knowledge, as described in Chapter 8. Informal cues that indicate the existence of problems have to be sensed on a more personal basis by managers.³⁹ The most sophisticated mathematical analyses are of no value if the important factors cannot be quantified and included in the model. Such things as competitor reactions, consumer tastes, and product warmth are qualitative dimensions. In these situations, the role of management science is to

supplement manager decision making. Quantitative results can be given to managers for discussion and interpretation along with their informal opinions, judgment, and intuition. The final decision can include both qualitative factors and quantitative calculations.

Carnegie Model

The **Carnegie model** of organizational decision making is based on the work of Richard Cyert, James March, and Herbert Simon, who were all associated with Carnegie-Mellon University.⁴⁰ Their research helped formulate the bounded rationality approach to individual decision making, as well as provide new insights about organizational decisions.

Until their work, research in economics assumed that business firms made decisions as a single entity, as if all relevant information were funneled to the top decision maker for a choice. Research by the Carnegie group indicated that organization-level decisions involved many managers and that a final choice was based on a coalition among those managers. A **coalition** is an alliance among several managers who agree about organizational goals and problem priorities.⁴¹ It could include managers from line departments, staff specialists, and even external groups, such as powerful customers, bankers, or union representatives.

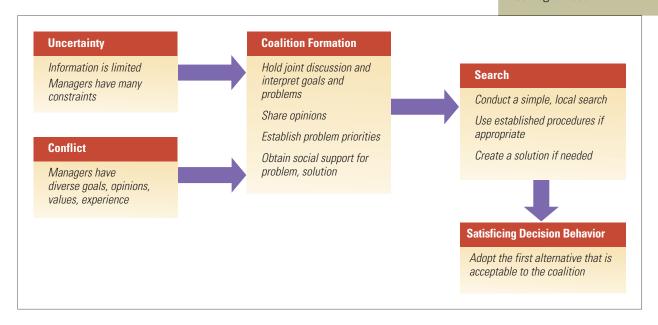
Management coalitions are needed during decision making for two reasons. First, organizational goals are often ambiguous, and operative goals of departments are often inconsistent. When goals are ambiguous and inconsistent, managers disagree about problem priorities. They must bargain about problems and build a coalition around the question of which problems to address.

The second reason for coalitions is that individual managers intend to be rational but function with human cognitive limitations and other constraints, as described earlier. Managers do not have the time, resources, or mental capacity to identify all dimensions and to process all information relevant to a decision. These limitations lead to coalition-building behavior. Managers talk to each other and exchange points of view to gather information and reduce ambiguity. People who have relevant information or a stake in a decision outcome are consulted. Building a coalition will lead to a decision that is supported by interested parties.

The process of coalition formation has several implications for organizational decision behavior. First, decisions are made to *satisfice* rather than to optimize problem solutions. **Satisficing** means organizations accept a satisfactory rather than a maximum level of performance, enabling them to achieve several goals simultaneously. In decision making, the coalition will accept a solution that is perceived as satisfactory to all coalition members. Second, managers are concerned with immediate problems and short-run solutions. They engage in what Cyert and March called *problemistic search*.⁴²

Problemistic search means managers look around in the immediate environment for a solution to quickly resolve a problem. Managers don't expect a perfect solution when the situation is ill-defined and conflict-laden. This contrasts with the management science approach, which assumes that analysis can uncover every reasonable alternative. The Carnegie model says that search behavior is just sufficient to produce a satisfactory solution and that managers typically adopt the first satisfactory solution that emerges. Third, discussion and bargaining are especially important in the problem identification stage of decision making. Unless coalition members perceive a problem, action will not be taken.

EXHIBIT 12.4
Choice Processes in the Carnegie Model



The decision process described in the Carnegie model is summarized in Exhibit 12.4. The Carnegie model points out that building agreement through a managerial coalition is a major part of organizational decision making. This is especially true at upper management levels. Discussion and bargaining are time consuming, so search procedures are usually simple and the selected alternative satisfices rather than optimizes problem solution. When problems are programmed—are clear and have been seen before—the organization will rely on previous procedures and routines. Rules and procedures prevent the need for renewed coalition formation and political bargaining. Nonprogrammed decisions, however, require bargaining and conflict resolution.

Organizations suffer when managers are unable to build a coalition around goals and problem priorities. The U.S.-led war and reconstruction in Iraq have been plagued by disagreements and goal conflicts from the beginning, harming both security and reconstruction efforts and the Bush administration. For example, the 2007 decision to send 20,000 additional troops to carry out a new counterinsurgency strategy was successful in reversing the spiral of sectarian killings in Iraq. However, critics argue that the decision took too long because of disagreements among leaders and Bush's difficulty in building a coalition to support his decision. One analysis said the conflicts and disagreements delayed the decision until conditions in Iraq resembled anarchy and civil war.⁴³

The Carnegie model is particularly useful at the problem identification stage. However, a coalition of key department managers is also important for smooth implementation of a decision. When top managers perceive a problem or want to make a major decision, they need to reach agreement with other managers to support the decision.⁴⁴

Briefcase

As an organization manager, keep these guidelines in mind:

Use a coalition-building approach when organizational goals and problem priorities are in conflict. When managers disagree about priorities or the true nature of the problem, they should discuss and seek agreement about priorities.

ASSESS YOUR ANSWER

When a manager knows the best solution to a serious organizational problem and has the necessary authority, it is best to simply make the decision and implement it rather than involve other managers in the decision process.

ANSWER: Disagree. Few organizational decisions are made by a single manager. Organizational decision making is a social process that combines multiple perspectives. Managers have to talk to one another about problem priorities and exchange opinions and viewpoints to reach agreement. When managers don't build coalitions, important problems may go unsolved and good decisions may fail because other managers don't buy into the decisions and effectively implement them.

Incremental Decision Model

Henry Mintzberg and his associates at McGill University in Montreal approached organizational decision making from a different perspective. They identified twenty-five decisions made in organizations and traced the events associated with these decisions from beginning to end.⁴⁵ Their research identified each step in the decision sequence. This approach to decision making, called the **incremental decision model**, places less emphasis on the political and social factors described in the Carnegie model, but tells more about the structured sequence of activities undertaken from the discovery of a problem to its solution.⁴⁶

Sample decisions in Mintzberg's research included choosing which jet aircraft to acquire for a regional airline, developing a new supper club, designing a new container terminal in a harbor, identifying a new market for a deodorant, installing a controversial new medical treatment in a hospital, and firing a star radio announcer.⁴⁷ The scope and importance of these decisions are revealed in the length of time taken to complete them. Most of these decisions took more than a year, and one-third of them took more than two years. Most of these decisions were nonprogrammed and required custom-designed solutions.

One discovery from this research is that major organizational choices are usually a series of small choices that combine to produce the major decision. Thus, many organizational decisions are a series of nibbles rather than a big bite. Organizations move through several decision points and may hit barriers along the way. Mintzberg called these barriers *decision interrupts*. An interrupt may mean an organization has to cycle back through a previous decision and try something new. Decision loops or cycles are one way the organization learns which alternatives will work. The ultimate solution may be very different from what was initially anticipated.

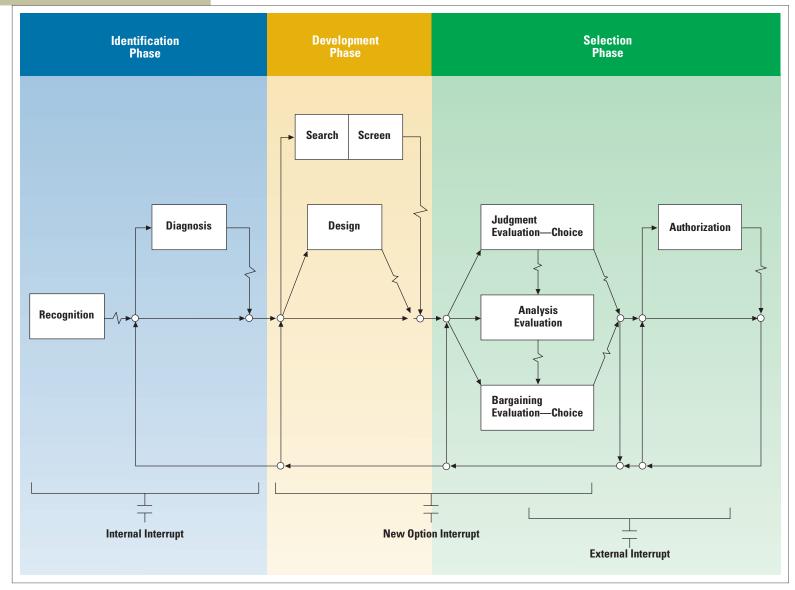
The pattern of decision stages discovered by Mintzberg and his associates is shown in Exhibit 12.5. Each box indicates a possible step in the decision sequence. The steps take place in three major decision phases: identification, development, and selection.

Identification Phase. The identification phase begins with *recognition*. Recognition means one or more managers become aware of a problem and the need to make a decision. Recognition is usually stimulated by a problem or an opportunity. A problem exists when elements in the external environment change or when internal



the company ahead by increments when a problem is defined but solutions are uncertain. Try solutions step by step to learn whether they work.

EXHIBIT 12.5The Incremental Decision Model



Source: American Science Quarterly. "Structure of Unstructured Decision Processes" by Henry Mintzberg, Duru Raisinghani, and André Théorêt vol. 21, pp. 246–275, June 1976. Reprinted by permission.

performance is perceived to be below standard. In the case of firing a radio announcer, comments about the announcer came from listeners, other announcers, and advertisers. Managers interpreted these cues until a pattern emerged that indicated a problem had to be dealt with.

The second step is *diagnosis*, in which more information is gathered if needed to define the problem situation. Diagnosis may be systematic or informal, depending upon the severity of the problem. Severe problems do not allow time for extensive diagnosis; the response must be immediate. Mild problems are usually diagnosed in a more systematic manner.

Development Phase. In the development phase, a solution is shaped to solve the problem defined in the identification phase. The development of a solution takes one of two directions. First, *search* procedures may be used to seek out alternatives within the organization's repertoire of solutions. For example, in the case of firing a star announcer, managers asked what the radio station had done the last time an announcer had to be let go. To conduct the search, organization participants may look into their own memories, talk to other managers, or examine the formal procedures of the organization.

The second direction of development is to *design* a custom solution. This happens when the problem is novel so that previous experience has no value. Mintzberg found that in these cases, key decision makers have only a vague idea of the ideal solution. Gradually, through a trial-and-error process, a custom-designed alternative will emerge. Development of the solution is a groping, incremental procedure, building a solution brick by brick.

Selection Phase. The selection phase is when the solution is chosen. This phase is not always a matter of making a clear choice among alternatives. In the case of custom-made solutions, selection is more an evaluation of the single alternative that seems feasible.

Evaluation and choice may be accomplished in three ways. The *judgment* form of selection is used when a final choice falls upon a single decision maker, and the choice involves judgment based upon experience. In *analysis*, alternatives are evaluated on a more systematic basis, such as with management science techniques. Mintzberg found that most decisions did not involve systematic analysis and evaluation of alternatives. *Bargaining* occurs when selection involves a group of decision makers. Each decision maker may have a different stake in the outcome, so conflict emerges. Discussion and bargaining occur until a coalition is formed, as in the Carnegie model described earlier.

When a decision is formally accepted by the organization, *authorization* takes place. The decision may be passed up the hierarchy to the responsible hierarchical level. Authorization is often routine because the expertise and knowledge rest with the lower-level decision makers who identified the problem and developed the solution. A few decisions may be rejected because of implications not anticipated by lower-level managers.

Dynamic Factors. The lower part of the chart in Exhibit 12.5 shows lines running back toward the beginning of the decision process. These lines represent loops or cycles that take place in the decision process. Organizational decisions do not follow an orderly progression from recognition through authorization. Minor problems arise that force a loop back to an earlier stage. These are decision interrupts. If a custom-designed solution is perceived as unsatisfactory, the organization may have

to go back to the very beginning and reconsider whether the problem is truly worth solving. Feedback loops can be caused by problems of timing, politics, disagreement among managers, inability to identify a feasible solution, turnover of managers, or the sudden appearance of a new alternative. For example, when a small Canadian airline made the decision to acquire jet aircraft, the board authorized the decision, but shortly after, a new chief executive was brought in who canceled the contract, recycling the decision back to the identification phase. He accepted the diagnosis of the problem but insisted upon a new search for alternatives. Then a foreign airline went out of business and two used aircraft became available at a bargain price. This presented an unexpected option, and the chief executive used his own judgment to authorize the purchase of the aircraft.⁴⁸

Because most decisions take place over an extended period of time, circumstances change. Decision making is a dynamic process that may require a number of cycles before a problem is solved. An example of the incremental process and cycling that can take place is illustrated in Gillette's decision to create a new razor.

The Gillette Company uses incremental decision making to perfect the design of razors such as the Mach3 Turbo, the vibrating M3Power, or the Fusion shaving system.



Consider the development of the original Mach3. While searching for a new idea to increase sales in Gillette's mature shaving market, researchers at the company's British research lab came up with a bright idea to create a razor with three blades to produce a closer, smoother, more comfortable shave (recognition and diagnosis). Ten years later, the Mach3 reached the market, after thousands of shaving tests, numerous design modifications, and a development and tooling cost of \$750 million, roughly the amount a pharmaceutical firm invests in developing a blockbuster drug.

The technical demands of building a razor with three blades that would follow a man's face and also be easy to clean had several blind alleys. Engineers first tried to find established techniques (search, screen), but none fit the bill. Eventually a prototype called Manx was built (design), and in shaving tests it "beat the pants off" Gillette's Sensor Excel, the company's best-selling razor at the time. However, Gillette's CEO insisted that the razor had to have a radically new blade edge so the razor could use thinner blades (internal interrupt), so engineers began looking for new technology that could produce a stronger blade (search, screen). Eventually, the new edge, known as DLC for diamond-like carbon coating, would be applied atom by atom with chip-making technology (design).

The next problem was manufacturing (diagnosis), which required an entirely new process to handle the complexity of the triple-bladed razor (design). Although the board gave the go-ahead to develop manufacturing equipment (judgment, authorization), some members became concerned because the new blades, which are three times stronger than stainless steel, would last longer and cause Gillette to sell fewer cartridges (internal interrupt). The board eventually made the decision to continue with the new blades, which have a blue indicator strip that fades to white and signals when it's time for a new cartridge.

The board gave final approval for production of the Mach3 to begin in the fall of 1997. The new razor was introduced in the summer of 1998 and began smoothly sliding off shelves. Gillette recovered its huge investment in record time. Gillette then started the process of searching for the next shaving breakthrough all over again, using new technology that can examine a razor blade at the atomic level and high-speed video that can capture the act of cutting a single whisker. The company moved ahead in increments and rolled out its next major shaving product, the five-bladed Fusion, in 2006.⁴⁹

Gillette Company

At Gillette, the identification phase occurred because executives were aware of the need for a new razor and became alert to the idea of using three blades to produce a closer shave. The development phase was characterized by the trial-and-error custom design leading to the Mach3. During the selection phase, certain approaches were found to be unacceptable, causing Gillette to cycle back and redesign the razor, including using thinner, stronger blades. Advancing once again to the selection phase, the Mach3 passed the judgment of top executives and board members, and manufacturing and marketing budgets were quickly authorized. This decision took more than a decade, finally reaching completion in the summer of 1998.

ORGANIZATIONAL DECISIONS AND CHANGE

At the beginning of this chapter, we discussed how the rapidly changing business environment is creating greater uncertainty for decision makers. Many organizations are marked by a tremendous amount of uncertainty at both the problem identification and problem solution stages. Two approaches to decision making have evolved to help managers cope with this uncertainty and complexity. One approach is to combine the Carnegie and incremental models just described. The second is a unique approach called the garbage can model.

Combining the Incremental and Carnegie Models

The Carnegie description of coalition building is especially relevant for the problem identification stage. When issues are ambiguous, or if managers disagree about problem severity, discussion, negotiation, and coalition building are needed. The incremental model tends to emphasize the steps used to reach a solution. After managers agree on a problem, the step-by-step process is a way of trying various solutions to see what will work. When problem solution is unclear, a trial-and-error solution may be designed.

The application of the Carnegie and incremental models to the stages in the decision process is illustrated in Exhibit 12.6. The two models do not disagree with one another. They describe different approaches for how organizations make decisions when either problem identification or problem solution is uncertain. When both parts of the decision process are simultaneously highly uncertain, the organization is in an extremely difficult position. Decision processes in that situation may be a combination of the Carnegie and incremental models, and this combination may evolve into a situation described in the garbage can model.

Garbage Can Model

The garbage can model is one of the most recent and interesting descriptions of organizational decision processes. It is not directly comparable to the earlier models, because the garbage can model deals with the pattern or flow of multiple decisions within organizations, whereas the incremental and Carnegie models focus on how a single decision is made. The garbage can model helps you think



uncertainty about

both problems and

solutions. Decision

making may also employ garbage can procedures. Move the organization toward

better performance by proposing new ideas,

spending time working

in important areas,

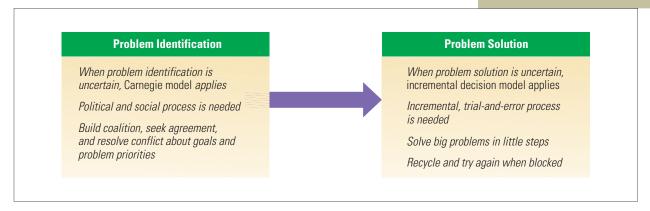
and persisting with

potential solutions.

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EXHIBIT 12.6

Decision Process When Problem Identification and Problem Solution Are Uncertain



of the whole organization and the frequent decisions being made by managers throughout.

Organized Anarchy. The garbage can model was developed to explain the pattern of decision making in organizations that experience extremely high uncertainty. Michael Cohen, James March, and Johan Olsen, the originators of the model, called the highly uncertain conditions an **organized anarchy**, which is an extremely organic organization. Organized anarchies do not rely on the normal vertical hierarchy of authority and bureaucratic decision rules. They result from three characteristics:

- 1. *Problematic preferences*. Goals, problems, alternatives, and solutions are ill-defined. Ambiguity characterizes each step of a decision process.
- 2. *Unclear*, poorly understood technology. Cause-and-effect relationships within the organization are difficult to identify. An explicit database that applies to decisions is not available.
- 3. *Turnover*. Organizational positions experience turnover of participants. In addition, employees are busy and have only limited time to allocate to any one problem or decision. Participation in any given decision will be fluid and limited.

An organized anarchy is characterized by rapid change and a collegial, nonbureaucratic environment. No organization fits this extremely organic circumstance all the time, although today's Internet-based companies, as well as organizations in rapidly changing industries, may experience it much of the time. Many organizations will occasionally find themselves in positions of making decisions under unclear, problematic circumstances. The garbage can model is useful for understanding the pattern of these decisions.

Streams of Events. The unique characteristic of the garbage can model is that the decision process is not seen as a sequence of steps that begins with a problem and ends with a solution. Indeed, problem identification and problem solution may not be connected to each other. An idea may be proposed as a solution when no problem is specified. A problem may exist and never generate a solution. Decisions

are the outcome of independent streams of events within the organization. The four streams relevant to organizational decision making are as follows:

- 1. *Problems*. Problems are points of dissatisfaction with current activities and performance. They represent a gap between desired performance and current activities. Problems are perceived to require attention. However, they are distinct from solutions and choices. A problem may lead to a proposed solution or it may not. Problems may not be solved when solutions are adopted.
- 2. *Potential solutions*. A solution is an idea somebody proposes for adoption. Such ideas form a flow of alternative solutions through the organization. Ideas may be brought into the organization by new personnel or may be invented by existing personnel. Participants may simply be attracted to certain ideas and push them as logical choices regardless of problems. Attraction to an idea may cause an employee to look for a problem to which the idea can be attached and, hence, justified. The point is that solutions exist independent of problems.
- 3. *Participants*. Organization participants are employees who come and go throughout the organization. People are hired, reassigned, and fired. Participants vary widely in their ideas, perception of problems, experience, values, and training. The problems and solutions recognized by one manager will differ from those recognized by another manager.
- 4. Choice opportunities. Choice opportunities are occasions when an organization usually makes a decision. They occur when contracts are signed, people are hired, or a new product is authorized. They also occur when the right mix of participants, solutions, and problems exists. Thus, a manager who happened to learn of a good idea may suddenly become aware of a problem to which it applies and, hence, can provide the organization with a choice opportunity. Match-ups of problems and solutions often result in decisions.

With the concept of four streams, the overall pattern of organizational decision making takes on a random quality. Problems, solutions, participants, and choices all flow through the organization. In one sense, the organization is a large garbage can in which these streams are being stirred, as illustrated in Exhibit 12.7. When a problem, solution, and participant happen to connect at one point, a decision may be made and the problem may be solved; but if the solution does not fit the problem, the problem may not be solved.

Thus, when viewing the organization as a whole and considering its high level of uncertainty, one sees problems arise that are not solved and solutions tried that do not work. Organizational decisions are disorderly and not the result of a logical, step-by-step sequence. Events may be so ill-defined and complex that decisions, problems, and solutions act as independent events. When they connect, some problems are solved, but many are not.⁵¹

Consequences. There are four specific consequences of the garbage can decision process for organizational decision making:

1. Solutions may be proposed even when problems do not exist. An employee might be sold on an idea and might try to sell it to the rest of the organization. An example was the adoption of computers by many organizations during the 1970s. The computer was an exciting solution and was pushed by both computer manufacturers and systems analysts within organizations. The computer did not solve any problems in those initial applications. Indeed, some computers caused more problems than they solved.

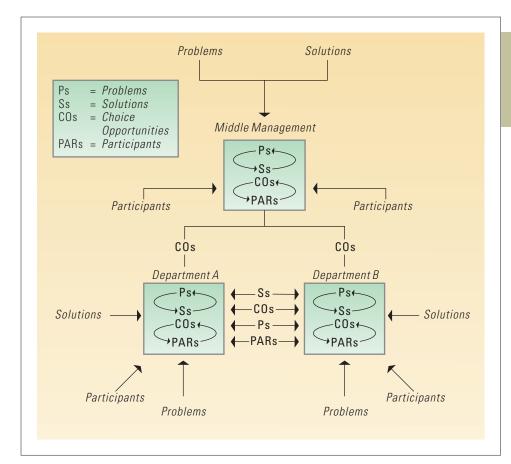


EXHIBIT 12.7

Illustration of Independent Streams of Events in the Garbage Can Model of Decision Making

- 2. Choices are made without solving problems. A choice—for example, creating a new department or revising work procedures—may be made with the intention of solving a problem; but, under conditions of high uncertainty, the choice may be incorrect. Moreover, many choices just seem to happen. People decide to quit, the organization's budget is cut, or a new policy bulletin is issued. These choices may be oriented toward problems but do not necessarily solve them.
- 3. Problems may persist without being solved. Organization participants get used to certain problems and give up trying to solve them; or participants may not know how to solve certain problems because the technology is unclear. A university in Canada was placed on probation by the American Association of University Professors because a professor had been denied tenure without due process. The probation was a nagging annoyance that the administrators wanted to remove. Fifteen years later, the nontenured professor died. The probation continues because the university did not acquiesce to the demands of the heirs of the association to reevaluate the case. The university would like to solve the problem, but administrators are not sure how, and they do not have the resources to allocate to it. The probation problem persists without a solution.

4. A few problems are solved. The decision process does work in the aggregate. In computer simulation models of the garbage can model, important problems were often resolved. Solutions do connect with appropriate problems and participants so that a good choice is made. Of course, not all problems are resolved when choices are made, but the organization does move in the direction of problem reduction.

The effects of independent streams and the rather chaotic decision processes of the garbage can model can be seen in the production of David O. Russell's movie *I \neq Huckabees*, which has been called an "existential comedy."

PRACTICE

Screenwriter and director David O. Russell is known for creating intelligent, original movies such as *Spanking the Monkey*, *Flirting with Disaster* and *Three Kings*. His 2004 film

I ♥ Huckabees might be the most original—or some would say just plain weird—so far. The New York Times referred to the movie as "a jumbled, antic exploration of existential and Buddhist philosophy that also involves tree-hugging, African immigrants, and Shania Twain." Yet the movie got decent critical reviews and was picked by the Village Voice as one of the best films of 2004.

Russell had a vision of what he wanted the movie to be from the beginning, but few others could grasp what that was. Most of the actors who signed on to star in *I* * Huckabees admit that they didn't really understand the script, but they trusted Russell's vision and imagination. Two of the biggest actors in Hollywood, Jude Law and Gwyneth Paltrow, signed on to play employees at a department store chain called Huckabees. But Paltrow backed out before filming ever started. Nicole Kidman was interested but had a conflict. Jennifer Aniston became—and as quickly unbecame—a possibility. Finally, Naomi Watts, who had been Russell's original choice for the role, was able to free herself from scheduling conflicts to take the part. The casting wasn't quite set though. Jude Law dropped out for unknown reasons—but just as quickly dropped back in.

Filming was chaotic. As the actors were on camera saying the lines they had memorized, Russell was a few feet away continually calling out new lines to them. In one scene, Law became so exhausted and frustrated that he started pounding his fists on the ground and shouting expletives. Russell loved the improvisation and kept the cameras rolling. Actors were unsure of how to develop their characterizations, so they just did whatever seemed right at the time, often based on Russell's efforts to keep them off balance. Scenes were often filmed blindly with no idea of how they were supposed to fit in the overall story.

After Russell's hours in the editing room, the final film turned out to be quite different from what the actors thought they'd shot. Some major scenes, including one that was supposed to articulate the film's theme that "everything is connected," were cut entirely.

The production of I \checkmark *Huckabees* was not a rational process that started with a clear problem and ended with a logical solution. Many events occurred by chance and were intertwined, which characterizes the garbage can model. Everyone from the director to the actors continuously added to the stream of new ideas for the

I ♥ Huckabees

story. Some solutions were connected to emerging problems: Naomi Watts cleared her schedule just in time to take the role after Gwyneth Paltrow dropped out, for example. The actors (participants) daily made personal choices regarding characterization that proved to be right for the story line. The garbage can model, however, doesn't always work—in the movies or in organizations. A similar haphazard process during the filming of *Waterworld* led to the most expensive film in Hollywood history and a decided box-office flop for Universal Pictures.⁵³

CONTINGENCY DECISION-MAKING FRAMEWORK

This chapter has covered several approaches to organizational decision making, including management science, the Carnegie model, the incremental decision model, and the garbage can model. It has also discussed rational and intuitive decision processes used by individual managers. Each decision approach is a relatively accurate description of the actual decision process, yet all differ from each other. Management science, for example, reflects a different set of decision assumptions and procedures than does the garbage can model.

One reason for having different approaches is that they appear in different organizational situations. The use of an approach is contingent on the organization setting. Two characteristics of organizations that determine the use of decision approaches are (1) problem consensus and (2) technical knowledge about the means to solve those problems.⁵⁴ Analyzing organizations along these two dimensions suggests which approach is most appropriate for making decisions.

Problem Consensus

Problem consensus refers to the agreement among managers about the nature of a problem or opportunity and about which goals and outcomes to pursue. This variable ranges from complete agreement to complete disagreement. When managers agree, there is little uncertainty—the problems and goals of the organization are clear, and so are standards of performance. When managers disagree, organization direction and performance expectations are in dispute, creating a situation of high uncertainty. One example of problem uncertainty occurred at Wal-Mart stores regarding the use of parking lot patrols. Some managers believed the stores needed to do more to control parking lot crime, presenting evidence that parking lot patrols increased business because they encouraged more nighttime shopping. Other managers, however, insisted that parking lot crime was a society problem rather than a store problem, and they argued that trying to control parking lot crime would be too expensive.⁵⁵

Problem consensus tends to be low when organizations are differentiated, as described in Chapter 4. Recall that uncertain environments cause organizational departments to differentiate from one another in goals and attitudes to specialize in specific environmental sectors. This differentiation leads to disagreement and conflict, so managers must make a special effort to build coalitions during decision making. For example, NASA has been criticized for failing to identify problems with the *Columbia* space shuttle that might have prevented the February 2003 disaster. Part of the reason was high differentiation and conflicting opinions between safety managers and scheduling managers, in which pressure to launch on time overrode safety concerns. In addition, after the launch, engineers three times requested—and were denied—better

photos to assess the damage from a piece of foam debris that struck the shuttle's left wing just seconds after launch. Investigations now indicate that the damage caused by the debris may have been the primary physical cause of the explosion. Mechanisms for hearing dissenting opinions and building coalitions can improve decision making at NASA and other organizations dealing with complex problems.⁵⁶

Problem consensus is especially important for the problem identification stage of decision making. When problems are clear and agreed on, they provide clear standards and expectations for performance. When problems are not agreed on, problem identification is uncertain and management attention must be focused on gaining agreement about goals and priorities.

Technical Knowledge about Solutions

Technical knowledge refers to understanding and agreement about how to solve problems and reach organizational goals. This variable can range from complete agreement and certainty to complete disagreement and uncertainty about cause–effect relationships leading to problem solution. One example of low technical knowledge occurred at PepsiCo's 7-Up division. Managers agreed on the problem to be solved—they wanted to increase market share from 6 percent to 7 percent. However, the means for achieving this increase in market share were not known or agreed on. A few managers wanted to use discount pricing in supermarkets. Other managers believed they should increase the number of soda fountain outlets in restaurants and fast-food chains. A few other managers insisted that the best approach was to increase advertising. Managers did not know what would cause an increase in market share. Eventually, the advertising judgment prevailed at 7-Up, but it did not work very well. The failure of its decision reflected 7-Up's low technical knowledge about how to solve the problem.

When means are well understood, the appropriate alternatives can be identified and calculated with some degree of certainty. When means are poorly understood, potential solutions are ill-defined and uncertain. Intuition, judgment, and trial and error become the basis for decisions.

Contingency Framework

Exhibit 12.8 describes the **contingency decision-making framework**, which brings together the two dimensions of problem consensus and technical knowledge about solutions. Each cell represents an organizational situation that is appropriate for the decision-making approaches described in this chapter.

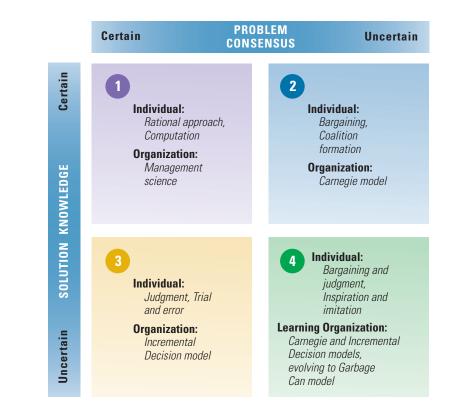
Cell 1. In cell 1 of Exhibit 12.8, rational decision procedures are used because problems are agreed on and cause–effect relationships are well understood, so there is little uncertainty. Decisions can be made in a computational manner. Alternatives can be identified and the best solution adopted through analysis and calculations. The rational models described earlier in this chapter, both for individuals and for the organization, are appropriate when problems and the means for solving them are well defined.

Cell 2. In cell 2, there is high uncertainty about problems and priorities, so bargaining and compromise are used to reach consensus. Tackling one problem might mean the organization must postpone action on other issues. The priorities given to respective problems are decided through discussion, debate, and coalition building.

EXHIBIT 12.8
Contingency Framework

Models

for Using Decision



Managers in this situation should use broad participation to achieve consensus in the decision process. Opinions should be surfaced and discussed until compromise is reached. The organization will not otherwise move forward as an integrated unit. The Carnegie model applies when there is dissension about organizational problems. When groups within the organization disagree, or when the organization is in conflict with constituencies (government regulators, suppliers, unions), bargaining and negotiation are required. The bargaining strategy is especially relevant

to the problem identification stage of the decision process. Once bargaining and negotiation are completed, the organization will have support for one direction.

Cell 3. In a cell 3 situation, problems and standards of performance are certain, but alternative technical solutions are vague and uncertain. Techniques to solve a problem are ill defined and poorly understood. When an individual manager faces this situation, intuition will be the decision guideline. The manager will rely on past experience and judgment to make a decision. Rational, analytical approaches are not effective because the alternatives cannot be identified and calculated. Hard facts and accurate information are not available.

The incremental decision model reflects trial and error on the part of the organization. Once a problem is identified, a sequence of small steps enables the organization to learn a solution. As new problems arise, the organization may recycle back to an earlier point and start over. Eventually, over a period of months or years, the organization will acquire sufficient experience to solve the problem in a satisfactory way.

The situation in cell 3, of senior managers agreeing about problems but not knowing how to solve them, occurs frequently in business organizations. If managers use incremental decisions in such situations, they will eventually acquire the technical knowledge to accomplish goals and solve problems.

Cell 4. The situation in cell 4, characterized by high uncertainty about both problems and solutions, is difficult for decision making. An individual manager making a decision under this high level of uncertainty can employ techniques from both cell 2 and cell 3. The manager can attempt to build a coalition to establish goals and priorities and use judgment, intuition, or trial and error to solve problems. Additional techniques, such as inspiration and imitation, also may be required. **Inspiration** refers to an innovative, creative solution that is not reached by logical means. Inspiration sometimes comes like a flash of insight, but—similar to intuition—it is often based on deep knowledge and understanding of a problem that the unconscious mind has had time to mull over.⁵⁷ **Imitation** means adopting a decision tried elsewhere in the hope that it will work in this situation.

For example, in one university, accounting department faculty were unhappy with their current circumstances but could not decide on the direction the department should take. Some faculty members wanted a greater research orientation, whereas others wanted greater orientation toward business firms and accounting applications. The disagreement about goals was compounded because neither group was sure about the best technique for achieving its goals. The ultimate solution was inspirational on the part of the dean. An accounting research center was established with funding from major accounting firms. The funding was used to finance research activities for faculty interested in basic research and to provide contact with business firms for other faculty. The solution provided a common goal and unified people within the department to work toward that goal.

When an entire organization is characterized by high uncertainty regarding both problems and solutions, elements of the garbage can model will appear. Managers may first try techniques from both cells 2 and 3, but logical decision sequences starting with problem identification and ending with problem solution will not occur. Potential solutions will precede problems as often as problems precede solutions. In this situation, managers should encourage widespread discussion of problems and idea proposals to facilitate the opportunity to make choices. Eventually, through trial and error, the organization will solve some problems.

Research has found that decisions made following the prescriptions of the contingency decision-making framework tend to be more successful. However, the study noted that nearly six of ten strategic management decisions failed to follow the framework, leading to a situation in which misleading or missing information decreased the chance of an effective decision choice.⁵⁸ Managers can use the contingency framework in Exhibit 12.8 to improve the likelihood of successful organizational decisions.

SPECIAL DECISION CIRCUMSTANCES

In a highly competitive world beset by global competition and rapid change, decision making seldom fits the traditional rational, analytical model. Today's managers have to make high-stakes decisions more often and more quickly than ever before

in an environment that is increasingly less predictable. For example, interviews with CEOs in high-tech industries found that they strive to use some type of rational process, but the uncertainty and change in the industry often make that approach unsuccessful. The way these managers actually reach decisions is through a complex interaction with other managers, subordinates, environmental factors, and organizational events.⁵⁹

Issues of particular concern for today's decision makers are coping with high-velocity environments, learning from decision mistakes, and understanding and overcoming cognitive biases in decision making.

High-Velocity Environments

In some industries, the rate of competitive and technological change is so extreme that market data are either unavailable or obsolete, strategic windows open and shut quickly, perhaps within a few months, and the cost of poor decisions may be company failure. Research has examined how successful companies make decisions in these **high-velocity environments**, especially to understand whether organizations abandon rational approaches or have time for incremental implementation.⁶⁰

A comparison of successful with unsuccessful decisions in high-velocity environments found the following patterns:

- Successful decision makers tracked information in real time to develop a deep
 and intuitive grasp of the business. Two to three intense meetings per week with
 all key players were usual. Decision makers closely tracked operating statistics
 to constantly feel the pulse of what was happening. Unsuccessful firms were
 more concerned with future planning and forward-looking information, with
 only a loose grip on immediate happenings.
- During a major decision, successful companies began immediately to build multiple alternatives. Implementation of alternatives sometimes ran in parallel before managers finally settled on a final choice. Companies that made decisions slowly developed just one alternative, moving to another only after the first one failed.
- Fast, successful decision makers sought advice from everyone and depended heavily on one or two savvy, trusted colleagues as counselors. Slow companies were unable to build trust and agreement among the best people.
- Fast companies involved everyone in the decision and tried for consensus; but if consensus did not emerge, the top manager made the choice and moved ahead. Waiting for everyone to be on board created more delays than was warranted. Slow companies delayed decisions to achieve a uniform consensus.
- Fast, successful choices were well integrated with other decisions and the
 overall strategic direction of the company. Less successful choices considered
 the decision in isolation from other decisions; the decision was made in the
 abstract.⁶¹

When speed matters, a slow decision can be as ineffective as the wrong decision. Managers can learn to make decisions quickly. To improve the chances of a good decision under high-velocity conditions, some organizations stimulate constructive conflict through a technique called **point-counterpoint**, which divides decision makers into two groups and assigns them different, often competing responsibilities.⁶² The groups develop and exchange proposals and debate options until they arrive

Briefcase

As an organization manager, keep this guideline in mind:

Track real-time information, build multiple alternatives simultaneously, and try to involve everyone—but move ahead anyway when making decisions in a highvelocity environment. at a common set of understandings and recommendations. Groups can often make better decisions because multiple and diverse opinions are considered. In the face of complexity and uncertainty, the more people who have a say in the decision making, the better.

In group decision making, a consensus may not always be reached, but the exercise gives everyone a chance to consider options and state their opinions, and it gives top managers a broader understanding. Typically, those involved support the final choice. However, if a very speedy decision is required, top managers are willing to make the decision and move forward.

Decision Mistakes and Learning

Organizational decisions result in many errors, especially when made in conditions of great uncertainty. Managers simply cannot determine or predict which alternative will solve a problem. In these cases, the organization must make the decision—and take the risk—often in the spirit of trial and error. If an alternative fails, the organization can learn from it and try another alternative that better fits the situation. Each failure provides new information and insight. The point for managers is to move ahead with the decision process despite the potential for mistakes. "Chaotic action is preferable to orderly inaction."

In some organizations, managers are encouraged to instill a climate of experimentation to facilitate creative decision making. If one idea fails, another idea should be tried. Failure often lays the groundwork for success, such as when technicians at 3M developed Post-it Notes based on a failed product—a not-very-sticky glue. Managers in the most innovative companies believe that if all their new products succeed, they're doing something wrong, not taking the necessary risks to develop new markets. In other words, they recognize that when failure teaches the company something new, it lays the groundwork for success. The CEO of Coca-Cola, for example, is emphasizing the importance of accepting failure as he tries to change Coke's traditionally risk-averse culture into a more innovative, adaptive one.⁶⁴

Only by making mistakes can managers and organizations go through the process of **decision learning** and acquire sufficient experience and knowledge to perform more effectively in the future. Some companies, such as Intuit, even give awards for failures that lead to learning. One recent winner at Intuit was the team that developed an aggressive marketing campaign to target young tax filers. Through a Website called RockYourRefund.com, Intuit offered discounts to Best Buy and other companies and the ability to deposit tax refunds directly into prepaid Visa cards issued by hip-hop star and entrepreneur Russell Simmons. The campaign was a bust, with Intuit doing "very few returns" through the site. A postmortem of the project gave the team lessons they applied to future projects, such as the fact that young people shun Websites that feel too much like advertising. "It's only a failure if we fail to get the learning," said Intuit Chairman Scott Cook.⁶⁵

Based on what has been said about decision making in this chapter, one can expect companies to be ultimately successful in their decision making by adopting a learning approach toward solutions. They will make mistakes along the way, but they will resolve uncertainty through the trial-and-error process.

ASSESS YOUR ANSWER

3 Making a poor decision can help a manager and organization learn and get stronger.

ANSWER: Agree. Managers don't want people to intentionally make poor decisions, of course, but smart managers encourage people to take risks and experiment, which can lead to failed decisions. Learning from the failures is the key to growing and improving. In addition, although managers strive to make good decisions, they understand that decisions sometimes must be made quickly based on limited information, and that trial and error is an important way the organization learns and grows stronger.

Cognitive Biases

While encouraging risk-taking and accepting mistakes can lead to learning, one error smart managers strive to avoid is allowing cognitive biases to cloud their decision making. **Cognitive biases** are severe errors in judgment that all humans are prone to and that typically lead to bad choices.⁶⁶ Three common biases are escalating commitment, loss aversion, and groupthink.

Escalating Commitment. One well-known cognitive bias is referred to as **escalating commitment**. Research suggests that organizations often continue to invest time and money in a solution despite strong evidence that it is not working. Several explanations are given for why managers escalate commitment to a failing decision. Many times managers simply keep hoping they can recoup their losses. In addition, managers block or distort negative information when they are personally responsible for a bad decision. Another explanation is that consistency and persistence are valued in contemporary society. Consistent managers are considered better leaders than those who switch around from one course of action to another, so managers have a hard time pulling the plug despite evidence that a decision was wrong.

Prospect Theory. Most people are naturally *loss averse*. The pain one feels from losing a ten-dollar bill is typically much more powerful than the happiness one gets from finding a twenty-dollar one. **Prospect theory**, developed by psychologists Daniel Kahneman and Amos Tversky, suggests that the threat of a loss has a greater impact on a decision than the possibility of an equivalent gain. ⁶⁸ Therefore, most managers have a tendency to analyze problems in terms of what they fear losing rather than what they might gain. When faced with a specific decision, they overweight the value of potential losses and underweight the value of potential gains. In addition, research indicates that the regret associated with a decision that results in a loss is stronger than the regret of a missed opportunity. Thus, managers might avoid potentially wonderful opportunities that also have potentially negative outcomes. Prospect theory also helps to explain the phenomenon of escalating commitment, discussed in the previous section. Managers don't want to lose, so they keep throwing good money after bad.



Don't let cognitive biases cloud your decision making. To avoid the problems of groupthink, escalating commitment, and being influenced by loss aversion, apply evidence-based management and use techniques to encourage diversity and dissent.

Groupthink. Many decisions in organizations are made by groups, so the desire to go along with the group also can bias decisions. Subtle pressures for conformity exist in almost any group, and particularly when people like one another they tend to avoid anything that might create disharmony. **Groupthink** refers to the tendency of people in groups to suppress contrary opinions.⁶⁹ When people slip into groupthink, the desire for harmony outweighs concerns over decision quality. Group members emphasize maintaining unity rather than realistically challenging problems and alternatives. People censor their personal opinions and are reluctant to criticize the opinions of others.

Overcoming Personal Biases

How can managers avoid the problems of groupthink, escalating commitment, and being influenced by loss aversion? Several ideas have been proposed that help managers be more realistic and objective when making decisions. Two of the most effective are to use evidence-based management and to encourage dissent and diversity.

Evidence-Based Management. Evidence-based management means a commitment to make more informed and intelligent decisions based on the best available facts and evidence. It means being aware of one's biases, seeking and examining evidence with rigor. Managers practice evidence-based decision making by being careful and thoughtful rather than carelessly relying on assumptions, past experience, rules of thumb, or intuition. Evidence-based management can be particularly useful for overcoming fear of loss and the problem of escalating commitment. To practice evidence-based management, managers use data and facts to the extent possible to inform their decisions. Many manager problems are uncertain, and hard facts and data aren't available, but by always seeking evidence, managers can avoid relying on faulty assumptions. Decision makers can also do a post-mortem of decisions to evaluate what worked, what didn't, and how to do things better. The best decision makers have a healthy appreciation for what they don't know. They are always questioning and encouraging others to question their knowledge and assumptions. They foster a culture of inquiry, observation, and experimentation.

Encourage Dissent and Diversity. Dissent and diversity can be particularly useful in complex circumstances because they open the decision process to a wide variety of ideas and opinions rather than being constrained by personal biases or groupthink.⁷¹ Chuck Knight, the former CEO of Emerson Electric, always sparked heated debates during strategic planning meetings. Knight believed rigorous debate gave people a clearer picture of the competitive landscape and forced managers to look at all sides of an issue, helping them reach better decisions.⁷² One way to encourage dissent is to ensure that the group is diverse in terms of age and gender, functional area of expertise, hierarchical level, and experience with the business. Some groups assign a **devil's advocate**, who has the role of challenging the assumptions and assertions made by the group.⁷³ The devil's advocate may force the group to rethink its approach to the problem and avoid reaching premature decisions. Another approach, referred to as ritual dissent, puts parallel teams to work on the same problem in a large group meeting. Each team appoints a spokesperson who presents the team's finding and ideas to another team, which is required to listen quietly. Then, the spokesperson turns to face away from the team, which rips into the presentation no-holds-barred while the spokesperson is required to listen quietly. Each team's spokesperson does

this with every other team in turn, so that by the end of the session all ideas have been well-dissected and discussed.⁷⁴ The point–counterpoint method described earlier is also effective for encouraging dissent. Whatever techniques they use, good managers find ways to get a diversity of ideas and opinions on the table when making complex decisions.

DESIGN ESSENTIALS

- Most organizational decisions are not made in a logical, rational manner. Most decisions do not begin with the careful analysis of a problem, followed by systematic analysis of alternatives, and finally implementation of a solution. On the contrary, decision processes are characterized by conflict, coalition building, trial and error, speed, and mistakes. Managers operate under many constraints that limit rationality; hence, they use satisficing and intuition as well as rational analysis in their decision making.
- Another important idea is that individuals make decisions, but organizational decisions are not made by a single individual. Organizational decision-making approaches include the management science approach, the Carnegie model, the incremental decision model, and the garbage can model.
- Only in rare circumstances do managers analyze problems and find solutions by themselves. Many problems are not clear, so widespread discussion and coalition building take place. Once goals and priorities are set, alternatives to achieve those goals can be tried. When a manager does make an individual decision, it is often a small part of a larger decision process. Organizations solve big problems through a series of small steps. A single manager may initiate one step but should be aware of the larger decision process to which it belongs.
- The greatest amount of conflict and coalition building occurs when problems are not agreed on. Priorities must be established to indicate which goals are important and what problems should be solved first. If a manager attacks a problem other people do not agree with, the manager will lose support for the solution to be implemented. Thus, time and activity should be spent building a coalition in the problem identification stage of decision making. Then the organization can move toward solutions. Under conditions of low technical knowledge, the solution unfolds as a series of incremental trials that will gradually lead to an overall solution.
- The most novel description of decision making is the garbage can model. This model describes how decision processes can seem almost random in highly organic organizations. Decisions, problems, ideas, and people flow through organizations and mix together in various combinations. Through this process, the organization gradually learns. Some problems may never be solved, but many are, and the organization will move toward maintaining and improving its level of performance.
- Many organizations operating in high-velocity environments must make decisions with speed, which means staying in immediate touch with operations and the environment. Moreover, in an uncertain world, organizations will make mistakes, and mistakes made through trial and error should be appreciated. Encouraging trial-and-error increments facilitates organizational learning.

On the other hand, allowing cognitive biases to cloud decision making can have serious negative consequences for an organization. Managers can avoid the biases of escalating commitment, loss aversion, and groupthink by using evidence-based management and by encouraging diversity and dissent in the decision-making process.

Key Concepts

bounded rationality perspective Carnegie model coalition cognitive biases contingency decision-making framework decision learning devil's advocate escalating commitment evidence-based management garbage can model groupthink
high-velocity environments
imitation
incremental decision model
inspiration
intuitive decision making
management science approach
nonprogrammed decisions
organizational decision making
organized anarchy
point-counterpoint

problem consensus problem identification problem solution problemistic search programmed decisions prospect theory rational approach satisficing technical knowledge

Discussion Questions

- 1. When you are faced with choosing between several valid options, how do you typically make your decision? How do you think managers typically choose between several options? What are the similarities between your decision process and what you think managers do?
- 2. A professional economist once told his class, "An individual decision maker should process all relevant information and select the economically rational alternative." Do you agree? Why or why not?
- 3. If managers frequently use experience and intuition to make complex, nonprogrammed decisions, how do they apply evidence-based management, which seems to suggest that managers should rely on facts and data?
- 4. The Carnegie model emphasizes the need for a political coalition in the decision-making process. When and why are coalitions necessary?
- 5. What are the three major phases in Mintzberg's incremental decision model? Why might an organization recycle through one or more phases of the model?
- 6. An organization theorist once told her class, "Organizations never make big decisions. They make

- small decisions that eventually add up to a big decision." Explain the logic behind this statement.
- 7. How would you make a decision to select a building site for a new waste-treatment plant in the Philippines? Where would you start with this complex decision, and what steps would you take? Explain which decision model in the chapter best describes your approach.
- 8. Why would managers in high-velocity environments worry more about the present than the future? Would an individual manager working in this type of environment be more likely to succeed with a rational approach or an intuitive approach? Discuss.
- 9. Can you think of a decision you have made in your personal, school, or work life that reflects a stronger desire to avoid a loss than to make a gain? How about a time when you stayed with an idea or project for too long, perhaps even escalating your commitment, to avoid a failure? Discuss.
- 10. Why are decision mistakes usually accepted in organizations but penalized in college courses and exams that are designed to train managers?

Chapter 12 Workbook: Decision Styles*

Think of some recent decisions that have influenced your life. Choose two significant decisions that you made and

two decisions that other people made. Fill out the following table, using Exhibit 12.8 to determine decision styles.

Your decisions	Approach used	Advantages and disadvantages	Your recommended decision style
1.			
2.			
Decisions by others			
1.			
2.			

Questions

- How can a decision approach influence the outcome of the decision? What happens when the approach fits the decision? When it doesn't fit?
- 2. How can you know which approach is best?

*Adapted by Dorothy Marcic from "Action Assignment" in Jennifer M. Howard and Lawrence M. Miller, *Team Management* (Miller Consulting Group, 1994), 205.

Case for Analysis: Cracking the Whip*

Harmon Davidson stared dejectedly at the departing figure of his management survey team leader. Their meeting had not gone well. Davidson had relayed to Al Pitcher complaints about his handling of the survey. Pitcher had responded with adamant denial and unveiled scorn.

Davidson, director of headquarters management, was prepared to discount some of the criticism as resentment of outsiders meddling with "the way we've always done business," exacerbated by the turbulence of continual reorganization. But Davidson could hardly ignore the sheer volume of complaints or his high regard for some of their sources. "Was I missing danger signals about Pitcher from the start?" Davidson asked himself. "Or was I just giving a guy I didn't know a fair chance with an inherently controversial assignment?"

With his division decimated in the latest round of downsizing at the Department of Technical Services (DTS) earlier that year, Davidson had been asked to return to the headquarters management office after a five-year hiatus. The director, Walton Drummond, had abruptly taken early retirement.

One of the first things Davidson had learned about his new job was that he would be responsible for a comprehensive six-month survey of the headquarters management structure and processes. The DTS secretary had promised the survey to the White House as a prelude to the agency's next phase of management reform. Drummond had already picked the five-person survey team consisting of two experienced management analysts, a promising younger staff member, an intern, and Pitcher, the team leader. Pitcher was fresh from the Treasury Department, where he had participated in a similar survey. But having gone off after retirement for an extended mountainclimbing expedition in Asia, Drummond was unavailable to explain his survey plans or any understandings he had reached with Pitcher.

Davidson had been impressed with Pitcher's energy and motivation. He worked long hours, wrote voluminously if awkwardly, and was brimming with the latest organizational theory. Pitcher had other characteristics, however, that were disquieting. He seemed uninterested in DTS's history and culture and was paternalistic toward top

managers, assuming they were unsophisticated and unconcerned about modern management.

A series of presurvey informational briefings for headquarters office heads conducted by Davidson and Pitcher seemed to go swimmingly. Pitcher deferred to his chief on matters of philosophy and confined his remarks to schedule and procedures. He closed his segment on a friendly note, saying, "If we do find opportunities for improvement, we'll try to have recommendations for you."

But the survey was barely a week old when the director of management received his first call from an outraged customer. It was the assistant secretary for public affairs, Erin Dove, and she was not speaking in her usual upbeat tones. "Your folks have managed to upset my whole supervisory staff with their comments about how we'll have to change our organization and methods," she said. "I thought you were going through a fact-finding study. This guy Pitcher sounds like he wants to remake DTS headquarters overnight. Who does he think he is?"

When Davidson asked him about the encounter with public affairs, Pitcher expressed puzzlement that a few summary observations shared with supervisors in the interest of "prompt informal feedback" had been interpreted as such disturbing conclusions. "I told them we'll tell them how to fix it," he reassured his supervisor.

"Listen, Al," Davidson remonstrated gently. "These are very accomplished managers who aren't used to being told they have to fix anything. This agency's been on a roll for years, and the need for reinvention isn't resonating all that well yet. We've got to collect and analyze the information and assemble a convincing case for change, or we'll be spinning our wheels. Let's hold off on the feedback until you and I have reviewed it together."

But two weeks later, Technology Development Director Phil Canseco, an old and treasured colleague, was on Davidson's doorstep looking as unhappy as Erin Dove had sounded on the phone. "Harmon, buddy, I think you have to rein in this survey team a bit," he said. "Several managers who were scheduled for survey interviews were working on a 24-hour turnaround to give a revised project budget to the Appropriations subcommittee that day. My deputy says Pitcher was put out about postponing interviews and grumbled about whether we understood the new priorities. Is he living in the real world?"

Canseco's comments prompted Davidson to call a few of his respected peers who had dealt with the survey team. With varying degrees of reluctance, they all criticized the team leader and, in some cases, team members, as abrasive and uninterested in the rationales offered for existing structure and processes.

And so Davidson marshaled all of his tact for a review with the survey team leader. But Pitcher was in no mood for either introspection or reconsideration. He took the view that he had been brought in to spearhead a White House–inspired management improvement initiative in a glamour agency that had never had to think much about efficiency. He reminded Davidson that even he had conceded that managers were due some hard lessons on this score. Pitcher didn't see any way to meet his deadline except by adhering to a rigorous schedule, since he was working with managers disinclined to cooperate with an outsider pushing an unpopular exercise. He felt Davidson's role was to hold the line against unwarranted criticisms from prima donnas trying to discredit the survey.

Many questions arose in Davidson's mind about the survey plan and his division's capacity to carry it out. Had they taken on too much with too little? Had the right people been picked for the survey team? Had managers and executives, and even the team, been properly prepared for the survey?

But the most immediate question was whether Al Pitcher could help him with these problems.

*This case was prepared by David Hornestay and appeared in *Government Executive*, vol. 30, No. 8, August 1998, 45–46, as part of a series of case studies examining workplace dilemmas confronting federal managers. Reprinted by permission of *Government Executive*.

Case for Analysis: The Dilemma of Aliesha State College: Competence versus Need*

Until the 1980s, Aliesha was a well-reputed, somewhat sleepy state teachers college located on the outer fringes of a major metropolitan area. Then with the rapid expansion of college enrollments, the state converted Aliesha to a four-year state college (and the plans called for it to become a state university with graduate work and perhaps even with a medical school in the late 1990s). Within 10 years, Aliesha grew from 1,500 to 9,000 students. Its

budget expanded even faster than the enrollment, increasing twentyfold during that period.

The only part of Aliesha that did not grow was the original part, the teachers' college; there enrollment actually went down. Everything else seemed to flourish. In addition to building new four-year schools of liberal arts, business, veterinary medicine, and dentistry, Aliesha developed many community service programs. Among

them were a rapidly growing evening program, a mental health clinic, and a speech-therapy center for children with speech defects—the only one in the area. Even within education, one area grew—the demonstration high school attached to the old teachers college. Even though the high school enrolled only 300 students, its teachers were the leading experts in teacher education, and it was considered the best high school in the area.

Then, in 1992, the budget was suddenly cut quite sharply by the state legislature. At the same time the faculty demanded and got a fairly hefty raise in salary. It was clear that something had to give—the budget deficit was much too great to be covered by ordinary cost reductions. When the faculty committee sat down with the president and the board of trustees, two candidates for abandonment emerged after long and heated wrangling: the speechtherapy program and the demonstration high school. Both cost about the same—and both were extremely expensive. The speech-therapy clinic, everyone agreed, addressed itself to a real need and one of high priority. But—and everyone had to agree because the evidence was overwhelming—it did not do the job. Indeed, it did such a poor, sloppy, disorganized job that pediatricians, psychiatrists, and psychologists hesitated to refer their patients to the clinic. The reason was that the clinic was a college program run to teach psychology students rather than to help children with serious speech impediments.

The opposite criticism applied to the high school. No one questioned its excellence and the impact it made on the education students who listened in on its classes and on many young teachers in the area who came in as auditors. But what need did it fill? There were plenty of perfectly adequate high schools in the area.

"How can we justify," asked one of the psychologists connected with the speech clinic, "running an unnecessary high school in which each child costs as much as a graduate student at Harvard?"

"But how can we justify," asked the dean of the school of education, himself one of the outstanding teachers in the demonstration high school, "a speech clinic that has no results even though each of its patients costs the state as much as one of our demonstration high school students, or more?"

*Drucker, Management Cases, 1st Edition, copyright 1977, pp. 23–24. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

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Conflict, Power, and Politics



Intergroup Conflict in Organizations

Sources of Conflict · Rational versus Political Model

Power and Organizations

Individual versus Organizational Power \cdot Power versus Authority \cdot Vertical Sources of Power \cdot The Power of Empowerment \cdot Horizontal Sources of Power

Political Processes in Organizations

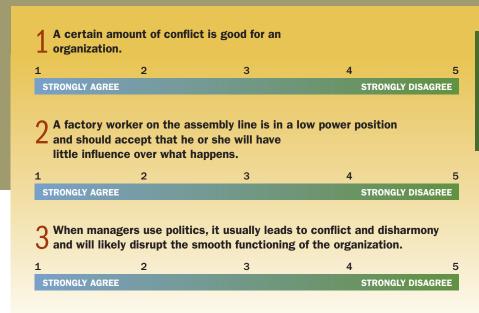
Definition • When Is Political Activity Used?

Using Power, Politics, and Collaboration

Tactics for Increasing Power \cdot Political Tactics for Using Power \cdot Tactics for Enhancing Collaboration

Design Essentials

Before reading this chapter, please circle your opinion below for each of the following statements:



The Los Angeles Times has long been one of the most respected names in journalism. The winner of several Pulitzer Prizes, the *Times* is one of only a handful of newspapers with a claim to national standing. So why can't the newspaper keep an editor? In less than four years, three seasoned editors came and went from the top editorial position. Moreover, the paper has seen the departures of several other high-level editors after short tenures, many of which came as a result of conflict and dissension. All newspapers are facing seriously tough circumstances, but The Los Angeles Times has been hit particularly hard, battered by years of flagging circulation even before the housing slump and declining economy cut deeply into ad revenues. Thus, the never-ending battle between the business side (reduce costs, lure advertisers) and the news side (quality news) of the organization became an all-out war at the *Times*. (For more about this age-old conflict at news organizations, read this chapter's Case for Analysis, "The Daily Tribune," on page 523.) Although the internal dissension at the Times is complex, most former editors say business-minded executives are cutting out the heart of the storied newspaper by making devastating newsroom cuts, meddling in the affairs of the newsroom by suggesting articles or assessing what is reported, and involving marketing more and more in the business of reporting the news.¹

All organizations, like *The Los Angeles Times*, are a complex mix of individuals and groups pursuing various goals and interests. Conflict is a natural outcome of the close interaction of people who may have diverse opinions and values, pursue different objectives, and have differential access to information and resources within the organization. Individuals and groups use power and political activity to handle their differences and manage the inevitable conflicts that arise.²

Too much conflict can be harmful to an organization, as it has been at *The Los Angeles Times*. The newspaper's parent company, Tribune Company, which owns the *Chicago Tribune* and acquired the Los Angeles paper in 2000, filed for bankruptcy protection in late 2008. The conflicts and tensions that have plagued *The Los Angeles Times* certainly can't be blamed directly for the Tribune Company's woes, but the inability of leaders to effectively manage conflict made it even more difficult

Managing by Design Questions for the organization to weather the "perfect storm" of forces roiling the media industry and the broader economy.³ However, conflict can also be a positive force because it challenges the status quo, encourages new ideas and approaches, and leads to needed change.⁴ Some degree of conflict occurs in all human relationships—between friends, romantic partners, and teammates, as well as between parents and children, teachers and students, and bosses and employees. Conflict is not necessarily a negative force; it results from the normal interaction of varying human interests. Within organizations, individuals and groups frequently have different interests and goals they wish to achieve through the organization. Managers can effectively use power and politics to manage conflict, get the most out of employees, enhance job satisfaction and team identification, achieve important goals, and realize high organizational performance.

Purpose of This Chapter

In this chapter we discuss the nature of conflict and the use of power and political tactics to manage and reduce conflict among individuals and groups. The notions of conflict, power, and politics have appeared in previous chapters. In Chapter 3, we talked about horizontal linkages such as task forces and teams that encourage collaboration among functional departments. Chapter 4 introduced the concept of differentiation, which means that different departments pursue different goals and may have different attitudes and values. Chapter 5 touched on conflict and power relationships among organizations. Chapter 10 discussed the emergence of subcultures, and in Chapter 12, coalition building was proposed as one way to resolve disagreements among managers and departments.

The first sections of this chapter explore the nature of intergroup conflict, characteristics of organizations that contribute to conflict, and the use of a political versus a rational model of organization to manage conflicting interests. Subsequent sections examine individual and organizational power, the vertical and horizontal sources of power for managers and other employees, and how power is used to attain organizational goals. We also look at the trend toward empowerment, sharing power with lower-level employees. The latter part of the chapter turns to politics, which is the application of power and influence to achieve desired outcomes. We discuss ways managers increase their power, political tactics for using power, and some ways managers can enhance collaboration among people and departments.

INTERGROUP CONFLICT IN ORGANIZATIONS

Intergroup conflict requires three ingredients: group identification, observable group differences, and frustration. First, employees have to perceive themselves as part of an identifiable group or department.⁵ Second, there has to be an observable group difference of some form. Groups may be located on different floors of the building, members may have different social or educational backgrounds, or members may work in different departments. The ability to identify oneself as a part of one group and to observe differences in comparison with other groups is necessary for conflict.⁶

The third ingredient is frustration. Frustration means that if one group achieves its goal, the other will not; it will be blocked. Frustration need not be severe and only needs to be anticipated to set off intergroup conflict. Intergroup conflict will appear

when one group tries to advance its position in relation to other groups. **Intergroup conflict** can be defined as the behavior that occurs among organizational groups when participants identify with one group and perceive that other groups may block their group's goal achievement or expectations. Conflict means that groups clash directly, that they are in fundamental opposition. Conflict is similar to competition but more severe. **Competition** is rivalry among groups in the pursuit of a common prize, whereas conflict presumes direct interference with goal achievement.

Intergroup conflict within organizations can occur horizontally across departments or vertically between different levels of the organization. The production department of a manufacturing company may have a dispute with quality control because new quality procedures reduce production efficiency. Teammates may argue about the best way to accomplish tasks and achieve goals. Employees may clash with bosses about new work methods, reward systems, or job assignments. Another typical area of conflict is between groups such as unions and management or franchise owners and headquarters. For example, the United Auto Workers (UAW) has routinely clashed with U.S. automakers over demands from management that union workers accept decreased wages and benefits to alleviate increasing cost pressures. Franchise owners for McDonald's, Taco Bell, Burger King, and KFC have clashed with headquarters because of the increase of company-owned stores in neighborhoods that compete directly with franchisees.

Conflict can also occur between different divisions or business units within an organization, such as between the auditing and consulting units of big firms such as PricewaterhouseCoopers and Deloitte Touche.¹⁰ In global organizations, conflicts between regional managers and business division managers, among different divisions, or between divisions and headquarters are common because of the complexities of international business, as described in Chapter 6. Similar problems occur between distinct organizations. As we briefly discussed in Chapter 5, with so many companies involved in interorganizational collaboration, conflicts and shifting power relationships are inevitable.

Sources of Conflict

Some specific organizational characteristics can generate conflict. These **sources of intergroup conflict** are goal incompatibility, differentiation, task interdependence, and limited resources. These characteristics of organizational relationships are determined by the contextual factors of environment, size, technology, strategy and goals, and organizational structure, which have been discussed in previous chapters. These characteristics, in turn, help shape the extent to which a rational model of behavior versus a political model of behavior is used to accomplish objectives.

A certain amount of conflict is good for an organization.

ANSWER: Agree. Conflict is inevitable in all human relationships, including those in organizations, and is often a good thing. Some conflict can be healthy because it contributes to diverse thinking and leads to change. If there is no conflict whatsoever, there is likely no growth and development either.

ASSESS YOUR ANSWER



guidelines in mind:

Recognize that some interdepartmental conflict is natural and can benefit the organization. Associate the organizational design characteristics of goal incompatibility, differentiation, task interdependence, and resource scarcity with greater conflict among groups. Expect to devote more time and energy to resolving conflict in these situations.

Goal Incompatibility. The goals of each department reflect the specific objectives members are trying to achieve. The achievement of one department's goals often interferes with another department's goals, leading to conflict. University police, for example, have a goal of providing a safe and secure campus. They can achieve their goal by locking all buildings on evenings and weekends and not distributing keys. Without easy access to buildings, however, progress toward the science department's research goals will proceed slowly. On the other hand, if scientists come and go at all hours and security is ignored, police goals for security will not be met. Goal incompatibility throws the departments into conflict with each other.

The potential for conflict is perhaps greater between marketing and manufacturing than between other departments because the goals of these two departments are frequently at odds. Exhibit 13.1 shows examples of goal conflict between typical marketing and manufacturing departments. Marketing strives to increase the breadth of the product line to meet customer tastes for variety. A broad product line means short production runs, so manufacturing has to bear higher costs. Typical areas of goal conflict are quality, cost control, and new products or services. For example, at Rockford Health Systems, the human resources (HR) department wanted to implement a new self-service benefits system that would let employees manage their benefits from their home computers, but the high price of the software licenses conflicted with the finance department's goal of controlling costs. Another example is the goal conflict between business managers and editorial managers at *The Los Angeles Times*, described earlier. Goal incompatibility is probably the greatest cause of intergroup conflict in organizations. Goal conflict also occurs within churches and religious groups.

EXHIBIT 13.1Marketing-Manufacturing Areas of Potential Goal Conflict

	MARKETING versu	s MANUFACTURING
Goal Conflict	Operative Goal Is Customer Satisfaction	Operative Goal Is Production Efficiency
Conflict Area	Typical Comment	Typical Comment
1. Breadth of product line	"Our customers demand variety."	"The product line is too broad—all we get are short, uneconomical runs."
2. New product introduction	"New products are our lifeblood."	"Unnecessary design changes are prohibitively expensive."
3. Product scheduling	"We need faster response. Our customer lead times are too long."	"We need realistic commitments that don't change like wind direction."
4. Physical distribution	"Why don't we ever have the right merchandise in inventory?"	"We can't afford to keep huge inventories."
5. Quality	"Why can't we have reasonable quality at lower cost?"	"Why must we always offer options that are too expensive and offer little customer utility?"

Source: Based on Benson S. Shapiro, "Can Marketing and Manufacturing Coexist?" *Harvard Business Review* 55 (September–October 1977), 104–114; and Victoria L. Crittenden, Lorraine R. Gardiner, and Antonie Stam, "Reducing Conflict between Marketing and Manufacturing," *Industrial Marketing Management* 22 (1993), 299–309.

Church schisms are almost as numerous as churches—and they are frequently linked to differences in goals. Recent years have seen splits in some church congre-



gations related to the "purpose-driven" movement espoused by Reverend Rick Warren, pastor of Saddleback Church in Lake Forest, California, and author of *The Purpose Driven Life*. Warren advocates that churches be *purpose driven* and attract nonbelievers by using modern growth techniques, such as marketing research, lively services incorporating rock music, volunteer programs, and more focus on everyday personal problems rather than fighting sin.

The Purpose-Driven Church

At the Valley View Christian Church in Dallas, some leaders who had a goal of increasing membership, particularly in the 20-to-30-year-old age group, believed adopting modern techniques based on Warren's principles was the way to grow. Other leaders, however, preferred a goal of strengthening the church's traditions and continuing an emphasis on atonement and redemption rather than solving marital problems or dealing with personal angst. Eventually, Valley View split, with the traditionalists setting up a new congregation.

The purpose-driven movement is only one aspect of an ongoing conflict within Christian churches over whether they should adapt and modernize their religion or strengthen and honor tradition. Similar conflicts have roiled the Episcopal Church, where some groups have left over issues such as the ordination of women and gays, revisions to the Book of Common Prayer, or changes in liturgical practices. In late 2008, conservatives announced the founding of a rival denomination, to be called the Anglican Church in North America, reflecting a major conflict within Anglican Christianity that will affect the church for years to come.¹⁴

Differentiation. Differentiation was defined in Chapter 4 as "the differences in cognitive and emotional orientations among managers in different functional departments." Functional specialization requires people with specific education, skills, attitudes, and time horizons. For example, people may join a sales department because they have ability and aptitude consistent with sales work. After becoming members of the sales department, they are influenced by departmental norms and values.

Departments or divisions within an organization often differ in values, attitudes, and standards of behavior, and these subcultural differences lead to conflicts.¹⁵ Consider an encounter between a sales manager and a research and development (R&D) scientist about a new product:

The sales manager may be outgoing and concerned with maintaining a warm, friendly relationship with the scientist. He may be put off because the scientist seems withdrawn and disinclined to talk about anything other than the problems in which he is interested. He may also be annoyed that the scientist seems to have such freedom in choosing what he will work on. Furthermore, the scientist is probably often late for appointments, which, from the salesman's point of view, is no way to run a business. Our scientist, for his part, may feel uncomfortable because the salesman seems to be pressing for immediate answers to technical questions that will take a long time to investigate. All the discomforts are concrete manifestations of the relatively wide differences between these two men in respect to their working and thinking styles. ¹⁶

Task Interdependence. Task interdependence refers to the dependence of one unit on another for materials, resources, or information. As described in Chapter 7, pooled interdependence means there is little interaction; sequential interdependence means

the output of one department goes to the next department; and *reciprocal interde*pendence means that departments mutually exchange materials and information.¹⁷

Generally, as interdependence increases, the potential for conflict increases. ¹⁸ In the case of pooled interdependence, units have little need to interact. Conflict is at a minimum. Sequential and reciprocal interdependence require employees to spend time coordinating and sharing information. Employees must communicate frequently, and differences in goals or attitudes will surface. Conflict is especially likely to occur when agreement is not reached about the coordination of services to each other. Greater interdependence means departments often exert pressure for a fast response because departmental work has to wait on other departments. ¹⁹

Limited Resources. Another major source of conflict involves competition between groups for what members perceive as limited resources.²⁰ Organizations have limited money, physical facilities, staff resources, and human resources to share among departments. In their desire to achieve goals, groups want to increase their resources. This throws them into conflict. Managers may develop strategies, such as inflating budget requirements or working behind the scenes, to obtain a desired level of resources.

Resources also symbolize power and influence within an organization. The ability to obtain resources enhances prestige. Departments typically believe they have a legitimate claim on additional resources. However, exercising that claim results in conflict. For example, in almost every organization, conflict occurs during the annual budget exercise, often creating political activity.

Rational versus Political Model

The sources of intergroup conflict are listed in Exhibit 13.2. The degree of goal incompatibility, differentiation, interdependence, and competition for limited

EXHIBIT 13.2

Sources of Conflict and Use of Rational versus Political Model

tent across pants lized	Goals Power and	Inconsistent, pluralistic within the organization Decentralized, shifting coalitions
lized		Decentralized, shifting coalitions
	control	and interest groups
, logical, rational	Decision process	Disorderly, result of bargaining and interplay among interests
of efficiency	Rules and norms	Free play of market forces; conflict is legitimate and expected
*	Information	Ambiguous; information used and withheld strategically
	ive, systematic, te	ive, systematic, Information

resources determines whether a rational or political model of behavior is used within the organization to accomplish goals.

When goals are in alignment, there is little differentiation, departments are characterized by pooled interdependence, and resources seem abundant, managers can use a **rational model** of organization, as outlined in Exhibit 13.2. As with the rational approach to decision making described in Chapter 12, the rational model of organization is an ideal that is not fully achievable in the real world, though managers strive to use rational processes whenever possible. In the rational organization, behavior is not random or accidental. Goals are clear and choices are made in a logical way. When a decision is needed, the goal is defined, alternatives are identified, and the choice with the highest probability of success is selected. The rational model is also characterized by centralized power and control, extensive information systems, and an efficiency orientation.²¹

The opposite view of organizational processes is the **political model**, also described in Exhibit 13.2. When differences are great, organization groups have separate interests, goals, and values. Disagreement and conflict are normal, so power and influence are needed to reach decisions. Groups will engage in the push and pull of debate to decide goals and reach decisions. Information is ambiguous and incomplete. The political model describes the way organizations operate much of the time. Although managers strive to use a rational approach, the political model prevails because each department has different interests it wants met and different goals it wants to achieve. Purely rational procedures do not work for many circumstances.

Typically, both rational and political processes are used in organizations. Neither the rational model nor the political model characterizes things fully, but each will be used some of the time. For example, at Amazon.com, founder and CEO Jeff Bezos says he emphasizes a rational approach to planning and decision making whenever possible. "The great thing about fact-based decisions," he says, "is that they overrule the hierarchy. The most junior person in the company can win an argument with the most senior person with a fact-based decision." For decisions and situations that are complex, ill-defined, and controversial, however, Bezos uses a political model, discussing the issues with people and building agreement among senior executives.²²

Managers may strive to adopt rational procedures but will find that politics is needed to accomplish objectives. The political model means managers learn to acquire, develop, and use power to achieve important outcomes.

Briefcase

As an organization manager, keep these guidelines in mind:

Use the rational model of organization when alternatives are clear, when goals are defined, and when managers can estimate the outcomes accurately. In these circumstances, coalition building, cooptation, or other political tactics are not needed and will not lead to effective decisions.

POWER AND ORGANIZATIONS

Power is an intangible force in organizations. It cannot be seen, but its effect can be felt. *Power* is often defined as the potential ability of one person (or department) to influence other people (or departments) to carry out orders²³ or to do something they would not otherwise have done.²⁴ Other definitions stress that power is the ability to achieve goals or outcomes that power holders desire.²⁵ The achievement of desired outcomes is the basis of the definition used here: **Power** is the ability of one person or department in an organization to influence other people to bring about desired outcomes. It is the potential to influence others within the organization with the goal of attaining desired outcomes for power holders. Powerful managers, for

instance, are often able to get bigger budgets for their departments, more favorable production schedules, and more control over the organization's agenda.²⁶

Power exists only in a relationship between two or more people, and it can be exercised in either vertical or horizontal directions. The source of power often derives from an exchange relationship in which one position, department, or organization provides scarce or valued resources to other people, departments, or organizations. When one is dependent on another, a power relationship emerges in which the side with the resources has greater power.²⁷ Power holders can achieve compliance with their requests.

As an illustration, consider how power is shifting in the Hollywood comedy industry. At one time, United Talent Agency (UTA) had control of most of the big names in comedy, including Jim Carrey, Owen Wilson, Ben Stiller, Will Ferrell, and Jack Black. That gave UTA tremendous power in the industry, enabling the agency to virtually dictate the terms it wanted for any star's project. With growing cost pressures, however, studios began to crack down on the prices they were willing to pay, the percentage of revenues they were willing to share, and the extent to which they were willing to meet demands for script changes or other conditions. At the same time, conflicts within UTA led to the departure of several important stars. Power shifted toward the studios, because no single agency had control over a large stable of comedians.²⁸

Individual versus Organizational Power

In popular literature, power is often described as a personal characteristic, and a frequent topic is how one person can influence or dominate another person.²⁹ You probably recall from an earlier management or organizational behavior course that managers have five sources of personal power.³⁰ *Legitimate power* is the authority granted by the organization to the formal management position a manager holds. *Reward power* stems from the ability to bestow rewards—a promotion, raise, or pat on the back—to other people. The authority to punish or recommend punishment is called *coercive power*. *Expert power* derives from a person's greater skill or knowledge about the tasks being performed. The last, *referent power*, is derived from personal characteristics: people admire the manager and want to be like or identify with the manager out of respect and admiration. Each of these sources may be used by individuals within organizations.

Power in organizations, however, is often the result of structural characteristics.³¹ Organizations are large, complex systems that may contain hundreds, even thousands, of people. These systems have a formal hierarchy in which some tasks are more important regardless of who performs them. In addition, some positions have access to more information and greater resources, or their contribution to the organization is more critical. Thus, the important power processes in organizations reflect larger organizational relationships, both horizontal and vertical.

Power versus Authority

Anyone in an organization can exercise power to achieve desired outcomes. For example, when the Discovery Channel wanted to extend its brand beyond cable television, Tom Hicks began pushing for a focus on the Internet. Even though Discovery's CEO favored exploring interactive television instead, Hicks organized a grassroots campaign that eventually persuaded the CEO to focus on Web publishing,

indicating that Hicks had power within the organization. Eventually, Hicks was put in charge of running Discovery Channel Online.³²

The concept of formal authority is related to power but is narrower in scope. **Authority** is also a force for achieving desired outcomes, but only as prescribed by the formal hierarchy and reporting relationships. Three properties identify authority:

- 1. Authority is vested in organizational positions. People have authority because of the positions they hold, not because of personal characteristics or resources.
- 2. Authority is accepted by subordinates. Subordinates comply because they believe position holders have a legitimate right to exercise authority.³³ In most North American organizations, employees accept that supervisors can legitimately tell them what time to arrive at work, the tasks to perform while they're there, and what time they can go home.
- 3. Authority flows down the vertical hierarchy.³⁴ Authority exists along the formal chain of command, and positions at the top of the hierarchy are vested with more formal authority than are positions at the bottom.

Formal authority is exercised downward along the hierarchy. Organizational power, on the other hand, can be exercised upward, downward, and horizontally in organizations. In addition, managers can have formal authority but little real power. Consider what happened when Bill Gates turned the CEO job at Microsoft over to Steven Ballmer. Although Ballmer got the title and the formal authority, Gates retained the power. He continued to hold sway over many day-to-day business decisions, and sometimes his personal power would undermine Ballmer in front of other executives. Though Gates has now fully stepped aside from management of the company and publicly supports Ballmer's decisions, insiders say the power struggle left the company in a weakened position, without a clear strategic direction.³⁵ In the following sections, we will examine how employees throughout the organization can tap into both vertical and horizontal sources of power.

Vertical Sources of Power

All employees along the vertical hierarchy have access to some sources of power. Although a large amount of power is typically allocated to top managers by the organization structure, people throughout the organization often obtain power disproportionate to their formal positions and can exert influence in an upward direction, as Tom Hicks did at the Discovery Channel. There are four major sources of vertical power: formal position, resources, control of decision premises and information, and network centrality.³⁶

Formal Position. Certain rights, responsibilities, and prerogatives accrue to top positions. People throughout the organization accept the legitimate right of top managers to set goals, make decisions, and direct activities. This is *legitimate power*, as defined earlier. Senior managers often use symbols and language to perpetuate their legitimate power. For example, the new administrator at a large hospital in the San Francisco area symbolized his legitimate position power by issuing a newsletter with his photo on the cover and airing a 24-hour-a-day video to personally welcome patients.³⁷

The amount of power provided to middle managers and lower-level participants can be built into the organization's structural design. The allocation of power to middle managers and staff is important because power enables employees to be

Briefcase

As an organization manager, keep this guideline in mind:

Understand and use the vertical sources of power in organizations, including formal position, resources, control of decision premises and information, and network centrality.

productive. When job tasks are nonroutine, and when employees participate in self-directed teams and problem-solving task forces, this encourages them to be flexible and creative and to use their own discretion. Allowing people to make their own decisions increases their power.

Power is also increased when a position encourages contact with high-level people. Access to powerful people and the development of a relationship with them provide a strong base of influence.³⁸ For example, in some organizations an administrative assistant to the president might have more power than a department head because the assistant has access to the senior executive on a daily basis.

The logic of designing positions for more power assumes that an organization does not have a limited amount of power to be allocated among high-level and low-level employees. The total amount of power in an organization can be increased by designing tasks and interactions along the hierarchy so everyone can exert more influence. If the distribution of power is skewed too heavily toward the top, research suggests that the organization will be less effective.³⁹

Resources. Organizations allocate huge amounts of resources. Buildings are constructed, salaries are paid, and equipment and supplies are purchased. Each year, new resources are allocated in the form of budgets. These resources are allocated downward from top managers. Top managers often own stock, which gives them property rights over resource allocation. However, in many of today's organizations, employees throughout the organization also share in ownership, which increases their power.

In most cases, top managers control the resources and, hence, can determine their distribution. Resources can be used as rewards and punishments, which are additional sources of power. Resource allocation also creates a dependency relationship. Lower-level participants depend on top managers for the financial and physical resources needed to perform their tasks. Top management can exchange resources in the form of salaries and bonuses, personnel, promotions, and physical facilities for compliance with the outcomes they desire.

Control of Decision Premises and Information. Control of **decision premises** means that top managers place constraints on decisions made at lower levels by specifying a decision frame of reference and guidelines. In one sense, top managers make big decisions, whereas lower-level participants make small decisions. Top management decides which goal an organization will try to achieve, such as increased market share. Lower-level participants then decide how the goal is to be reached. In one company, top management appointed a committee to select a new marketing vice president. The CEO provided the committee with detailed qualifications that the new vice president should have. He also selected people to serve on the committee. In this way, the CEO shaped the decision premises within which the marketing vice president would be chosen. Top manager actions and decisions such as these place limits on the decisions of lower-level managers and thereby influence the outcome of their decisions.⁴⁰

The control of information can also be a source of power. Managers recognize that information is a primary business resource and that by controlling what information is collected, how it is interpreted, and how it is shared, they can influence how decisions are made.⁴¹ In many of today's companies, information is openly and broadly shared, which increases the power of people throughout the organization.

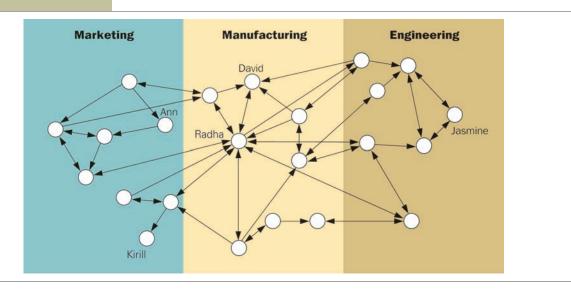
However, top managers generally have access to more information than do other employees. This information can be released as needed to shape the decision outcomes of other people. In one organization, Clark Ltd., the senior information technology (IT) manager controlled information given to the board of directors and thereby influenced the board's decision to purchase a sophisticated computer system. ⁴² The board of directors had formal authority to decide from which company the system would be purchased. The management services group was asked to recommend which of six computer manufacturers should receive the order. Jim Kenny was in charge of the management services group, and Kenny disagreed with other managers about which system to purchase. As shown in Exhibit 13.3, other managers had to go through Kenny to have their viewpoints heard by the board. Kenny shaped the board's thinking toward selecting the system he preferred by controlling information given to them.

Middle managers and lower-level employees may also have access to information that can increase their power. An assistant to a senior executive can often control information that other people want and will thus be able to influence those people. Top executives depend on people throughout the organization for information about problems or opportunities. Middle managers or lower-level employees may manipulate the information they provide to top managers in order to influence decision outcomes.

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Network Centrality. Network centrality means being centrally located in the organization and having access to information and people that are critical to the company's success. Managers as well as lower-level employees are more effective and more influential when they put themselves at the center of a communication network, building connections with people throughout the company. For example, in Exhibit 13.4, Radha has a well-developed communication network, sharing information and assistance with many people across the marketing, manufacturing, and engineering departments. Contrast Radha's contacts with those of Jasmine or Kirill. Who do you think is likely to have greater access to resources and more influence in the organization?

EXHIBIT 13.4An Illustration of Network Centrality



People at all levels of the hierarchy can use the idea of network centrality to accomplish goals and be more successful. A real-life example comes from Xerox Corporation. Several years ago, Cindy Casselman, who had little formal power and authority, began selling her idea for an intranet site to managers all over the company. Casselman had a well-developed network, and she worked behind the scenes, gradually gaining the power she needed to make her vision a reality—and win a promotion in the process.⁴³

People can increase their network centrality by becoming knowledgeable and expert about certain activities or by taking on difficult tasks and acquiring specialized knowledge that makes them indispensable to managers above them. People who show initiative, work beyond what is expected, take on undesirable but important projects, and show interest in learning about the company and industry often find themselves with influence. Physical location also helps because some locations are in the center of things. Central location lets a person be visible to key people and become part of important interaction networks.

ASSESS YOUR ANSWER

2 A factory worker on the assembly line is in a low power position and should accept that he or she will have little influence over what happens.

ANSWER: Disagree. Although an assembly line worker typically has little formal power and authority, all employees have access to some sources of power. It is up to the individual to network or gather information to expand his or her power in the organization. In addition, when employees band together, they can have a tremendous amount of power. Managers can't get anything done unless employees cooperate and do the work they're supposed to do.

People. Top leaders often increase their power by surrounding themselves with a group of loyal executives.⁴⁴ Loyal managers keep the leader informed and in touch with events and report possible disobedience or troublemaking in the organization. Top executives can use their central positions to build alliances and exercise substantial power when they have a management team that is fully in support of their decisions and actions.

Many top executives strive to build a cadre of loyal and supportive executives to help them achieve their goals for the organization. For example, former New York Stock Exchange Chairman Dick Grasso placed his friends and allies in critical positions and pushed favored candidates for board posts. As another example, the U.S. government handpicked the advisers and committee members who would influence decisions made by the interim Iraqi government.⁴⁵

This idea works in the opposite direction too. Lower-level people have greater power when they have positive relationships and connections with higher-ups. By being loyal and supportive of their bosses, employees sometimes gain favorable status and exert greater influence.

The Power of Empowerment

In forward-thinking organizations, top managers want lower-level employees to have greater power so they can do their jobs more effectively. These managers intentionally push power down the hierarchy and share it with employees to enable them to achieve goals. **Empowerment** is power sharing, the delegation of power or authority to subordinates in an organization.⁴⁶ Increasing employee power heightens motivation for task accomplishment because people improve their own effectiveness, choosing how to do a task and using their creativity.⁴⁷

Empowering employees involves giving them three elements that enable them to act more freely to accomplish their jobs: information, knowledge, and power.⁴⁸

- 1. *Employees receive information about company performance*. In companies where employees are fully empowered, all employees have access to all financial and operational information.
- 2. Employees have knowledge and skills to contribute to company goals. Companies use training programs and other development tools to help people acquire the knowledge and skills they need to contribute to organizational performance.
- 3. *Employees have the power to make substantive decisions*. Empowered employees have the authority to directly influence work procedures and organizational performance, such as through quality circles or self-directed work teams.

Many of today's organizations are implementing empowerment programs, but they are empowering workers to varying degrees. At some companies, empowerment means encouraging workers' ideas while managers retain final authority for decisions; at others it means giving employees almost complete freedom and power to make decisions and exercise initiative and imagination.⁴⁹ The continuum of empowerment can run from a situation in which front-line workers have almost no discretion, such as on a traditional assembly line, to full empowerment, where workers even participate in formulating organizational strategy. One organization that pushes empowerment to the maximum is Semco.

Briefcase

As an organization manager, keep these guidelines in mind:

Do not leave lower organization levels powerless. If vertical power is too heavy in favor of top management, empower lower levels by giving people the tools they need to perform better: information, knowledge and skills, and the power to make substantive decisions.



The Brazil-based company Semco's fundamental operating principle is to harness the wisdom of all its employees. It does so by letting people control their work hours, loca-

tion, and even pay plans. Employees also participate in all organizational decisions, including what businesses Semco should pursue.

Semco leaders believe economic success requires creating an atmosphere that puts power and control directly in the hands of employees. People can veto any new product idea or business venture. They choose their own leaders and manage themselves to accomplish goals. Information is openly and broadly shared so that everyone knows where they and the company stand. Instead of dictating Semco's identity and strategy, leaders allow it to be shaped by individual interests and efforts. People are encouraged to seek challenge, explore new ideas and business opportunities, and question the ideas of anyone in the company.

This high level of employee empowerment has helped Semco achieve decades of high profitability and growth despite fluctuations in the economy and shifting markets. "At Semco, we don't play by the rules," says Ricardo Semler. Semler, whose father started the company in the 1950s, says it doesn't unnerve him to "step back and see nothing on the company's horizon." He is happy to watch the company and its employees "ramble through their days, running on instinct and opportunity. . . ."⁵⁰ ■

Horizontal Sources of Power

Horizontal power pertains to relationships across departments, divisions, or other units. All vice presidents are usually at the same level on the organization chart. Does this mean each department has the same amount of power? No. Horizontal power is not defined by the formal hierarchy or the organization chart. Each department makes a unique contribution to organizational success. Some departments will have greater say and will achieve their desired outcomes, whereas others will not. For example, Charles Perrow surveyed managers in several industrial firms.⁵¹ He bluntly asked, "Which department has the most power?" among four major departments: production, sales and marketing, R&D, and finance and accounting. Partial survey results are given in Exhibit 13.5.

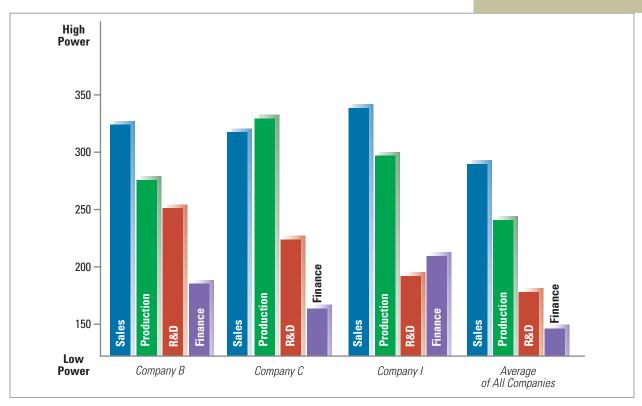
In most firms, sales had the greatest power. In a few firms, production was also quite powerful. On average, the sales and production departments were more powerful than R&D and finance, although substantial variation existed. Differences in the amount of horizontal power clearly occurred in those firms. Power shifts among departments depending on circumstances. Today, IT departments have growing power in many organizations. In the federal government, watchdog and regulatory agencies for Wall Street are increasing in power because of the 2008 financial meltdown.

Power differences also apply to organizations that join together in alliances or other partnerships, where one company may gain more power because of changing circumstances. For example, when SBC Communications (AT&T's predecessor) and Yahoo! first entered a strategic partnership in 2001, SBC desperately needed Yahoo! to help convince people to sign up for high-speed Internet service. By 2008, though, broadband was in high demand, and AT&T was in a much stronger position overall than Yahoo!, leading to a shift in the power relationship between the two companies. AT&T is negotiating to reduce the fees it pays to Yahoo!, which could kick the Internet company where it hurts even as it tries to become more competitive against Google.⁵²

Semco

EXHIBIT 13.5Ratings of Power among Departments in Industrial

Firms



Source: Charles Perrow, "Departmental Power and Perspective in Industrial Firms," in Mayer N. Zald, ed., *Power in Organizations* (Nashville, Tenn.: Vanderbilt University Press, 1970), 64.

Horizontal power is difficult to measure because power differences are not defined on the organization chart. However, some initial explanations for power differences, such as those shown in Exhibit 13.5, have been found. The theoretical concept that explains relative power is called strategic contingencies.⁵³

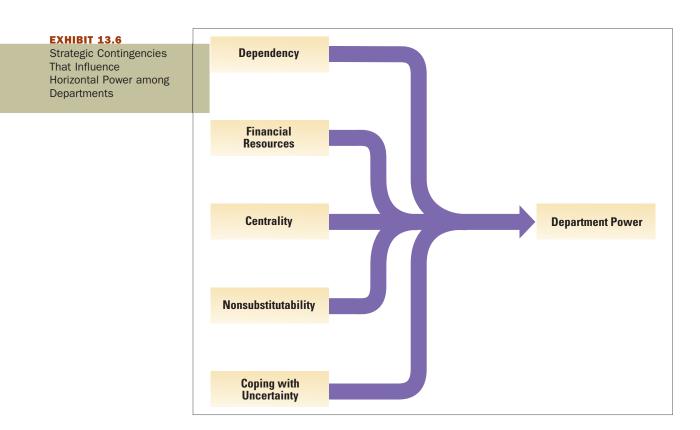
Strategic Contingencies. Strategic contingencies are events and activities both inside and outside an organization that are essential for attaining organizational goals. Departments involved with strategic contingencies for the organization tend to have greater power. Departmental activities are important when they provide strategic value by solving problems or crises for the organization. For example, if an organization faces an intense threat from lawsuits and regulations, the legal department will gain power and influence over organizational decisions because it copes with such a threat. If product innovation is the key strategic issue, the power of R&D can be expected to be high.

The strategic contingency approach to power is similar to the resource dependence model described in Chapters 4 and 5. Recall that organizations try to reduce dependency on the external environment. The strategic contingency approach to power suggests that the departments or organizations most responsible for dealing with key resource issues and dependencies in the environment will become most powerful. The National Football League, for instance, bowed to the power of the

cable companies and arranged for its television partners, CBS and NBC, to simultaneously broadcast along with the NFL Network the highly-anticipated December 2007 game between the undefeated Patriots and the Giants. The NFL tried for years to get the cable companies to add its network to their basic packages along with ESPN and ESPN2, but the cable companies refused because the price was too high. The NFL has a popular product, but with limited distribution options, it is in a low power position compared to the cable operators.⁵⁴

Power Sources. Jeffrey Pfeffer and Gerald Salancik, among others, have been instrumental in conducting research on the strategic contingency theory.⁵⁵ Their findings indicate that a department rated as powerful may possess one or more of the characteristics illustrated in Exhibit 13.6.⁵⁶ In some organizations these five **power sources** overlap, but each provides a useful way to evaluate sources of horizontal power.

1. Dependency. Interdepartmental **dependency** is a key element underlying relative power. Power is derived from having something someone else wants. The power of department A over department B is greater when department B depends on department A.⁵⁷ Materials, information, and resources may flow between departments in one direction, such as in the case of sequential task interdependence (see Chapter 7). In such cases, the department receiving resources is in a lower power position than the department providing them. The number and strength of dependencies are also important. When seven or eight departments must come for help to the engineering department, for example, engineering is in a strong power position. In contrast, a department that depends on many other



- departments is in a low power position. Likewise, a department in an otherwise low power position might gain power through dependencies. If a factory cannot produce without the expertise of maintenance workers to keep the machines working, the maintenance department is in a strong power position because it has control over a strategic contingency.
- 2. Financial resources. Control over resources is an important source of power in organizations. Money can be converted into other kinds of resources that are needed by other departments. Money generates dependency; departments that provide financial resources have something other departments want. Departments that generate income for an organization have greater power. Exhibit 13.5 showed sales as the most powerful unit in most industrial firms. This is because salespeople find customers and bring in money, thereby removing an important problem for the organization. An ability to provide financial resources also explains why certain departments are powerful in other organizations, such as universities.

You might expect budget allocation in a state university to be a straightforward process. The need for financial resources can be determined by such things as the num-

INPRACT

ber of undergraduate students, the number of graduate students, and the number of faculty in each department.

In fact, resource allocation at the University of Illinois is not clear-cut. The University of Illinois has a relatively fixed resource inflow from state government. Beyond that, important resources come from research grants and the quality of students and faculty. University departments that provide the most resources to the university are rated as having the most power. Some departments have more power because of their resource contribution to the university. Departments that generate large research grants are more powerful, for instance, because research grants contain a sizable overhead payment to university administration. This overhead money pays for a large share of the university's personnel and facilities. The size of a department's graduate student body and the national prestige of the department also add to power. Graduate students and national prestige are nonfinancial resources that add to the reputation and effectiveness of the university.

How do university departments use their power? Generally, they use it to obtain even more resources from the rest of the university. Very powerful departments receive university resources, such as graduate-student fellowships, internal research support, and summer faculty salaries, far in excess of their needs based on the number of students and faculty.⁵⁸

As shown in the example of the University of Illinois, power accrues to departments that bring in or provide resources that are highly valued by an organization. Power enables those departments to obtain more of the scarce resources allocated within the organization. "Power derived from acquiring resources is used to obtain more resources, which in turn can be employed to produce more power—the rich get richer." ⁵⁹

3. Centrality. Centrality reflects a department's role in the primary activity of an organization. 60 One measure of centrality is the extent to which the work of the department affects the final output of the organization. For example, the production department is more central and usually has more power than

University of Illinois



manager, keep these guidelines in mind:

Be aware of the important horizontal power relationships that come from the ability of a department to deal with strategic contingencies that confront the organization. Increase the horizontal power of a department by increasing involvement in strategic contingencies.

staff groups (assuming no other critical contingencies). Centrality is associated with power because it reflects the contribution made to the organization. The corporate finance department of an investment bank generally has more power than the stock research department. By contrast, in the manufacturing firms described in Exhibit 13.5, finance tends to be low in power. When the finance department has the limited task of recording money and expenditures, it is not responsible for obtaining critical resources or for producing the products of the organization. Today, however, finance departments have greater power in many organizations because of the greater need for controlling costs.

4. *Nonsubstitutability*. Power is also determined by **nonsubstitutability**, which means that a department's function cannot be performed by other readily available resources. Similarly, if an employee cannot be easily replaced, his or her power is greater. If an organization has no alternative sources of skill and information, a department's power will be greater. This can be one reason top managers use outside consultants. Consultants might be used as substitutes for staff people to reduce the power of staff groups.

The impact of substitutability on power was studied for programmers in computer departments.⁶¹ When computers were first introduced, programming was a rare and specialized occupation. Programmers controlled the use of organizational computers because they alone possessed the knowledge to program them. Over a period of about 10 years, computer programming became a more common activity. People could be substituted easily, and the power of programming departments dropped. Substitutability affects the power of organizations as well. Major record labels once had tremendous power over artists in the music industry because they had almost total control over which artists got their music recorded and in front of consumers. Today, though, bands like Nine Inch Nails and Radiohead can release albums directly on the Internet without going through a label. In addition, Wal-Mart, the largest music retailer in the United States, has entered the music making and marketing business, buying albums directly from artists like the Eagles and Journey. Intense marketing helped the Eagles' "Long Road Out of Eden" sell 711,000 copies through Wal-Mart in its first week, without a traditional record company ever being involved.⁶²

5. Coping with Uncertainty. Elements in the environment can change swiftly and can be unpredictable and complex. In the face of uncertainty, little information is available to managers on appropriate courses of action. Departments that reduce this uncertainty for the organization will increase their power. 63 When market research personnel accurately predict changes in demand for new products, they gain power and prestige because they have reduced a critical uncertainty. But forecasting is only one technique. Sometimes uncertainty can be reduced by taking quick and appropriate action after an unpredictable event occurs.

Departments can cope with critical uncertainties by (1) obtaining prior information, (2) prevention, and (3) absorption.⁶⁴ Obtaining prior information means a department can reduce an organization's uncertainty by forecasting an event. Departments increase their power through prevention by predicting and forestalling negative events. Absorption occurs when a department takes action after an event to reduce its negative consequences. Consider the following case from the health care industry.

Because hospitals and other health care providers have to deal with so many complex legal and regulatory matters, the legal department is usually in a high power posi-



tion. That is certainly the case at Carilion Health System, based in Roanoke, Virginia. Some years ago, the legal department successfully fought off a U.S. Department of Justice antitrust lawsuit and played a crucial role in negotiating a merger between Carilion and Roanoke's only other hospital.

Since then, the legal department has been kept busy not only with regulatory issues but also with trying to get payment from patients who say they can't pay their high medical bills. Because Roanoke is now a "one-market town" in terms of health care, critics say Carilion is getting away with charging excessive fees, thereby hurting patients, businesses, insurers, and the entire community. The Roanoke City District Court devotes one morning a week to cases filed by Carilion, which during one recent fiscal year sued nearly 10,000 patients, garnished the wages of more than 5,000 people, and placed liens on nearly 4,000 homes.

The negative press resulting from this, along with a backlash from independent doctors who say Carilion is intentionally stifling competition, means the public relations department has a chance to increase its power as well. The department is actively involved in efforts to bolster Carilion's image as a good corporate citizen, emphasizing that it only sues patients it believes have the ability to pay and pointing out the millions of dollars Carilion dispenses to charity care each year. ⁶⁵

At Carilion, the legal department absorbed a critical uncertainty by fighting off the antitrust lawsuit and helping Carilion grow in size and power. It continues to take action after uncertainties appear (such as patients who don't pay).

Horizontal power relationships in organizations change as strategic contingencies change. Whereas the legal department will likely continue in a high power position at Carilion, the need of the hospital to improve its reputation and fend off growing criticism could lead to an increase in the power of the public relations department. The public relations department can gain power by being involved in activities targeted toward both prevention and absorption. Departments that help organizations cope with new strategic issues will increase their power.

POLITICAL PROCESSES IN ORGANIZATIONS

Politics, like power, is intangible and difficult to measure. It is hidden from view and is hard to observe in a systematic way. Two surveys uncovered the following reactions of managers toward political behavior.⁶⁶

- 1. Most managers have a negative view toward politics and believe that politics will more often hurt than help an organization in achieving its goals.
- 2. Managers believe that political behavior is common in practically all organizations.
- 3. Most managers think that political behavior occurs more often at upper rather than lower levels in organizations.
- 4. Managers believe political behavior arises in certain decision domains, such as structural change, but is absent from other decisions, such as handling employee grievances.

Carilion Health System

Based on these surveys, politics seems more likely to occur at the top levels of an organization and around certain issues and decisions. Moreover, managers do not approve of political behavior. The remainder of this chapter explores more fully what political behavior is, when it should be used, the type of issues and decisions most likely to be associated with politics, and some political tactics that may be effective.

Definition

Power has been described as the available force or potential for achieving desired outcomes. *Politics* is the use of power to influence decisions in order to achieve those outcomes. The exercise of power and influence has led to two ways to define politics—as self-serving behavior or as a natural organizational decision process. The first definition emphasizes that politics is self-serving and involves activities that are not sanctioned by the organization.⁶⁷

In this view, politics involves deception and dishonesty for purposes of individual self-interest and leads to conflict and disharmony within the work environment. This dark view of politics is widely held by laypeople, and political activity certainly can be used in this way. Recent studies have shown that workers who perceive this kind of political activity within their companies often have related feelings of anxiety and job dissatisfaction. Studies also support the belief that inappropriate use of politics is related to low employee morale, inferior organizational performance, and poor decision making. This view of politics explains why managers in the aforementioned surveys did not approve of political behavior.

Although politics can be used in a negative, self-serving way, the appropriate use of political behavior can serve organizational goals.⁶⁹ The second view sees politics as a natural organizational process for resolving differences among organizational interest groups.⁷⁰ Politics is the process of bargaining and negotiation that is used to overcome conflicts and differences of opinion. In this view, politics is similar to the coalition-building decision processes described in Chapter 12.

The organization theory perspective views politics as described in the second definition. Politics is simply the activity through which power is exercised in the resolution of conflicts and uncertainty. Consider that Jeffrey Immelt, CEO of General Electric, considers himself a failure if he exercises his formal authority more than seven or eight times a year. The rest of the time, Immelt is using political activity to persuade and influence others and to resolve conflicting ideas and opinions.⁷¹ Politics is neutral and is not necessarily harmful to the organization. The formal definition of organizational politics is as follows: **Organizational politics** involves activities to acquire, develop, and use power and other resources to influence others and obtain the preferred outcome when there is uncertainty or disagreement about choices.⁷²

Political behavior can be either a positive or a negative force. Politics is the use of power to get things accomplished—good things as well as bad. Uncertainty and conflict are natural and inevitable, and politics is the mechanism for reaching agreement. Politics includes informal discussions that enable people to arrive at consensus and make decisions that otherwise might be stalemated or unsolvable.

ASSESS YOUR ANSWER

When managers use politics, it usually leads to conflict and disharmony and will likely disrupt the smooth functioning of the organization.

ANSWER: *Disagree.* Politics is a natural organizational process for resolving differences and getting things done. Although politics can be used for negative and self-serving purposes, political activity is also the primary way managers are brought together to accomplish good things. Being political is part of the job of a manager, but managers should take care to use politics to serve the interests of the organization rather than themselves.

When Is Political Activity Used?

Politics is a mechanism for arriving at consensus when uncertainty is high and there is disagreement over goals or problem priorities. Recall the rational versus political models described in Exhibit 13.2. The political model is associated with conflict over goals, shifting coalitions and interest groups, ambiguous information, and uncertainty. Thus, political activity tends to be most visible when managers confront nonprogrammed decisions, as described in Chapter 12, and is related to the Carnegie model of decision making. Because managers at the top of an organization generally deal with more nonprogrammed decisions than do managers at lower levels, more political activity will appear at higher levels. Moreover, some issues are associated with inherent disagreement. Resources, for example, are critical for the survival and effectiveness of departments, so resource allocation often becomes a political issue. Rational methods of allocation do not satisfy participants. Three domains of political activity (areas in which politics plays a role) in most organizations are structural change, management succession, and resource allocation.

Structural reorganizations strike at the heart of power and authority relationships. Reorganizations such as those discussed in Chapter 3 change responsibilities and tasks, which also affects the underlying power base from strategic contingencies. For these reasons, a major reorganization can lead to an explosion of political activity.⁷³ Managers may actively bargain and negotiate to maintain the responsibilities and power bases they have. Mergers and acquisitions also frequently create tremendous political activity.

Organizational changes such as hiring new executives, promotions, and transfers have great political significance, particularly at top organizational levels where uncertainty is high and networks of trust, cooperation, and communication among executives are important.⁷⁴ Hiring decisions can generate uncertainty, discussion, and disagreement. Managers can use hiring and promotion to strengthen network alliances and coalitions by putting their own people in prominent positions.

The third area of political activity is resource allocation. Resource allocation decisions encompass all resources required for organizational performance, including salaries, operating budgets, employees, office facilities, equipment, use of the company airplane, and so forth. Resources are so vital that disagreement about priorities exists, and political processes help resolve the dilemmas.

USING POWER, POLITICS, AND COLLABORATION

One theme in this chapter has been that power in organizations is not primarily a phenomenon of the individual. It is related to the resources departments command, the role departments play in an organization, and the environmental contingencies with which departments cope. Position and responsibility, more than personality and style, may determine a manager's ability to influence outcomes in the organization.

Power is used through individual political behavior, however. To fully understand the use of power within organizations, it is important to look at both structural components and individual behavior. Although power often comes from larger organizational forms and processes, the political use of power involves individual-level activities and skills. To learn about your political skills, complete the questionnaire in the "How Do You Fit the Design?" box. Managers with political

How Do You Fit the Design?

Political Skills

How good are you at influencing people across an organization? To learn something about your political skills, answer the questions that follow. Please answer whether each item is Mostly True or Mostly False for you.

		Mostly True	Mostly False
1.	I am able to communicate easily and effectively with others.		
2.	I spend a lot of time at work developing connections with people outside my area.		
3.	I instinctively know the right thing to say or do to influence others.		
4.	I am good at using my connections outside my area to get things done at work.		
5.	When communicating with others I am absolutely genuine in what I say and do.		
6.	It is easy for me to reach out to new people.		
7.	I make strangers feel comfortable and at ease around me.		
8.	I am good at sensing the motivations and hidden agendas of others.		

Scoring: Give yourself one point for each item marked as Mostly True.

Interpretation: Having some basic political skill helps a manager gain broad support and influence. Political skills help a manager build personal and organizational relationships that enhance your team's outcomes. A score of 6 or higher suggests active political skills and a good start for your career, especially in an organization in which things get done politically. If you scored three or less, you may want to focus more on building collegial and supportive relationships as you progress in your career. If not, perhaps join an organization in which decisions and actions are undertaken by rational procedures rather than by support of key coalitions.

Source: Adapted from Gerald R. Ferris, Darren C. Treadway, Robert W. Kolodinsky, Wayne A. Hochwarter, Charles J. Kacmer, Ceasar Douglas, and Dwight D. Frink, "Development and Validation of the Political Skill Inventory," *Journal of Management* 31 (February 2005), 126–152.

skill are more effective at influencing others and thus getting what they want. These managers have honed their abilities to observe and understand patterns of interaction and influence in the organization. They are skilled at developing relationships with a broad network of people and can adapt their behavior and approach to diverse people and situations. Politically effective managers understand that influence is about relationships.⁷⁶

Managers can develop political competence, and they can learn to use a wide variety of influence tactics depending on their own position as well as the specific situation. For instance, research indicates that managers in HR departments may use softer, more subtle approaches than do managers in more powerful finance departments. In one study, HR executives, who were not seen as having centrality to the firm's mission, took a low-key approach to try to influence others, whereas finance executives, who had a more central and powerful position, used harder, more direct influence tactics.⁷⁷

The following sections summarize various tactics that managers can use to increase their own or their department's power base, political tactics they can use to achieve desired outcomes, and tactics for increasing cooperation and collaboration, thus reducing damaging conflict. These tactics are summarized in Exhibit 13.7.

Tactics for Increasing Power

Four tactics for increasing power are as follows:

- 1. Enter areas of high uncertainty. One source of individual or departmental power is to identify key uncertainties and take steps to remove those uncertainties. Uncertainties could arise from stoppages on an assembly line, from the quality demanded of a new product, or from the inability to predict a demand for new services. Once an uncertainty is identified, the department can take action to cope with it. By their very nature, uncertain tasks will not be solved immediately. Trial and error will be needed, which is to the advantage of the department. The trial-and-error process provides experience and expertise that cannot easily be duplicated by other departments.
- 2. *Create dependencies*. Dependencies are another source of power.⁷⁹ When the organization depends on a department for information, materials, knowledge, or skills, that department will hold power over others. This power can be increased by incurring obligations. There is much research indicating that most people feel

EXHIBIT 13.7Power and Political
Tactics in Organizations

Tactics for Increasing Political Tactics for Tactics for Enhancing the Power Base **Using Power** Collaboration 1. Enter areas of high uncertainty. 1. Build coalitions and expand 1. Create integration devices. 2. Create dependencies. 2. Use confrontation and networks. 3. Provide scarce resources. 2. Assign loyal people to key positions. negotiation. 4. Satisfy strategic contingencies. 3. Control decision premises. 3. Schedule intergroup 5. Make a direct appeal. 4. Enhance legitimacy and expertise. consultation. 5. Create superordinate goals. 4. Practice member rotation.



BookMark 13.0 (HAVE YOU READ THIS BOOK?

Influence: Science and Practice



ers and bring about desired outcomes. In his book Influence: Science and Practice, Robert Cialdini examines the social and psychological pressures that cause people to respond favorably to these various tactics. Over years of study, Cialdini, Regents' Professor of Psychology at Arizona State University, has identified some basic influence principles, "those that work in a variety of situations, for a variety of practitioners, on a variety of topics, for a variety of prospects."

INFLUENCE PRINCIPLES

Having a working knowledge of the basic set of persuasion tools can help managers predict and influence human behavior, which is valuable for interacting with colleagues, employees, customers, partners, and even friends. Some basic psychological principles that govern successful influence tactics are as follows:

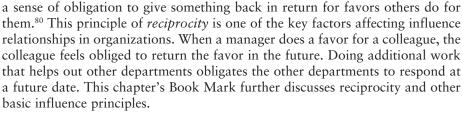
- Reciprocity. The principle of reciprocity refers to the sense of obligation people feel to give back in kind what they have received. For example, a manager who does favors for others creates in them a sense of obligation to return the favors in the future. Smart managers find ways to be helpful to others, whether it be helping a colleague finish an unpleasant job or offering compassion and concern for a subordinate's personal problems.
- Liking. People say yes more often to those they like. Companies such as Tupperware Corp. have long understood that familiar faces and congenial characteristics sell products. In-home Tupperware parties allow customers to buy from a friend instead of an unknown salesperson. Salespeople in all kinds of companies often try to capitalize on this principle by finding interests they share with customers as a way to establish rapport. In general,

- have greater influence.
- Credible authority. Legitimate authorities are particularly influential sources. However, research has discovered that the key to successful use of authority is to be knowledgeable, credible, and trustworthy. Managers who become known for their expertise, who are honest and straightforward with others, and who inspire trust can exert greater influence than those who rely on formal position alone.
- Social validation. One of the primary ways people decide what to do in any given situation is to consider what others are doing. That is, people examine the actions of others to validate correct choices. For instance, when homeowners were shown a list of neighbors who had donated to a local charity during a fundraiser, the frequency of contributions increased dramatically. By demonstrating, or even implying, that others have already complied with a request, managers gain greater cooperation.

THE PROCESS OF SOCIAL INFLUENCE

Because life as a manager is all about influencing others, learning to be genuinely persuasive is a valuable management skill. Cialdini's book helps managers understand the basic psychological rules of persuasion—how and why people are motivated to change their attitudes and behaviors. When managers use this understanding in an honest and ethical manner, they improve their effectiveness and the success of their organizations.

Influence: Science and Practice (4th edition), by Robert B. Cialdini, is published by Allyn & Bacon.



An equally effective and related strategy is to reduce dependency on other departments by acquiring necessary information or skills. IT departments have

- created dependencies in many organizations because of the rapid changes in this area. Employees in other departments depend on the IT unit to master complex software programs, changing use of the Internet, and other advances so that they will have the information they need to perform effectively.
- 3. Provide scarce resources. Resources are always important to organizational survival. Departments that accumulate resources and provide them to an organization in the form of money, information, or facilities will be powerful. An earlier "In Practice" example described how university departments with the greatest power are those that obtain external research funds for contributions to university overhead. Likewise, sales departments are powerful in industrial firms because they bring in financial resources.
- 4. Satisfy strategic contingencies. The theory of strategic contingencies says that some elements in the external environment and within the organization are especially important for organizational success. A contingency could be a critical event, a task for which there are no substitutes, or a central task that is interdependent with many others in the organization. An analysis of the organization and its changing environment will reveal strategic contingencies. To the extent that contingencies are new or are not being satisfied, there is room for a department to move into those critical areas and increase its importance and power.

In summary, the allocation of power in an organization is not random. Power is the result of organizational processes that can be understood and predicted. The abilities to reduce uncertainty, increase dependency on one's own department, obtain resources, and cope with strategic contingencies all enhance a department's power. Once power is available, the next challenge is to use it to attain desired outcomes.

Political Tactics for Using Power

The use of power in organizations requires both skill and willingness. Many decisions are made through political processes because rational decision processes do not fit. Uncertainty or disagreement is too high. **Political tactics for using power** to influence decision outcomes include the following:

1. Build coalitions and expand networks. Effective managers develop positive relationships throughout the organization, and they spend time talking with others to learn about their views and build mutually beneficial alliances and coalitions.⁸¹ Most important decisions are made outside of formal meetings. Managers discuss issues with each other and reach agreement. Effective managers are those who huddle, meeting in groups of twos and threes to resolve key issues.82 They also make sure their networks cross hierarchical, functional, and even organizational boundaries. One research project found that the ability to build networks has a positive impact on both employees' perception of a manager's effectiveness and the ability of the manager to influence performance.⁸³ Networks can be expanded by (1) reaching out to establish contact with additional managers and (2) coopting dissenters. Establishing contact with additional managers means building good interpersonal relationships based on liking, trust, and respect. Reliability and the motivation to work with rather than exploit others are part of both networking and coalition building.⁸⁴ The second approach to expanding networks, cooptation, is the act of bringing a dissenter into one's network. One example of cooptation involved a university

- committee whose membership was based on promotion and tenure. Several professors who were critical of the tenure and promotion process were appointed to the committee. Once a part of the administrative process, they could see the administrative point of view. Cooptation effectively brought them into the administrative network.⁸⁵
- 2. Assign loyal people to key positions. Another political tactic is to assign trusted and loyal people to key positions in the organization or department. Top managers as well as department heads often use the hiring, transfer, and promotion processes to place in key positions people who are sympathetic to the outcomes of the department, thus helping to achieve departmental goals.⁸⁶ Top leaders frequently use this tactic, as we discussed earlier. When an outside police chief was hired to take over a major metropolitan police department, he brought three assistant chiefs with him because their thinking and management skills were compatible with his goals to transform the department.
- 3. Control decision premises. To control decision premises means to constrain the boundaries of a decision. One technique is to choose or limit information provided to other managers. A common method is simply to put your department's best foot forward, such as selectively presenting favorable criteria. A variety of statistics can be assembled to support the departmental point of view. A university department that is growing rapidly and has a large number of students can make claims for additional resources by emphasizing its growth and large size. Such objective criteria do not always work, but they are a valuable step.

Decision premises can be further influenced by limiting the decision process. Decisions can be influenced by the items put on an agenda for an important meeting or even by the sequence in which items are discussed.⁸⁷ Items discussed last, when time is short and people want to leave, will receive less attention than those discussed earlier. Calling attention to specific problems and suggesting alternatives also will affect outcomes. Stressing a specific problem to get it—rather than problems not relevant to your department—on the agenda is an example of agenda setting.

- 4. Enhance legitimacy and expertise. Managers can exert the greatest influence in areas in which they have recognized legitimacy and expertise. If a request is within the task domain of a department and is consistent with the department's vested interest, other departments will tend to comply. Members can also identify external consultants or other experts within the organization to support their cause. Refer example, a financial vice president in a large retail firm wanted to fire the director of HR management. She hired a consultant to evaluate the HR projects undertaken to date. A negative report from the consultant provided sufficient legitimacy to fire the director, who was replaced with a director loyal to the financial vice president.
- 5. Make a direct appeal. If managers do not ask, they seldom receive. An example of direct appeal comes from Drugstore.com, where Jessica Morrison used direct appeal to get a new title and a salary increase. Morrison researched pay scales on PayScale.com and approached her boss armed with that and other pertinent information. Her direct appeal, backed up with research, won her the promotion. Political activity is effective only when goals and needs are made explicit so the organization can respond. An assertive proposal may be accepted because other managers have no better alternatives. Moreover, an explicit proposal will often receive favorable treatment because other alternatives are ambiguous and less well defined. Effective political behavior requires



Expect and allow for political behavior in organizations. Politics provides the discussion and clash of interests needed to crystallize points of view and to reach a decision. Build coalitions, expand networks, control decision premises, enhance legitimacy, and make a direct appeal to attain desired outcomes.

sufficient forcefulness and risk taking to at least ask for what you need to achieve desired outcomes.

Managers can use an understanding of these tactics to assert influence and get things done within the organization. When managers ignore political tactics, they may find themselves failing without understanding why. For example, at the World Bank, Paul Wolfowitz tried to wield power without building the necessary relationships he needed to assert influence.

After former Deputy Secretary of Defense Paul Wolfowitz lost his bids to become defense secretary or national security advisor in the Bush administration, he jumped



at the chance to be the new president of World Bank. But Wolfowitz doomed his career at World Bank from the start by failing to develop relationships and build alliances.

Most World Bank leaders had been in their positions for many years when Wolfowitz arrived, and they were accustomed to "promoting each other's interests and scratching each other's backs," as one board member put it. Wolfowitz came in and tried to assert his own ideas, goals, and formal authority without considering the interests, ideas, and goals of others. He quickly alienated much of the World Bank leadership team and board by adopting a single-minded position on key issues and refusing to consider alternative views. Rather than attempting to persuade others to his way of thinking, Wolfowitz issued directives to senior bank officers, either personally or through his handpicked managers. Several high-level officers resigned following disputes with the new president.

Eventually, the board asked for Wolfowitz's resignation. "What Paul didn't understand is that the World Bank presidency is not inherently a powerful job," said one former colleague. "A bank president is successful only if he can form alliances with the bank's many fiefdoms. Wolfowitz didn't ally with those fiefdoms. He alienated them." ⁹⁰

Wolfowitz realized too late that he needed to use a political approach rather than trying to force his own agenda. Even when a manager has a great deal of power, the use of power should not be obvious. ⁹¹ If a manager formally draws on her power base in a meeting by saying, "My department has more power, so the rest of you have to do it my way," her power will be diminished. Power works best when it is used quietly. To call attention to power is to lose it. People know who has power. Explicit claims to power are not necessary and can even harm the manager's or department's cause.

Also, when using any of the preceding tactics, recall that most people think self-serving behavior hurts rather than helps an organization. If managers are perceived to be throwing their weight around or pursuing goals that are self-serving rather than beneficial to the organization, they will lose respect. On the other hand, managers must recognize the relational and political aspect of their work. It is not sufficient to be rational and technically competent. Developing and using political skill is an important part of being a good manager.

Tactics for Enhancing Collaboration

Most organizations have at least moderate interunit conflict, and an additional approach in many organizations is to overcome conflict by stimulating cooperation

World Bank



group consultation,

member rotation, and

superordinate goals. Select the technique

that fits the organiza-

tion and the conflict.

and collaboration among departments to support the attainment of organizational goals. **Tactics for enhancing collaboration** include the following:

Create integration devices. As described in Chapter 3, teams, task forces, and project managers who span the boundaries between departments can be used as integration devices. Bringing together representatives from conflicting departments in joint problem-solving teams is an effective way to enhance collaboration because representatives learn to understand each other's point of view.⁹² Sometimes a full-time integrator is assigned to achieve cooperation and collaboration by meeting with members of the respective departments and exchanging information. The integrator has to understand each group's problems and must be able to move both groups toward a solution that is mutually acceptable.⁹³ Teams and task forces reduce conflict and enhance cooperation because they integrate people from different departments. Integration devices can also be used to enhance cooperation between labor and management. At Magee Rieter Automotive Systems in Bloomsburg, Pennsylvania, for example, empowered cross-functional teams work closely with managers to run the business. Conflicts between labor and management arise, but they are worked out before they ever reach the grievance stage.94

Labor-management teams, which are designed to increase worker participation and provide a cooperative model for solving union-management problems, are increasingly being used at companies such as Goodyear, Ford Motor Company, and Xerox. In the steel industry, companies such as USX and Wheeling-Pittsburgh Steel have signed pacts that give union representatives seats on the board.⁹⁵ Although unions continue to battle over traditional issues such as wages, these integration devices are creating a level of cooperation that many managers would not have believed possible just a few years ago.

2. Use confrontation and negotiation. Confrontation occurs when parties in conflict directly engage one another and try to work out their differences. Negotiation is the bargaining process that often occurs during confrontation and that enables the parties to systematically reach a solution. These techniques bring appointed representatives from the departments together to work out a serious dispute. Confrontation and negotiation involve some risk. There is no guarantee that discussions will focus on a conflict or that emotions will not get out of hand. However, if members are able to resolve the conflict on the basis of face-to-face discussions, they will find new respect for each other, and future collaboration becomes easier. The beginnings of relatively permanent attitude change are possible through direct negotiation.

Confrontation and negotiation are successful when managers engage in a *win-win strategy*. Win-win means both sides adopt a positive attitude and strive to resolve the conflict in a way that will benefit each other. ⁹⁶ If the negotiations deteriorate into a strictly win-lose strategy (each group wants to defeat the other), the confrontation will be ineffective. The differences between win-win and win-lose strategies of negotiation are shown in Exhibit 13.8. With a win-win strategy—which includes defining the problem as mutual, communicating openly, and avoiding threats—understanding can be changed while the dispute is resolved.

One type of negotiation, used to resolve a disagreement between workers and management, is referred to as **collective bargaining**. The bargaining process is usually accomplished through a union and results in an agreement that specifies each party's responsibilities for the next two to three years.

EXHIBIT 13.8Negotiating Strategies

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- 1. Define the problem as a win-lose situation.
- 2. Pursue own group's outcomes.
- 3. Force the other group into submission.
- Be deceitful, inaccurate, and misleading in communicating the group's needs, goals, and proposals.
- 5. Use threats (to force submission).
- 6. Communicate strong commitment (rigidity) regarding one's position.

Win-Win Strategy

- 1. Define the conflict as a mutual problem.
- 2. Pursue joint outcomes.
- 3. Find creative agreements that satisfy both groups.
- Be open, honest, and accurate in communicating the group's needs, goals, and proposals.
- 5. Avoid threats (to reduce the other's defensiveness).
- 6. Communicate flexibility of position.

Source: Adapted from David W. Johnson and Frank P. Johnson, *Joining Together: Group Theory and Group Skills* (Englewood Cliffs, N.J.: Prentice-Hall, 1975), 182–183.

3. Schedule intergroup consultation. When conflict is intense and enduring, and department members are suspicious and uncooperative, top managers may intervene as third parties to help resolve the conflict or bring in third-party consultants from outside the organization.⁹⁷ This process, sometimes called workplace mediation, is a strong intervention to reduce conflict because it involves bringing the disputing parties together and allowing each side to present its version of the situation. The technique has been developed by such psychologists as Robert Blake, Jane Mouton, and Richard Walton.⁹⁸

Department members attend a workshop, which may last for several days, away from day-to-day work problems. This approach is similar to the organization development (OD) approach described in Chapter 11. The conflicting groups are separated, and each group is invited to discuss and make a list of its perceptions of itself and the other group. Group representatives publicly share these perceptions, and together the groups discuss the results. Intergroup consultation can be quite demanding for everyone involved, but if handled correctly, these sessions can help department employees understand each other much better and lead to improved attitudes and better working relationships for years to come.

- 4. *Practice member rotation*. Rotation means that individuals from one department can be asked to work in another department on a temporary or permanent basis. The advantage is that individuals become submerged in the values, attitudes, problems, and goals of the other department. In addition, individuals can explain the problems and goals of their original departments to their new colleagues. This enables a frank, accurate exchange of views and information. Rotation works slowly to reduce conflict but is very effective for changing the underlying attitudes and perceptions that promote conflict.⁹⁹
- 5. Create shared mission and superordinate goals. Another strategy is for top management to create a shared mission and establish superordinate goals that require cooperation among departments. 100 As discussed in Chapter 10, organizations with strong, adaptive cultures, where employees share a larger vision for

their company, are more likely to have a united, cooperative workforce. Studies have shown that when employees from different departments see that their goals are linked, they will openly share resources and information. To be effective, superordinate goals must be substantial, and employees must be granted the time and incentives to work cooperatively in pursuit of the superordinate goals rather than departmental subgoals.

DESIGN ESSENTIALS

- The central message of this chapter is that conflict, power, and politics are natural outcomes of organizing. Differences in goals, backgrounds, and tasks are necessary for organizational excellence, but these differences can throw groups into conflict. Managers use power and politics to manage and resolve conflict.
- Two views of organization were presented. The rational model of organization assumes that organizations have specific goals and that problems can be logically solved. The other view, the political model of organization, is the basis for much of the chapter. This view assumes that the goals of an organization are not specific or agreed upon. Departments have different values and interests, so managers come into conflict. Decisions are made on the basis of power and political influence. Bargaining, negotiation, persuasion, and coalition building decide outcomes.
- The chapter also discussed the vertical and horizontal sources of power. Vertical sources of power include formal position, resources, control of decision premises, and network centrality. In general, managers at the top of the organizational hierarchy have more power than people at lower levels. However, positions all along the hierarchy can be designed to increase the power of employees. As organizations face increased competition and environmental uncertainty, top executives are finding that increasing the power of middle managers and lower-level employees can help the organization be more competitive. Empowerment is a popular trend in today's organizations. Empowering employees means giving them three key elements: information and resources, necessary knowledge and skills, and the power to make substantive decisions.
- Research into horizontal power processes has revealed that certain characteristics make some departments more powerful than others. Differences in power can be understood using the concept of strategic contingencies. Departments responsible for dealing with key resource issues and dependencies are more powerful. Such factors as dependency, resources, nonsubstitutability, and dealing with uncertainty determine the influence of departments.
- Managers need political skills. Many people distrust political behavior, fearing that it will be used for selfish ends that benefit the individual but not the organization. However, politics is often needed to achieve the legitimate goals of a department or organization. Three areas in which political behavior often plays a role are structural change, management succession, and resource allocation because these are areas of high uncertainty. Managers use political tactics, including building coalitions, expanding networks, controlling decision premises, enhancing legitimacy, and making a direct appeal, to help their departments achieve desired outcomes.

Although conflict and political behavior are natural and can be used for beneficial purposes, managers also strive to enhance collaboration so that conflict between groups does not become too strong. Tactics for enhancing collaboration include integration devices, confrontation and negotiation, intergroup consultation, member rotation, and shared mission and superordinate goals.

Key Concepts

authority
centrality
collective bargaining
competition
confrontation
decision premises
dependency
domains of political activity

empowerment
intergroup conflict
labor–management teams
negotiation
network centrality
nonsubstitutability
organizational politics
political model

political tactics for using power power power sources rational model sources of intergroup conflict strategic contingencies tactics for enhancing collaboration tactics for increasing power

Discussion Questions

- 1. Give an example from your personal experience of how differences in tasks, personal background, and training lead to conflict among groups. How might task interdependence have influenced that conflict?
- 2. As discussed in Chapter 11, consumer products giant Procter & Gamble and Internet leader Google have entered into a marketing partnership. What organizational and environmental factors might determine which organization will have more power in the relationship?
- 3. In a rapidly changing organization, are decisions more likely to be made using the rational or political model of organization? Discuss.
- 4. What is the difference between power and authority? Is it possible for a person to have formal authority but no real power? Discuss.
- 5. Discuss ways in which a department at a health insurance company might help the organization cope with the increased power of large hospital systems such as Carilion by obtaining prior information, prevention, or absorption.
- 6. In Exhibit 13.5, R&D has greater power in company B than in the other firms. Discuss possible strategic contingencies that might give R&D greater power in this firm
- 7. State University X receives 90 percent of its financial resources from the state and is overcrowded with

- students. It is trying to pass regulations to limit student enrollment. Private University Y receives 90 percent of its income from student tuition and has barely enough students to make ends meet. It is actively recruiting students for next year. In which university will students have greater power? What implications will this have for professors and administrators? Discuss.
- 8. A financial analyst at Merrill Lynch tried for several months to expose the risks of investments in subprime mortgages, but he couldn't get anyone to pay attention to his claims. How would you evaluate this employee's power? What might he have done to increase his power and call notice to the impending problems at the firm?
- 9. The engineering college at a major university brings in three times as many government research dollars as does the rest of the university combined. Engineering appears wealthy and has many professors on full-time research status. Yet, when internal research funds are allocated, engineering gets a larger share of the money, even though it already has substantial external research funds. Why would this happen?
- 10. Some researchers argue that the concept of exchange underlying the principle of reciprocity (trading something of value to another for what you want) is the basis of *all* influence. Do you agree? Discuss. To what extent do you feel obligated to return a favor that is done for you?

Chapter 13 Workbook: How Do You Handle Conflict?*

Think of some disagreements you have had with a friend, relative, manager, or co-worker. Then indicate how frequently you engage in each of the following behaviors.

There are no right or wrong answers. Respond to all items using the following scale from 1 to 7:

Scale								
Always		Very often	Often	Sometimes	Seldom	Very seldom	Never	
1		2	3	4	5	6	7	
	1.	I blend my	ideas to crea	te new alternatives	for resolving a	disagreement.		
	2.	I shy away from topics that are sources of disputes.						
	3.	I make my opinion known in a disagreement.						
	4.	I suggest solutions that combine a variety of viewpoints.						
	5.	I steer clear of disagreeable situations.						
	6.	I give in a little on my ideas when the other person also gives in.						
	7.	I avoid the other person when I suspect that he or she wants to discuss a disagreement.						
	8.	I integrate arguments into a new solution from the issues raised in a dispute.						
	9.	I will go 50–50 to reach a settlement.						
	10.	I raise my voice when I'm trying to get the other person to accept my position.						
	11.	I offer creative solutions in discussions of disagreements.						
	12.	I keep quiet about my views in order to avoid disagreements.						
	13.	I give in if the other person will meet me halfway.						
	14.	I downplay the importance of a disagreement.						
	15.	I reduce disagreements by making them seem insignificant.						
	16.	I meet the other person at a midpoint in our differences.						
	17.	I assert my	opinion force	efully.				
	18.	I dominate	arguments u	ntil the other perso	on understands	my position.		
	19.	I suggest w	ve work togetl	her to create soluti	ons to disagree	ments.		
	20.	I try to use	the other per	rson's ideas to gen	erate solutions	to problems.		
	21.	I offer trad	leoffs to reach	solutions in disag	reements.			
	22.	I argue ins	istently for m	y stance.				
	23.	I withdraw	when the otl	ner person confron	its me about a	controversial issue.		
	24.	I sidestep o	disagreements	when they arise.				
	25.			agreements by mal				
	26.				isagreement wi	th the other person.		
		I make our	differences s	eem less serious.				
	28.	I hold my	tongue rather	than argue with the	ne other person			
	29.	I ease conf	lict by claimir	ng our differences	are trivial.			
	30.	I stand firr	n in expressin	g my viewpoints d	luring a disagre	ement.		

Scoring and Interpretation: Three categories of conflict-handling strategies are measured in this instrument: solution oriented, nonconfrontational, and control. By comparing your scores on the following three scales, you can see which of the three is your preferred conflict-handling strategy.

To calculate your three scores, add the individual scores for the items and divide by the number of items measuring the strategy. Then subtract each of the three mean scores from seven.

Solution oriented: Items 1, 4, 6, 8, 9, 11, 13, 16, 19, 20, 21 (total = 11)

Nonconfrontational: Items 2, 5, 7, 12, 14, 15, 23, 24, 25, 27, 28, 29 (total = 12)

Control: Items 3, 10, 17, 18, 22, 26, 30 (total = 7)

Solution-oriented strategies tend to focus on the problem rather than on the individuals involved. Solutions reached are often mutually beneficial, with neither party defining himself or herself as the winner and the other party as the loser.

Nonconfrontational strategies tend to focus on avoiding the conflict by either avoiding the other party or by simply allowing the other party to have his or her way.

These strategies are used when there is more concern with avoiding a confrontation than with the actual outcome of the problem situation.

Control strategies tend to focus on winning or achieving one's goals without regard for the other party's needs or desires. Individuals using these strategies often rely on rules and regulations in order to win the battle.

Questions

Which strategy do you find easiest to use? Most difficult? Which do you use more often?

- 2. How would your answers have differed if the other person was a friend, family member, or co-worker?
- 3. What is it about the conflict situation or strategy that tells you which strategy to use in dealing with a conflict situation?

*"How Do You Handle Conflict?" in Robert E. Quinn et al., *Becoming a Master Manager* (New York: Wiley, 1990), 221–223. Copyright 1990 by John Wiley & Sons, Inc. Reproduced with permission of John Wiley & Sons, Inc.

Case for Analysis: The Daily Tribune*

The *Daily Tribune* is the only daily newspaper serving a six-county region of eastern Tennessee. Even though its staff is small and it serves a region of mostly small towns and rural areas, the *Tribune* has won numerous awards for news coverage and photojournalism from the Tennessee Press Association and other organizations.

Rick Arnold became news editor almost fifteen years ago. He has spent his entire career with the *Tribune* and feels a great sense of pride that it has been recognized for its journalistic integrity and balanced coverage of issues and events. The paper has been able to attract bright, talented young writers and photographers thanks largely to Rick's commitment and his support of the news staff. In his early years, the newsroom was a dynamic, exciting place to work—reporters thrived on the fast pace and the chance to occasionally scoop the major daily paper in Knoxville.

But times have changed at the *Daily Tribune*. Over the past five years or so, the advertising department has continued to grow, in terms of both staff and budget, while the news department has begun to shrink. "Advertising pays the bills," publisher John Freeman reminded everyone at this month's managers' meeting. "Today, advertisers can go to direct mail, cable television, even the Internet, if they don't like what we're doing for them."

Rick has regularly clashed with the advertising department regarding news stories that are critical of major advertisers, but the conflicts have increased dramatically over the past few years. Now, Freeman is encouraging greater "horizontal collaboration," as he calls it, asking that managers in the news department and the ad department consult with one another regarding issues or stories that involve the paper's major advertisers. The move was prompted in part by a growing number of complaints from advertisers about stories they deemed unfair. "We print the news," Freeman

said, "and I understand that sometimes we've got to print things that some people won't like. But we've got to find ways to be more advertiser-friendly. If we work together, we can develop strategies that both present good news coverage and serve to attract more advertisers."

Rick left the meeting fuming, and he didn't fail to make his contempt for the new "advertiser-friendly" approach known to all, including the advertising manager, Fred Thomas, as he headed down the hallway back to the newsroom. Lisa Lawrence, his managing editor, quietly agreed but pointed out that advertisers were readers too, and the newspaper had to listen to all its constituencies. "If we don't handle this carefully, we'll have Freeman and Thomas in here dictating to us what we can write and what we can't."

Lawrence has worked with Rick since he first came to the paper, and even though the two have had their share of conflicts, the relationship is primarily one of mutual respect and trust. "Let's just be careful," she emphasized. "Read the stories about big advertisers a little more carefully, make sure we can defend whatever we print, and it will all work out. I know this blurring of the line between advertising and editorial rubs you the wrong way, but Thomas is a reasonable man. We just need to keep him in the loop."

Late that afternoon, Rick received a story from one of his corresponding reporters that had been in the works for a couple of days. East Tennessee Healthcorp (ETH), which operated a string of health clinics throughout the region, was closing three of its rural clinics because of mounting financial woes. The reporter, Elisabeth Fraley, who lived in one of the communities, had learned about the closings from her neighbor, who worked as an accountant for ETH, before the announcement had been made just this afternoon. Fraley had written a compelling human-interest story about how the closings would leave

people in two counties with essentially no access to health care, while clinics in larger towns that didn't really need them were being kept open. She had carefully interviewed both former patients of the clinics and ETH employees, including the director of one of the clinics and two highlevel managers at the corporate office, and she had carefully documented her sources. After this morning's meeting, Rick knew he should run the story by Lisa Lawrence, since East Tennessee Healthcorp was one of the Tribune's biggest advertisers, but Lawrence had left for the day. And he simply couldn't bring himself to consult with the advertising department—that political nonsense was for Lawrence to handle. If he held the story for Lawrence's approval, it wouldn't make the Sunday edition. His only other option was to write a brief story simply reporting the closings and leaving out the human-interest aspect. Rick was sure the major papers from Knoxville and other nearby cities would have the report in their Sunday papers, but none of them would have the time to develop as comprehensive and interesting an account as Fraley had presented. With a few quick strokes of the pen to make some minor editorial changes, Rick sent the story to production.

When he arrived at work the next day, Rick was called immediately to the publisher's office. He knew it was bad news for Freeman to be in on a Sunday. After some general yelling and screaming, Rick learned that tens of thousands of copies of the Sunday paper had been destroyed and a new edition printed. The advertising manager had called Freeman at home in the wee hours of Sunday morning and informed him of the ETH story, which was appearing the same day the corporation was running a full-page ad touting its service to the small towns and rural communities of East Tennessee.

"The story's accurate, and I assumed you'd want to take advantage of a chance to scoop the big papers," Rick began, but Freeman cut his argument short. "You could have just reported the basic facts without implying that the company doesn't care about the people of this region. The next time something like this happens, you'll find yourself and your reporters standing in the unemployment line!"

Rick had heard it before, but somehow this time he almost believed it. "What happened to the days when the primary purpose of a newspaper was to present the news?" Rick mumbled. "Now, it seems we have to dance to the tune played by the ad department."

*This case was inspired by G. Pascal Zachary, "Many Journalists See a Growing Reluctance to Criticize Advertisers," *The Wall Street Journal* (February 6, 1992), A1, A9; and G. Bruce Knecht, "Retail Chains Emerge as Advance Arbiters of Magazine Content," *The Wall Street Journal* (October 22, 1997), A1, A13.

Case for Analysis: Pierre Dux*

Pierre Dux sat quietly in his office considering the news. A third appointment to regional management had been announced and, once again, the promotion he had expected had been given to someone else. The explanations seemed insufficient this time. Clearly, this signaled the end to his career at INCO. Only one year ago, the company president had arrived at Dux's facility with national press coverage to publicize the success of his innovations in the management of manufacturing operations. The intervening year had brought improved operating results and further positive publicity for the corporation but a string of personal disappointments for Pierre Dux.

Four years earlier, the INCO manufacturing plant had been one of the least productive of the thirteen facilities operating in Europe. Absenteeism and high employee turnover were symptoms of the low morale among the work group. These factors were reflected in mediocre production levels and the worst quality record in INCO. Pierre Dux had been in his current position one year and had derived his only satisfaction from the fact that these poor results

might have been worse had he not instituted minor reforms in organizational communication. These allowed workers and supervisors to vent their concerns and frustrations. Although nothing substantial had changed during that first year, operating results had stabilized, ending a period of rapid decline. But this honeymoon was ending. The expectation of significant change was growing, particularly among workers who had been vocal in expressing their dissatisfaction and suggesting concrete proposals for change.

The change process, which had begun three years before, had centered on a redesign of production operations from a single machine-paced assembly line to a number of semi-autonomous assembly teams. Although the change had been referred to as the INCO "Volvo project" or "INCO's effort at Japanese-style management," it had really been neither of these. Rather, it had been the brainchild of a group of managers, led by Dux, who believed that both productivity and working conditions in the plant could be improved through a single effort. Of course, members of the group had visited other so-called innovative production

facilities, but the new work groups and job classifications had been designed with the particular products and technology at INCO in mind.

After lengthy discussions among the management group, largely dedicated to reaching agreement on the general direction that the new project would take, the actual design began to emerge. Equally lengthy discussions (often referred to as negotiations) with members of the workforce, supervisors, and representatives of the local unions were part of the design process. The first restructuring into smaller work groups was tried in an experimental project that received tentative approval from top management in INCO headquarters and a "wait and see" response from the union. The strongest initial resistance had come from the plant engineers. They were sold neither on the new structure nor on the process of involving the workforce in the design of operating equipment and production methods. Previously, the engineering group had itself fulfilled these functions, and it felt the present problems were a result of a lack of skill among employees or managerial unwillingness to make the system work.

The experiment was staffed by volunteers supported by a few of the better-trained workers in the plant. The latter were necessary to ensure a start-up of the new equipment, which had been modified from the existing technology on the assembly line.

The initial experiment met with limited success. Although the group was able to meet the productivity levels of the existing line within a few weeks, critics of the new plan attributed the low level of success to the unrepresentative nature of the experimental group or the newness of the equipment on which they were working. However, even this limited success attracted the attention of numerous people at INCO headquarters and in other plants. All were interested in seeing the new experiment. Visits soon became a major distraction, and Dux declared a temporary halt to permit the project to proceed, although this produced some muttering at headquarters about his "secretive" and "uncooperative" behavior.

Because of the experiment's success, Dux and his staff prepared to convert the entire production operation to the new system. The enthusiasm of workers in the plant grew as training for the changeover proceeded. In fact, a group of production workers asked to help with the installation of the new equipment as a means of learning more about its operation.

Dux and his staff were surprised at the difficulties encountered at this phase. Headquarters seemed to drag its feet in approving the necessary funding for the change-over. Even after the funding was approved, there was a stream of challenges to minor parts of the plan. "Can't you lay the workers off during the changeover?" "Why use workers on overtime to do the changeover when you

could hire temporary workers more cheaply?" These criticisms reflected a lack of understanding of the basic operating principles of the new system, and Dux rejected them.

The conversion of the entire assembly line to work groups was finally achieved, with the local management group making few concessions from their stated plans. The initial change and the first days of operation were filled with crises. The design process had not anticipated many of the problems that arose with full-scale operations. However, Dux was pleased to see managers, staff, and workers clustered together at the trouble areas, fine-tuning the design when problems arose. Just as the start-up finally appeared to be moving forward, a change in product specifications from a headquarters group dictated additional changes in the design of the assembly process. The new changes were handled quickly and with enthusiasm by the workforce. While the period was exhausting and seemingly endless to those who felt responsible for the change, the new design took only six months to reach normal operating levels (one year had been forecast as the time needed to reach that level—without the added requirement for a change in product specifications).

Within a year, Dux was certain that he had a major success on his hands. Productivity and product quality measures for the plant had greatly improved. In this relatively short period his plant had moved from the worst, according to these indicators, to the third most productive in the INCO system. Absenteeism had dropped only slightly, but turnover had been reduced substantially. Morale was not measured formally but was considered by all members of the management team to be greatly improved. Now, after three years of full operations, the plant was considered the most productive in the entire INCO system.

Dux was a bit surprised when no other facility in INCO initiated a similar effort or called upon him for help. Increases of the early years had leveled off, with the peak being achieved in the early part of year three. Now the facility seemed to have found a new equilibrium. The calm of smoother operations had been a welcome relief to many who had worked so hard to launch the new design. For Dux it provided the time to reflect on his accomplishment and think about his future career.

It was in this context that he considered the news that he had once again been bypassed for promotion to the next level in the INCO hierarchy.

*This case was prepared by Michael Brimm, Associate Professor of INSEAD. It is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. Copyright © 1983 INSEAD Foundation, Fontainebleau, France. Revised 1987.

Notes

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Integrative Case 1.0

Rondell Data Corporation

Company History

The Engineering Department: Research

The Engineering Department: Engineering Services

The Sales Department

The Production Department

The Executive Committee

Merry Christmas

Integrative Case 2.0

It Isn't So Simple: Infrastructure Change at Royce Consulting

Background

Infrastructure and Proposed Changes

Work Patterns

Organizational Culture

Current Situation

The Feasibility Study

The Challenge

Integrative Case 3.0

Custom Chip, Inc.

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The Manufacturing Process

Role of the Product Engineer

Weekly Meeting

Coordination with Applications Engineers

Coordination with Manufacturing

Later in the Day

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"Ramrod" Stockwell

The Problem

Integrative Case 5.0

W. L. Gore & Associates, Inc. Entering 1998

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Company Products

W. L. Gore & Associates' Approach to Organization and Structure

The Lattice Organization

Features of W. L. Gore's Culture

W. L. Gore & Associates' Sponsor

Program

Compensation Practices

W. L. Gore & Associates' Guiding Principles and Core Values

Research and Development

Development of Gore Associates

Marketing Approaches and Strategy

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Acknowledgments

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Dick Spencer

Salesman

Troubleshooter

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Modrow Manager

The Siding Department Incident

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The Plaza Inn

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"One of the Ten Best New Inns"

The Front Desk

Reinstatement of the Front Office

Manager

The New PBX Position

A New Front Office Manager

Integrative Case 8.0

Dowling Flexible Metals

Background

Bill Dowling, Owner-President

Wally Denton, Shop Foreman, First Shift

Thomas McNull, Shop Foreman, Second Shift

Charlie Oakes, Journeyman Apprentice

Gene Jenkins, Chief Engineer

Eve Sullivan, Office Manager

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The Donor Services Department

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Empire Plastics

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The Company

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The Quality Improvement System

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Top Management
Recommendation Time

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Littleton Manufacturing (B)

Integrative Case 12.0

Hartland Memorial Hospital (A):

An Inbox Exercise

Introduction

You and the Hospital

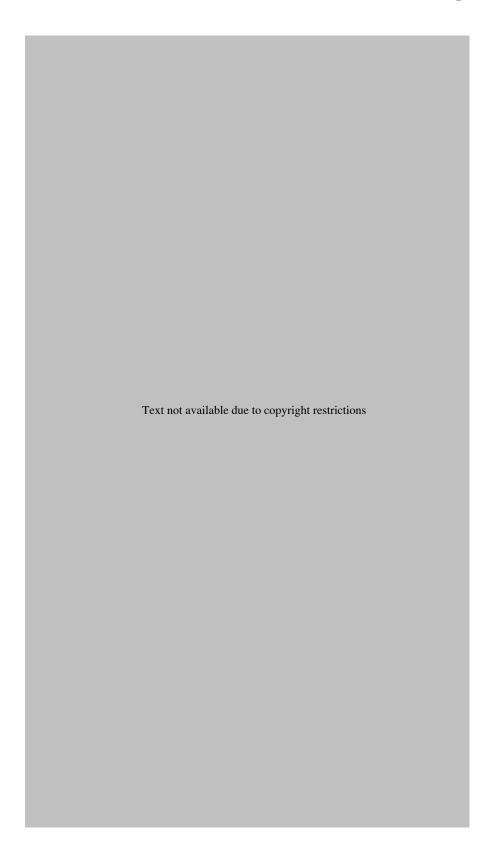
The Situation

What Needs to Be Done

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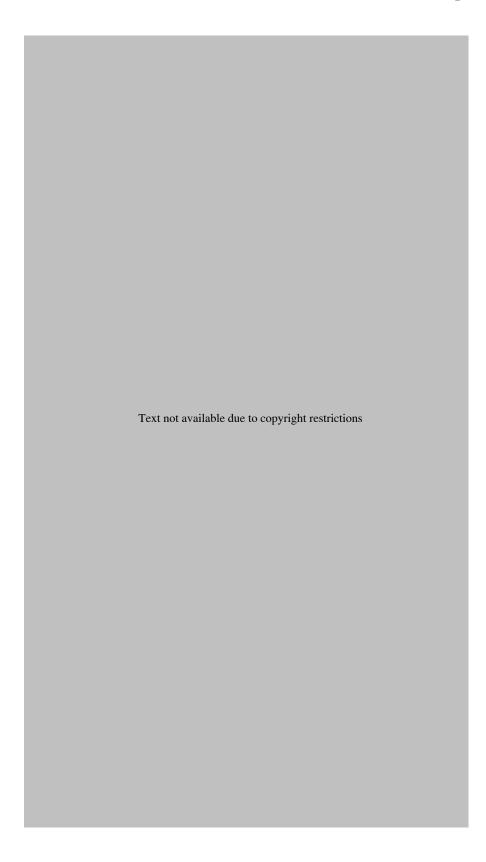
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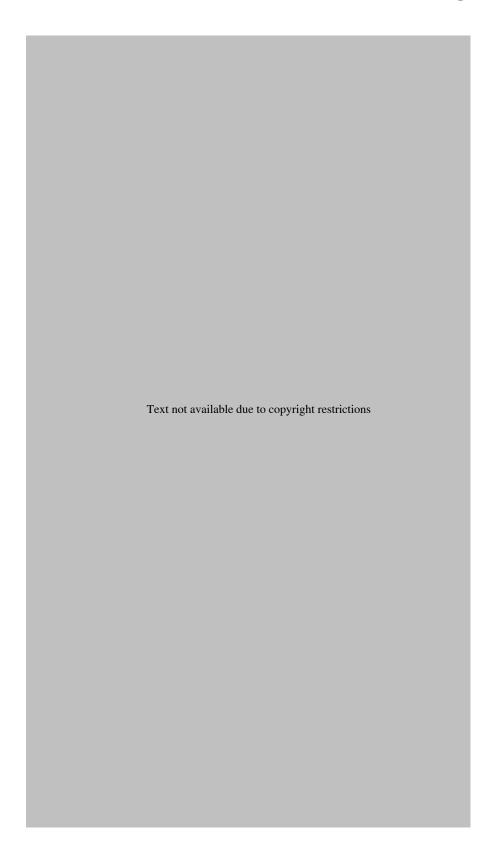
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Integrative Case 2.0 It Isn't So Simple: Infrastructure Change at Royce Consulting*

2.0

The lights of the city glittered outside Ken Vincent's twelfth-floor office. After nine years of late nights and missed holidays, Ken was in the executive suite with the words "Associate Partner" on the door. Things should be easier now, but the proposed changes at Royce Consulting had been more challenging than he had expected. "I don't understand," he thought. "At Royce Consulting our clients, our people, and our reputation are what count, so why do I feel so much tension from the managers about the changes that are going to be made in the office? We've analyzed why we have to make the changes. Heck, we even got an outside person to help us. The administrative support staff are pleased. So why aren't the managers enthusiastic? We all know what the decision at tomorrow's meeting will be—Go! Then it will all be over. Or will it?" Ken thought as he turned out the lights.

Background

Royce Consulting is an international consulting firm whose clients are large corporations, usually with long-term contracts. Royce employees spend weeks, months, and even years working under contract at the client's site. Royce consultants are employed by a wide range of industries, from manufacturing facilities to utilities to service businesses. The firm has over 160 consulting offices located in 65 countries. At this location Royce employees included 85 staff members, 22 site managers, 9 partners and associate partners, 6 administrative support staff, 1 human resource professional, and 1 financial support person.

For the most part, Royce Consulting hired entry-level staff straight out of college and promoted from within. New hires worked on staff for five or six years; if they did well, they were promoted to manager. Managers were responsible for maintaining client contracts and assisting partners in creating proposals for future engagements. Those who were not promoted after six or seven years generally left the company for other jobs.

Newly promoted managers were assigned an office, a major perquisite of their new status. During the previous year, some new managers had been forced to share an office because of space limitations. To minimize the friction of sharing an office, one of the managers was usually assigned to a long-term project out of town. Thus, practically speaking, each manager had a private office.

Infrastructure and Proposed Changes

Royce was thinking about instituting a hoteling office system—also referred to as a "nonterritorial" or "free-address"

office. A hoteling office system made offices available to managers on a reservation or drop-in basis. Managers are not assigned a permanent office; instead, whatever materials and equipment the manager needs are moved into the temporary office. These are some of the features and advantages of a hoteling office system:

- No permanent office assigned
- Offices are scheduled by reservations
- Long-term scheduling of an office is feasible
- Storage space would be located in a separate file room
- Standard manuals and supplies would be maintained in each office
- Hoteling coordinator is responsible for maintaining offices
- A change in "possession of space"
- Eliminates two or more managers assigned to the same office
- Allows managers to keep the same office if desired
- Managers would have to bring in whatever files they needed for their stay
- Information available would be standardized regardless of office
- Managers do not have to worry about "housekeeping issues"

The other innovation under consideration was an upgrade to state-of-the-art electronic office technology. All managers would receive a new notebook computer with updated communications capability to use Royce's integrated and proprietary software. Also, as part of the electronic office technology, an electronic filing system was considered. The electronic filing system meant information regarding proposals, client records, and promotional materials would be electronically available on the Royce Consulting network.

The administrative support staff had limited experience with many of the application packages used by the managers.

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This case was prepared by Sally Dresdow of the University of Wisconsin at Green Bay and Joy Benson of the University of Illinois at Springfield and is intended to be used as a basis for class discussion. The views represented here are those of the case authors and do not necessarily reflect the views of the Society for Case Research. The authors' views are based on their own professional judgments. The names of the organization, individuals, and location have been disguised to preserve the organization's request for anonymity.

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2.0

While they used word processing extensively, they had little experience with spreadsheets, communications, or graphics packages. The firm had a graphics department and the managers did most of their own work, so the administrative staff did not have to work with those application software packages.

Work Patterns

Royce Consulting was located in a large city in the Midwest. The office was located in the downtown area, but it was easy to get to. Managers assigned to in-town projects often stopped by for a few hours at various times of the day. Managers who were not currently assigned to client projects were expected to be in the office to assist on current projects or work with a partner to develop proposals for new business.

In a consulting firm, managers spend a significant portion of their time at client sites. As a result, the office occupancy rate at Royce Consulting was about 40 to 60 percent. This meant that the firm paid lease costs for offices that were empty approximately half of the time. With the planned growth over the next ten years, assigning permanent offices to every manager, even in doubled-up arrangements, was judged to be economically unnecessary given the amount of time offices were empty.

The proposed changes would require managers and administrative support staff to adjust their work patterns. Additionally, if a hoteling office system was adopted, managers would need to keep their files in a centralized file room.

Organizational Culture

Royce Consulting had a strong organizational culture, and management personnel were highly effective at communicating it to all employees.

Stability of Culture

The culture at Royce Consulting was stable. The leadership of the corporation had a clear picture of who they were and what type of organization they were. Royce Consulting had positioned itself to be a leader in all areas of large business consulting. Royce Consulting's CEO articulated the firm's commitment to being client-centered. Everything that was done at Royce Consulting was because of the client.

Training

New hires at Royce Consulting received extensive training in the culture of the organization and the methodology employed in consulting projects. They began with a structured program of classroom instruction and computer-aided courses covering technologies used in the various industries in which the firm was involved. Royce Consulting recruited top young people who were aggressive and who

were willing to do whatever was necessary to get the job done and build a common bond. Among new hires, camaraderie was encouraged along with a level of competition. This kind of behavior continued to be cultivated throughout the training and promotion process.

Work Relationships

Royce Consulting employees had a remarkably similar outlook on the organization. Accepting the culture and norms of the organization was important for each employee. The norms of Royce Consulting revolved around high performance expectations and strong job involvement.

By the time people made manager, they were aware of what types of behaviors were acceptable. Managers were formally assigned the role of coach to younger staff people, and they modeled acceptable behavior. Behavioral norms included when they came into the office, how late they stayed at the office, and the type of comments they made about others. Managers spent time checking on staff people and talking with them about how they were doing.

The standard for relationships was that of professionalism. Managers knew they had to do what the partners asked and they were to be available at all times. A norms survey and conversations made it clear that people at Royce Consulting were expected to help each other with on-the-job problems, but personal problems were outside the realm of sanctioned relationships. Personal problems were not to interfere with performance on a job. To illustrate, vacations were put on hold and other kinds of commitments were set aside if something was needed at Royce Consulting.

Organizational Values

Three things were of major importance to the organization: its clients, its people, and its reputation. There was a strong client-centered philosophy communicated and practiced. Organization members sought to meet and exceed customer expectations. Putting clients first was stressed. The management of Royce Consulting listened to its clients and made adjustments to satisfy the client.

The reputation of Royce Consulting was important to those leading the organization. They protected and enhanced it by focusing on quality services delivered by quality people. The emphasis on clients, Royce Consulting personnel, and the firm's reputation was cultivated by developing a highly motivated, cohesive, and committed group of employees.

Management Style and Hierarchical Structure

The company organization was characterized by a directive style of management. The partners had the final word on all issues of importance. It was common to hear statements like "Managers are expected to solve problems, and do whatever it takes to finish the job" and "Whatever the partners want, we do." Partners accepted and asked for managers' feedback on projects, but in the final analysis, the partners made the decisions.

Current Situation

Royce Consulting had an aggressive five-year plan that was predicated on a continued increase in business. Increases in the total number of partners, associate partners, managers, and staff were forecast. Additional office space would be required to accommodate the growth in staff; this would increase rental costs at a time when Royce's fixed and variable costs were going up.

The partners, led by managing partner Donald Gray and associate partner Ken Vincent, believed that something had to be done to improve space utilization and the productivity of the managers and administrative personnel. The partners approved a feasibility study of the innovations and their impact on the company.

The ultimate decision makers were the partner group who had the power to approve the concepts and commit the required financial investment. A planning committee consisted of Ken Vincent; the human resources person; the financial officer; and an outside consultant, Mary Schrean.

The Feasibility Study

Within two working days of the initial meeting, all the partners and managers received a memo announcing the hoteling office feasibility study. The memo included a brief description of the concept and stated that it would include an interview with the staff. By this time, partners and managers had already heard about the possible changes and knew that Gray was leaning toward hoteling offices.

Interviews with the Partners

All the partners were interviewed. One similarity in the comments was that they thought the move to hoteling offices was necessary but they were glad it would not affect them. Three partners expressed concern about managers' acceptance of the change to a hoteling system. The conclusion of each partner was that if Royce Consulting moved to hoteling offices, with or without electronic office technology, the managers would accept the change. The reason given by the partners for such acceptance was that the managers would do what the partners wanted done.

The partners all agreed that productivity could be improved at all levels of the organization: in their own work as well as among the secretaries and the managers. Partners acknowledged that current levels of information technology at Royce Consulting would not support the move to hoteling offices and that advances in electronic office technology needed to be considered.

Partners viewed all filing issues as secondary to both the office layout change and the proposed technology improvement. What eventually emerged, however, was that ownership and control of files was a major concern, and most partners and managers did not want anything centralized.

Interviews with the Managers

Personal interviews were conducted with all ten managers who were in the office. During

the interviews, four of the managers asked Schrean whether the change to hoteling offices was her idea. The managers passed the question off as a joke; however, they expected a response from her. She stated that she was there as an adviser, that she had not generated the idea, and that she would not make the final decision regarding the changes.

The length of time that these managers had been in their current positions ranged from six months to five years. None of them expressed positive feelings about the hoteling system, and all of them referred to how hard they had worked to make manager and gain an office of their own. Eight managers spoke of the status that the office gave them and the convenience of having a permanent place to keep their information and files. Two of the managers said they did not care so much about the status but were concerned about the convenience. One manager said he would come in less frequently if he did not have his own office. The managers believed that a change to hoteling offices would decrease their productivity. Two managers stated that they did not care how much money Royce Consulting would save on lease costs; they wanted to keep their offices.

However, for all the negative comments, all the managers said that they would go along with whatever the partners decided to do. One manager stated that if Royce Consulting stays busy with client projects, having a permanently assigned office was not a big issue.

During the interviews, every manager was enthusiastic and supportive of new productivity tools, particularly the improved electronic office technology. They believed that new computers and integrated software and productivity tools would definitely improve their productivity. Half the managers stated that updated technology would make the change to hoteling offices "a little less terrible," and they wanted their secretaries to have the same software as they did.

The managers' responses to the filing issue varied. The volume of files managers had was in direct proportion to their tenure in that position: The longer a person was a manager, the more files he or she had. In all cases, managers took care of their own files, storing them in their offices and in whatever filing drawers were free.

As part of the process of speaking with managers, their administrative assistants were asked about the proposed changes. Each of the six thought that the electronic office upgrade would benefit the managers, although they were somewhat concerned about what would be expected of

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them. Regarding the move to hoteling offices, each said that the managers would hate the change, but that they would agree to it if the partners wanted to move in that direction.

Results of the Survey

A survey developed from the interviews was sent to all partners, associate partners, and

managers two weeks after the interviews were conducted. The completed survey was returned by 6 of the 9 partners and associate partners and 16 of the 22 managers. This is what the survey showed.

Work Patterns. It was "common knowledge" that managers were out of the office a significant portion of their time, but there were no figures to substantiate this belief, so the respondents were asked to provide data on where they spent their time. The survey results indicated that partners spent 38 percent of their time in the office; 54 percent at client sites; 5 percent at home; and 3 percent in other places, such as airports. Managers reported spending 32 percent of their time in the office, 63 percent at client sites, 4 percent at home, and 1 percent in other places.

For 15 workdays, the planning team also visually checked each of the 15 managers' offices four times each day: at 9 a.m., 11 a.m., 2 p.m., and 4 p.m. These times were selected because initial observations indicated that these were the peak occupancy times. An average of six offices (40 percent of all manager offices) were empty at any given time; in other words, there was a 60 percent occupancy rate.

Alternative Office Layouts. One of the alternatives outlined by the planning committee was a continuation of and expansion of shared offices. Eleven of the managers responding to the survey preferred shared offices to hoteling offices. Occasions when more than one manager was in the shared office at the same time were infrequent. Eight managers reported 0 to 5 office conflicts per month; three managers reported 6 to 10 office conflicts per month. The type of problems encountered with shared offices included not having enough filing space, problems in directing telephone calls, and lack of privacy.

Managers agreed that having a permanently assigned office was an important perquisite. The survey confirmed the information gathered in the interviews about managers' attitudes: All but two managers preferred shared offices over hoteling, and managers believed their productivity would be negatively impacted. The challenges facing Royce Consulting if they move to hoteling offices centered around tradition and managers' expectations, file accessibility and organization, security and privacy issues, unpredictable work schedules, and high-traffic periods.

Control of Personal Files. Because of the comments made during the face-to-face interviews, survey respondents were asked to rank the importance of having personal control of their files. A 5-point scale was used, with 5 being "strongly agree" and 1 being "strongly disagree." Here are the responses.

Respondents	Sample	Rank
Partners	6	4.3
Managers:		
0-1 year	5	4.6
2–3 years	5	3.6
4+ years	6	4.3

Electronic Technology. Royce Consulting had a basic network system in the office that could not accommodate the current partners and managers working at a remote site. The administrative support staff had a separate network, and the managers and staff could not communicate electronically. Of managers responding to the survey, 95 percent wanted to use the network but only 50 percent could actually do so.

Option Analysis

A financial analysis showed that there were significant cost differences between the options under consideration:

Option 1: Continue private offices with some office sharing

- Lease an additional floor in existing building; annual cost, \$360,000
- Build out the additional floor (i.e., construct, furnish, and equip offices and work areas): one-time cost, \$600,000

Option 2: Move to hoteling offices with upgraded office technology

 Upgrade office electronic technology: one-time cost, \$190,000

Option 1 was expensive because under the terms of the existing lease, Royce had to commit to an entire floor if it wanted additional space. Hoteling offices showed an overall financial advantage of \$360,000 per year and a one-time savings of \$410,000 over shared or individual offices.

The Challenge

Vincent met with Mary Schrean to discuss the upcoming meeting of partners and managers, where they would present the results of the study and a proposal for action. Included in the report were proposed layouts for both shared and hoteling offices. Vincent and Gray were planning to recommend a hoteling office system, which would include storage areas, state-of-the-art electronic office technology for managers and administrative support staff, and centralized files. The rationale for their decision emphasized the amount of time that managers were out of the

office and the high cost of maintaining the status quo and was built around the following points:

- 1. Royce's business is different: offices are empty from 40 to 60 percent of the time.
- 2. Real estate costs continue to escalate.
- Projections indicate there will be increased need for offices and cost-control strategies as the business develops.
- 4. Royce Consulting plays a leading role in helping organizations implement innovation.

"It's still a go," thought Vincent as he and the others returned from a break. "The cost figures support it and the growth figures support it. It's simple—or is it? The decision is the easy part. What is it about Royce Consulting that will help or hinder its acceptance? In the long run, I hope we strengthen our internal processes and don't

hinder our effectiveness by going ahead with these simple changes."

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Introduction

It was 7:50 on Monday morning. Frank Questin, product engineering manager at Custom Chip, Inc., was sitting in his office making a TO DO list for the day. From 8:00 to 9:30 a.m., he would have his weekly meeting with his staff of engineers. After the meeting, Frank thought he would begin developing a proposal for solving what he called "Custom Chip's manufacturing documentation problem"—inadequate technical information regarding the steps to manufacture many of the company's products. Before he could finish his TO DO list, he answered a phone call from Custom Chip's human resource manager, who asked him about the status of two overdue performance appraisals and reminded him that this day marked Bill Lazarus's fifth-year anniversary with the company. Following this call, Frank hurried off to the Monday morning meeting with his staff.

Frank had been product engineering manager at Custom Chip for fourteen months. This was his first management position, and he sometimes questioned his effectiveness as a manager. Often he could not complete the tasks he set out for himself due to interruptions and problems brought to his attention by others. Even though he had not been told exactly what results he was supposed to accomplish, he had a nagging feeling that he should have achieved more after these fourteen months. On the other hand, he thought maybe he was functioning pretty well in some of his areas of responsibility given the complexity of the problems his group handled and the unpredictable changes in the semiconductor industry—changes caused not only by rapid advances in technology, but also by increased foreign competition and a recent downturn in demand.

Company Background

Custom Chip, Inc., was a semiconductor manufacturer specializing in custom chips and components used in radars, satellite transmitters, and other radio frequency devices. The company had been founded in 1977 and had grown rapidly with sales exceeding \$25 million in 1986. Most of the company's 300 employees were located in the main plant in Silicon Valley, but overseas manufacturing facilities in Europe and the Far East were growing in size and importance. These overseas facilities assembled the less complex, higher-volume products. New products and the more complex ones were assembled in the main plant. Approximately one-third of the assembly employees were in overseas facilities.

While the specialized products and markets of Custom Chip provided a market niche that had thus far shielded the company from the major downturn in the semiconductor industry, growth had come to a standstill. Because of this, cost reduction had become a high priority.

The Manufacturing Process

Manufacturers of standard chips have long production runs of a few products. Their cost per unit is low and cost control is a primary determinant of success. In contrast, manufacturers of custom chips have extensive product lines and produce small production runs of special applications. Custom Chip, Inc., for example, had manufactured over 2,000 different products in the last five years. In any one quarter the company might schedule 300 production runs for different products, as many as one-third of which might be new or modified products that the company had not made before. Because they must be efficient in designing and manufacturing many product lines, all custom chip manufacturers are highly dependent on their engineers. Customers are often first concerned with whether Custom Chip can design and manufacture the needed product at all; second, with whether they can deliver it on time; and only third, with cost.

After a product is designed, there are two phases to the manufacturing process. (See Exhibit 1.) The first is wafer fabrication. This is a complex process in which circuits are etched onto the various layers added to a silicon wafer. The number of steps that the wafer goes through plus inherent problems in controlling various chemical processes make it very difficult to meet the exacting specifications required for the final wafer. The wafers, which are typically "just a few" inches in diameter when the fabrication process is complete, contain hundreds, sometimes thousands, of tiny identical die. Once the wafer has been tested and sliced up to produce these die, each die will be used as a circuit component.

If the completed wafer passes the various quality tests, it moves on to the assembly phase. In assembly, the die from the wafers, very small wires, and other components are attached to a circuit in a series of precise operations. This finished circuit is the final product of Custom Chip, Inc.

Each product goes through many independent and delicate operations, and each step is subject to operator

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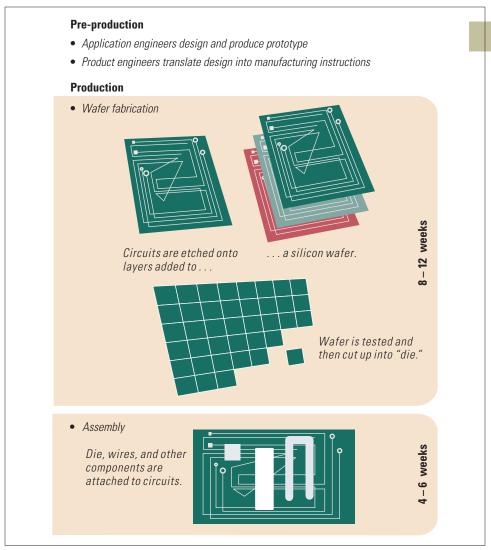


EXHIBIT 1Manufacturing Process

or machine error. Due to the number of steps and tests involved, the wafer fabrication takes eight to twelve weeks and the assembly process takes four to six weeks. Because of the exacting specifications, products are rejected for the slightest flaw. The likelihood that every product starting the run will make it through all of the processes and still meet specifications is often quite low. For some products, average yield¹ is as low as 40 percent, and actual yields can vary considerably from one run to another. At Custom Chip, the average yield for all products is in the 60 to 70 percent range.

Because it takes so long to make a custom chip, it is especially important to have some control of these yields. For

¹Yield refers to the ratio of finished products that meet specifications relative to the number that initially entered the manufacturing process.

example, if a customer orders one thousand units of a product and typical yields for that product average 50 percent, Custom Chip will schedule a starting batch of 2,200 units. With this approach, even if the yield falls as low as 45.4 percent (45.4 percent of 2,200 is 1,000) the company can still meet the order. If the actual yield falls below 45.4 percent, the order will not be completed in that run, and a very small, costly run of the item will be needed to complete the order. The only way the company can effectively control these yields and stay on schedule is for the engineering groups and operations to cooperate and coordinate their efforts efficiently.

Role of the Product Engineer

The product engineer's job is defined by its relationship to applications engineering and operations. The applications

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engineers are responsible for designing and developing prototypes when incoming orders are for new or modified products. The product engineer's role is to translate the applications engineering group's design into a set of manufacturing instructions and then to work alongside manufacturing to make sure that engineeringrelated problems get solved. The product engineers' effectiveness is ultimately measured by their ability to control yields on their assigned products. The organization chart in Exhibit 2 shows the engineering and operations departments. Exhibit 3 summarizes the roles and objectives of

EXHIBIT 2Custom Chip, Inc., Partial Organization Chart

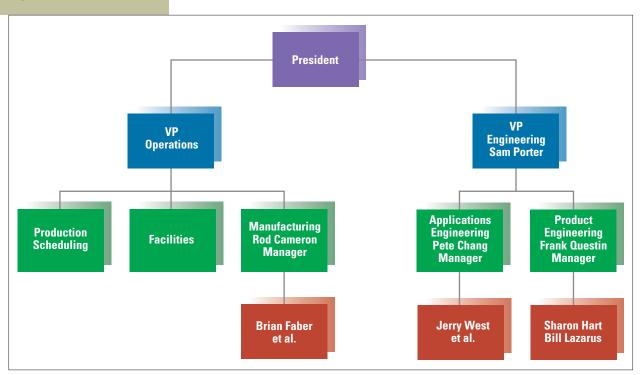


EXHIBIT 3Departmental Roles and Objectives

Department	Role	Primary Objective
Applications Engineering	Designs and develops prototypes for new or modified products	Satisfy customer needs through innovative designs
Product	Translates designs into	Maintain and control yields
Engineering	manufacturing instructions and works alongside manufacturing to solve "engineering-related" problems	on assigned products
Manufacturing	Executes designs	Meet productivity standards and time schedules

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manufacturing, applications engineering, and product engineering.

The product engineers estimate that 70 to 80 percent of their time is spent in solving day-to-day manufacturing problems. The product engineers have cubicles in a room directly across the hall from the manufacturing facility. If a manufacturing supervisor has a question regarding how to build a product during a run, that supervisor will call the engineer assigned to that product. If the engineer is available, he or she will go to the manufacturing floor to help answer the question. If the engineer is not available, the production run may be stopped and the product put aside so that other orders can be manufactured. This results in delays and added costs. One reason that product engineers are consulted is that documentation—the instructions for manufacturing the product—is unclear or incomplete.

The product engineer will also be called if a product is tested and fails to meet specifications. If a product fails to meet test specifications, production stops, and the engineer must diagnose the problem and attempt to find a solution. Otherwise, the order for that product may be only partially met. Test failures are a very serious problem, which can result in considerable cost increases and schedule delays for customers. Products do not test properly for many reasons, including operator errors, poor materials, a design that is very difficult to manufacture, a design that provides too little margin for error, or a combination of these.

On a typical day, the product engineers may respond to half a dozen questions from the manufacturing floor, and two to four calls to the testing stations. When interviewed, the engineers expressed a frustration with this situation. They thought they spent too much time solving short-term problems, and, consequently, they were neglecting other important parts of their jobs. In particular, they felt they had little time in which to:

- Coordinate with applications engineers during the design phase. The product engineers stated that their knowledge of manufacturing could provide valuable input to the applications engineers. Together they could improve the manufacturability and thus, the yields of the new or modified products.
- Engage in yield improvement projects. This would involve an in-depth study of the existing process for a specific product in conjunction with an analysis of past product failures.
- Accurately document the manufacturing steps for their assigned products, especially for those that tend to have large or repeat orders. They said that the current state of the documentation is very poor. Operators often have to build products using only a drawing showing the final circuit, along with a few notes scribbled in the margins. While experienced operators and supervisors may be able to work with this information, they often make incorrect guesses and assumptions. Inexperienced

operators may not be able to proceed with certain products because of this poor documentation.

Weekly Meeting

As manager of the product engineering group, Frank Questin had eight engineers reporting to him, each responsible for a different set of Custom Chip products. According to Frank:

When I took over as manager, the product engineers were not spending much time together as a group. They were required to handle operations problems on short notice. This made it difficult for the entire group to meet due to constant requests for assistance from the manufacturing area.

I thought that my engineers could be of more assistance and support to each other if they all spent more time together as a group, so one of my first actions as a manager was to institute a regularly scheduled weekly meeting. I let the manufacturing people know that my staff would not respond to requests for assistance during the meeting.

The meeting on this particular Monday morning followed the usual pattern. Frank talked about upcoming company plans, projects, and other news that might be of interest to the group. He then provided data about current yields for each product and commended those engineers who had maintained or improved yields on most of their products. This initial phase of the meeting lasted until about 8:30 a.m. The remainder of the meeting was a meandering discussion of a variety of topics. Since there was no agenda, engineers felt comfortable in raising issues of concern to them.

The discussion started with one of the engineers describing a technical problem in the assembly of one of his products. He was asked a number of questions and given some advice. Another engineer raised the topic of a need for new testing equipment and described a test unit he had seen at a recent demonstration. He claimed the savings in labor and improved yields from this machine would allow it to pay for itself in less than nine months. Frank immediately replied that budget limitations made such a purchase unfeasible, and the discussion moved into another area. They briefly discussed the increasing inaccessibility of the applications engineers and then talked about a few other topics.

In general, the engineers valued these meetings. One commented that:

The Monday meetings give me a chance to hear what's on everyone's mind and to find out about and discuss company-wide news. It's hard to reach any conclusions because the meeting is a freewheeling discussion. But I really appreciate the friendly atmosphere with my peers.

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Coordination with Applications Engineers

Following the meeting that morning, an event occurred that highlighted the issue of the inaccessibility of the applications engineers. An order of 300 units of custom chip 1210A for a major customer was already overdue. Because the projected yield of this product

was 70 percent, they had started with a run of 500 units. A sample tested at one of the early assembly points indicated a major performance problem that could drop the yield to below 50 percent. Bill Lazarus, the product engineer assigned to the 1210A, examined the sample and determined that the problem could be solved by redesigning the wiring. Jerry West, the applications engineer assigned to that product category, was responsible for revising the design. Bill tried to contact Jerry, but he was not immediately available, and didn't get back to Bill until later in the day. Jerry explained that he was on a tight schedule trying to finish a design for a customer who was coming into town in two days, and could not get to "Bill's problem" for a while.

Jerry's attitude that the problem belonged to product engineering was typical of the applications engineers. From their point of view there were a number of reasons for making the product engineers' needs for assistance a lower priority. In the first place, applications engineers were rewarded and acknowledged primarily for satisfying customer needs through designing new and modified products. They got little recognition for solving manufacturing problems. Second, applications engineering was perceived to be more glamorous than product engineering because of opportunities to be credited with innovative and groundbreaking designs. Finally, the size of the applications engineering group had declined over the past year, causing the workload on each engineer to increase considerably. Now they had even less time to respond to the product engineers' requests.

When Bill Lazarus told Frank about the situation, Frank acted quickly. He wanted this order to be in process again by tomorrow, and he knew manufacturing was also trying to meet this goal. He walked over to see Pete Chang, head of applications engineering (see the organizational chart in Exhibit 2). Meetings like this with Pete to discuss and resolve interdepartmental issues were common.

Frank found Pete at a workbench talking with one of his engineers. He asked Pete if he could talk to him in private, and they walked to Pete's office.

Frank: We've got a problem in manufacturing in getting out an order of 1210As. Bill Lazarus is getting little or no assistance from Jerry West. I'm hoping you can get Jerry to pitch in and help Bill. It should take no more than a few hours of his time.

Pete: I do have Jerry on a short leash trying to keep him focused on getting out a design for Teletronics. We can't afford to show up empty-handed at our meeting with them in two days.

Frank: Well, we are going to end up losing one customer in trying to please another. Can't we satisfy everyone here?

Pete: Do you have an idea?

Frank: Can't you give Jerry some additional support on the Teletronics design?

Pete: Let's get Jerry in here to see what we can do.

Pete brought Jerry back to the office, and together they discussed the issues and possible solutions. When Pete made it clear to Jerry that he considered the problem with the 1210As a priority, Jerry offered to work on the 1210A problem with Bill. He said, "This will mean I'll have to stay a few hours past 5:00 this evening, but I'll do what's required to get the job done."

Frank was glad he had developed a collaborative relationship with Pete. He had always made it a point to keep Pete informed about activities in the product engineering group that might affect the applications engineers. In addition, he would often chat with Pete informally over coffee or lunch in the company cafeteria. This relationship with Pete made Frank's job easier. He wished he had the same rapport with Rod Cameron, the manufacturing manager.

Coordination with Manufacturing

The product engineers worked closely on a day-to-day basis with the manufacturing supervisors and workers. The problems between these two groups stemmed from an inherent conflict between their objectives (see Exhibit 3). The objective of the product engineers was to maintain and improve yields. They had the authority to stop production of any run that did not test properly. Manufacturing, on the other hand, was trying to meet productivity standards and time schedules. When a product engineer stopped a manufacturing run, he or she was possibly preventing the manufacturing group from reaching its objectives.

Rod Cameron, the current manufacturing manager, had been promoted from his position as a manufacturing supervisor a year ago. His views on the product engineers:

The product engineers are perfectionists. The minute a test result looks a little suspicious they want to shut down the factory. I'm under a lot of pressure to get products out the door. If they pull a few \$50,000 orders off the line when they are within a few days of reaching shipping, I'm liable to miss my numbers by \$100,000 that month.

Besides that, they are doing a lousy job of documenting the manufacturing steps. I've got a lot of turnover, and my new operators need to be told or shown exactly what to do for each product. The instructions for a lot of our products are a joke. Custom Chip, Inc. 549

At first, Frank found Rod very difficult to deal with. Rod found fault with the product engineers for many problems and sometimes seemed rude to Frank when they talked. For example, Rod might tell Frank to "make it quick; I haven't got much time." Frank tried not to take Rod's actions personally, and through persistence was able to develop a more amicable relationship with him. According to Frank:

Sometimes, my people will stop work on a product because it doesn't meet test results at that stage of manufacturing. If we study the situation, we might be able to maintain yields or even save an entire run by adjusting the manufacturing procedures. Rod tries to bully me into changing my engineers' decisions. He yells at me or criticizes the competence of my people, but I don't allow his temper or ravings to influence my best judgment in a situation. My strategy in dealing with Rod is to try not to respond defensively to him. Eventually he cools down, and we can have a reasonable discussion of the situation.

Despite this strategy, Frank could not always resolve his problems with Rod. On these occasions, Frank took the issue to his own boss, Sam Porter, the vice president in charge of engineering. However, Frank was not satisfied with the support he got from Sam. Frank said:

Sam avoids confrontations with the operations VP. He doesn't have the influence or clout with the other VPs or the president to do justice to engineering's needs in the organization.

Early that afternoon, Frank again found himself trying to resolve a conflict between engineering and manufacturing. Sharon Hart, one of his most effective product engineers, was responsible for a series of products used in radars—the 3805A-3808A series. Today she had stopped a large run of 3806As. The manufacturing supervisor, Brian Faber, went to Rod Cameron to complain about the impact of this stoppage on his group's productivity. Brian felt that yields were low on that particular product because the production instructions were confusing to his operators, and that even with clearer instructions, his operators would need additional training to build it satisfactorily. He stressed that the product engineer's responsibility was to adequately document the production instructions and provide training. For these reasons, Brian asserted that product engineering, and not manufacturing, should be accountable for the productivity loss in the case of these 3806As.

Rod called Frank to his office, where he joined the discussion with Sharon, Brian, and Rod. After listening to the issues, Frank conceded that product engineering had responsibility for documenting and training. He also explained, even though everyone was aware of it, that the product engineering group had been operating with

reduced staff for over a year now, so training and documentation were lower priorities. Because of this staffing situation, Frank suggested that manufacturing and product engineering work together and pool their limited resources to solve the documentation and training problem. He was especially interested in using a few of the long-term experienced workers to

assist in training newer workers. Rod and Brian opposed his suggestion. They did not want to take experienced operators off of the line because it would decrease productivity. The meeting ended when Brian stormed out, saying that Sharon had better get the 3806As up and running again that morning.

Frank was particularly frustrated by this episode with manufacturing. He knew perfectly well that his group had primary responsibility for documenting the manufacturing steps for each product. A year ago he told Sam Porter that the product engineers needed to update and standardize all of the documentation for manufacturing products. At that time, Sam told Frank that he would support his efforts to develop the documentation, but would not increase his staff. In fact, Sam had withheld authorization to fill a recently vacated product engineering slot. Frank was reluctant to push the staffing issue because of Sam's adamance about reducing costs. "Perhaps," Frank thought, "if I develop a proposal clearly showing the benefits of a documentation program in manufacturing and detailing the steps and resources required to implement the program, I might be able to convince Sam to provide us with more resources." But Frank could never find the time to develop that proposal. And so he remained frustrated.

Later in the Day

Frank was reflecting on the complexity of his job when Sharon came to the doorway to see if he had a few moments. Before he could say "Come in," the phone rang. He looked at the clock. It was 4:10 P.M. Pete was on the other end of the line with an idea he wanted to try out on Frank, so Frank said he could call him back shortly. Sharon was upset, and told him that she was thinking of quitting because the job was not satisfying for her.

Sharon said that although she very much enjoyed working on yield improvement projects, she could find no time for them. She was tired of the applications engineers acting like "prima donnas," too busy to help her solve what they seemed to think were mundane day-to-day manufacturing problems. She also thought that many of the day-to-day problems she handled wouldn't exist if there was enough time to document manufacturing procedures to begin with.

Frank didn't want to lose Sharon, so he tried to get into a frame of mind where he could be empathetic to her.

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He listened to her and told her that he could understand her frustration in this situation. He told her the situation would change as industry conditions improved. He told her that he was pleased that she felt comfortable in venting her frustrations with him, and he hoped she would stay with Custom Chip.

After Sharon left, Frank realized that he had told Pete that he would call back. He glanced at the

TO DO list he had never completed, and realized that he hadn't spent time on his top priority—developing a proposal relating to solving the documentation problem in manufacturing. Then, he remembered that he had forgotten to acknowledge Bill Lazarus's fifth-year anniversary with the company. He thought to himself that his job felt like a roller coaster ride, and once again he pondered his effectiveness as a manager.

"Ramrod" Stockwell 551

Integrative Case 4.0 "Ramrod" Stockwell*

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The Benson Metal Company employs about 1,500 people, is listed on the stock exchange, and has been in existence for many decades. It makes a variety of metals that are purchased by manufacturers or specialized metal firms. It is one of the five or six leading firms in the specialty steel industry. This industry produces steels in fairly small quantities with a variety of characteristics. Orders tend to be in terms of pounds rather than tons, although a 1,000-pound order is not unusual. For some of the steels, 100 pounds is an average order.

The technology for producing specialty steels in the firm is fairly well established, but there is still a good deal of guesswork, skill, and even some "black magic" involved. Small changes are made in the ingredients going into the melting process, often amounting to the addition of a tiny bit of expensive alloying material in order to produce varieties of specialty steels. Competitors can analyze one another's products and generally produce the same product without too much difficulty, although there are some secrets. There are also important variations stemming from the type of equipment used to melt, cog, roll, and finish the steel.

In the period that we are considering, the Benson Company and some of its competitors were steadily moving into more sophisticated and technically more difficult steels, largely for the aerospace industry. The aerospace products were far more difficult to make, required more research skills and metallurgical analysis, and required more "delicate" handling in all stages of production, even though the same basic equipment was involved. Furthermore, they were marketed in a different fashion. They were produced to the specifications of government subcontractors, and government inspectors were often in the plant to watch all stages of production. One firm might be able to produce a particular kind of steel that another firm could not produce even though it had tried. These steels were considerably more expensive than the specialty steels, and failures to meet specifications resulted in more substantial losses for the company. At the time of the study about 20 percent of the cash value output was in aerospace metals.

The chairman, Fred Benson, had been president (managing director) of the company for two decades before moving up to this position. He is an elderly man but has a strong will and is much revered in the company for having built it up to its present size and influence. The president, Tom Hollis, has been in office for about four years; he was formerly the sales director and has worked closely with Fred Benson over many

years. Hollis has three or four years to go before expected retirement. His assistant, Joe Craig, had been a sales manager in one of the smaller offices. It is the custom of this firm to pick promising people from middle-management and put them in the "assistant-to" position for perhaps a year to groom them for higher offices in their division. For some time these people had come from sales, and they generally went back as managers of large districts, from whence they might be promoted to a sales manager position in the main office.

Dick Benson, the executive vice president (roughly, general manager), is the son of Fred Benson. He is generally regarded as being willing, fairly competent, and decent, but weak and still much under his father's thumb. Traditionally, the executive vice president became president. Dick is not thought to be up to that job, but it is believed that he will get it anyway.

Ramsey Stockwell, vice president of production, had come into the organization as an experienced engineer about six years before. He rose rather rapidly to his present position. Rob Bronson, vice president of sales, succeeded Dick Benson after Benson had a rather short term as vice president of sales. Alan Carswell, the vice president of research, has a doctorate in metallurgy and some patents in his name, but he is not considered an aggressive researcher or an aggressive in-fighter in the company.

The Problem

When the research team studied Benson Metal, there were the usual problems of competition and price-cutting, the difficulties with the new aerospace metals, and inadequate plant facilities for a growing industry and company. However, the problem that particularly interests us here concerned the vice president of production, Ramsey Stockwell. He was regarded as a very competent production man. His loyalty to the company was unquestioned. He managed to keep outdated facilities operating and still had been able to push through the construction of quite modern facilities in the finishing phases of the production process. But he was in trouble with his own staff and with other divisions of the company, principally sales.

It was widely noted that Stockwell failed to delegate authority to his subordinates. A steady stream of people came into his office asking for permission for this and that or bringing questions to him. People who took some action

^{*}Charles Perrow, Yale University. Reprinted with permission.

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on their own could be bawled out unmercifully at times. At other times they were left on their own because of the heavy demands on Stockwell's time, given his frequent attention to details in some matters, particularly those concerning schedules and priorities. He "contracted" the lines of authority by giving orders directly to a manager or even to a head

foreman rather than by working through the intermediate levels. This violated the chain of command, left managers uninformed, and reduced their authority. It was sometimes noted that he had good people under him but did not always let them do their jobs.

The key group of production people rarely met in a group unless it was to be bawled out by Stockwell. Coordinating committees and the like existed mainly on paper.

More serious perhaps than this was the relationship to sales. Rob Bronson was widely regarded as an extremely bright, capable, likable, and up-and-coming manager. The sales division performed like a well-oiled machine but also had the enthusiasm and flashes of brilliance that indicated considerable adaptability. Morale was high, and identification with the company was complete. However, sales personnel found it quite difficult to get reliable information from production as to delivery dates or even what stage in the process a product was in.

Through long tradition, they were able to get special orders thrust into the work flow when they wanted to, but they often could not find out what this was going to do to normal orders, or even how disruptive this might be. The reason was that Stockwell would not allow production people to give any but the most routine information to sales personnel. In fact, because of the high centralization of authority and information in production, production personnel often did not know themselves. "Ramrod" Stockwell knew, and the only way to get information out of him was to go up the sales line to Rob Bronson. The vice president of sales could get the information from the vice president of production.

But Bronson had more troubles than just not wanting to waste his time by calling Stockwell about status reports. At the weekly top-management meeting, which involved all personnel from the vice presidential level and above, and frequently a few from below that level, Bronson would continually ask Stockwell whether something or other could be done. Stockwell always said that he thought it could be. He could not be pressed for any better estimations, and he rarely admitted that a job was, in fact, not possible. Even queries from President Tom Hollis could not evoke accurate forecasts from Stockwell. Consequently, planning on the part of sales and other divisions was difficult, and failures on the part of production were many because it always vaguely promised so much. Stockwell was willing to

try anything, and worked his head off at it, but the rest of the group knew that many of these attempts would fail.

While the people under Stockwell resented the way he took over their jobs at times and the lack of information available to them about other aspects of production, they were loyal to him. They admired his ability and they knew that he fought off the continual pressure of sales to slip in special orders, change schedules, or blame production for rejects. "Sales gets all the glory here" said one. "At the semiannual company meeting last week, the chairman of the board and the managing director of the company couldn't compliment sales enough for their good work, but there was only the stock 'well done' for production; 'well done given the trying circumstances.' Hell, Sales is what is trying us." The annual reports over the years credited sales for the good years and referred to equipment failures, crowded or poor production facilities, and the like in bad years. But it was also true that problems still remained even after Stockwell finally managed to pry some new production facilities out of the board of directors.

Stockwell was also isolated socially from the right group of top personnel: He tended to work later than most, had rougher manners, was less concerned with cultural activities, and rarely played golf. He occasionally relaxed with the manager of aerospace sales, who, incidentally, was the only high-level sales person who tended to defend Stockwell. "Ramrod's a rough diamond; I don't know that we ought to try to polish him," he sometimes said.

But polishing was in the minds of many. "Great production man—amazing what he gets out of that mill. But he doesn't know how to handle people. He won't delegate; he won't tell us when he is in trouble with something; he builds a fence around his people, preventing easy exchange," said the president. "Bullheaded as hell—he was good a few years ago, but I would never give him the job again," said the chairman of the board. He disagreed with the president that Stockwell could change. "You can't change people's personalities, least of all production men." "He's in a tough position," said the vice president of sales, "and he has to be able to get his people to work with him, not against him, and we all have to work together in today's market. I just wish he would not be so uptight."

A year or so before, the president had approached Stockwell about taking a couple of weeks off and joining a leadership training session. Stockwell would have nothing to do with it and was offended. The president waited a few months, then announced that he had arranged for the personnel manager and each of the directors to attend successive four-day T-group sessions run by a well-known organization. This had been agreed on at one of the directors' meetings, though no one had taken it very seriously. One by one, the directors came back with marked enthusiasm for the program. "It's almost as if they had our company in mind when they designed it," said one. Some started

"Ramrod" Stockwell 553

having evening and weekend sessions with their staff, occasionally using the personnel manager, who had had more experience with this than the others. Stockwell was scheduled to be the last one to attend the four-day session, but he canceled at the last minute—there were too many crises in the plant, he said, to go off that time. In fact, several had developed over the previous few weeks.

That did it, as far as the other vice presidents were concerned. They got together themselves, then with the president and executive vice president, and said that they had to get to the bottom of the problem. A top-level group session should be held to discuss the tensions that were accumulating. The friction between production and sales was spilling over into other areas as well, and the morale of management in general was suffering. They acknowledged that they put a lot of pressure on production, and were probably at fault in this or that matter, and thus a session would do all the directors good, not just Stockwell. The president hesitated. Stockwell, he felt, would just ride it out. Besides, he added, the "Old Man" (chairman of the board) was skeptical of such techniques. The executive vice president was quite unenthusiastic. It was remarked later that Stockwell had never recognized his official authority, and thus young Dick feared any open confrontation.

But events overtook the plan of the vice presidents. A first-class crisis had developed involving a major order for their oldest and best customer, and an emergency topmanagement meeting was called, which included several of their subordinates. Three in particular were involved: Joe Craig, assistant to the president, who knows well the problems at the plant in his role as troubleshooter for the managing director; Sandy Falk, vice president of personnel, who is sophisticated about leadership training programs and in a position to watch a good bit of the bickering at the middle and lower levels between sales and production; Bill Bletchford, manager of finishing, who is loyal to Stockwell and who has the most modern-equipped phase of the production process and the most to do with sales. It was in his department that the jam had occurred, due to some massive scheduling changes at the rolling phase and to the failure of key equipment.

In the meeting, the ground is gone over thoroughly. With their backs to the wall, the two production men, behaving somewhat uncharacteristically in an open meeting, charge sales with devious tactics for introducing special orders and for acting on partial and misinterpreted information from a foreman. Joe Craig knows, and admits, that the specialty A sales manager made promises to the

customer without checking with the vice president of sales, who could have checked with Stockwell. "He was right," says Vice President Bronson. "I can't spend all my time calling Ramsey about status reports; if Harrison can't find out from production on an official basis, he has to do the best he can." Ramsey Stockwell, after his forceful outburst about

the following speech:

Stockwell, after his forceful outburst about misleading information through devious tactics, falls into a hardened silence, answering only direct questions, and then briefly. The manager of finishing and the specialty A sales manager start working on each other. Sandy Falk, of personnel, knows they have been enemies for years, so he intervenes as best he can. The vice president of research, Carswell, a reflective man, often worried about elusive dimensions of company problems, then calls a halt with

You're all wrong and you're all right. I have heard bits and pieces of this fracas a hundred times over the last two or three years, and it gets worse each year. The facts of this damn case don't matter unless all you want is to score points with your opponents. What is wrong is something with the whole team here. I don't know what it is, but I know that we have to radically rethink our relations with one another. Three years ago this kind of thing rarely happened; now it is starting to happen all the time. And it is a time when we can't afford it. There is no more growth in our bread-andbutter line, specialty steels. The money, and the growth, is in aerospace; we all know that. Without aerospace we will just stand still. Maybe that's part of it. But maybe Ramsey's part of it too; this crisis is over specialty steel, and more of them seem to concern that than aerospace, so it can't be the product shift or that only. Some part of it has to be people, and you're on the hot seat, Ramsey.

Carswell let that sink in, then went on.

Or maybe it's something more than even these.... It is not being pulled together at the top, or maybe, the old way of pulling it together won't work anymore. I'm talking about you, Tom [Hollis], as well as Fred [Benson, the chairman of the board, who did not attend these meetings] and Dick [the executive vice president, and heir apparent]. I don't know what it is, here are Ramsey and Rob at loggerheads; neither of them are fools, and both of them are working their heads off. Maybe the problem is above their level.

There is a long silence. Assume you break the silence with your own analysis. What would that be?

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Integrative Case 5.0 W. L. Gore & Associates, Inc. Entering 1998*

"To make money and have fun." W. L. Gore

The First Day on the Job

Bursting with resolve, Jack Dougherty, a newly minted M.B.A. from the College of William and Mary, reported to his first day at W. L. Gore & Associates on July 26, 1976. He presented himself to Bill Gore, shook hands firmly, looked him in the eye, and said he was ready for anything.

Jack was not ready, however, for what happened next. Gore replied, "That's fine, Jack, fine. Why don't you look around and find something you'd like to do?" Three frustrating weeks later he found that something: trading in his dark blue suit for jeans, he loaded fabric into the mouth of a machine that laminated the company's patented GORE-TEX®1 membrane to fabric. By 1982, Jack had become responsible for all advertising and marketing in the fabrics group. This story is part of the folklore of W. L. Gore & Associates.

Today the process is more structured. Regardless of the job for which they are hired, new Associates² take a journey through the business before settling into their own positions. A new sales Associate in the fabrics division may spend six weeks rotating through different areas before beginning to concentrate on sales and marketing. Among other things the newcomer learns is how GORE-TEX fabric is made, what it can and cannot do, how Gore handles customer complaints, and how it makes its investment decisions.

Anita McBride related her early experience at W. L. Gore & Associates this way: "Before I came to Gore, I had worked for a structured organization. I came here, and for the first month it was fairly structured because I was going through training and this is what we do and this is how Gore is and all of that. I went to Flagstaff for that training. After a month I came down to Phoenix and my sponsor said, 'Well, here's your office; it's a wonderful office,' and 'Here's your desk,' and walked away. And I thought, 'Now what do I do?' You know, I was waiting for a memo or something, or a job description. Finally after another month I was so frustrated, I felt, 'What have I gotten myself into?' And so I went to my sponsor and I said, 'What the heck do you want from me? I need something from you.' And he said, 'If you don't know what you're supposed to do, examine your commitment, and opportunities."

Company Background

W. L. Gore & Associates was formed by the late Wilbert L. Gore and his wife in 1958. The idea for the business sprang from his personal, organizational, and technical experiences at E. I. DuPont de Nemours, and, particularly, his discovery of a chemical compound with unique properties. The compound, now widely known as GORE-TEX, has catapulted W. L. Gore & Associates to a high ranking on the *Forbes* 1998 list of the 500 largest private companies in the United States, with estimated revenues of more than \$1.1 billion. The company's avant-garde culture and people management practices resulted in W. L. Gore being ranked as the seventh best company to work for in America by *Fortune* in a January 1998 article.

Wilbert Gore was born in Meridian, Idaho, near Boise in 1912. By age six, according to his own account, he was an avid hiker in the Wasatch Mountain Range in Utah. In those mountains, at a church camp, he met Genevieve, his future wife. In 1935, they got married—in their eyes, a partnership. He would make breakfast and Vieve, as everyone called her, would make lunch. The partnership lasted a lifetime.

He received both a bachelor of science in chemical engineering in 1933 and a master of science in physical chemistry in 1935 from the University of Utah. He began his professional career at American Smelting and Refining in 1936. He moved to Remington Arms Company in 1941 and then to E. I. DuPont de Nemours in 1945. He held positions as research supervisor and head of operations research. While at DuPont, he worked on a team to develop applications for polytetrafluoroethylene, referred to as PTFE in the scientific community and known as "Teflon" by DuPont's consumers. (Consumers know it under other names from other companies.) On this team Wilbert Gore, called Bill by everyone, felt a sense of excited commitment, personal fulfillment, and self-direction. He followed the development of computers and transistors and felt that PTFE had the ideal insulating characteristics for use with such equipment.

He tried many ways to make a PTFE-coated ribbon cable without success. A breakthrough came in his home basement laboratory while he was explaining the problem to his nineteen-year-old son, Bob. The young Gore saw some PTFE

*Prepared by Frank Shipper, Department of Management and Marketing, Franklin P. Perdue School of Business, Salisbury State University, and Charles C. Manz, Nirenberg Professor of Business Leadership, School of Management, University of Massachusetts. Used with permission.

sealant tape made by 3M and asked his father, "Why don't you try this tape?" Bill then explained that everyone knew that you cannot bond PTFE to itself. Bob went on to bed.

Bill Gore remained in his basement lab and proceeded to try what everyone knew would not work. At about 4 a.m. he woke up his son, waving a small piece of cable around and saying excitedly, "It works, it works." The following night father and son returned to the basement lab to make ribbon cable coated with PTFE. Because the breakthrough idea came from Bob, the patent for the cable was issued in Bob's name.

For the next four months Bill Gore tried to persuade DuPont to make a new product—PTFE-coated ribbon cable. By this time in his career Bill Gore knew some of the decision makers at DuPont. After talking to a number of them, he came to realize that DuPont wanted to remain a supplier of raw materials and not a fabricator.

Bill and his wife, Vieve, began discussing the possibility of starting their own insulated wire and cable business. On January 1, 1958, their wedding anniversary, they founded W. L. Gore & Associates. The basement of their home served as their first facility. After finishing dinner that night, Vieve turned to her husband of twenty-three years and said, "Well, let's clear up the dishes, go downstairs, and get to work."

Bill Gore was forty-five years old with five children to support when he left DuPont. He put aside a career of seventeen years, and a good, secure salary. To finance the first two years of the business, he and Vieve mortgaged their house and took \$4,000 from savings. All their friends told them not to do it.

The first few years were rough. In lieu of salary, some of their employees accepted room and board in the Gore home. At one point eleven Associates were living and working under one roof. One afternoon, while sifting PTFE powder, Vieve received a call from the City of Denver's water department. The caller indicated that he was interested in the ribbon cable, but wanted to ask some technical questions. Bill was out running some errands. The caller asked for the product manager. Vieve explained that he was out at the moment. Next he asked for the sales manager and finally, the president. Vieve explained that they were also out. The caller became outraged and hollered, "What kind of company is this anyway?" With a little diplomacy the Gores were able eventually to secure an order for \$100,000. This order put the company on a profitable footing and it began to take off.

W. L. Gore & Associates continued to grow and develop new products, primarily derived from PTFE. Its best-known product would become GORE-TEX fabric. In 1986, Bill Gore died while backpacking in the Wind River Mountains of Wyoming. He was then Chairman of the Board. His son, Bob, continued to occupy the position of president. Vieve remained as the only other officer, secretary-treasurer.

Company Products

In 1998, W. L. Gore & Associates has a fairly extensive line of high-tech products that are used in a variety of applications, including electronic, waterproofing, industrial filtration, industrial seals, and coatings.

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Electronic & Wire Products

Gore electronic products have been found in unconventional places where conventional products will not do—in space shuttles, for example, where Gore wire and cable assemblies withstand the heat of ignition and the cold of space. In addition, they have been found in fast computers, transmitting signals at up to 93 percent of the speed of light. Gore cables have even gone underground, in oil-drilling operations, and underseas, on submarines that require superior microwave signal equipment and no-fail cables that can survive high pressure. The Gore electronic products division has a history of anticipating future customer needs with innovative products. Gore electronic products have been well received in industry for their ability to last under adverse conditions. For example, Gore has become, according to Sally Gore, leader in Human Resources and Communications, "one of the largest manufacturers of ultrasound cable in the world, the reason being that Gore's electronic cables' signal transmission is very, very accurate and it's very thin and extremely flexible and has a very, very long flex life. That makes it ideal for things like ultrasound and many medical electronic applications."

Medical Products

The medical division began on the ski slopes of Colorado. Bill was skiing with a friend, Dr. Ben Eiseman of Denver General Hospital. As Bill Gore told the story: "We were just to start a run when I absentmindedly pulled a small tubular section of GORE-TEX out of my pocket and looked at it. 'What is that stuff?' Ben asked. So I told him about its properties. 'Feels great,' he said. 'What do you use it for?' 'Got no idea,' I said. 'Well give it to me,' he said, 'and I'll try it in a vascular graft on a pig.' Two weeks later, he called me up. Ben was pretty excited. 'Bill,' he said, 'I put it in a pig and it works. What do I do now?' I told him to get together with Pete Cooper in our Flagstaff plant, and let them figure it out." Not long after, hundreds of thousands of people throughout the world began walking around with GORE-TEX vascular grafts.

GORE-TEX's expanded PTFE proved to be an ideal replacement for human tissue in many situations. In patients suffering from cardiovascular disease the diseased portion of arteries has been replaced by tubes of expanded PTFE—strong, biocompatible structures capable of carrying blood at arterial pressures. Gore has a strong position in this product segment. Other Gore medical products have included patches that can literally mend broken hearts by

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sealing holes, and sutures that allow for tissue attachment and offer the surgeon silk-like handling coupled with extreme strength. In 1985, W. L. Gore & Associates won Britain's Prince Philip Award for Polymers in the Service of Mankind. The award recognized especially the lifesaving achievements of the Gore medical products team.

Two recently developed products by this division are a new patch material that is intended to incorporate more tissue into the graft more quickly and the GORETM RideOn®3 Cable System for bicycles. According to Amy LeGere of the medical division, "All the top pro riders in the world are using it. It was introduced just about a year ago and it has become an industry standard." This product had a positive cash flow very soon after its introduction. Some Associates who were also outdoor sports enthusiasts developed the product and realized that Gore could make a great bicycle cable that would have 70 percent less friction and need no lubrication. The Associates maintain that the profitable development, production, and marketing of such specialized niche products are possible because of the lack of bureaucracy and associated overhead, Associate commitment, and the use of product champions.

Industrial Products

The output of the industrial products division has included sealants, filter bags, cartridges, clothes, and coatings. Industrial filtration products, such as GORE-TEX filter bags, have reduced air pollution and recovered valuable solids from gases and liquids more completely than alternatives—and they have done so economically. In the future they may make coal-burning plants completely smoke-free, contributing to a cleaner environment. The specialized and critical applications of these products, along with Gore's reputation for quality, have had a strong influence on industrial purchasers.

This division has developed a unique joint sealant—a flexible cord of porous PTFE—that can be applied as a gasket to the most complex shapes, sealing them to prevent leakage of corrosive chemicals, even at extreme temperature and pressure. Steam valves packed with GORE-TEX have been sold with a lifetime guarantee, provided the valve is used properly. In addition, this division has introduced Gore's first consumer product—GLIDE®4—a dental floss. "That was a product that people knew about for a while and they went the route of trying to persuade industry leaders to promote the product, but they didn't really pursue it very well. So out of basically default almost, Gore decided, Okay, they're not doing it right. Let's go in ourselves. We had a champion, John Spencer, who took that and pushed it forward through the dentists' offices and it just skyrocketed. There were many more people on the team but it was basically getting that one champion who focused on that product and got it out. They told him it 'couldn't be done,' 'It's never going to work,' and I guess that's all he needed. It was done and it worked," said Ray Wnenchak of the industrial products division. Amy LeGere added, "The champion worked very closely with the medical people to understand the medical market like claims and labeling so that when the product came out on the market it would be consistent with our medical products. And that's where, when we cross divisions, we know whom to work with and with whom we combine forces so that the end result takes the strengths of all of our different teams." As of 1998, GLIDE has captured a major portion of the dental floss market and the mint flavor is the largest-selling variety in the U.S. market based on dollar volume.

Fabric Products

The Gore fabrics division has supplied laminates to manufacturers of foul weather gear, ski wear, running suits, footwear, gloves, and hunting and fishing garments. Firefighters and U.S. Navy pilots have worn GORE-TEX fabric gear, as have some Olympic athletes. The U.S. Army adopted a total garment system built around a GORE-TEX fabric component. Employees in high-tech clean rooms also wear GORE-TEX garments.

GORE-TEX membrane has 9 billion pores randomly dotting each square inch and is feather-light. Each pore is 700 times larger than a water vapor molecule, yet thousands of times smaller than a water droplet. Wind and water cannot penetrate the pores, but perspiration can escape.

As a result, fabrics bonded with GORE-TEX membrane are waterproof, windproof, and breathable. The laminated fabrics bring protection from the elements to a variety of products—from survival gear to high-fashion rainwear. Other manufacturers, including 3M, Burlington Industries, Akzo Nobel Fibers, and DuPont, have brought out products to compete with GORE-TEX fabrics. Earlier, the toughest competition came from firms that violated the patents on GORE-TEX. Gore successfully challenged them in court. In 1993, the basic patent on the process for manufacturing ran out. Nevertheless, as Sally Gore explained, "What happens is you get an initial process patent and then as you begin to create things with this process you get additional patents. For instance we have patents protecting our vascular graft, different patents for protecting GORE-TEX patches, and still other patents protecting GORE-TEX industrial sealants and filtration material. One of our patent attorneys did a talk recently, a year or so ago, when the patent expired and a lot of people were saying, Oh, golly, are we going to be in trouble! We would be in trouble if we didn't have any patents. Our attorney had this picture with a great big umbrella, sort of a parachute, with Gore under it. Next he showed us lots of little umbrellas scattered all over the sky. So you protect certain niche markets and niche areas, but indeed competition increases as your initial patents expire." Gore, however, has continued to have a commanding position in the active-wear market.

To meet a variety of customer needs, Gore introduced a new family of fabrics in the 1990s (Exhibit 1). The introduction posed new challenges. According to Bob Winterling, "We did such a great job with the brand GORE-TEX that we actually have hurt ourselves in many ways. By that I mean it has been very difficult for us to come up with other new brands, because many people didn't even know Gore. We are the GORE-TEX company. One thing we decided to change about Gore four or five years ago was instead of being the GORE-TEX company we wanted to become the Gore company and that underneath the Gore company we had an umbrella of products that fall out of being the great Gore company. So it was a shift in how we positioned GORE-TEX. Today GORE-TEX is stronger than ever as it's turned out, but now we've ventured into such things as WindStopper®5 fabric that is very big in the golf market. It could be a sweater or a fleece piece or even a knit shirt with the WindStopper behind it or closer to your skin and what it does is it stops the wind. It's not waterproof; it's water resistant. What we've tried to do is position the Gore name and beneath that all of the great products of the company."

W. L. Gore & Associates' Approach to Organization and Structure

W. L. Gore & Associates has never had titles, hierarchy, or any of the conventional structures associated with enterprises of its size. The titles of president and secretary-treasurer continue to be used only because they are required by the laws of incorporation. In addition, Gore has never

had a corporate-wide mission or code of ethics statement, nor has Gore ever required or prohibited business units from developing such statements for themselves. Thus, the Associates of some business units who have felt a need for such statements have developed them on their own. When questioned about this issue, one Associate stated, "The company

belief is that (1) its four basic operating principles cover ethical practices required of people in business; (2) it will not tolerate illegal practices." Gore's management style has been referred to as unmanagement. The organization has been guided by Bill's experiences on teams at DuPont and has evolved as needed.

For example, in 1965 W. L. Gore & Associates was a thriving company with a facility on Paper Mill Road in Newark, Delaware. One Monday morning in the summer, Bill Gore was taking his usual walk through the plant. All of a sudden he realized that he did not know everyone in the plant. The team had become too big. As a result, he established the practice of limiting plant size to approximately two hundred Associates. Thus was born the expansion policy of "Get big by staying small." The purpose of maintaining small plants was to accentuate a close-knit atmosphere and encourage communication among Associates in a facility.

At the beginning of 1998, W. L. Gore & Associates consisted of over forty-five plants worldwide with approximately seven thousand Associates. In some cases, the plants are grouped together on the same site (as in Flagstaff, Arizona, with ten plants). Overseas, Gore's manufacturing facilities are located in Scotland, Germany, and China, and the company has two joint ventures in Japan (Exhibit 2). In addition, it has sales facilities located in fifteen other countries. Gore manufactures electronic,

EXHIBIT 1Gore's Family of Fabrics

Brand Name	Activity/Conditions	Breathability	Water Protection	Wind Protection
GORE-TEX®	rain, snow, cold, windy	very breathable	waterproof	windproof
Immersion™	for fishing and paddle	very breathable	waterproof	windproof
technology	sports			
Ocean technology	for offshore and	very breathable	waterproof	windproof
	coastal sailing			
WindStopper®	cool/cold, windy	very breathable	water resistance	windproof
Gore Dryloft™	cold, windy, light	extremely breathable	water-resistant	windproof
	precipitation			
Activent™	cool/cold, windy, light	extremely breathable	water-resistant	windproof
	precipitation			

EXHIBIT 2

International Locations of W. L. Gore & Associates



medical, industrial, and fabric products. In addition, it has numerous sales offices worldwide, including offices in Eastern Europe and Russia.

The Lattice Organization

W. L. Gore & Associates has been described not only as unmanaged, but also as unstructured. Bill Gore referred to the structure as a lattice organization (Exhibit 3). The characteristics of this structure are:

- Direct lines of communication—person to person—no intermediary
- No fixed or assigned authority
- 3. Sponsors, not bosses
- 4. Natural leadership defined by followership
- 5. Objectives set by those who must "make them happen"
- 6. Tasks and functions organized through commitments

The structure within the lattice is complex and evolves from interpersonal interactions, self commitment to group-known responsibilities, natural leadership, and group-imposed discipline. Bill Gore once explained the structure this way: "Every successful organization has an underground lattice. It's where the news spreads like lightning, where people can go around the organization to get things done." An analogy might be drawn to a structure of constant cross-area teams—the equivalent of quality circles going on all the time. When a puzzled interviewer told Bill that he was having trouble understand-

ing how planning and accountability worked, Bill replied with a grin: "So am I. You ask me how it works? Every which way."

The lattice structure has not been without its critics. As Bill Gore stated, "I'm told from time to time that a lattice organization can't meet a crisis well because it takes too long to reach a consensus when there are no bosses. But this isn't true. Actually, a lattice by its very nature works particularly well in a crisis. A lot of useless effort is avoided because there is no rigid management hierarchy to conquer before you can attack a problem."

The lattice has been put to the test on a number of occasions. For example, in 1975, Dr. Charles Campbell of the University of Pittsburgh reported that a GORE-TEX arterial graft had developed an aneurysm. If the bubble-like protrusion continued to expand, it would explode.

Obviously, this life-threatening situation had to be resolved quickly and permanently. Within only a few days of Dr. Campbell's first report, he flew to Newark to present his findings to Bill and Bob Gore and a few other Associates. The meeting lasted two hours. Dan Hubis, a former policeman who had joined Gore to develop new production methods, had an idea before the meeting was over. He returned to his work area to try some different production techniques. After only three hours and twelve tries, he had developed a permanent solution. In other words, in three hours a potentially damaging problem to both patients and the company was resolved.

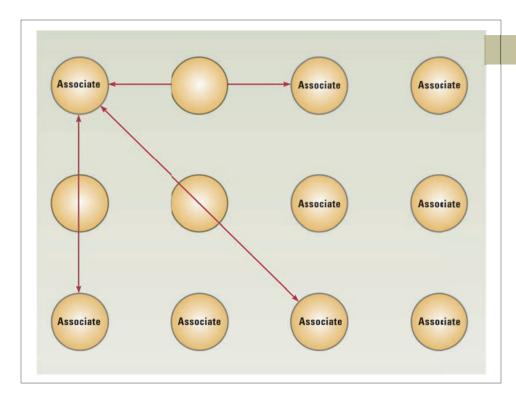


EXHIBIT 3The Lattice Structure

Furthermore, Hubis's redesigned graft went on to win widespread acceptance in the medical community.

Eric Reynolds, founder of Marmot Mountain Works Ltd. of Grand Junction, Colorado, and a major Gore customer, raised another issue: "I think the lattice has its problems with the day-to-day nitty-gritty of getting things done on time and out the door. I don't think Bill realizes how the lattice system affects customers. I mean, after you've established a relationship with someone about product quality, you can call up one day and suddenly find that someone new to you is handling your problem. It's frustrating to find a lack of continuity." He went on to say: "But I have to admit that I've personally seen at Gore remarkable examples of people coming out of nowhere and excelling."

When Bill Gore was asked if the lattice structure could be used by other companies, he answered: "No. For example, established companies would find it very difficult to use the lattice. Too many hierarchies would be destroyed. When you remove titles and positions and allow people to follow who they want, it may very well be someone other than the person who has been in charge. The lattice works for us, but it's always evolving. You have to expect problems." He maintained that the lattice system worked best when it was put in place in start-up companies by dynamic entrepreneurs.

Not all Gore Associates function well in this unstructured work environment, especially initially. For those

accustomed to a more structured work environment, there can be adjustment problems. As Bill Gore said: "All our lives most of us have been told what to do, and some people don't know how to respond when asked to do something—and have the very real option of saying no—on their job. It's the new Associate's responsibility to find out what he or she can do for the good of the operation." The vast majority of the new Associates, after some initial floundering, have adapted quickly.

Others, especially those who require more structured working conditions, have found that Gore's flexible workplace is not for them. According to Bill, for those few, "It's an unhappy situation, for both the Associate and the sponsor. If there is no contribution, there is no paycheck."

As Anita McBride, an Associate in Phoenix, noted: "It's not for everybody. People ask me do we have turnover, and yes we do have turnover. What you're seeing looks like utopia, but it also looks extreme. If you finally figure the system, it can be real exciting. If you can't handle it, you gotta go. Probably by your own choice, because you're going to be so frustrated." Overall, the Associates appear to have responded positively to the Gore system of unmanagement and unstructure. And the company's lattice organization has proven itself to be good from a bottom-line perspective. Bill estimated the year before he died that "the profit per Associate is double" that of DuPont.

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Features of W. L. Gore's Culture

Outsiders have been struck by the degree of informality and humor in the Gore organization. Meetings tend to be only as long as necessary. As Trish Hearn, an Associate in Newark, Delaware, said, "No one feels a need to pontificate." Words such as "responsibilities" and "commitments" are commonly heard, whereas

words such as "employees," "subordinates," and "managers" are taboo in the Gore culture. This is an organization that has always taken what it does very seriously, without its members taking themselves too seriously.

For a company of its size, Gore has always had a very short organizational pyramid. As of 1995 the pyramid consists of Bob Gore, the late Bill Gore's son, as president and Vieve, Bill Gore's widow, as secretary-treasurer. He has been the chief executive officer for more than twenty years. No second-in-command or successor has been designated. All the other members of the Gore organization were, and continue to be, referred to as Associates.

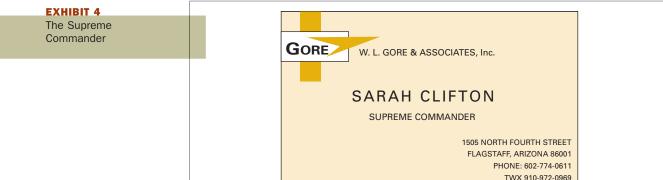
Some outsiders have had problems with the idea of no titles. Sarah Clifton, an Associate at the Flagstaff facility, was being pressed by some outsiders as to what her title was. She made one up and had it printed on some business cards: SUPREME COMMANDER (see Exhibit 4). When Bill Gore learned what she did, he loved it and recounted the story to others.

Leaders, Not Managers

Within W. L. Gore & Associates, the various people who take lead roles are thought of as being leaders, not managers. Bill Gore described in an internal memo the kinds of leadership and the role of leadership as follows:

1. The Associate who is recognized by a team as having a special knowledge, or experience (for example, this could be a chemist, computer expert, machine operator, salesman, engineer, lawyer). This kind of leader gives the team *guidance in a special area*.

- 2. The Associate the team looks to for coordination of individual activities in order to achieve the agreed-upon objectives of the team. The role of this leader is to persuade team members to *make the commitments* necessary for success (commitment seeker).
- 3. The Associate who proposes necessary objectives and activities and seeks agreement and team *consensus on objectives*. This leader is perceived by the team members as having a good grasp of how the objectives of the team fit in with the broad objective of the enterprise. This kind of leader is often also the "commitment-seeking" leader.
- 4. The leader who evaluates relative contribution of team members (in consultation with other sponsors), and reports these contribution evaluations to a compensation committee. This leader may also participate in the compensation committee on relative contribution and pay and reports changes in compensation to individual Associates. This leader is then also a compensation sponsor.
- 5. Product specialists who coordinate the research, manufacturing, and marketing of one product type within a business, interacting with team leaders and individual Associates who have commitments regarding the product type. They are respected for their knowledge and dedication to their products.
- 6. *Plant leaders* who help coordinate activities of people within a plant.
- 7. Business leaders who help coordinate activities of people in a business.
- 8. Functional leaders who help coordinate activities of people in a "functional" area.
- 9. Corporate leaders who help coordinate activities of people in different businesses and functions and who try to promote communication and cooperation among all Associates.
- 10. Entrepreneuring Associates who organize new teams for new businesses, new products, new processes, new



devices, new marketing efforts, new or better methods of all kinds. These leaders invite other Associates to "sign up" for their project.

It is clear that leadership is widespread in our lattice organization and that it is continually changing and evolving. The situation that leaders are frequently also sponsors should not imply that these are different activities and responsibilities.

Leaders are not authoritarians, managers of people, or supervisors who tell us what to do or forbid us to do things; nor are they "parents" to whom we transfer our own self-responsibility. However, they do often advise us of the consequences of actions we have done or propose to do. Our actions result in contributions, or lack of contribution, to the success of our enterprise. Our pay depends on the magnitude of our contributions. This is the basic discipline of our lattice organization.

Egalitarian and Innovative

Other aspects of the Gore culture have been aimed at promoting an egalitarian atmosphere, such as parking lots with no reserved parking spaces except for customers and disabled workers or visitors, and dining areas—only one in each plant—set up as focal points for Associate interaction. As Dave McCarter of Phoenix explained: "The design is no accident. The lunchroom in Flagstaff has a fireplace in the middle. We want people to like to be here." The location of a plant is also no accident. Sites have been selected on the basis of transportation access, a nearby university, beautiful surroundings, and climate appeal. Land cost has never been a primary consideration. McCarter justified the selection by stating: "Expanding is not costly in the long run. The loss of money is what you make happen by stymieing people into a box."

Bob Gore is a champion of Gore culture. As Sally Gore related, "We have managed surprisingly to maintain our sense of freedom and our entrepreneurial spirit. I think what we've found is that we had to develop new ways to communicate with Associates because you can't communicate with six thousand people the way that you can communicate with five hundred people. It just can't be done. So we have developed a newsletter that we didn't have before. One of the most important communication mediums that we developed, and this was Bob Gore's idea, is a digital voice exchange which we call our Gorecom. Basically everyone has a mailbox and a password. Lots of companies have gone to e-mail and we use e-mail, but Bob feels very strongly that we're very much an oral culture and there's a big difference between cultures that are predominantly oral and predominantly written. Oral cultures encourage direct communication, which is, of course, something that we encourage."

In rare cases an Associate "is trying to be unfair," in Bill's own words. In one case the problem was chronic absenteeism and in another, an individual was caught stealing. "When that happens, all hell breaks loose," said Bill Gore. "We can get damned authoritarian when we have to."

Over the years, Gore & Associates has faced a number of unionization drives. The company has neither tried to dissuade Associates from attending an organizational meeting nor retaliated when flyers were passed out. As of 1998, none of the plants had been

organized. Bill believed that no need existed for third-party representation under the lattice structure. He asked the question, "Why would Associates join a union when they own the company? It seems rather absurd."

Commitment has long been considered a two-way street. W. L. Gore & Associates has tried to avoid layoffs. Instead of cutting pay, which in the Gore culture would be disastrous to morale, the company has used a system of temporary transfers within a plant or cluster of plants and voluntary layoffs. Excerpts of interviews with two Gore Associates included at the end of this case further indicate the nature of the culture and work environment at W. L. Gore & Associates.

W. L. Gore & Associates' Sponsor Program

Bill Gore knew that products alone did not a company make. He wanted to avoid smothering the company in thick layers of formal "management." He felt that hierarchy stifled individual creativity. As the company grew, he knew that he had to find a way to assist new people and to follow their progress. This was particularly important when it came to compensation. W. L. Gore & Associates developed its "sponsor" program to meet these needs.

When people apply to Gore, they are initially screened by personnel specialists. As many as ten references might be contacted on each applicant. Those who meet the basic criteria are interviewed by current Associates. The interviews have been described as rigorous by those who have gone through them. Before anyone is hired, an Associate must agree to be his or her sponsor. The sponsor is to take a personal interest in the new Associate's contributions, problems, and goals, acting as both a coach and an advocate. The sponsor tracks the new Associate's progress, helping and encouraging, dealing with weaknesses, and concentrating on strengths. Sponsoring is not a short-term commitment. All Associates have sponsors and many have more than one. When individuals are hired initially, they are likely to have a sponsor in their immediate work area. If they move to another area, they may have a sponsor in that work area. As Associates' commitments change or grow, they may acquire additional sponsors. Because the hiring process looks beyond conventional views of what makes a good Associate, some anomalies have occurred. Bill Gore proudly told the story of "a very young man" of 84 who walked in, applied, and spent five very good years

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with the company. The individual had thirty years of experience in the industry before joining Gore. His other Associates had no problems accepting him, but the personnel computer did. It insisted that his age was 48. The individual success stories at Gore have come from diverse backgrounds.

An internal memo by Bill Gore described three roles of sponsors:

- Starting sponsor—a sponsor who helps a new Associate get started on a first job, or a present Associate get started on a new job.
- Advocate sponsor—a sponsor who sees that an Associate's accomplishments are recognized.
- Compensation sponsor—a sponsor who sees to it that an Associate is fairly paid for contributions to the success of the enterprise.

A single person can perform any one or all three kinds of sponsorship. Quite frequently, a sponsoring Associate is a good friend and it is not unknown for two Associates to sponsor each other.

Compensation Practices

Compensation at W. L. Gore & Associates has taken three forms: salary, profit sharing, and an Associates' Stock Ownership Program (ASOP).6 Entry-level salary has been in the middle for comparable jobs. According to Sally Gore: "We do not feel we need to be the highest paid. We never try to steal people away from other companies with salary. We want them to come here because of the opportunities for growth and the unique work environment." Associates' salaries have been reviewed at least once a year and more commonly twice a year. The reviews are conducted by a compensation team at each facility, with sponsors for the Associates acting as their advocates during the review process. Prior to meeting with the compensation committee, the sponsor checks with customers or Associates familiar with the person's work to find out what contribution the Associate has made. The compensation team relies heavily on this input. In addition, the compensation team considers the Associate's leadership ability and willingness to help others develop to their fullest.

Profit sharing follows a formula based on economic value added (EVA). Sally Gore had the following to say about the adoption of a formula: "It's become more formalized, and in a way, I think that's unfortunate because it used to be a complete surprise to receive a profit share. The thinking of the people like Bob Gore and other leaders was that maybe we weren't using it in the right way and we could encourage people by helping them know more about it and how we made profit-share decisions. The fun of it before was people didn't know when it was coming and all of a sudden you could do something

creative about passing out checks. It was great fun and people would have a wonderful time with it. The disadvantage was that Associates then did not focus much on, 'What am I doing to create another profit share?' By using EVA as a method of evaluation for our profit share, we know at the end of every month how much EVA was created that month. When we've created a certain amount of EVA, we then get another profit share. So everybody knows and everyone says, 'We'll do it in January,' so it is done. Now Associates feel more part of the happening to make it work. What have you done? Go make some more sales calls, please! There are lots of things we can do to improve our EVA and everybody has a responsibility to do that." Every month EVA is calculated and every Associate is informed. John Mosko of electronic products commented, ". . .(EVA) lets us know where we are on the path to getting one (a profit share). It's very critical every Associate knows."

Annually, Gore also buys company stock equivalent to a fixed percent of the Associates' annual incomes, placing it in the ASOP retirement fund. Thus, an Associate can become a stockholder after being at Gore for a year. Gore's ASOP ensures Associates participate in the growth of the company by acquiring ownership in it. Bill Gore wanted Associates to feel that they themselves are owners. One Associate stated, "This is much more important than profit sharing." In fact, some long-term Associates (including a twenty-five-year veteran machinist) have become millionaires from the ASOP.

W. L. Gore & Associates' Guiding Principles and Core Values

In addition to the sponsor program, Bill Gore articulated four guiding principles:

- 1. Try to be fair.
- Encourage, help, and allow other Associates to grow in knowledge, skill, and scope of activity and responsibility.
- 3. Make your own commitments, and keep them.
- 4. Consult with other Associates before taking actions that may be "below the water line."

The four principles have been referred to as Fairness, Freedom, Commitment, and Waterline. The *waterline* terminology is drawn from an analogy to ships. If someone pokes a hole in a boat above the water line, the boat will be in relatively little real danger. If someone, however, pokes a hole below the water line, the boat is in immediate danger of sinking. "Water line" issues must be discussed across teams and plants before decisions are made.

The operating principles were put to a test in 1978. By this time word about the qualities of GORE-TEX fabric was being spread throughout the recreational and outdoor markets. Production and shipment had begun in volume. At first a few complaints were heard. Next some of the clothing started coming back. Finally, much of the clothing was being returned. The trouble was that the GORE-TEX fabric was leaking. Waterproofing was one of the major properties responsible for GORE-TEX fabric's success. The company's reputation and credibility were on the line.

Peter W. Gilson, who led Gore's fabrics division, recalled: "It was an incredible crisis for us at that point. We were really starting to attract attention; we were taking off—and then this." In the next few months, Gilson and a number of his Associates made a number of those below-the-water-line decisions.

First, the researchers determined that oils in human sweat were responsible for clogging the pores in the GORE-TEX fabric and altering the surface tension of the membrane. Thus, water could pass through. They also discovered that a good washing could restore the waterproof property. At first this solution, known as the "Ivory Snow solution," was accepted. A single letter from "Butch," a mountain guide in the Sierras, changed the company's position. Butch described what happened while he was leading a group: "My parka leaked and my life was in danger." As Gilson noted, "That scared the hell out of us. Clearly our solution was no solution at all to someone on a mountaintop." All the products were recalled. Gilson remembered: "We bought back, at our own expense, a fortune in pipeline material—anything that was in the stores, at the manufacturers, or anywhere else in the pipeline."

In the meantime, Bob Gore and other Associates set out to develop a permanent fix. One month later, a second-generation GORE-TEX fabric had been developed. Gilson, furthermore, told dealers that if a customer ever returned a leaky parka, they should replace it and bill the company. The replacement program alone cost Gore roughly \$4 million.

The popularity of GORE-TEX outerwear took off. Many manufacturers now make numerous pieces of apparel such as parkas, gloves, boots, jogging outfits, and wind shirts from GORE-TEX laminate. Sometimes when customers are dissatisfied with a garment, they return them directly to Gore. Gore has always stood behind any product made of GORE-TEX fabric. Analysis of the returned garments found that the problem was often not the GORE-TEX fabric. The manufacturer, "... had created a design flaw so that the water could get in here or get in over the zipper and we found that when there was something negative about it, everyone knew it was GORE-TEX. So we had to make good on products that we were not manufacturing. We now license the manufacturers of all our GORE-TEX fabric products. They pay a fee to obtain a license to manufacture GORE-TEX products. In return we oversee the manufacture and we let them manufacture only designs that we are sure are guaranteed to keep you dry, that really will work. Then it works for them and for us—a win-win for them as well as for us," according to Sally Gore.

To further ensure quality, Gore & Associates has its own test facility including a rain room for garments made from GORE-TEX. Besides a rain/storm test, all garments must pass abrasion and washing machine tests. Only the garments that pass these tests will be licensed to display the GORE-TEX label.

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Research and Development

Like everything else at Gore, research and development has always been unstructured. Even without a formal R&D department, the company has been issued many patents, although most inventions have been held as proprietary or trade secrets. For example, few Associates are allowed to see GORE-TEX being made. Any Associate can, however, ask for a piece of raw PTFE (known as a silly worm) with which to experiment. Bill Gore believed that all people had it within themselves to be creative.

One of the best examples of Gore inventiveness occurred in 1969. At the time, the wire and cable division was facing increased competition. Bill Gore began to look for a way to straighten out the PTFE molecules. As he said, "I figured out that if we ever unfold those molecules, get them to stretch out straight, we'd have a tremendous new kind of material." He thought that if PTFE could be stretched, air could be introduced into its molecular structure. The result would be greater volume per pound of raw material with no effect on performance. Thus, fabricating costs would be reduced and profit margins would be increased. Going about this search in a scientific manner, Bob Gore heated rods of PTFE to various temperatures and then slowly stretched them. Regardless of the temperature or how carefully he stretched them, the rods broke.

Working alone late one night after countless failures, Bob in frustration stretched one of the rods violently. To his surprise, it did not break. He tried it again and again with the same results. The next morning Bob demonstrated his breakthrough to his father, but not without some drama. As Bill Gore recalled: "Bob wanted to surprise me so he took a rod and stretched it slowly. Naturally, it broke. Then he pretended to get mad. He grabbed another rod and said, 'Oh, the hell with this,' and gave it a pull. It didn't break—he'd done it." The new arrangement of molecules not only changed the wire and cable division, but led to the development of GORE-TEX fabric.

Bill and Vieve did the initial field-testing of GORE-TEX fabric the summer of 1970. Vieve made a hand-sewn tent out of patches of GORE-TEX fabric. They took it on their annual camping trip to the Wind River Mountains in Wyoming. The very first night in the wilderness, they encountered a hail storm. The hail tore holes in the top of the tent, and the bottom filled up like a bathtub from the

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rain. Undaunted, Bill Gore stated: "At least we knew from all the water that the tent was waterproof. We just needed to make it stronger, so it could withstand hail."

Gore Associates have always been encouraged to think, experiment, and follow a potentially profitable idea to its conclusion. At a plant in Newark, Delaware,

Fred L. Eldreth, an Associate with a third-grade education, designed a machine that could wrap thousands of feet of wire a day. The design was completed over a weekend. Many other Associates have contributed their ideas through both product and process breakthroughs.

Even without an R&D department, innovation and creativity continue at a rapid pace at Gore & Associates. The year before he died, Bill Gore claimed that "the creativity, the number of patent applications and innovative products is triple" that of DuPont.

Development of Gore Associates

Ron Hill, an Associate in Newark, noted that Gore "will work with Associates who want to advance themselves." Associates have been offered many in-house training opportunities, not only in technical and engineering areas but also in leadership development. In addition, the company has established cooperative education programs with universities and other outside providers, picking up most of the costs for the Gore Associates. The emphasis in Associate development, as in many parts of Gore, has always been that the Associate must take the initiative.

Marketing Approaches and Strategy

Gore's business philosophy incorporates three beliefs and principles: (1) that the company can and should offer the best-valued products in the markets and market segments where it chooses to compete, (2) that buyers in each of its markets should appreciate the caliber and performance of the items it manufactures, and (3) that Gore should become a leader with unique expertise in each of the product categories where it competes. To achieve these outcomes, the company's approach to marketing (it has no formally organized marketing department) is based on the following principles:

1. Marketing a product requires a leader, or product champion. According to Dave McCarter: "You marry your technology with the interests of your champions, since you've got to have champions for all these things no matter what. And that's the key element within our company. Without a product champion you can't do much anyway, so it is individually driven. If you get people interested in a particular market or a particular product for the marketplace, then there is no stopping them." Bob Winterling of the Fabrics Division elaborated further on the role and importance of the product champion.

The product champion is probably the most important resource we have at Gore for the introduction of new products. You look at that bicycle cable. That could have come out of many different divisions of Gore, but it really happened because one or two individuals said, "Look, this can work. I believe in it; I'm passionate about it; and I want it to happen." And the same thing with GLIDE floss. I think John Spencer in this case although there was a team that supported John, let's never forget that—John sought the experts out throughout the organization. But without John making it happen on his own, GLIDE floss would never have come to fruition. He started with a little chain of drugstores here, Happy Harry's I think, and we put a few cases in and we just tracked the sales and that's how it all started. Who would have ever believed that you could take what we would have considered a commodity product like that, sell it direct for \$3-\$5 apiece. That is so unGorelike it's incredible. So it comes down to people and it comes down to the product champion to make things happen.

- 2. A product champion is responsible for marketing the product through commitments with sales representatives. Again, according to Dave McCarter: "We have no quota system. Our marketing and our sales people make their own commitments as to what their forecasts have been. There is no person sitting around telling them that is not high enough, you have to increase it by 10 percent, or whatever somebody feels is necessary. You are expected to meet your commitment, which is your forecast, but nobody is going to tell you to change it. . . . There is no order of command, no chain involved. These are groups of independent people who come together to make unified commitments to do something and sometimes when they can't make those agreements . . . you may pass up a marketplace . . . but that's OK, because there's much more advantage when the team decides to do something."
- 3. Sales Associates are on salary, not commission. They participate in the profit sharing and ASOP plans in which all other Associates participate. As in other areas of Gore, individual success stories have come from diverse backgrounds. Dave McCarter related another success of the company relying on a product champion as follows:

I interviewed Sam one day. I didn't even know why I was interviewing him actually. Sam was retired from AT&T. After twenty-five years, he took the golden parachute and went down to Sun Lakes to play golf. He played golf a few months and got tired of that. He was selling life insurance. I sat reading the application; his technical background interested me. . . . He had managed an engineering department with six

hundred people. He'd managed manufacturing plants for AT&T and had a great wealth of experience at AT&T. He said, "I'm retired. I like to play golf but I just can't do it every day, so I want to do something else. Do you have something around here I can do?" I was thinking to myself, "This is one of these guys I would sure like to hire but I don't know what I would do with him." The thing that triggered me was the fact that he said he sold insurance and here is a guy with a high degree of technical background selling insurance. He had marketing experience, international marketing experience. So, the bell went off in my head that we were trying to introduce a new product into the marketplace that was a hydrocarbon leak protection cable. You can bury it in the ground and in a matter of seconds it could detect a hydrocarbon-like gasoline. I had a couple of other guys working on the product who hadn't been very successful with marketing it. We were having a hard time finding a customer. Well, I thought, that kind of product would be like selling insurance. If you think about it, why should you protect your tanks? It's an insurance policy that things are not leaking into the environment. That has implications, bigtime monetary. So, actually, I said, "Why don't you come back Monday? I have just the thing for you." He did. We hired him; he went to work, a very energetic guy. Certainly a champion of the product, he picked right up on it, ran with it single-handed.

Now it's a growing business. It certainly is a valuable one too for the environment. In the implementation of its marketing strategy, Gore has relied on cooperative and word-of-mouth advertising. Cooperative advertising has been especially used to promote GORE-TEX fabric products. These high-dollar, glossy campaigns include full-color ads and dressing the sales force in GORE-TEX garments. A recent slogan used in the ad campaigns has been, "If it doesn't say GORE-TEX, it's not." Some retailers praise the marketing and advertising efforts as the best. Leigh Gallagher, managing editor of *Sporting Goods Business* magazine, describes Gore & Associates' marketing as "unbeatable."

Gore has stressed cooperative advertising because the Associates believe positive experiences with any one product will carry over to purchases of other and more GORE-TEX fabric products. Apparently, this strategy has paid off. When the Grandoe Corporation introduced GORE-TEX gloves, its president, Richard Zuckerwar, noted: "Sports activists have had the benefit of GORE-TEX gloves to protect their hands from the elements. . . . With this handsome collection of gloves . . . you can have warm, dry hands without sacrificing style." Other clothing manufacturers and distributors who sell GORE-TEX garments include Apparel Technologies, Lands' End, Austin Reed, Hudson Trail

Outfitters, Timberland, Woolrich, North Face, L.L. Bean, and Michelle Jaffe.

The power of these marketing techniques extends beyond consumer products. According to Dave McCarter: "In the technical end of the business, company reputation probably is most important. You have to have a good reputation with your company."

He went on to say that without a good reputation, a company's products would not be considered seriously by many industrial customers. In other words, the sale is often made before the representative calls. Using its marketing strategies, Gore has been very successful in securing a market leadership position in a number of areas, ranging from waterproof outdoor clothing to vascular grafts. Its market share of waterproof, breathable fabrics is estimated to be 90 percent.

Adapting to Changing Environmental Forces

Each of Gore's divisions has faced from time to time adverse environmental forces. For example, the fabric division was hit hard when the fad for jogging suits collapsed in the mid-1980s. The fabric division took another hit from the recession of 1989. People simply reduced their purchases of high-end athletic apparel. By 1995, the fabric division was the fastest-growing division of Gore again.

The electronic division was hit hard when the mainframe computer business declined in the early 1990s. By 1995, that division was seeing a resurgence for its products partially because that division had developed some electronic products for the medical industry. As can be seen, not all the forces have been negative.

The aging population of America has increased the need for health care. As a result, Gore has invested in the development of additional medical products and the medical division is growing.

W. L. Gore & Associates' Financial Performance

As a closely held private corporation, W. L. Gore has kept its financial information as closely guarded as proprietary information on products and processes. It has been estimated that Associates who work at Gore own 90 percent of the stock. According to Shanti Mehta, an Associate, Gore's returns on assets and sales have consistently ranked it among the top 10 percent of the *Fortune* 500 companies. According to another source, W. L. Gore & Associates has been doing just fine by any financial measure. For thirty-seven straight years (from 1961 to 1997) the company has enjoyed profitability and positive return on equity. The compounded growth rate for revenues at W. L. Gore & Associates from 1969 to 1989 was more than 18 percent, discounted for inflation.⁷ In 1969, total sales were about

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\$6 million; by 1989, the figure was \$600 million. As should be expected with the increase in size, the percentage increase in sales has slowed over the last seven years (Exhibit 5). The company projects sales to reach \$1.4 billion in 1998. Gore financed this growth without long-term debt unless it made sense. For example, "We used to have

some industrial revenue bonds where, in essence, to build facilities the government allows banks to lend you money tax-free. Up to a couple of years ago we were borrowing

money through industrial revenue bonds. Other than that, we are totally debt-free. Our money is generated out of the operations of the business, and frankly we're looking for new things to invest in. I know that's a challenge for all of us today," said Bob Winterling. *Forbes* magazine estimates Gore's operating profits for 1993, 1994, 1995, 1996, and 1997 to be \$120, \$140, \$192, \$213, and \$230 million, respectively (see Exhibit 6). Bob Gore predicts that the company will reach \$2 billion in sales by 2001.

Recently, the company purchased Optical Concepts Inc., a laser, semiconductor technology company, of



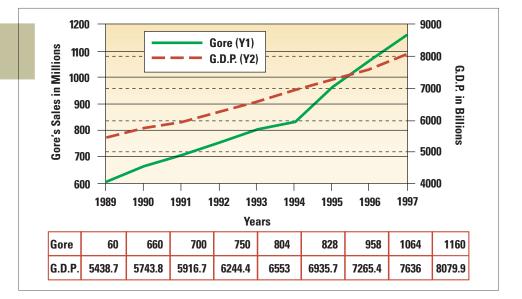
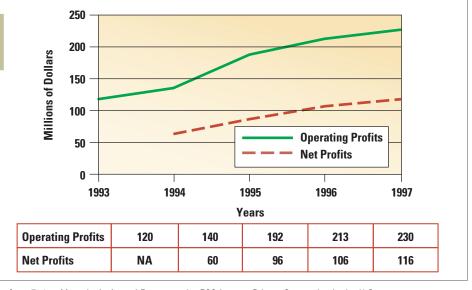


EXHIBIT 6Operating and Net
Profits of W. L. Gore &
Associates



Data from Forbes Magazine's Annual Report on the 500 Largest Private Companies in the U.S.

Lompoc, California. In addition, Gore & Associates is investing in test-marketing a new product, guitar strings, which was developed by its Associates.

When asked about cost control, Sally Gore had the following to say:

You have to pay attention to cost or you're not an effective steward of anyone's money, your own or anyone else's. It's kind of interesting, we started manufacturing medical products in 1974 with the vascular graft and it built from there. The Gore vascular graft is the Cadillac or BMW or the Rolls Royce of the business. There is absolutely no contest, and our medical products division became very successful. People thought this was Mecca. Nothing had ever been manufactured that was so wonderful. Our business expanded enormously, rapidly out there (Flagstaff, Arizona) and we had a lot of young, young leadership. They spent some time thinking they could do no wrong and that everything they touched was going to turn to gold.

They have had some hard knocks along the way and discovered it wasn't as easy as they initially thought it was. And that's probably good learning for everyone somewhere along the way. That's not how business works. There's a lot of truth in that old saying that you learn more from your failures than you do your successes. One failure goes a long way toward making you say, Oh, wow!

Acknowledgments

Many sources were helpful in providing background material for this case. The most important sources of all were the W. L. Gore Associates, who generously shared their time and viewpoints about the company. They provided many resources, including internal documents, and added much to this case through sharing their personal experiences as well as ensuring that the case accurately reflected the Gore company and culture.

Excerpts from Interviews with Associates

The first excerpt is from an Associate that was formerly with IBM and has been with Gore for two years:

- Q. What is the difference between being with IBM and Gore?
- A. I spent twenty-four years working for IBM, and there's a big difference. I can go ten times faster here at Gore because of the simplicity of the lattice organization. Let me give you an example. If I wanted to purchase chemicals at IBM (I am an industrial chemist), the first thing I would need to do is get accounting approval, then I would need at least two levels of managers' approval, then a secretary to log in my purchase and the purchase order would go to Purchasing where it would be assigned a buyer. Some time could be saved if you were

willing to "walk" the paperwork through the approval process, but even after computerizing the process, it typically would take one month from the time you initiated the purchase requisition till the time the material actually arrived. Here they have one simple form. Usually, I get the chemicals the next day and a copy of the purchase

order will arrive a day or two after that. It happens so fast. I wasn't used to that.

- Q. Do you find that a lot more pleasant?
- A. Yeah, you're unshackled here. There's a lot less bureaucracy that allows you to be a lot more productive. Take Lab Safety, for example. In my lab at IBM, we were cited for not having eyewash taped properly. The first time, we were cited for not having a big enough area taped off. So we taped off a bigger area. The next week the same eyewash was cited again, because the area we taped off was three inches too short in one direction. We retaped it and the following week, it got cited again for having the wrong color tape. Keep in mind that the violation was viewed as serious as a pail of gasoline next to a lit Bunsen burner. Another time I had the dubious honor of being selected the functional safety representative in charge of getting the function's labs ready for a Corporate Safety Audit. (The function was a third level in the pyramidal organization-[1] department, [2] project, and [3] function.) At the same time I was working on developing a new surface mount package. As it turned out, I had no time to work on development, and the function spent a lot of time and money getting ready for the Corporate Auditors who in the end never showed. I'm not belittling the importance of safety, but you really don't need all that bureaucracy to be safe.

The second interview is with an Associate who is a recent engineering graduate:

- Q. How did you find the transition coming here?
- A. Although I never would have expected it to be, I found my transition coming to Gore to be rather challenging. What attracted me to the company was the opportunity to "be my own boss" and determine my own commitments. I am very goal-oriented, and enjoy taking a project and running with it—all things that you are able to do and encouraged to do within the Gore culture. Thus, I thought, a perfect fit!

However, as a new Associate, I really struggled with where to focus my efforts—I was ready to make my own commitments, but to what?! I felt a strong need to be sure that I was working on something that had value, something that truly needed to be done. While I didn't expect to have the "hottest" project, I

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did want to make sure that I was helping the company to "make money" in some way.

At the time, though, I was working for a plant that was pretty typical of what Gore was like when it was originally founded—after my first project (which was designed to be a "quick win"—a project with meaning, but one that had a definite end point),

I was told, "Go find something to work on." While I could have found something, I wanted to find something with at least a small degree of priority! Thus, the whole process of finding a project was very frustrating for me—I didn't feel that I had the perspective to make such a choice and ended up in many conversations with my sponsor about what would be valuable. . . .

In the end, of course, I did find that project—and it did actually turn out to be a good investment for Gore. The process to get there, though, was definitely trying for someone as inexperienced as I was—so much ground would have been gained by suggesting a few projects to me and then letting me choose from that smaller pool.

What's really neat about the whole thing, though, is that my experience has truly made a difference. Due in part to my frustrations, my plant now provides college grads with more guidance on their first several projects. (This guidance obviously becomes less and less critical as each Associate grows within Gore.) Associates still are choosing their own commitments, but they're doing so with additional perspective, and the knowledge that they are making a contribution to Gore—which is an important thing within our culture. As I said, though, it was definitely rewarding to see that the company was so responsive, and to feel that I had helped to shape someone else's transition!

Notes

- GORE-TEX is a registered trademark of W. L. Gore & Associates
- In this case the word Associates is used and capitalized because in W. L. Gore & Associates' literature the word is always used instead of employees and is capitalized. In fact, case writers were told that Gore "never had 'employees' always 'Associates.'"

- GORE RideOn is a registered trademark of W. L. Gore & Associates
- 4. Glide is a registered trademark of W. L. Gore & Associates.
- WindStopper is a registered trademark of W. L. Gore & Associates.
- Similar legally to an ESOP (Employee Stock Ownership Plan). Again, Gore simply has never allowed the word employee in any of its documentation.
- 7. In comparison, only 11 of the 200 largest companies in the *Fortune* 500 had positive ROE each year from 1970 to 1988 and only 2 other companies missed a year. The revenue growth rate for these 13 companies was 5.4 percent, compared with 2.5 percent for the entire *Fortune* 500.

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Integrative Case 6.0 Dick Spencer*

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After the usual banter when old friends meet for cocktails, the conversation between a couple of university professors and Dick Spencer, who was now a successful businessman, turned to Dick's life as a vice president of a large manufacturing firm.

"I've made a lot of mistakes, most of which I could live with, but this one series of incidents was so frustrating that I could have cried at the time," Dick said in response to a question. "I really have to laugh at how ridiculous it is now, but at the time I blew my cork."

Spencer was plant manager of Modrow Company, a Canadian branch of the Tri-American Corporation. Tri-American was a major producer of primary aluminum with integrated operations ranging from the mining of bauxite through the processing to fabrication of aluminum into a variety of products. The company had also made and sold refractories and industrial chemicals. The parent company had wholly-owned subsidiaries in five separate United States locations and had foreign affiliates in fifteen different countries.

Tri-American mined bauxite in the Jamaican West Indies and shipped the raw material by commercial vessels to two plants in Louisiana where it was processed into alumina. The alumina was then shipped to reduction plants in one of three locations for conversion into primary aluminum. Most of the primary aluminum was then moved to the companies' fabricating plants for further processing. Fabricated aluminum items included sheet, flat, coil, and corrugated products; siding; and roofing.

Tri-American employed approximately 22,000 employees in the total organization. The company was governed by a board of directors, which included the chairman, vice chairman, president, and twelve vice presidents. However, each of the subsidiaries and branches functioned as independent units. The board set general policy, which was then interpreted and applied by the various plant managers. In a sense, the various plants competed with one another as though they were independent companies. This decentralization in organizational structure increased the freedom and authority of the plant managers, but increased the pressure for profitability.

The Modrow branch was located in a border town in Canada. The total work force in Modrow was 1,000. This Canadian subsidiary was primarily a fabricating unit. Its main products were foil and building products such as roofing and siding. Aluminum products were gaining in

importance in architectural plans, and increased sales were predicted for this branch. Its location and its stable work force were the most important advantages it possessed.

In anticipation of estimated increases in building product sales, Modrow had recently completed a modernization and expansion project. At the same time, their research and art departments combined talents in developing a series of twelve new patterns of siding which were being introduced to the market. Modernization and pattern development had been costly undertakings, but the expected return on investment made the project feasible. However, the plant manager, who was a Tri-American vice president, had instituted a campaign to cut expenses wherever possible. In this introductory notice of the campaign, he emphasized that cost reduction would be the personal aim of every employee at Modrow.

Salesman

The plant manager of Modrow, Dick Spencer, was an American who had been transferred to this Canadian branch two years previously, after the start of the modernization plan. Dick had been with the Tri-American Company for fourteen years, and his progress within the organization was considered spectacular by those who knew him well. Dick had received a master's degree in Business Administration from a well-known university at the age of twenty-two. Upon graduation he had accepted a job as salesman for Tri-American. During his first year as a salesman, he succeeded in landing a single, large contract, which put him near the top of the sales-volume leaders. In discussing this phenomenal rise in the sales volume, several of his fellow salesmen concluded that his looks, charm, and ability on the golf course contributed as much to his success as his knowledge of the business or his ability to sell the products.

The second year of his sales career, he continued to set a fast pace. Although his record set difficult goals for the other salesmen, he was considered a "regular guy" by them, and both he and they seemed to enjoy the few occasions when they socialized. However, by the end of the second year of constant traveling and selling, Dick began to experience some doubt about his future.

^{*}This case was developed and prepared by Professor Margaret E. Fenn, Graduate School of Business Administration, University of Washington. Reprinted by permission.

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His constant involvement in business affairs disrupted his marital life, and his wife divorced him during the second year with Tri-American. Dick resented her action at first, but gradually seemed to recognize that his career at present depended on his freedom to travel unencumbered. During that second year, he ranged far and wide in his sales terri-

tory, and successfully closed several large contracts. None of them was as large as his first year's major sale, but in total volume he again was well up near the top of salesmen for the year. Dick's name became well known in the corporate headquarters, and he was spoken of as "the boy to watch."

Dick had met the president of Tri-American during his first year as a salesman at a company conference. After three days of golfing and socializing they developed a relaxed camaraderie considered unusual by those who observed the developing friendship. Although their contacts were infrequent after the conference, their easy relationship seemed to blossom the few times they did meet. Dick's friends kidded him about his ability to make use of his new friendship to promote himself in the company, but Dick brushed aside their jibes and insisted that he'd make it on his own abilities, not someone's coattails.

By the time he was twenty-five, Dick began to suspect that he did not look forward to a life as a salesman for the rest of his career. He talked about his unrest with his friends, and they suggested that he groom himself for sales manager. "You won't make the kind of money you're making from commissions," he was told, "but you will have a foot in the door from an administrative standpoint, and you won't have to travel quite as much as you do now." Dick took their suggestions lightly, and continued to sell the product, but was aware that he felt dissatisfied and did not seem to get the satisfaction out of his job that he had once enjoyed.

By the end of his third year with the company Dick was convinced that he wanted a change in direction. As usual, he and the president spent quite a bit of time on the golf course during the annual company sales conference. After their match one day, the president kidded Dick about his game. The conversation drifted back to business, and the president, who seemed to be in a jovial mood, started to kid Dick about his sales ability. In a joking way, he implied that anyone could sell a product as good as Tri-American's, but that it took real "guts and know-how" to make the products. The conversation drifted to other things, but the remark stuck with Dick.

Sometime later, Dick approached the president formally with a request for a transfer out of the sales division. The president was surprised and hesitant about this change in career direction for Dick. He recognized the superior sales ability that Dick seemed to possess, but was unsure

that Dick was willing or able to assume responsibilities in any other division of the organization. Dick sensed the hesitancy, but continued to push his request. He later remarked that it seemed that the initial hesitancy of the president convinced Dick that he needed an opportunity to prove himself in a field other than sales.

Troubleshooter

Dick was finally transferred back to the home office of the organization and indoctrinated into production and administrative roles in the company as a special assistant to the senior vice president of production. As a special assistant, Dick was assigned several troubleshooting jobs. He acquitted himself well in this role, but in the process succeeded in gaining a reputation as a ruthless headhunter among the branches where he had performed a series of amputations. His reputation as an amiable, genial, easygoing guy from the sales department was the antithesis of the reputation of a cold, calculating headhunter which he earned in his troubleshooting role. The vice president, who was Dick's boss, was aware of the reputation which Dick had earned but was pleased with the results that were obtained. The faltering departments that Dick had worked in seemed to bloom with new life and energy after Dick's recommended amputations. As a result, the vice president began to sing Dick's praises, and the president began to accept Dick in his new role in the company.

Management Responsibility

About three years after Dick's switch from sales, he was given an assignment as assistant plant manager of an English branch of the company. Dick, who had remarried, moved his wife and family to London, and they attempted to adapt to their new routine. The plant manager was English, as were most of the other employees. Dick and his family were accepted with reservations into the community life as well as into the plant life. The difference between British and American philosophy and performance within the plant was marked for Dick, who was imbued with modern managerial concepts and methods. Dick's directives from headquarters were to update and upgrade performance in this branch. However, his power and authority were less than those of his superiors, so he constantly found himself in the position of having to soft pedal or withhold suggestions that he would have liked to make, or innovations that he would have liked to introduce. After a frustrating year and a half, Dick was suddenly made plant manager of an old British company which had just been purchased by Tri-American. He left his first English assignment with mixed feelings and moved from London to Birmingham.

As the new plant manager, Dick operated much as he had in his troubleshooting job for the first couple of years of his change from sales to administration. Training and

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reeducation programs were instituted for all supervisors and managers who survived the initial purge. Methods were studied and simplified or redesigned whenever possible, and new attention was directed toward production which better met the needs of the sales organization. A strong controller helped to straighten out the profit picture through stringent cost control; and by the end of the third year, the company showed a small profit for the first time in many years. Because he felt that this battle was won, Dick requested transfer back to the United States. The request was partially granted when nine months later he was awarded a junior vice president title, and was made manager of a subsidiary Canadian plant, Modrow.

Modrow Manager

Prior to Dick's appointment as plant manager at Modrow, extensive plans for plant expansion and improvement had been approved and started. Although he had not been in on the original discussions and plans, he inherited all the problems that accompany large-scale changes in any organization. Construction was slower in completion than originally planned, equipment arrived before the building was finished, employees were upset about the extent of change expected in their work routines with the installation of additional machinery, and, in general, morale was at a low ebb.

Various versions of Dick's former activities had preceded him, and on his arrival he was viewed with dubious eyes. The first few months after his arrival were spent in a frenzy of catching up. This entailed constant conferences and meetings, volumes of reading of past reports, becoming acquainted with the civic leaders of the area, and a plethora of dispatches to and from the home office. Costs continued to climb unabated.

By the end of his first year at Modrow, the building program had been completed, although behind schedule, the new equipment had been installed, and some revamping of cost procedures had been incorporated. The financial picture at this time showed a substantial loss, but since it had been budgeted as a loss, this was not surprising. All managers of the various divisions had worked closely with their supervisors and accountants in planning the budget for the following year, and Dick began to emphasize his personal interest in cost reduction.

As he worked through his first year as plant manager, Dick developed the habit of strolling around the organization. He was apt to leave his office and appear anywhere on the plant floor, in the design offices, at the desk of a purchasing agent or accountant, in the plant cafeteria rather than the executive dining room, or wherever there was activity concerned with Modrow. During his strolls he looked, listened, and became acquainted. If he observed activities which he wanted to talk about, or heard remarks that gave him clues to future action, he did not reveal these

at the time. Rather he had a nod, a wave, a smile, for the people near him, but a mental note to talk to his supervisors, managers, and foremen in the future. At first his presence disturbed those who noted him coming and going, but after several exposures to him without any noticeable effect, the workers came to accept his presence and continue their usual activi-

ties. Supervisors, managers, and foremen, however, did not feel as comfortable when they saw him in the area.

Their feelings were aptly expressed by the manager of the siding department one day when he was talking to one of his foremen: "I wish to hell he'd stay up in the front office where he belongs. Whoever heard of a plant manager who has time to wander around the plant all the time? Why doesn't he tend to his paper work and let us tend to our business?"

"Don't let him get you down," joked the foreman.
"Nothing ever comes of his visits. Maybe he's just lonesome and looking for a friend. You know how these
Americans are."

"Well, you may feel that nothing ever comes of his visits, but I don't. I've been called into his office three separate times within the last two months. The heat must really be on from the head office. You know these conferences we have every month where he reviews our financial progress, our building progress, our design progress, etc.? Well, we're not really progressing as fast as we should be. If you ask me we're in for continuing trouble."

In recalling his first year at Modrow, Dick had felt constantly pressured and badgered. He always sensed that the Canadians he worked with resented his presence since he was brought in over the heads of the operating staff. At the same time he felt this subtle resistance from his Canadian work force, he believed that the president and his friends in the home office were constantly on the alert, waiting for Dick to prove himself or fall flat on his face. Because of the constant pressures and demands of the work, he had literally dumped his family into a new community and had withdrawn into the plant. In the process, he built up a wall of resistance toward the demands of his wife and children who, in turn, felt as though he was abandoning them.

During the course of the conversation with his university friends, he began to recall a series of incidents that probably had resulted from the conflicting pressures. When describing some of these incidents, he continued to emphasize the fact that his attempt to be relaxed and casual had backfired. Laughingly, Dick said, "As you know, both human relations and accounting were my weakest subjects during the master's program, and yet they are two fields I felt I needed the most at Modrow at this time." He described some of the cost procedures that he would have liked to incorporate. However, without the support and

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knowledge furnished by his former controller, he busied himself with details that were unnecessary. One day, as he describes it, he overheard a conversation between two of the accounting staff members with whom he had been working very closely. One of them commented to the other, "For a guy who's a vice president, he sure spends a lot of time

breathing down our necks. Why doesn't he simply tell us the kind of systems he would like to try, and let us do the experimenting and work out the budget?" Without commenting on the conversation he overheard, Dick then described himself as attempting to spend less time and be less directive in the accounting department.

Another incident he described, which apparently had real meaning for him, was one in which he had called a staff conference with his top-level managers. They had been going "hammer and tongs" for better than an hour in his private office, and in the process of heated conversation had loosened ties, taken off coats, and really rolled up their sleeves. Dick himself had slipped out of his shoes. In the midst of this, his secretary reminded him of an appointment with public officials. Dick had rapidly finished up his conference with his managers, straightened his tie, donned his coat, and had wandered out into the main office in his stocking feet.

Dick fully described several incidents when he had disappointed, frustrated, or confused his wife and family by forgetting birthdays, appointments, dinner engagements, etc. He seemed to be describing a pattern of behavior which resulted from continuing pressure and frustration. He was setting the scene to describe his baffling and humiliating position in the siding department. In looking back and recalling his activities during this first year, Dick commented on the fact that his frequent wanderings throughout the plant had resulted in a nodding acquaintance with the workers, but probably had also resulted in foremen and supervisors spending more time getting ready for his visits and reading meaning into them afterwards than attending to their specific duties. His attempts to know in detail the accounting procedures being used required long hours of concentration and detailed conversations with the accounting staff, which were time consuming and very frustrating for him, as well as for them. His lack of attention to his family life resulted in continued pressure from both wife and family.

The Siding Department Incident

Siding was the product which had been budgeted as a large profit item of Modrow. Aluminum siding was gaining in popularity among both architects and builders, because of its possibilities in both decorative and practical uses. Panel sheets of siding were shipped in standard sizes to order; large sheets of the coated siding were cut to specifications in the trim department, packed, and shipped. The trim shop was located near the loading platforms, and Dick often cut through the trim shop on his wanderings through the plant. On one of his frequent trips through the area, he suddenly became aware of the fact that several workers responsible for the disposal function were spending countless hours at high-speed saws cutting scraps into specified lengths to fit into scrap barrels. The narrow bands of scrap which resulted from the trim process varied in length from seven to twenty-seven feet and had to be reduced in size to fit into disposal barrels. Dick, in his concentration on cost reduction, picked up one of the thin strips, bent it several times and fitted it into the barrel. He tried this with another piece, and it bent very easily. After assuring himself that bending was possible, he walked over to a worker at the saw and asked why he was using the saw when material could easily be bent and fitted into the barrels, resulting in saving time and equipment. The worker's response was, "We've never done it that way, sir. We've always cut it."

Following his plan of not commenting or discussing matters on the floor, but distressed by the reply, Dick returned to his office and asked the manager of the siding department if he could speak to the foreman in the scrap division. The manager said, "Of course, I'll send him up to you in just a minute."

After a short time, the foreman, very agitated at being called to the plant manager's office, appeared. Dick began questioning him about the scrap disposal process and received the standard answer: "We've always done it that way." Dick then proceeded to review cost-cutting objectives. He talked about the pliability of the strips of scrap. He called for a few pieces of scrap to demonstrate the ease with which it could be bent, and ended what he thought was a satisfactory conversation by requesting the foreman to order heavy-duty gloves for his workers and use the bending process for a trial period of two weeks to check the cost savings possible.

The foreman listened throughout most of this hour's conference, offered several reasons why it wouldn't work, raised some questions about the record-keeping process for cost purposes, and finally left the office with the forced agreement to try the suggested new method of bending, rather than cutting, for disposal. Although he was immersed in many other problems, his request was forcibly brought home one day as he cut through the scrap area. The workers were using power saws to cut scraps. He called the manager of the siding department and questioned him about the process. The manager explained that each foreman was responsible for his own processes, and since Dick had already talked to the foreman, perhaps he had better talk to him again. When the foreman arrived, Dick began to question him. He received a series of excuses, and some explanations of the kinds of problems they were meeting by attempting to bend the scrap material. "I don't care what the problems are," Dick nearly shouted, "when Dick Spencer 573

I request a cost-reduction program instituted, I want to see it carried through."

Dick was furious. When the foreman left, Dick phoned the maintenance department and ordered the removal of the power saws from the scrap area immediately. A short time later the foreman of the scrap department knocked on Dick's door reporting his astonishment at having maintenance men step into his area and physically remove the saws. Dick reminded the foreman of his request for a trial at cost reduction to no avail, and ended the conversation

by saying that the power saws were gone and would not be returned, and the foreman had damned well better learn to get along without them. After a stormy exit by the foreman, Dick congratulated himself on having solved a problem and turned his attention to other matters.

A few days later Dick cut through the trim department and literally stopped to stare. As he

described it, he was completely nonplussed to discover gloved workmen using hand shears to cut each strip of scrap.

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Integrative Case 7.0 The Plaza Inn*

David Bart, General Manager of the Plaza Inn, had just finished reading a letter from Jean Dumas, President of the prestigious Relais & Chateaux, a French hotel association of which the Plaza Inn was a member. In the formal and polite tone of the French language, the president stated that the last inspection had determined that the service levels of the Plaza Inn did not measure up to the Relais & Chateaux standards. Moreover, the letter noted that the Front Desk and Reservations, two critical guest contact departments, received the worst ratings among all of the Relais & Chateaux member properties. The letter concluded that unless the management of the Plaza Inn could submit a plan for guest service improvement and pass the next inspection scheduled in six months, the Relais & Chateaux would "regrettably be forced to withhold the Plaza Inn's membership."

Background

Located within walking distance of the Country Club Plaza and the Crown Center districts of Kansas City, the Plaza Inn is a 50-room hotel modeled after the boutique hotels of Europe. The Inn's intimate atmosphere and unobtrusive service attract business and leisure travelers alike.

Built in the 1920s in the classic Victorian style and meticulously renovated in 1985, the Inn occupies a place on the National Register of Historic Places. Guest rooms are decorated in the best country manner with antique furnishings and oriental rugs discreetly coupled with the most modern leisure and business amenities. Luxurious terry cloth robes and marbled baths, for example, await the weary guest. The Plaza Inn also boasts two gourmet restaurants: the romantic, nationally acclaimed St. Jacques with an award winning wine list, and the more casual Andre's bar and bistro. In addition to its overnight guests, the restaurants have an established local clientele.

Nostalgia prompted Andre Bertrand and Tim Boyle, two successful Kansas City entrepreneurs and real estate developers, to purchase the Plaza Inn in 1983. They entered into a partnership with Antoine Fluri, a Swiss hotelier who soon assumed the position of the Inn's general manager. In addition to the three general partners the Inn is owned by approximately 20 limited partners.

"One of the Ten Best New Inns"

Under the charismatic direction of Antoine Fluri, the Inn quickly established a national reputation. In 1987, *Travel*

magazine voted the Plaza Inn among the "ten best new inns." A loyal clientele included such famous people as former French President Valery Giscard D'Estaing, Senator Danforth, and Susan Sontag, to name a few. Antoine Fluri also negotiated the Inn's membership in the prestigious, world-renowned Relais & Chateaux association. The existing hotels in the immediate area: a Marriott, a Holiday Inn, and a Hilton gave the Plaza Inn virtually no competition for the upscale traveler.

Despite the success of the Inn, in early 1989 Antoine Fluri sold his share to the remaining two partners and left the Inn citing, "irreconcilable differences" as the reason. A year later, he opened his own restaurant in the Country Club Plaza District.

To continue to promote the European image of the Inn, the owners hired a French couple from Normandy, Marc and Nicole Duval, to replace Antoine Fluri. However, the Duvals soon proved to lack knowledge about European hospitality practices as well as management expertise. They abused their position and power, and within a short time succeeded in alienating many of the Inn's clientele and most of its staff. Under their management, the Inn rapidly incurred heavy financial losses. Alarmed by the practices of the Duvals, the owners looked for new management for the Inn. In December 1989, David Bart was hired as the new general manager. A native of Missouri, he had a solid hotel management background in the middle west, most recently including several years as controller at the headquarters of a large chain hotel.

As David Bart assumed the direction of the Inn in early 1990, he faced several challenges, including steadily declining hotel occupancy and revenues. Many of the regular clientele complained that the Inn had not been the same since Antoine Fluri left. Moreover, contrary to optimistic expectations, the Inn was also losing business to a 300-room, upscale Ritz-Carlton hotel which had just opened a few blocks down the street and was offering introductory room rates as low as \$75. Finally, toward the end of 1990 demand also declined as a national recession began to set in.

Given the poor performance of the hotel, David Bart immediately proceeded to cut costs, which included the elimination of several staff positions. In the Food and

*Written for class discussion by Craig Lundberg, Cornell University, based on field research by Monika Dubaj. This case does not purport to illustrate either effective or ineffective managerial practices. Reprinted with permission.

The Plaza Inn 575

Beverage Department (F&B), two of the three restaurant managers were eliminated. St. Jacques and Andre's were to be run by the F&B director with the assistance of only one restaurant manager. In the Rooms Department, Bart eliminated the position of Private Branch Exchange (PBX) operator, and transferred the responsibility of answering the phone directly to the front desk. Finally, the front office manager position was eliminated, and the front desk staff came under the supervision of the sales manager. Thus, the Inn began to operate with a lean management and staff group. All operating departments, with the exception of F&B, were headed by one person and with no administrative support. Even Bart himself did not retain a secretary.

The Front Desk

The end of David Bart's first year at the Plaza Inn was marked by the outbreak of the Gulf War. During the first quarter of 1990, occupancy hit an all-time low of just 40%. However, business finally began to pick up in April. This increase in demand was especially hard for the front desk. The reception area, consisting of an elegant antique concierge-type desk, was too small to be staffed by more than one person at a time. Consequently, only one front desk receptionist was scheduled per shift. With no PBX operator and no secretarial staff, this meant that the front desk receptionist was responsible for not only providing guest service, but also for answering the telephone, taking messages for the management staff, and booking room and restaurant reservations. Moreover, the sales office was not connected to the computerized Property Management System (PMS), and consequently the sales and catering managers relied on the front desk to check availability and block and update group reservations. Similarly, the housekeeping department was not computerized, and the front desk was charged with the preparation of housekeeping room assignments each morning and evening as well as with the tracking and updating of room status in the PMS. Bart believed that the front desk should perform a central function in the operation of the Inn. Rather than computerize the housekeeping, sales and catering departments, and train the managers to utilize the PMS, Bart preferred the front desk to oversee those activities. This, he believed, allowed for greater consistency and control.

With only one person scheduled per shift, the front desk receptionist had to juggle the telephone, coordinate department activities, and take care of guest needs in the personalized manner that was the trademark of the Inn. On busy days, guests checking in or out were rudely interrupted by the ringing telephone, or alternatively, callers were put on hold for lengthy periods of time while the front desk receptionist helped a guest.

The inability to efficiently expedite phone calls and respond to guest needs became worrisome not only from a guest service perspective, but also from a potential revenue

loss standpoint. Room reservation calls usually hung up if they remained on hold for more than two minutes. Moreover, under the pressure to answer the phone and help a guest at the same time, the front desk receptionists frequently underquoted rates, mixed up arrival dates, and booked rooms on sold out nights. Cancellation requests were not handled cor-

rectly with the consequence that some guests were billed for reservations that they had canceled. One of the front desk receptionists commented: "It's extremely difficult to make a room sale when I constantly have to ask the customer to hold because I'm trying to pick up the other five lines that are ringing. What is more important: making a \$130 room reservation for two nights or taking a message for one of the managers?"

Reinstatement of the Front Office Manager

Lost revenues and customer complaints about front office service finally convinced David Bart of the need to reinstate the position of the front office manager. A manager was needed to monitor the rooms inventory and ensure that no revenues were lost due to un-canceled reservations and unreleased room blocks, to coordinate activities between the departments, and to train the front office staff consisting of front desk receptionists and valets/bellhops. However, to minimize costs, Bart decided that the front office manager would also work three shifts per week at the front desk as a receptionist.

In February 1991, Bart offered the position of front office manager to Ms. Claire Ruiz, who had been working as a front desk receptionist since 1989. The promotion worked out well. Claire knew the job thoroughly and was genuinely interested in hotel management. She was able to effectively combine her managerial duties with the three shifts at the front desk.

Cooperation between the departments soon increased significantly. Claire believed that the Inn would never be able to afford the specialized and extensive front office staff of a larger hotel, and thus its ability to deliver high-quality customer service depended on mutual cooperation between all employees. Consequently, when things got busy, she had the front desk ask other departments for support. For example, if the switchboard was busy, reservation calls were transferred from the front desk to accounting or sales. Even the general manager himself got called on to help the valets park cars or assist guests with luggage, although he clearly preferred being in his office going over reports and records.

The New PBX Position

While other managers were willing to help out, they also had their own duties to tend to and weren't always available. Since occupancy remained strong, Claire convinced

7.0

the general manager to reinstate the PBX position. However, Claire's idea was to have the PBX operator function as an extension of the front desk. A PBX station was set up in an unoccupied reception area in the lobby, and with the exception of checking guests in and out, the PBX operator performed the same duties and was compensated at the same rate

of pay as the front desk receptionist. This additional support allowed the front desk to provide more efficient and gracious service to the Inn's guests and improve their roomselling ability. Despite the continuing recession and competition from the Ritz-Carlton, 1991 proved to be a year of record high occupancy and revenues for the Plaza Inn.

In August 1992, Claire left the Plaza Inn to pursue a graduate degree in hotel management at an eastern university. David Bart believed that the situation at the front desk was under control, and did not plan to fill the vacant position of front office manager. The front desk staff once again would be indirectly supervised by the sales manager.

It wasn't long, however, before the same problems Claire had worked so hard to resolve cropped up again. With the start of the school year, the front desk staff were no longer as flexible in terms of scheduling, and the PBX operator was called on to fill vacant shifts at the front desk. More often than not, there was only one person scheduled to work in the front office, and guest service began to suffer again. One day, for example, David Bart discovered that a recently hired front desk receptionist frequently told clients that the hotel was sold out because she was too busy to take a reservation.

Bart believed that there was no one at the front desk capable of being promoted to the position of front office manager. However, he also thought that it would be difficult to hire an outsider who would be willing to work the three shifts at the front desk for the modest salary he was willing to offer (most managers at the Plaza Inn were paid \$5,000 to \$7,000 less than other Kansas City hotels). Thus, Bart was relieved to learn that Laura Dunbar, who had previously worked at the Plaza Inn as a front desk receptionist, was interested in the position.

A New Front Office Manager

In addition to her experience at the Plaza Inn, Laura had worked as a concierge at one of the convention hotels in downtown Kansas City for several years. She had left the Plaza Inn for a secretarial position that offered more pay than the front desk position at the Inn. However, she missed the excitement and pace of the hospitality industry, and accepted the front office manager position in December 1992 with enthusiasm.

Despite her extensive connections with other Kansas City hotels, as well as the Kansas City Concierge Association, Laura soon found that one of her biggest

challenges was the hiring and retaining of the front desk staff. The difficulty of hiring qualified employees forced Laura to work more than three shifts at the front desk. This left her with little time for planning and managing the front office operation. Short-staffed, she sometimes found herself working as much as 30 days in a row without a day off. In addition, the PBX position had not been filled on a regular basis for several months. Laura noticed that the front desk receptionists were not very attentive to the guests and were unable to meet guest expectations of a personalized, concierge-type service. Guest comment cards frequently included negative observations regarding front desk service; in fact, one guest commented that it seemed to him that the front desk receptionists "were responsible for doing everything with the exception of bartending and bussing the tables in the restaurants."

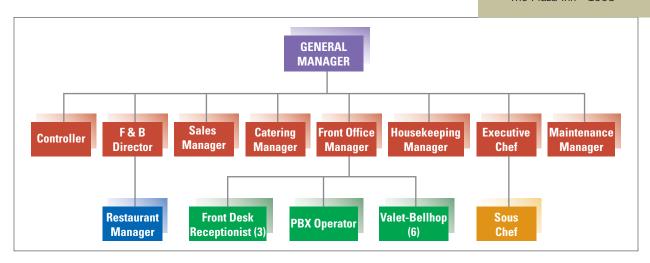
Laura believed that David Bart was reluctant to hire a full-time PBX operator due to financial constraints. She also felt pressured to meet the front office payroll budget, which had been prepared by Bart and which she felt had been grossly underestimated. In a bi-monthly management staff meeting, Laura suggested to the F&B director that perhaps the restaurant should assume responsibility for managing their own reservations and inquiries, so as to free up the front desk staff to improve guest service and sell more rooms. However, the F&B director was quick to point out that the evening restaurant manager was called on to assist with rooms-related issues on a daily basis, and replaced the evening front desk receptionist so that she could take a break. The restaurants, he asserted, could not afford to create a position just to take reservations and answer inquiries.

Laura felt especially pressured with managing the front desk operation on the weekends. During the week she felt she could call on the other managers for help, whether it was to park a car or take a reservation. On the weekends, however, the only manager on duty was the restaurant manager, and he was often too busy with the restaurant to help with rooms issues. The Manager on Duty (MOD) program (in which all department managers rotated in being at the Inn on call and in charge Friday and Saturday nights) that had been established the prior spring at the initiation of Bart, had been a tremendous help; however, it had been canceled when the Inn had hit the slow summer period. David Bart was not in on the weekends, and Laura felt he somehow forgot that the hotel existed on weekends, not to mention that it usually ran at full occupancy.

By mid-fall, Bart agreed with Laura that there was a definite need to reinstate the MOD program, as well as the PBX position. However, Bart thought that Laura herself had reduced her role of front office manager to that of a front desk receptionist. She seemed to him to surround herself with employees who were either not flexible or not qualified enough, and thus was left to fill a lot of shifts at the front desk herself. This didn't leave her with any time

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EXHIBIT 1
Organizational Chart,
The Plaza Inn—1993



to oversee the operation of the front desk, and to ensure everything was in order. She still hadn't even finished writing up job descriptions for the Inn which he had told her to do two months ago. Bart wondered if the problems at the Front Desk stemmed from Laura's rather shy personality, or perhaps from her lack of management expertise. It appeared that she was unable to articulate her needs to him and other managers. Perhaps he needed to give her more direction; however, this was contradictory to his belief that each manager should assume the responsibility of defining his or her own role consistent with the objectives of the Inn. The weakness he saw in the front office manager was

of growing concern to David Bart. Clearly, it was a key position in the operation of the Inn and required a highly competent, proactive individual.

As he thought back to the ultimatum he had received from the president of Relais & Chateaux, the general manager wondered what he should do. Perhaps he should look for an experienced manager to head the front office, even if it meant paying a much higher salary. Perhaps he just needed to shake Laura up. Perhaps the situation would just straighten itself out. David Bart reached for a copy of the Inn's organization chart (Exhibit 1); perhaps a major structural change was needed. Perhaps. . . .

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Integrative Case 8.0 Dowling Flexible Metals*

Background

In 1960, Bill Dowling, a "machine-tool set-up-man" for a large auto firm, became so frustrated with his job that he quit to form his own business. The manufacturing operation consisted of a few general purpose metal working machines that were set up in Dowling's garage. Space was such a constraint that it controlled the work process. For example, if the cutting press was to be used with long stock, the milling machines would have to be pushed back against the wall and remain idle. Production always increased on rain-free, summer days since the garage doors could be opened and a couple of machines moved out onto the drive. Besides Dowling, who acted as salesman, accountant, engineer, president, manufacturing representative, and working foreman, members of the original organization were Eve Sullivan, who began as a part-time secretary and payroll clerk; and Wally Denton, who left the auto firm with Bill. The workforce was composed of part-time "moonlighters," full-time machinists for other firms, who were attracted by the job autonomy which provided experience in setting up jobs and job processes, where a high degree of ingenuity was required.

The first years were touch and go with profits being erratic. Gradually the firm began to gain a reputation for being ingenious at solving unique problems and for producing a quality product on, or before, deadlines. The "product" consisted of fabricating dies for making minor component metal parts for automobiles and a specified quantity of the parts. Having realized that the firm was too dependent on the auto industry and that sudden fluctuations in auto sales could have a drastic effect on the firm's survival, Dowling began marketing their services toward manufacturing firms not connected with the auto industry. Bids were submitted for work that involved legs for vending machines, metal trim for large appliances, clamps and latches for metal windows, and display racks for small power hand tools.

As Dowling Flexible Metals became more diversified, the need for expansion forced the company to borrow building funds from the local bank, which enabled construction of a small factory on the edge of town. As new markets and products created a need for increasingly more versatile equipment and a larger workforce, the plant has since expanded twice until it is now three times its original size.

In 1980, Dowling Flexible Metals hardly resembles the garage operation of the formative years. The firm now employs approximately 30 full-time journeymen and apprentice machinists, a staff of 4 engineers that were hired about three years ago, and a full-time office secretary subordinate to Eve Sullivan, the Office Manager. (See Exhibit 1.) Their rapid growth has created problems that in 1980 have not been resolved. Bill Dowling, realizing his firm is suffering from growing pains, has asked you to "take a look at the operation and make recommendations as to how things could be run better." You begin the consulting project by interviewing Dowling, other key people in the firm, and workers out in the shop who seem willing to express their opinions about the firm.

Bill Dowling, Owner-President

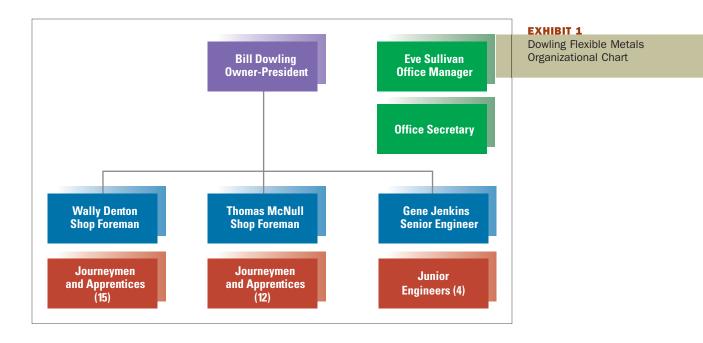
"We sure have come a long way from that first set-up in my garage. On a nice day we would get everything all spread out in the drive and then it would start pouring cats and dogs—so we would have to move back inside. It was just like a one-ring circus. Now it seems like a three-ring circus. You would think that with all that talent we have here and all the experience, things would run smoother. Instead, it seems I am putting in more time than ever and accomplishing a whole lot less in a day's time.

"It's not like the old days. Everything has gotten so complicated and precise in design. When you go to a customer to discuss a job you have to talk to six kids right out of engineering school. Every one of them has a calculator—they don't even carry slide rules anymore—and all they can talk is fancy formulas and how we should do our job. It just seems I spend more time with customers and less time around the shop than I used to. That's why I hired the engineering staff—to interpret specifications, solve engineering problems, and draw blueprints. It still seems all the problems are solved out on the shop floor by guys like Walt and Tom, just like always. Gene and the other engineers are necessary, but they don't seem to be working as smoothly with the guys on the floor as they should.

"One of the things I would like to see us do in the future is to diversify even more. Now that we have the capability, I am starting to bid jobs that require the computerized milling machine process tape. This involves devising a work process for milling a part on a machine and then making a computer process tape of it. We can then sell copies of the tape just like we do dies and parts. These tapes allow less skilled operators to operate complicated milling machines without

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Dowling Flexible Metals 579



the long apprenticeship of a tradesman. All they have to do is press buttons and follow the machine's instructions for changing the milling tools. Demand is increasing for the computerized process tapes.

"I would like to see the firm get into things like working with combinations of bonded materials such as plastics, fiberglass, and metals. I am also starting to bid jobs involving the machining of plastics and other materials beside metals."

Wally Denton, Shop Foreman, First Shift

"Life just doesn't seem to be as simple as when we first started in Bill's garage. In those days he would bring a job back and we would all gather 'round and decide how we were going to set it up and who would do it. If one of the 'moonlighters' was to get the job either Bill or I would lay the job out for him when he came in that afternoon. Now, the customers' ideas get processed through the engineers and we, out here in the shop, have to guess just exactly what the customer had in mind.

"What some people around here don't understand is that I am a partner in this business. I've stayed out here in the shop because this is where I like it and it's where I feel most useful. When Bill isn't here, I'm always around to put out fires. Between Eve, Gene, and myself we usually make the right decision.

"With all this diversification and Bill spending a lot of time with customers, I think we need to get somebody else out there to share the load."

Thomas McNull, Shop Foreman, Second Shift

"In general, I agree with Wally that things aren't as simple as they used to be, but I think, given the amount of jobs we are handling at any one time, we run the shop pretty smoothly. When the guys bring problems to me that require major job changes, I get Wally's approval before making the changes. We haven't had any difficulty in that area.

"Where we run into problems is with the engineers. They get the job when Bill brings it back. They decide how the part should be made and by what process, which in turn pretty much restricts what type of dies we have to make. Therein lies the bind. Oftentimes we run into a snag following the engineers' instructions. If it's after five o'clock, the engineers have left for the day. We, on the second shift, either have to let the job sit until the next morning or solve the problem ourselves. This not only creates bad feelings between the shop personnel and the engineers, but it makes extra work for the engineers because they have to draw up new plans.

"I often think we have the whole process backwards around here. What we should be doing is giving the job to the journeymen—after all, these guys have a lot of experience and know-how—then give the finished product to the engineers to draw up. I'll give you an example. Last year we got a job from a vending machine manufacturer. The job consisted of fabricating five sets of dies for making those stubby little legs for vending machines,

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plus five hundred of the finished legs. Well, the engineers figured the job all out, drew up the plans, and sent it out to us. We made the first die to specs, but when we tried to punch out the leg on the press, the metal tore. We took the problem back to the engineers, and after the preliminary accusations of who was responsible for the screw up,

they changed the raw material specifications. We waited two weeks for delivery of the new steel, then tried again. The metal still tore. Finally, after two months of hassle, Charlie Oakes and I worked on the die for two days and finally came up with a solution. The problem was that the shoulders of the die were too steep for forming the leg in just one punch. We had to use two punches (see Exhibit 2). The problem was the production process, not the raw materials. We spent four months on that job and ran over our deadline. Things like that shouldn't happen."

Charlie Oakes, Journeyman Apprentice

"Really, I hate to say anything against this place because it is a pretty good place to work. The pay and benefits are pretty good and because it is a small shop our hours can be somewhat flexible. If you have a doctor's appointment you can either come in late or stay until you get your time in or punch out and come back. You can work as much overtime as you want to.

"The thing I'm kind of disappointed about is that I thought the work would be more challenging. I'm just an apprentice, but I've only got a year to go in my program before I can get my journeyman's card, and I think I should be handling more jobs on my own. That's why I came to work here. My Dad was one of the original 'moonlighters' here. He told me about how interesting it was when he was here. I guess I just expected the same thing."

Gene Jenkins, Chief Engineer

"I imagine the guys out in the shop already have told you about 'The Great Vending Machine Fiasco.' They'll never let us forget that. However, it does point out the need for better coordination around here. The engineers were hired as engineers, not as draftsmen, which is just about all we do. I'm not saying we should have the final say on how the job is designed, because there is a lot of practical experience out in that shop; but just as we haven't their expertise neither do they have ours. There is a need for both, the technical skill of the engineers and the practical experience of the shop.

"One thing that would really help is more information from Bill. I realize Bill is spread pretty thin but there are a lot of times he comes back with a job, briefs us, and we still have to call the customer about details because Bill hasn't been specific enough or asked the right questions of the customer. Engineers communicate best with other engineers. Having an engineering function gives us a competitive advantage over our competition. In my opinion, operating as we do now, we are not maximizing that advantage.

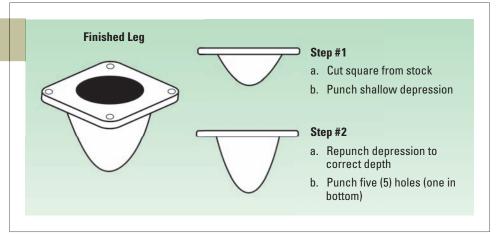
"When the plans leave here we have no idea what happens to those plans once they are out in the shop. The next thing we know, we get a die or set of dies back that doesn't even resemble the plans we sent out in the shop. We then have to draw up new plans to fit the dies. Believe me, it is not only discouraging, but it really makes you wonder what your job is around here. It's embarrassing when a customer calls to check on the status of a job and I have to run out in the shop, look up the guy handling the job, and get his best estimate of how the job is going."

Eve Sullivan, Office Manager

"One thing is for sure, life is far from dull around here. It seems Bill is either dragging in a bunch of plans or racing off with the truck to deliver a job to a customer.

EXHIBIT 2

Two Stage Production Process



Dowling Flexible Metals 581

"Really, Wally and I make all the day-to-day decisions around here. Of course, I don't get involved in technical matters. Wally and Gene take care of those, but if we are short-handed or need a new machine, Wally and I start the ball rolling by getting together the necessary information and talking to Bill the first chance we get. I guess you could say that we run things around here by consensus most of the time. If I get a call from a customer asking about the status of a job, I refer the call to Gene because Wally is usually out in the shop.

"I started with Bill and Wally 20 years ago, on a parttime basis, and somehow the excitement has turned into work. Joan, the office secretary, and I handle all correspondence, bookkeeping, payroll, insurance forms, and everything else besides run the office. It's just getting to be too hectic—I just wish the job was more fun, the way it used to be."

Having listened to all concerned, you returned to Bill's office only to find him gone.

You tell Eve and Wally that you will return within one week with your recommendations.

9.0

Integrative Case 9.0 The Donor Services Department*

Joanna Reed was walking home through fallen tree blossoms in Guatemala City. Today, however, her mind was more on her work than the natural beauty surrounding her. She unlocked the gate to her colonial home and sat down on the porch, surrounded by riotous toddlers, pets, and plants, to ponder the recommendations she would make to Sam Wilson. The key decisions she needed to make about his Donor Services Department concerned who should run the department and how the work should be structured.

Joanna had worked for a sponsorship agency engaged in international development work with poor people for six years. She and her husband moved from country to country setting up new agencies. In each country, they had to design how the work should be done, given the local labor market and work conditions.

After a year in Guatemala, Joanna, happily pregnant with her third child, had finished setting up the Donor Services Department for the agency and was working only part-time on a research project. A friend who ran a "competing" development agency approached her to do a consulting project for him. Sam Wilson, an American, was the national representative of a U.S.-based agency that had offices all over the world. Sam wanted Joanna to analyze his Donor Services Department, because he'd received complaints from headquarters about its efficiency. Since he'd been told that his office needed to double in size in the coming year, he wanted to get all the bugs worked out beforehand. Joanna agreed to spend a month gathering information and compiling a report on this department.

Sponsorship agencies, with multimillion-dollar budgets, are funded by individuals and groups in developed countries who contribute to development programs in less-developed countries (LDCs). Donors contribute approximately \$20.00 per month plus optional special gifts. The agencies use this money to fund education, health, community development, and income-producing projects for poor people affiliated with their agency in various communities. In the eyes of most donors, the specific benefit provided by sponsorship agencies is the personal relationship between a donor and a child and his or her family in the LDC. The donors and children write back and forth, and the agency sends photos of the child and family to the donors. Some donors never write the family they sponsor; others write weekly and visit the family on their vacations. The efficiency of a Donor Services Department and the quality of their translations are key ingredients to keeping donors and attracting new ones.

Good departments also never lose sight of the fact that sponsorship agencies serve a dual constituency—the local people they are trying to help develop and the sponsors who make that help possible through their donations.

What Is a Donor Services Department in a Sponsorship Agency Anyway?

The work of a Donor Services Department consists of more than translating letters, preparing annual progress reports on the families, and answering donor questions directed to the agency. It also handles the extensive, seemingly endless paperwork associated with enrolling new families and assigning them to donors, reassignments when either the donor or the family stops participating, and the special gifts of money sent (and thank you notes for them). Having accurate enrollment figures is crucial because the money the agency receives from headquarters is based upon these figures and affects planning.

The Department Head

Joanna tackled the challenge of analyzing the department by speaking first with the department head (see the organizational chart in Exhibit 1). José Barriga, a charismatic, dynamic man in his forties, was head of both Donor Services and Community Services. In reality, he spent virtually no time in the Donor Services Department and was not bilingual. "My biggest pleasure is working with the community leaders and coming up with programs that will be successful. I much prefer being in the field, driving from village to village talking with people, to supervising paperwork. I'm not sure exactly what goes on in Donor Services, but Elena, the supervisor, is very responsible. I make it a point to walk through the department once a week and say hello to everyone, and I check their daily production figures."

The Cast of Characters in the Department

Like José, Sam was also more interested in working with the communities on projects than in immersing himself in the details of the more administrative departments. In part, Sam had contracted Joanna because he rightfully worried that Donor Services did not receive the attention it deserved from José, who was very articulate and personable but seldom had time to look at anything beyond case histories. José never involved himself in the internal affairs of the department. Even though he was not considered much of a resource to

^{*}Joyce S. Osland, San Jose State University.

them, he was well liked and respected by the staff of Donor Services, and they never complained about him.

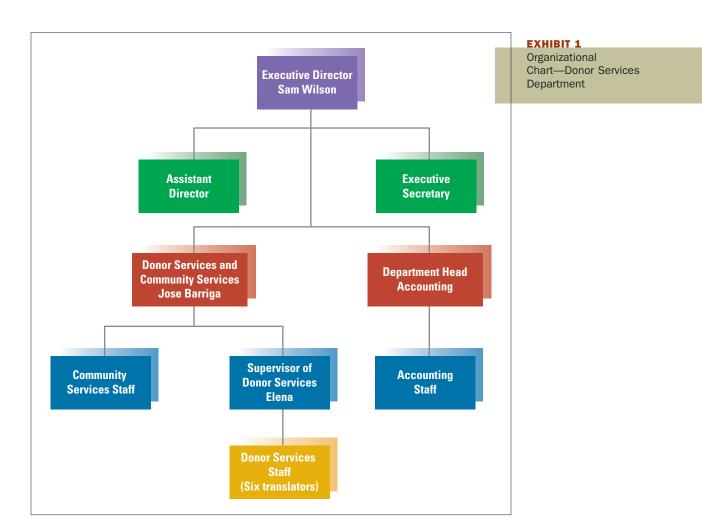
The Supervisor

This was not the case with the supervisor José had promoted from within. Elena had the title of departmental supervisor, but she exercised very little authority. A slight, single woman in her thirties, Elena had worked for the organization since its establishment ten years earlier. She was organized, meticulous, dependable, and hard working. But she was a quiet, non-assertive, nervous woman who was anything but proactive. When asked what changes she would make if she were the head of the department, she sidestepped the question by responding, "It is difficult to have an opinion on this subject. I think that the boss can see the necessary changes with greater clarity."

Elena did not enjoy her role as supervisor, which was partly due to the opposition she encountered from a small clique of long-time translators. In the opinion of this subgroup, Elena had three strikes against her. One, unlike her subordinates, she was not bilingual. "How can she be the supervisor when she doesn't even know English well? One of us would make a better supervisor." Bilingual secretaries in status-conscious Guatemala see themselves as a cut above ordinary secretaries. This group looked down

ordinary secretaries. This group looked down on Elena as being less skilled and educated than they were, even though she was an excellent employee. Second, Elena belonged to a different religion than the organization itself and almost all the other employees. This made no difference to Sam and José but seemed important to the clique who could be heard making occasional derogatory comments about Elena's religion.

The third strike against Elena was her lack of authority. No one had ever clarified how much authority she really possessed, and she herself made no effort to assume control of the department. "My instructions are to inform



9.0

Don José Barriga of infractions in my daily production memo. I'm not supposed to confront people directly when infractions occur, although it might be easier to correct things if I did." ("Don" is a Latin American honorific used before the first name to denote respect.)

This subgroup showed their disdain and lack of respect for Elena by treating her with

varying degrees of rudeness and ignoring her requests. They saw her as a watchdog, an attitude furthered by José who sometimes announced, "We (senior management) are not going to be here tomorrow, so be good because Elena will be watching you." When Sam and José left the office, the clique often stopped working to socialize. They'd watch Elena smolder out of the corner of their eyes, knowing she would not reprimand them. "I liked my job better before I became supervisor," said Elena. "Ever since, some of the girls have resented me, and I'm not comfortable trying to keep them in line. Why don't they just do their work without needing me to be the policeman? The only thing that keeps me from quitting is the loyalty I feel for the agency and Don José."

The Workers

In addition to the clique already mentioned, there were three other female translators in the department. All the translators but one had the same profile: in their twenties, of working-class backgrounds, and graduates of bilingual secretary schools, possessing average English skills. (As stated earlier, in Latin America, being a bilingual secretary is a fairly prestigious occupation for a woman.) The exception in this group was the best translator, Magdalena, a college-educated recent hire in her late thirties who came from an upper-class family. She worked, not because she needed the money, but because she believed in the mission of the agency. "This job lets me live out my religious beliefs and help people who have less advantages than I do." Magdalena was more professional and mature than the other translators. Although all the employees were proud of the agency and its religious mission, the clique members spent too much time socializing and skirmishing with other employees within and without the department.

The three translators who were not working at full capacity were very close friends. The leader of this group, Juana, was a spunky, bright woman with good oral English skills and a hearty sense of humor. A long-time friend of Barriga's, Juana translated for English-speaking visitors who came to visit the program sites throughout the country. The other translators, tied to their desks, saw this as a huge perk. Juana was the ringleader in the occasional mutinies against Elena and in feuds with people from other departments. Elena was reluctant to complain about Juana to Barriga, given their friendship. Perhaps she feared Juana would make her life even more miserable.

Juana's two buddies (compañeras) in the department also had many years with the agency. They'd gotten into the habit of helping each other on the infrequent occasions when they had excessive amounts of work. When they were idle or simply wanted to relieve the boredom of their jobs, they socialized and gossiped. Juana in particular was noted for lethal sarcasm and pointed jokes about people she didn't like. This clique was not very welcoming to the newer members of the department. Magdalena simply smiled at them but kept her distance, and the two younger translators kept a low profile to avoid incurring their disfavor. As one of them remarked, "It doesn't pay to get on Juana's bad side."

Like many small offices in Latin America, the agency was located in a spacious former private home. The Donor Services Department was housed in the 40 × 30-foot living room area. The women's desks were set up in two rows, with Elena's desk in the back corner. Since the offices of both Wilson and Barriga were in former back bedrooms, everyone who visited them walked through the department, greeting and stopping to chat with the long-time employees (Elena, Juana, and her two friends). Elena's numerous visitors also spent a good deal of time working their way through the department to reach her desk, further contributing to the amount of socializing going on in the department.

Elena was the only department member who had "official" visitors since she was the liaison person who dealt with program representatives and kept track of enrollments. The translators each were assigned one work process. For example, Marisol prepared case histories on new children and their families for prospective donors while Juana processed gifts. One of the newer translators prepared files for newly enrolled children and did all the filing for the entire department (a daunting task). Most of the jobs were primarily clerical and required little or no English. The letter translations were outsourced to external translators on a piece-work basis and supervised by Magdalena. Hers was the only job that involved extensive translation; for the most part, however, she translated simple messages (such as greeting cards) that were far below her level of language proficiency. The trickier translations, such as queries from donors in other countries, were still handled by Wilson's executive secretary.

Several translators complained that, "We don't have enough opportunity to use our English skills on the job. Not only are we not getting any better in English, we are probably losing fluency because most of our jobs are just clerical work. We do the same simple, boring tasks over and over, day in and day out. Why did they hire bilingual secretaries for these jobs anyway?"

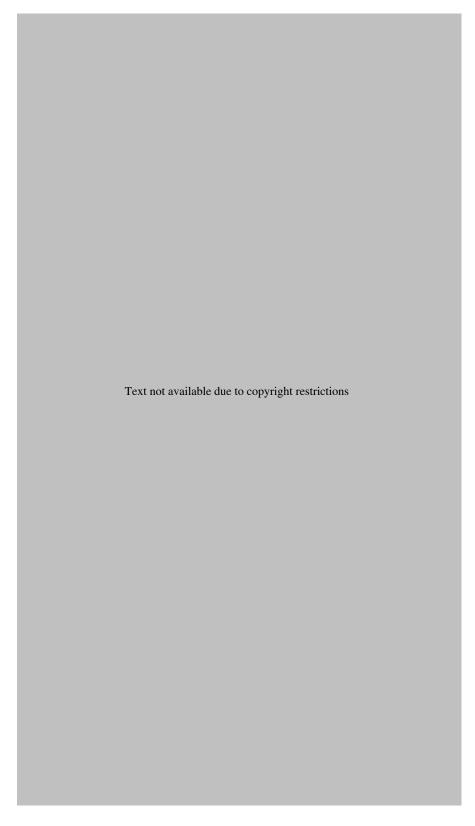
Another obvious problem was the uneven distribution of work in the office. The desks of Magdalena and the new translators were literally overflowing with several months' backlog of work while Juana and her two friends had time to kill. Nobody, including Elena, made any efforts to even out the work assignments or help out those who were buried. The subject had never been broached.

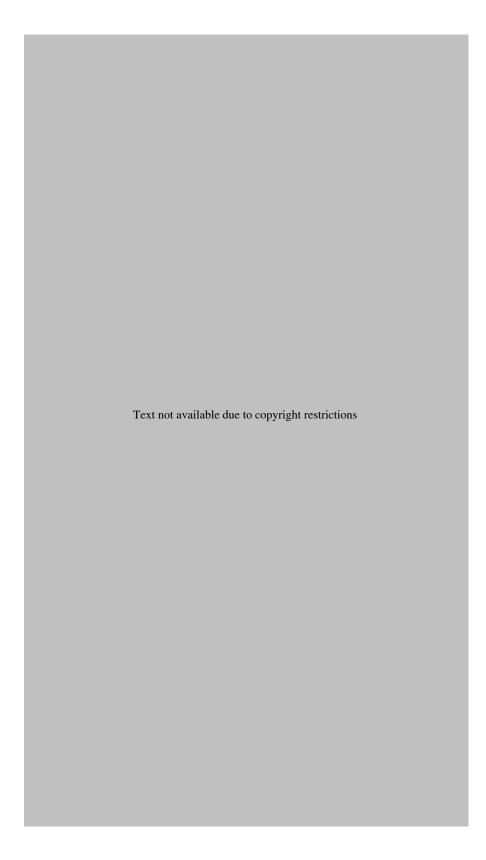
The agency was growing at a rapid pace, and there were piles of paperwork sitting around waiting to be processed. Joanna spent three weeks having each department member explain her job (in mind-numbing detail), drawing up flow charts of how each type of paperwork was handled, and poking around in their files. She found many unnecessary steps that resulted in slow turnaround times for various processes. There were daily output reports submitted to Barriga, but no statistics kept on the length of time it took to respond to requests for information or process paperwork. No data were shared with the translators, so they had no idea how the department was faring and little sense of urgency about their work. The only goal was to meet the monthly quota of case histories, which only affected Marisol. Trying to keep up with what came across their desks summed up the entire focus of the employees.

Joanna found many instances of errors and poor quality, not so much from carelessness as lack of training and supervision. Both Barriga and Wilson revised the case histories, but Joanna was amazed to discover that no one ever looked at any other work done by the department. Joanna found that the employees were very accommodating

when asked to explain their jobs and very conscientious about their work (if not the hours devoted to it). She also found, however, the employees were seldom able to explain why things were done in a certain way, because they had received little training for their jobs and only understood their small part of the department. Morale was obviously low, and all the employees seemed frustrated with the situation in the department. With the exception of Magdalena who had experience in other offices, they had few ideas for Joanna about how the department could be improved.







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Rule #1 for business organizations: People, not structure, make a business work or fail. Blindly following organizational concepts that have worked elsewhere is a sure way to waste talent and get poor results. Organizational change alone achieves nothing, while dedicated people can make any structure work. This doesn't mean that organizational changes shouldn't happen. But design any changes to get the most out of people in the company's unique circumstances. Top management should never dictate change as a cure-all to avoid facing fundamental problems.

Quotation from the Harvard Business Review (title and author uncited) posted on the wall of Bill Larson, Plant Manager of Littleton Manufacturing

On June 21, 1990, Paul Winslow, the director of human resources at Littleton Manufacturing, was told by his boss, Bill Larson, to put together a team of employees to address a number of issues that Larson thought were hurting Littleton's bottom line. Winslow's assignment had come about as a result of his making a presentation on those problems to Larson. Larson had then met with his executive staff, and he and Winslow had subsequently gone to the plant's Quality Steering Committee to discuss what to do. They decided to form a Human Resources Process Improvement Team (PIT) to prioritize the issues and propose a corrective course of action. Winslow, who had been at the plant for seventeen years, had been asked by Larson to chair the PIT.

The Quality Steering Committee decided that the PIT should include two representatives each from Sales and Marketing, Fabrication, and Components. Two managers from each of these areas were chosen, including Dan Gordon, the fabrication manufacturing manager, and Phil Hanson, the components manufacturing manager. There were no supervisors or hourly employees on the team.

At the first meeting, the PIT discussed the six widely recognized problem areas that Winslow had identified to Larson. Each member's assignment for the next meeting, on June 28, was to prioritize the issues and propose an action plan.

The Problems

A course in management and organizational studies carried out by students at a nearby college had started the chain of events that led to the formation of the Human Resources PIT. In late 1989, Winslow was approached by a faculty member at a local college who was interested in

using Littleton as a site for a field-project course. Because of ongoing concerns about communication at the plant by all levels, Winslow asked that the students assess organizational communication at Littleton. Larson gave his approval, and in the spring of 1990 the students carried out the project, conducting individual and group interviews with employees at all levels of the plant.

Winslow and his staff combined the results of the students' assessment with the results of an in-house survey done several years earlier. The result was the identification of six problem areas that they thought were critical for the plant to address:

- Lack of organizational unity
- Lack of consistency in enforcing rules and procedures
- Supervisor's role poorly perceived
- Insufficient focus on Littleton's priorities
- Change is poorly managed
- Lack of a systematic approach to training

The Company

Littleton Manufacturing, located in rural Minnesota, was founded in 1925. In 1942, Littleton was bought by Brooks Industries, a major manufacturer of domestic appliances and their components. At that time, Littleton manufactured custom-made and precision-machined components from special metals for a variety of industries.

In 1983, through the purchase of a larger competitor, Frühling, Inc., Brooks was able to increase its domestic market share from 8 percent to about 25 percent. Brooks then decided to have only one facility produce the components that were used in most of the products it made in the United States. The site chosen was Littleton Manufacturing. To do this, Brooks added a whole new business (Components) to Littleton's traditional activity. To accommodate the new line, a building of 80,000 square feet was added to the old Littleton plant, bringing the total to 220,000 square feet of plant space. Because of the addition of this new

*By David E. Whiteside, organizational development consultant. This case was written at Lewiston-Auburn College of the University of Southern Maine with the cooperation of management, solely for the purpose of stimulating student discussion. Data are based on field research; all events are real, although the names of organizations, locations, and individuals have been disguised. Faculty members in nonprofit institutions are encouraged to reproduce this case for distribution to their students without charge or written permission. All other rights reserved jointly to the author and the North American Case Research Association (NACRA). Copyright © 1994 by the Case Research Journal and David E. Whiteside.

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business, Littleton went from 150 employees in 1984 to 600 in 1986. In mid-1990, there were about 500 employees.

The older part of the plant (the Fabrication side) manufactured its traditional custom-made products and sold them to a variety of industrial customers. It also supplied the newer side of the plant (the Components side)

with a variety of parts that were further processed and used to make electrical components. These components were used by all other Brooks plants in the assembly of domestic appliances that were sold worldwide. About 95 percent of the products made on the Components side of the plant originated on the Fabrication side.

The plant was also headquarters for Brooks Industries' sales and marketing department, known as the "commercial group," which had worldwide sales responsibilities for products made by the Fabrication side. These included international and domestic sales of products to several industries, including the semiconductor, consumer electronics, and nuclear furnace industry. This group marketed products made not only by Littleton Manufacturing but also those made by Brooks's other fourteen plants, all located in the United States.

Bill Larson, the plant manager, reported to the executive vice president of manufacturing of Brooks, whose corporate office was in Chicago, Illinois. Larson met once a month with his boss and the other plant managers. Reporting directly to Larson were six functional line managers and the manager of the Quality Improvement System

(QIS). This group of seven managers, known as the "staff," met weekly to plan and discuss how things were going. (See Exhibit 1 for an organizational chart.)

In December 1989, there were 343 hourly and 125 salaried employees at the plant. About 80 percent of the workforce was under 45. Seventy-seven percent were male, and 23 percent were female. Seventy-six percent had been at the plant 10 years or less. All of the hourly workers were represented by the Teamsters union.

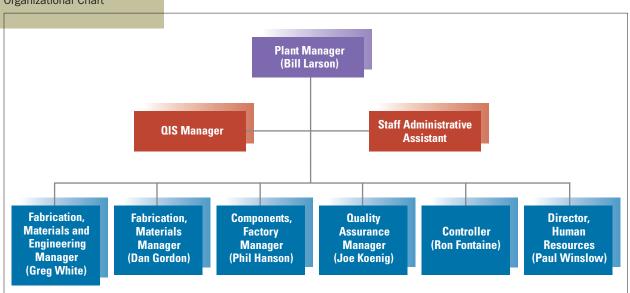
The Financial Picture

Brooks Industries

Brooks was the second largest producer of its kind of domestic appliances in the United States. Its three core business units were commercial/industrial, consumer, and original equipment manufacturing. The major U.S. competitors for its domestic appliances were Eagleton, Inc., and Universal Appliances, Inc. In the United States, Eagleton's market share was 47 percent; Brooks had about 23 percent; and Universal Appliances and a number of small companies had the remaining 30 percent. However, U.S. manufacturers were facing increasing competition, primarily based on lower prices, from companies in Asia and eastern Europe.

In 1989, Brooks's sales declined 4 percent, and in 1990, they declined another 5 percent, to \$647 million. Their 1989 annual report contained the following statement about the company's financial condition: "There was fierce competition . . . which led to a decline in our share of a stable market and a fall in prices, resulting in a lower level of sales. . . . With sales volume showing slower





growth, we failed to reduce our costs proportionately and there was underutilization of capacity." In May 1990, after announcing unexpected first-quarter losses, Brooks started a corporation-wide efficiency drive, including planned layoffs of 16 percent of its workforce, a corporate restructuring, and renewed emphasis on managerial accountability for bottom-line results.

Because of its worsening financial condition, for the past few years Brooks had been reducing the resources available to Littleton. For example, Larson's budget for salaries had been increased by only 4 percent each year for the past several years. As a result, supervisors and middle managers complained strongly that recent salary increases had been too little and that plant salaries were too low. They also felt that the forced-ranking performance appraisal system used by the plant, which was based on a bell curve, did not reward good performance adequately. One middle manager commented: "All we get now for good performance is a card and a turkey." In April 1990, the company cut Littleton's capital budget by half and stipulated that any new project involving nonessential items had to have a one-year payback.

In addition, in both 1988 and 1989 Brooks had charged the Littleton plant around \$300,000 for various services provided, such as technical support, but in 1990 this charge was increased by \$1 million. Many of the Littleton plant managers felt that this was done to help offset Brooks's deteriorating financial condition and were frustrated by it. Indicating that he thought Brooks was using Littleton as a cash cow, one staff member said, "The more profitable we get, the more corporate will charge us."

Many managers, especially those on the Fabrication side, felt that even though they had made money for the plant, corporate's increase in charges nullified their success and hard work. A number of managers on the Fabrication side also feared that if their operation did not do well financially, the company might close it down.

In discussing the increasing lack of resources available from corporate and the plant's own decline in profits, Larson said: "There needs to be a change in the way people here think about resources. They have to think more in terms of efficiency." He was proud of the fact that the company had achieved its goal of reducing standard costs by 1 percent for each of the past three years and that in 1990 cost reductions would equal 5 percent of production value. He thought that if the company reduced the number of reworks, costs could be lowered by another 20 to 30 percent.

Littleton Manufacturing

The Fabrication and the Components operations at Littleton Manufacturing were managed as cost centers by Brooks while the commercial group was a profit center. (A *profit center* is a part of an organization that is responsible for accumulating revenues as well as costs. A *cost*

center is an organizational division or unit of activity in which accounts are maintained containing direct costs for which the center's head is responsible.) In 1989 and 1990, the Fabrication side of Littleton had done well in terms of budgeted costs, while the Components side had incurred significant losses for both

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Littleton's net worth increased from \$319,000 in 1989 to \$3,094,000 in 1990 due to the addition of a new Fabrication-side product that was sold on the external market and had required no additional assets or resources. In 1990, sales for the plant as a whole were \$41,196,000, with an operating profit of 3.7 percent, down from 7.3 percent in 1989. Larson estimated that the current recession, which was hurting the company, would lower sales in 1991 by 10 percent. Exhibit 2 presents an operating statement for Littleton Manufacturing from 1988 to 1990.

The Quality Improvement System

In 1985, corporate mandated a total quality management effort, the Quality Improvement System (QIS), which replaced the quality circles that the plant had instituted in 1980. Posted throughout the plant was a Quality Declaration, which had been developed by Larson and his staff. It read:

We at Littleton Manufacturing are dedicated to achieving lasting quality. This means that each of us must understand and meet the requirements of our customers and co-workers. We all must continually strive for improvement and error-free work in all we do—in every job . . . on time . . . all the time.

Bill Larson was enthusiastic about QIS. He saw QIS as a total quality approach affecting not just products but all of the plant's processes, one that would require a long-term effort at changing the culture at the plant. He felt that QIS was already reaping benefits in terms of significant improvements in quality, and that the system had also greatly helped communication at the plant.

In the QIS all employees were required to participate in Departmental Quality Teams (DQTs) that met in groups of six to twelve every two weeks for at least an hour to identify ways to improve quality. Most hourly employees were on only one DQT; middle managers were, on average, on three DQTs. Some managers were on as many as six. The results of each team's efforts were exhibited in graphs and charts by their work area and updated monthly. There were about sixty teams in the plant.

The leader from each Departmental Quality Team, a volunteer, served also as a member of a Quality Improvement Team (QIT), whose goals were to support the DQTs and help them link their goals to the company's goals. QITs consisted of six to eight people; each was

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chaired by a member of the executive staff. These staff members, along with Bill Larson, composed the Quality Steering Committee (QSC) for the plant. The QSC's job was to oversee the direction and implementation of the Quality Improvement System for the plant and to coordinate with corporate's quality improvement programs. The QSC

also sometimes formed corrective action teams to work on special projects. Unlike DQTs, which were composed of employees from a single department or work area, corrective action teams had members from different functions or departments. By 1986, there were nine corrective action teams, but by 1989, none were functioning. When asked about them, Winslow said, "I'm not sure what happened to them. They just sort of died out."

Larson and most managers believed that the QIS had improved quality. On most of its Fabrication products, the company competed on the basis of quality and customer service, and the vice president of sales and marketing thought that their quality was the best in the industry. In 1988 and 1989, the plant won several Brooks awards for quality and was publicly cited by a number of customers for quality products.

Hourly employees in general also thought that QIS had improved quality, although they were less enthusiastic about the system than management. A number of hourly employees complained that since participation was mandatory, many groups were held back by unmotivated members. They thought participation should be voluntary. Another complaint was that there was inadequate training

EXHIBIT 2Littleton Manufacturing
Operating Profit Statement

	1988	1989	1990
Fabrication			
Sales	\$16,929	\$18,321	\$19,640
Direct costs	11,551	11,642	11,701
Contribution margin	5,378	6,679	7,939
% of sales	31.8%	36.5%	40.4%
All other operating costs	4,501	4,377	4,443
Operating profit	<u>877</u>	<u>2,301</u>	<u>3,496</u>
% to sales	5.2%	12.6%	17.8%
Components			
Sales	\$20,468	\$15,590	\$21,556
Direct costs	16,049	10,612	18,916
Contribution margin	4,419	4,978	2,640
% of sales	21.6%	31.9%	12.2%
All other operating costs	4,824	4,797	4,628
Operating profit	(405)	<u> 180</u>	_(1,988)
% to sales	-2.0%	1.2%	-9.2%
Total Littleton Manufacturing			
Sales	\$37,397	\$33,911	\$41,196
Direct costs	27,599	22,254	30,617
Contribution margin	9,798	11,657	10,579
% to sales	26.2%	34.4%	25.7%
All other operating costs	9,326	9,175	9,071
Operating profit	<u>472</u>	<u>2,482</u>	<u>1,508</u>
% to sales	1.3%	7.3%	3.7%

Note: Changes in Operating Profit from year to year are posted to retained earnings (net worth) account on the corporate balance sheet. It must be noted, however, that the balance sheet figures include the impact of headquarters, national organization changes, and extraordinary income from other operations, which are not reflected on the operating profit statement shown above.

Source: Controller, Littleton Manufacturing.

for group leaders, with the result that some groups were not productive.

In the spring of 1990, the company decided that the QIS effort was "stagnating" and that DQTs should be changed to include members from different departments. It was thought that this would improve communication and coordination between departments and lead to further improvements in quality, productivity, and on-time delivery. DQTs became known is IDQTs (Interdepartmental Quality Teams). IDQTs were scheduled to begin in November 1990. In addition, the company decided to begin Process Improvement Teams (PITs), which would focus on various ongoing processes at the plant, such as budgeting and inventory management. A PIT, composed of managers from different functions, would not be ongoing but only last as long as it took to achieve its particular goals.

How Different Levels Perceived the Problems

In order to choose the issues to tackle first and to devise a tentative plan for addressing them, Winslow reflected on the background information he had on the six problem areas that he and his staff had identified on the basis of their own analysis and the students' assessment of organizational communication.

A Lack of Organizational Unity

People often talked about "this side of the wall and that side of the wall" in describing the plant. They were referring to the wall separating the newer Components side and the older Fabrication side of the plant. (Some parts of the Fabrication side had been built in the twenties.) The Components side was brighter, cleaner, and more open, and, in summer, it was cooler. In comparing the two sides, one manager said, "At the end of the shift in Fabrication, you come out looking like you've been through the wringer." On the whole, the equipment in the Components side was also newer, with most of it dating from the 1970s and 1980s and some of it state-of-the-art machinery that was developed at the plant. Much of the equipment on the Fabrication side went back to the 1950s and 1960s. These differences in age meant that, in general, the machinery on the Fabrication side required more maintenance.

It was generally agreed that Components jobs were cleaner and easier, and allowed more social interaction. On the Fabrication side many of the machines could run only two to three hours before needing attention, whereas on the Components side the machines might run for days without worker intervention. On the Fabrication side, because of the placement of the machines and the need for frequent maintenance, people tended to work more by themselves and to "be on the go all the time." It was not uncommon for senior hourly employees in Fabrication to request a transfer to Components.

Hourly workers described Components as "a country club" compared to the Fabrication side. Many attributed this to how the different sides were managed. Enforcement of rules was more lax on the Components side. For example, rules requiring safety shoes and goggles were not as strictly enforced, and some operators were allowed to eat on the job.

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One Human Resources staff member described Components supervisors as "laid-back about sticking to the rules" and those in Fabrication as "sergeants." He saw the manufacturing manager of Fabrication, Dan Gordon, as having a clear vision of what he wanted for the Fabrication side and a definite plan on how to get there. He also saw Gordon as keeping a tight rein on his supervisors and holding them accountable. The same Human Resources employee described the factory manager of Components, Phil Hanson, as dealing with things as they came up—as more reactive. Hanson allowed his supervisors more freedom and did not get involved on the floor unless there was a problem. When there was a problem, however, he reacted strongly and swiftly. For example, to combat a recent tendency for employees to take extended breaks, he had begun posting supervisors outside of the bathrooms right before and after scheduled breaks.

Bill Larson attributed the differences in the two sides "to the different performance and accountability needs dictated by their business activities and by the corporate office." Components met the internal production needs of Brooks by supplying all of the other Brooks plants with a product that they, in turn, used to manufacture a household product that sold in the millions each year. Fabrication, however, had to satisfy the needs of a variety of industrial customers while competing on the open market. Larson felt that Fabrication had to have a more entrepreneurial ethic than Components because "Fabrication lives or dies by how they treat their customers—they have to woo them and interact well with them," whereas Components had a ready-made market.

Larson also thought that some of the differences were due to the fact that the plant was "held prisoner by what goes on in corporate." Although the corporate office set financial targets for both sides of the plant, it exercised more control over the financial and productivity goals of the Components side because no other Brooks plant was in the Fabrication business and Brooks understood the Components business much better. In addition, corporate was dependent on the Components side for the standardized parts—primarily wire coils—used in many of its finished products. The Components side produced as many as 2 million of some of these small parts a day.

Larson also indicated that the requirements for the number of workers on the two sides of the plant were different. For example, depending on what business was like for each side, the overtime requirements could vary.

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Hourly employees on the side of the plant that had more overtime felt the side that was working less was getting "easier" treatment. Larson knew that the overtime disparity was due to need, not preferential treatment of one side over the other, but as he put it: "You can talk your head off, but you're not going to be able to explain it to them to their satisfaction.

So that causes a lot of frustration among the ranks down there."

The Manager of QIS traced the differences between the Fabrication side and the Components side to the consolidation at Littleton of all of Brooks's production of wire coils needed for its domestic appliances after Brooks bought Frühling, Inc., in 1984. Most of the upper managers hired to start the Components business were brought in from Frühling, and, as he put it, "They had a different way of doing things. It wasn't a tightly run ship." He said that some of the old managers at the plant wondered about the wisdom of bringing in managers from a company that had not been successful. People asked, "Why use them here? They must have been part of what was wrong." One Fabrication manager added that the manager brought in to start the Components business, Bob Halperin, had the view: "We're going to start a new business here and do whatever is necessary to make it run and to hell with Littleton Manufacturing policies." Also, when the new Components business was started, its manager reported directly to the Brooks corporate office and not to the plant manager. In 1986 the structure was changed so that the factory manager of Components reported to the Littleton Manufacturing plant manager.

A union steward at the plant attributed some of the differences between the two sides to the fact that the workforce on the Components side tended to be younger and had more women with young children (67 percent of the hourly women in the plant worked in Components). The demands of raising children, he thought, resulted in the women needing to take more time off from work. One of the Fabrication supervisors thought that since the supervisors on the Components side were younger, they expected more from management and were more outspoken, especially about how much an hour they should be paid. A number of these supervisors had also been brought in from Frühling, and were not originally from Littleton.

Lack of Consistency in Enforcing Rules and Procedures

A major complaint of both hourly and salaried workers was the inconsistent application of policies and procedures. Although most people mentioned the differences from one side of the plant to the other, there were also differences from one department to another. As the chief union steward put it, "This is the number-one problem here—nobody

is the same!" Some Components supervisors were letting people take longer breaks and going for breaks earlier than they were supposed to. Some supervisors allowed hourly employees to stand around and talk for a while before getting them to start their machines. In some departments on the Components side, employees were allowed to gather in the bathrooms and "hang out" anywhere from five to twenty minutes before quitting time. The chief steward cited an example where, contrary to previous policy, some workers on the Components side were allowed to have radios. "When people on the Fabrication side found out," he said, "they went wild."

Some other examples of inconsistencies cited by employees were as follows:

- Fighting in the plant was supposed to result in automatic dismissal, but the Human Resources administrator recalled two incidents of fighting where the people involved were not disciplined.
- 2. Another incident that had been much discussed throughout the plant involved an employee who was "caught in a cloud of marijuana smoke" by his supervisor. Since the supervisor did not observe the man smoking but just smelled the marijuana, the person was only given a written warning. One manager said, "We need to take a stand on these things. We need to make a statement. That way we would gain some respect." Describing the same incident, another manager said, "It makes us close to thinking we're giving them (hourly employees) the key to the door."
- 3. Several people also mentioned the case of a mother who claimed she missed work several times because of doctors' appointments for her children and was suspended for three days, which they compared with the case of an operator who also missed work several times, and was suspected of drug or alcohol abuse, but was not disciplined.

In discussing differences in the enforcement of safety regulations throughout the plant, the administrator of plant safety and security said that when he confronted people who were wearing sneakers, often they would just say they forgot to wear their safety shoes. He said, "If I had to punish everyone, I'd be punishing 50 to 100 people a day."

There were also differences in absenteeism for the two sides of the plant. Absenteeism on the Components side was around 2.2 percent, whereas it was slightly less than 1 percent on the Fabrication side. Some attributed this to a looser enforcement of the rules governing absenteeism by supervisors on the Components side.

Winslow had tried to estimate the annual cost of failure to enforce the rules governing starting and stopping work. His estimate was that the plant was losing \$2,247.50 per day, for a total of \$539,400 a year. Winslow's memo detailing how he arrived at his overall estimate had been part of his presentation to Larson; it is included as Exhibit 3. Although Winslow had not said so in the memo, he later

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estimated that 70 percent of the total loss occurred on the Components side of the plant.

Supervisors complained that when they tried to discipline subordinates, they often did not feel confident of backing by management. They referred to incidents where they had disciplined hourly employees only to have their decisions changed by management or the Human Resources department. One supervisor told of an incident in which he tried to fire someone in accordance with what he thought was company policy, but the termination was changed to a suspension. He was told he had been too harsh. In a subsequent incident he had another decision overruled and was told he had been too lenient. He said, "We feel our hands are tied; we're not sure what we can do." Supervisors' decisions that were changed were usually communicated directly to the union by the Human Resources department. In these instances, the supervisors felt they wound up with "egg on their faces."

Winslow attributed some of these problems to a lack of communication regarding the company's policies and procedures. He thought that if the supervisors understood company policy better, their decisions would not need to be changed so frequently. There was no Human Resources policy manual, for example, although the work rules were contained in the union contract.

Dan Gordon disagreed with the view that these problems were a result of the supervisors' lack of understanding of the plant's policies and procedures. He claimed: "Ninety-nine

percent of the supervisors know the policies but they lack the skills and willingness to enforce them. Just like a police officer needs to be trained to read a prisoner his rights, the supervisors need to be taught to do their jobs." He thought that in some of the cases where a supervisor's decision was changed, the supervisor had made a mistake in following the proper disciplinary procedure. Then, when the supervisor's decision was overturned, no explanation was provided, so the supervisor would be left with his or her own erroneous view of what happened.

The Human Resources administrator thought that some of the supervisors were reluctant to discipline or confront people because "They're afraid to hurt people's feelings and want to stay on their good side."

EXHIBIT 3

Memo from Paul Winslow to Bill Larson

MEMORANDUM

From: Paul Winslow, Director of Human Resources

To: Bill Larson

Subject: Estimated Cost of Loss of Manufacturing Time

Date: 6/18/90

Loss of Manufacturing Time*
(Based on 348 Hourly Employees)

Delay at start of shift 10 minutes \times 25% (87) = 14.50 hours 5 minutes \times 75% (261) = 21.75 hours Washup before AM break 10 minutes \times 50% (174) = 29.00 hours Delayed return from break avg. 10 minutes \times 50% (174) = 29.00 hours Early washup—lunch 10 minutes \times 25% (87) = 14.50 hours Delayed return from lunch Early washup before PM break 5 minutes \times 75% (261) = 21.75 hours 10 minutes \times 50% (174) = 29.00 hours Delayed return from break 5 minutes \times 75% (261) = 65.25 hours Early washup—end of shift Total = 224.75 hours/day

Cost: $224.75 \times \text{avg.} \$10 \text{ hr.} = \$2,247.50/\text{day}$ $240 \text{ days} \times \$2,247.50 = \$539,400.00/\text{year}$

- *1. Does not include benefits.
- 2. Does not include overtime abuses.
- 3. Does not include instances of employees exiting building while punched in.

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Supervisor's Role Is Poorly Perceived

On the first shift in Fabrication there were about 70 hourly workers and 7 supervisors, and in Components there were about 140 hourly workers and 11 supervisors. Supervisors were assisted by group leaders, hourly employees who were appointed by the company and who received up to an extra 10

cents an hour.

All levels of the plant were concerned about the role of supervisors. "Supervisors feel like a nobody," said one senior manager. In the assessment of organizational communication done by the students, hourly employees, middle managers, and supervisors all reported that supervisors had too much to do and that this limited their effectiveness. A typical observation by one hourly employee was: "The supervisors can't be out on the floor because of meetings and paperwork. They have a tremendous amount of things on their mind. . . . The supervisor has become a paperboy, which prevents him from being able to do his job." In speaking about how busy the supervisors were and how they responded to suggestions by hourly employees, another hourly person said, "The supervisor's favorite word is, 'I forgot.'"

Supervisors also wanted more involvement in decision making. "You will! You will! You will!" is the way one supervisor characterized the dominant decision-making style of managers at the plant. He thought that most managers expected supervisors to just do what they were told to do. "We have a lot of responsibility but little authority," was how another supervisor put it. Many supervisors felt that they were ordered to do things by their managers, but when something went wrong, they were blamed.

Another factor contributing to the low morale of supervisors was a perceived lack of the resources that they felt were necessary to do a good job. Many complained that they were often told there was no money to make changes to improve things. They also complained of too few engineering, housekeeping, and maintenance personnel. Some supervisors thought there were too few supervisors on the second and third shifts. They thought this resulted in inadequate supervision and allowed some hourly workers to goof off, since the employees knew when these few supervisors would and would not be around.

The combination of these factors—job overload, too much paperwork, lack of authority, not enough involvement in decision making, lack of resources to make changes, inadequate training, and few rewards—made it difficult to find hourly people at the plant who would accept an offer to become a supervisor.

In discussing the role of supervisors, Larson said, "We don't do a good job of training our supervisors. We tell them what we want and hold them accountable, but we don't give them the personal tools for them to

do what we want them to do. They need to have the confidence and ability to deal with people and to hold them accountable without feeling badly." He continued by praising one supervisor who he thought was doing a good job. In particular, Larson felt, this supervisor's subordinates knew what to expect from him. This person had been a chief petty officer in the Navy for many years, and Larson thought this had helped him feel comfortable enforcing rules. Reflecting on this, he said, "Maybe we should just look for people with military backgrounds to be supervisors."

Insufficient Focus on Littleton's Priorities

The phrase "insufficient focus on Littleton's priorities" reflected two concerns expressed by employees. First, there was a lack of understanding of Littleton's goals. Second, there was a questioning of the plant's commitment to these goals. However, various levels saw these matters differently.

Although the plant had no mission statement, senior managers said that they thought that they understood Littleton's priorities. A typical senior management description of the plant's goals was, "To supply customers with quality products on time at the lowest possible cost in order to make a profit."

Each year, Larson and the executive staff developed a four-year strategic plan for Littleton. Sales and marketing would first project the amounts and types of products that they thought they could sell. Then manufacturing would look at the machine and labor capabilities of the plant. The sales projections and capabilities were then adjusted as necessary. Throughout the process, goals were set for improving quality and lowering costs. Larson then took the plan to Brooks for revision and/or approval. Next, Larson turned the goals in the strategic plan into specific objectives for each department. These departmental objectives were used to set measurable objectives for each executive staff member. These then formed the basis for annual performance appraisals. Because of this process, all of the executive staff felt that they knew what was expected of them and how their jobs contributed to achieving the company's goals.

At the same time, both senior and middle managers thought there was insufficient communication and support from corporate headquarters. They mentioned not knowing enough about corporate's long-term plans for the company. A number of the managers on the Fabrication side wondered about corporate's commitment to the Fabrication business. They thought that if their operation did not do well financially, the company might end it. In discussing the status of the Fabrication side of the plant, Gordon said that Brooks considered it a "noncore business." The Quality Assurance manager felt that corporate was not providing enough support and long-term direction for the QIS. Winslow was concerned about the lack of

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consistency in corporate's Human Resources policies and felt that he did not have enough say in corporate Human Resources planning efforts.

All levels below the executive staff complained that they did not have a good understanding of Littleton's own long-range goals. Some middle managers thought there was a written, long-range plan for the company but others disagreed. One member of the executive staff reported that as far as he knew, the entire strategic plan was seen only by the executive staff, although some managers would see the portions of it that concerned their departments. He also reported that the strategic plan was never discussed at operations review meetings. Most hourly employees said that they relied on the grapevine for information about "the big picture." In discussing the flow of information at the plant, one union steward said, "Things get lost in the chain of command." He said he got more than 80 percent of his information from gossip on the floor.

The primary mechanism used to communicate Littleton's goals and the plant's status with regard to achieving them was the operations review meeting held once a month by the plant manager, to which all salaried employees were ostensibly invited. At these meetings, usually attended by about eighty people, the plant manager provided figures on how closely the plant had hit selected business indicators. At one recent and typical meeting, for example, the Manager of QIS described various in-place efforts to improve quality. Bill Larson then reviewed the numbers. He presented data on budgeted versus actual production, variances between budgeted and actual manufacturing costs, profits, the top ten products in sales, standard margins on various products, shipments of products, information on backlogs, and the top ten customers. When he asked for questions at the end of his presentation, there were none.

The students' organizational assessment reported that all levels appreciated the intent of the operations review meetings, but there were a number of concerns. Everyone interviewed wanted more two-way communication but thought the size and format of the meetings inhibited discussion. Middle managers thought the meetings focused too much on what had happened and not enough on the future. As one manager said: "It's like seeing Lubbock in the rearview mirror. We want to know where we're going—not where we've been. We want to know what's coming up, how it's going to affect our department, and what we can do to help." Others, including some of the executive staff, complained about the difficulty of understanding the financial jargon. Some hourly employees interviewed did not know there were operations review meetings, and others did not know what was discussed

A number of middle managers in manufacturing thought that having regular departmental meetings would improve communication within their departments. They also said that they would like to see minutes of the executive staff meetings.

When interviewed by the students for their assessment of organizational communication, a number of middle managers, supervisors, and hourly workers thought the company was not practicing what it preached with regard

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to its stated goals. A primary goal was supposed to be a quality product; however, they reported that there was too much emphasis on "hitting the numbers," or getting the required number of products shipped, even if there were defects. They said this especially occurred toward the end of the month when production reports were submitted. One worker's comment reflected opinions held by many hourly employees: "Some foremen are telling people to push through products that are not of good quality. This passes the problem from one department to another and the end result is a lousy product. They seem too interested in reaching the quota and getting the order out on time rather than quality. It's a big problem because when the hourly workers believe that quality isn't important, they start not to care about their work. They pass it on to the next guy, and the next guy gets mad."

The perception by a number of hourly workers that their suggestions to improve quality were not responded to because of a lack of money also resulted in their questioning the company's commitment to quality.

Change Is Poorly Managed

Most of the employees interviewed by the students thought there were too many changes at the plant and that the numerous changes resulted in confusion.

- 1. QIS was initiated in 1985.
- 2. In 1986, 100 hourly employees were laid off.
- 3. In 1984, there were 154 managers; in 1990, there were 87 managers.
- 4. In 1989, corporate initiated a restructuring that changed the reporting relationships of several senior managers.
- In 1989, as part of QIS, the plant began using statistical process control techniques and began efforts to attain ISO certification. (ISO is an internationally recognized certification of excellence.)
- 6. In 1989, a new production and inventory control system was introduced, with the help of a team of outside consultants who were at the plant for almost a year studying its operations.

¹At Littleton, the manufacturing, engineering, and accounting departments estimated the standard labor costs for making each of the plant's products and a budget was prepared based on those estimates. The budgeted costs were plant goals. A variance is the difference between actual and standard costs. A variance could be positive (less than) or negative (greater than) with respect to the budgeted costs.

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7. In 1990, the Components side reorganized its production flow.

A number of complaints were voiced about the effect of all the changes. People felt that some roles and responsibilities were not clear. There was a widespread belief that the reasons for changes were not communicated well enough and that people found out about

changes affecting them too late. In addition, many were uncertain how long a new program, once started, would be continued. Larson thought that many hourly employees were resistant to the changes being made because they thought the changes would require more work for them and they were already "running all the time." One union steward observed, "There's never a gradual easing in of things here." A middle manager said: "We're mandated for speed. We pride ourselves on going fast. We rush through today to get to tomorrow."

Larson thought the culture of the plant was gradually changing due to the implementation of QIS, but he noted that a lot of time had to be spent giving the employees reasons for changes.

Dan Gordon thought the plant needed to "communicate change in a single voice." He said that Larson's style was to leave it to the staff to tell others about upcoming changes. He commented, "By the time it gets to the last person, it's lost something." He felt that Larson needed to communicate changes to those on lower levels in person.

The QIS manager thought that Brooks did not provide enough resources and support for changes at the plant. In explaining his view of corporate's approach to change, he said, "Step one is to not give much. Step two is to not give anything. Step three is they take what's left away." Another middle manager commented, "We're always being asked to do more with less, but the requirements by corporate don't get cut back."

A frequently mentioned example of change that was frustrating to many people was the introduction of the Manufacturing Assisted Production and Inventory Control System (MAPICS) in 1989. MAPICS was a computerized system that was supposed to keep track of materials, productivity, and labor efficiency. Theoretically, it tracked orders from time of entry to payment of the bill, and one could find out where an order was at any point in the system by calling it up on a computer. However, the system was time-consuming (data had to be entered manually by the supervisors), and was not as well suited to the Fabrication side of the plant as it was to the Components side, where production was more standardized. One senior manager commented, "MAPICS was sold as the savior for the supervisors, and the company was supposed to get all of the data it needed. But it's never happened. It's only half-installed, and there are systems problems and input problems." Recently, there had been some question as to whether MAPICS was giving an accurate inventory

Hourly workers felt put upon by the way in which changes were made. One person said, "We were all of a sudden told to start monitoring waste and then all of a sudden we were told to stop." Another said, "One day the MAPICS room is over here, and then the next day it's over there. They also put a new system in the stockroom, and we didn't know about it." Many resented the outside consultants that had been brought in by corporate, reporting that they did not know why the consultants were brought in or what they were doing. They feared that the consultants' recommendations might result in layoffs.

Hourly people felt that a lot of their information about upcoming changes came through the grapevine. "Rumors fly like crazy" is the way one hourly person described communication on the floor. Another said, "The managers don't walk through the plant much. We only see them when things are going bad."

In discussing communication about changes, one middle manager said: "It's a standing joke. The hourly know what's going to happen before we do." One steward said, "Lots of times, you'll tell the supervisors something that's going to happen and they will be surprised. It raises hell with morale and creates unstable working conditions. But nine out of ten times it's true."

Hourly workers also felt that they were not involved enough in management decisions about changes to be made. One hourly worker said, "They don't ask our input. We could tell them if something is not going to work. They should keep us informed. We're not idiots."

Lack of a Systematic Approach to Training

The company had carried out a well-regarded training effort when employees were hired to begin the Components side of the plant and when the QIS program was started. In addition, every two years each employee went through refresher training for the QIS. There was no other formal company training or career development at the plant.

Hourly employees and supervisors in particular complained about the lack of training. One hourly employee expressed the predominant view: "When you start work here, it's sink or swim." In discussing the promotion of supervisors, the chief union steward said he did not know how people got to be supervisors and that as far as he knew there was no training that one had to have to become a supervisor.

When they were hired, new hourly and salaried employees attended an orientation session in which they were informed about benefits, attendance policies, their work schedule, parking regulations, and safety issues. After the orientation session, further training for new salaried employees was left up to individual departments. Standard practice was for the department supervisor to assign the

hourly person to an experienced hourly operator for oneon-one job training for two weeks. Winslow expressed some of his reservations about this approach by commenting, "You don't know if the department is assigning the best person to train the new employee or if they always use the same person for training."

The Human Resources department had no separate training budget. Individual departments, however, did sometimes use their money for training and counted the money used as a variance from their budgeted goals. The training that did occur with some regularity tended to be technical training for maintenance personnel.

When asked to explain why there was not more training, Winslow replied, "We would like to do more but we haven't been able to because of the cost and staffing issues." For example, in 1986 Winslow's title was manager of training and development, and he had been responsible for the training program for all of the new employees hired to begin the Components unit. After the initial training was completed, he requested that the plant provide ongoing training for Components operators. However, his request was turned down by Larson, who did not want to spend the money. Winslow also recalled the over 160 hours he had spent the previous year developing a video training package for hourly workers in one part of the Components side of the plant. He said that the program had been piloted, but when it came time to send people through the training course, production management was unwilling to let people take time off the floor.

Winslow also cited a lack of support from corporate as a factor in the plant's sporadic training efforts. At one time Brooks had employed a director of training for its plants, but in 1987, the person left and the company never hired anyone to replace him. Now, Brooks had no training department; each plant was expected to provide its own training. The training Brooks did provide, according to Winslow, was for the "promising manager" and was purchased from an outside vendor.

Top Management

As he sat in his office thinking about what to do, Winslow knew that any plan would have to be acceptable to Larson, Gordon, and Hanson—the plant manager and the two factory managers—and he spent some time thinking about their management styles.

Bill Larson was in his late forties, had a B.S. in mechanical engineering, and had started at Littleton in 1970. He had been plant manager since 1983. His direct reports considered him bright, analytical, and down to earth. When asked once how he would describe himself to someone who didn't know him, he said, "I keep my emotions out of things. I can remember when I was in the Army, standing at attention in my dress blues at the Tomb of the Unknown Soldier. People would come up a foot from my face and

look me in the eye and try to get me to blink. But I was able to remove myself from that. I wouldn't even see it." He added that he had built most of his own home and repaired his own equipment, including the diesels on a cabin cruiser he used to own. Being raised on a farm in the rural Midwest, he said he learned at an early age how to repair equipment with baling wire to keep it going.

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Although Larson was considered accessible by the executive staff, he rarely got out on the floor to talk to people. Many managers saw him as a "numbers" person who readily sprinkled his conversations about the plant with quantitative data about business indicators, variances, budgeted costs, etc. In referring to his discomfort discussing personal things, he somewhat jokingly said about himself, "I can talk on the phone for about thirty-five seconds and then I can't talk any longer."

In describing his own management style, Larson said, "I like to support people and get them involved. I like to let them know what I am thinking and what they need to accomplish. I like to let ideas come from them. I want them to give me recommendations, and if I feel they're OK, I won't change them. They need to be accountable, but I don't want them to feel I'm looking over their shoulders. I don't want to hamper their motivation." He estimated that 40 percent of his job responsibility consisted of managing change.

Dan Gordon, who was 38, had been at Littleton for fifteen years and had been manufacturing manager of Fabrication for seven years. In describing himself, he said, "I'm a stickler for details, and I hate to not perform well. My superiors tell me I'm a Theory X manager and that I have a strong personality—that I can intimidate people."

In speaking about how much he communicated with hourly employees, Gordon said that he didn't do enough of it, adding that "Our platters are all so loaded, we don't spend as much time talking to people as we should." He said he seldom walked through the plant and never talked to hourly workers one-on-one. Once a year, though, he met formally with all the hourly employees on the Fabrication side to have an operations review meeting like the salaried people had in order to discuss what the plant was doing, profits, new products, etc. "The hourly people love it," he reported.

Reflecting on why he didn't communicate more with hourly workers, Gordon said, "Since the accounting department's data depends, in part, on our data collection, a lot of my time is eaten up with this. Maybe I'm too busy with clerical activities to be more visible." He based his management decisions on documented data and regularly studied the financial and productivity reports issued by the accounting department. He said he would like to see the supervisors go around in the morning to just talk to

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people but acknowledged that they had too many reports to fill out and too many meetings to attend.

When asked to explain what one needed to do to succeed as a manager at Littleton, Gordon answered, "You have to get things done. Bill Larson wants certain things done within a certain time span. If you do this,

you'll succeed."

Phil Hanson, in his early fifties, had been at Littleton for seven years. He was hired as materials manager for Components and was promoted to Components factory manager in mid-1989. Phil estimated that he spent 50 percent of his time on the factory floor talking to people. He felt it gave him a better insight as to what was going on at the plant and created trust. He thought that too many of the managers at the plant were "office haunts"—they felt it was beneath them to talk with hourly workers. It appeared to other managers that Hanson often made decisions based on what he learned in informal conversations with hourly employees. He tried to delegate as much as he could to his managers. When asked what a manager had to do to succeed there, he said, "You have to be a self-starter and make things happen."

Winslow remembered how a few years ago, when he was manager of training and development, the executive staff had gone to one of those management development workshops where you find out about your management style. All of the staff had scored high on the authoritarian end of the scale.

This triggered a memory of a recent debate in which he had passed along a suggestion by his staff to the executive staff to "do something nice for the workers on the floor." To celebrate the arrival of summer, his staff wanted the company to pay for buying hamburgers, hot dogs, and soft drinks so the workers could have a cookout during their lunch break. Those on the executive staff who resisted the idea cited the "jellybean theory of management." As one manager explained it, "If you give a hungry bear jellybeans, you can keep it happy and get it to do what you want. But watch out when you run out of jellybeans! You're going to have a helluva angry bear to deal with!" The jelly bean argument carried the day, and the cookout was not held.

Recommendation Time

As Winslow turned on the computer to write down his recommendations concerning the six problem areas, he recalled how Larson had reacted when the students made their presentation on organizational communication at Littleton. After praising the students' efforts, Larson had said, in an offhanded way, "This mainly confirms what we already knew. Most of this is not a surprise." Winslow was hopeful that now some of these issues would be addressed.

One potential sticking point, he knew, was the need for the meetings that would be necessary to discuss the problems and plan a strategy. People were already strapped for time and complaining about the number of meetings. Yet unless they took time to step back and look at what they were doing, nothing would change.

On a more hopeful note, he recalled that Larson had been impressed when the Human Resources staff emphasized in their presentation to him that these issues were impacting Littleton's bottom line. Winslow felt that the decline in sales and profits at Brooks, the increasing domestic and foreign competition, the current recession, and declining employee morale made it even more important that the issues be dealt with. People at all levels of the plant were starting to worry about the possibility of more layoffs.

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Integrative Case 11.2 Littleton Manufacturing (B)*

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Winslow met with his staff to develop a list of proposed corrective actions. Exhibit 1 is the memo that Winslow sent, in June 1990, to the Human Resources PIT, outlining suggested corrective actions. (The action steps were not prioritized.)

The PIT did not meet to discuss what to do about the six issues identified by the Human Resources department until the middle of September. The first issue the PIT decided to address was the inconsistent application of disciplinary policies and procedures. They chose this issue first because they thought that if this could be improved, many of the other issues would be resolved as well.

The PIT decided to first find out how well supervisors understood the work rules and the extent to which they had different interpretations of them. To do this they developed a quiz covering Littleton's twenty-eight work rules and gave the quiz to all supervisors. One question, for example, was "If you came in and found an employee who had just dozed off at his/her workstation, what would you do?" The supervisor then had to choose from several alternatives. This question was followed by, "If you came in and found an employee away from the job and asleep on top of some packing materials, what would you do?" Again, there was a choice of several responses. After taking the exam, the answers were discussed and the correct answer explained by Winslow and the Human Resources staff. The results revealed to the PIT that there was much less knowledge of these rules and how to apply them than management had expected.

The PIT then theorized that a number of supervisors were not comfortable with confronting employees about their failure to follow the company's policies and procedures, especially the wearing of safety shoes and goggles. They decided to seek the assistance of an outside consultant to help them develop a training program for the supervisors. However, on September 1, 1991, as a continuation of its "efficiency drive," Brooks had imposed a freeze on salaries and a reduction in travel, and prohibited the use of outside consultants at all of its plants. When Winslow asked Bill Larson for approval to hire the consultant, he was reminded that because of the freeze they would have to do the training in-house.

As a consequence, Winslow began a series of meetings with union stewards and supervisors—called "Sup and Stew" meetings—to discuss what the work rules were, different interpretations of them, and how violations of work rules should be handled. For scheduling reasons, it was

planned so that half of the supervisors and the stewards would attend each meeting. These meetings were held biweekly for over a year. Winslow believed that the meetings were helping to clarify and support the role of the supervisors and were beginning to have a positive effect on the enforcement of policies and procedures.

In 1991, because the plants that bought the wire coils made by Components had excess finished goods inventory, Brooks shut them down for a month during the Christmas holidays, leading Littleton to eliminate 125 positions from the Components side for the same month, to reduce production. "If we hadn't," Winslow said, "we would have had a horrendous amount of inventory." The employees filling those positions had, in general, less seniority than their counterparts from Fabrication, and no one from the Fabrication side was laid off. A few of the more senior employees from the Components side were hired to work on the Fabrication side. At the time of the layoffs, business on the Fabrication side was booming. In January, the plant started rehiring the laid-off workers, and by the end of June, all of them had been rehired.

In November 1991, Bill Larson learned that he had cancer, and in June 1992, he died. Because of Larson's illness, the lack of resources, and time pressures, there was no formal attempt to address any of the issues identified by Winslow other than inconsistent enforcement of policies and procedures.

The new plant manager, Bob Halperin, took over in the fall of 1992; Halperin had been managing another Brooks plant in the south for three years. One of the reasons he was chosen was his familiarity with Littleton. He had been at Littleton as an industrial engineer from 1973 to 1980, when he left to manage another facility. In 1984 he was sent back to Littleton to start and manage Components. He held this position for four years before leaving to manage the plant in the southern United States.

Shortly after Halperin arrived, Winslow acquainted him with the problem areas defined the previous year, gave

*By David E. Whiteside, organizational development consultant. This case was written at Lewiston-Auburn College of the University of Southern Maine with the cooperation of management, solely for the purpose of stimulating student discussion. Data are based on field research; all events are real, although the names of organizations, locations, and individuals have been disguised. Faculty members in nonprofit institutions are encouraged to reproduce this case for distribution to their students without charge or written permission. All other rights reserved jointly to the author and the North American Case Research Association (NACRA). Copyright © 1994 by the Case Research Journal and David E. Whiteside.

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EXHIBIT 1

Memorandum from Paul Winslow to Human Resources

MEMORANDUM

From: Paul Winslow, Director of Human Resources To: Human Resources Process Improvement Team

Subject: Proposed Corrective Actions

Date: 6/14/90

Lack of Organizational Unity

- 1. Use job shadowing or rotation to help people understand each other's jobs, e.g., do this across functions.
- 2. Reformat the Operations Review meetings, e.g., have a program committee.
- 3. Have a smaller group forum, e.g., have supervisors from the two sides meet.
- 4. Provide teamwork training for salaried employees.

Lack of Consistency in Enforcing Rules and Procedures

- 1. Hold meetings with department managers and supervisors to discuss how to enforce policies and procedures. Have these led by Bill Larson.
- 2. Develop a policy and procedures review and monitoring system.

Supervisor's Role Poorly Perceived

- 1. Have department managers meet with supervisors to determine priorities or conflicts between priorities.
- 2. Have supervisory training for all manufacturing supervisors.
- 3. Time assessment. (How is their time being spent?)

Insufficient Focus on Littleton's Priorities

- 1. Use the in-house newsletter to communicate priorities.
- 2. Develop an internal news sheet.
- 3. Have a question box for questions to be answered at Operations Review meetings.
- 4. Have a restatement of Littleton's purpose (do at Operations Review).
- 5. Have an Operations Review for hourly workers.
- 6. Use payroll stuffers to communicate information about goals.
- 7. Hold department meetings; have the manager of the department facilitate the meeting.

Change Is Poorly Managed

- 1. Provide training in managing change.
- 2. Communicate changes.

Lack of a Systematic Approach to Training

- 1. Establish annual departmental training goals.
- 2. Link training goals to organizational priorities.
- 3. Have a systematic approach to training the hourly workforce.
- 4. Have a training plan for each salaried employee.
- 5. Have an annual training budget.

HR Dept.

6/90

him a copy of the (A) case, and met with him to discuss the issues. At that time, although Winslow felt that progress had been made on having more consistent enforcement of policies and procedures from one side of the plant to the

other, he did not feel much had changed with regard to the other issues. With the exception of the Sup and Stew meetings, none of the specific action steps recommended by him and his staff had been implemented.

Integrative Case 12.0 Hartland Memorial Hospital (A): An Inbox Exercise*

Introduction

Hartland Memorial Hospital, established 85 years ago when wealthy benefactor Sir Reginald Hartland left an estate valued at more than \$2 million, is a 285-bed, free-standing community general hospital located in Westfield, a ski resort community of 85,000 people. Ridgeview Hospital is the only other hospital in the area, situated some 18 miles away in the village of Easton. Hartland Memorial is a fully accredited institution that provides a full range of medical and surgical services. It has an excellent reputation for delivering high-quality medical care for the citizens of Westfield and the surrounding area.

You and the Hospital

You are Elizabeth Parsons, BSN, MSN, PhD, vice president for Nursing Services at Hartland Memorial. You accepted this position 17 months ago and have been instrumental in introducing a number of innovations in nursing practice and management. In particular, these innovations have included the establishment of job sharing, self-scheduling, and a compressed work week for all general-duty nurses. In addition, you have also developed a new performance appraisal system and are contemplating using it to create a merit pay system for the nursing staff.

Your administrative assistant is Wilma Smith, who handles your correspondence, as well as scheduling meetings and conferences. Each morning she opens whatever hard-copy mail and memos you have received, and puts them on your desk. She also places hard-copy phone messages on your desk from those people who did not want to be routed to your voicemail. Although she has access to your e-mail, voice mail, and electronic calendar, she does not routinely monitor them. Wilma is only moderately comfortable with the new modes of communicating, generally preferring the ways of the "pre-electronic" era.

Your second in command is Anne Armstrong, who is assistant director for Nursing Services. Anne has worked at Hartland Memorial for seven years, and is very competent. She has only recently returned to work, however,

*This case was written by Kent V. Rondeau, University of Alberta, Edmonton, John E. Paul, University of North Carolina at Chapel Hill, and Jonathon S. Rakich, Indiana University Southeast, New Albany. The case is intended solely as a vehicle for classroom discussion, and is not intended to illustrate either effective or ineffective handling of the situation described.

after spending some time in the hospital recovering from the suicide of her husband. A list of the key personnel at Hartland Memorial is presented in Exhibit 1, and selected biographical sketches can be found in Exhibit 2.

The Situation

You have just returned from a greatly needed long weekend off. At your husband's insistence, the two of you left Thursday evening for a mountain resort, and just got back last night. Long hours, high stress, and constantly being accessible by cell phone, voice mail, and e-mail have been taking their toll—you seem to have been "on-call" continuously for months now. Compounding these "curses-of-themodern-job" have been meeting the needs ("being there") for your school-age kids, and, a recent development, the demands of addressing your parents' needs as they age. In particular, your mom seems increasingly incapable of taking care of your dad, for whom some other living arrangements may have to be found. Caught between

EXHIBIT 1

List of Key Personnel at Hartland Hospital

Name	Position
Allan Reid	President and CEO
Scott Little	Assistant to the President
Elizabeth Parsons	Vice President-Nursing Service
Anne Armstrong	Assistant Director-Nursing Service
Cynthia Nichols	Vice President-Human Resources
Clement Westaway,	President-Medical Staff
MD	
Janet Trist	Nursing Supervisor-3 East
Sylvia Godfrey	Weekend Supervisor
Jane Sawchuck	Clinical Nurse Specialist
Norm Sutter	Vice President-Finance
Marion Simpson	Auditing Clerk
Fran Nixon	Staff Relations Officer
George Cross	Nurses Union Representative
Bernard Stevens	Chairman of the Board
Wilma Smith	Administrative Assistant

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EXHIBIT 2

Brief Biographical Sketches of Key Players at Hartland

Elizabeth Parsons	A professionally trained and degreed registered nurse (BSN, MSN, PhD). Age 45, with 20 years of progressive management and nursing experience. Married, two children, 10 and 12.
Allan Reid	CEO at Hartland Hospital for 2 years. Age 35, with 6 years experience as an assistant administrator at a 100-bed rural hospital. MHA degree. Married, two children.
Bernard Stevens	Colonel, U.S. Army Infantry (retired). Chairman of the board for Hartland Hospital for the past 12 years. Age 70. Widower, four grown children.
Clement Westaway, MD	Medical degree from the University of Pennsylvania. Internist. Member of the Hartland medical staff for 30 years and president of medical staff for the past 10 years. Age 64. Divorced, two grown children.
Anne Armstrong	Assistant director of Nursing Service at Hartland for the past five years. Has MSN degree. Age 35. Recently widowed, two children.
Janet Trist	Nursing supervisor. Interrupted career at age 26 to raise her children. Resumed working two years ago. RN (diploma program). Age 41. Married.
Wilma Smith	Administrative assistant in her present position for the past 15 years. Has worked at Hartland for 28 years. Age 50. Single, no children.

responsibilities with kids and parents (to say nothing about spouse) you are truly in the "sandwich" generation.

The weekend away, however, was wonderful. You were out of cell phone coverage, and the inn did not make its computer generally available to guests. In any case, your husband would have probably left you if you'd logged on or called in. Sunday night after getting home you had planned on logging on and assessing the situation facing you at work, after four blessed days out of touch. The kids, however, needed attention, the dog needed walking, and Mom called and talked for over an hour about what to do about Dad. You never got to your voice mail, either.

It is now 7:45 A.M. on Monday morning, and you have just a little over one hour until your first meeting of the day with Norm Sutter, vice president for Finance. You really have to get through your e-mail, voice mail, and the hard-copy items Wilma left on your desk—letters, phone messages, etc.—and take some action before meeting with Norm. You know the rest of the day will be a blur, and you'll have no further opportunities to get caught up. Moreover, new stuff will be coming in and piling up constantly. The refreshed feeling you had after the weekend out of town is rapidly slipping away. . . A hard copy schedule of your appointments for the day left on Friday by Wilma is shown in Exhibit 3. You know that it will likely be changing.

What Needs to Be Done

This case includes the various e-mails, voice mails, and hard-copy letters and messages that Elizabeth finds awaiting her. Since Wilma doesn't arrive until 8:30 A.M.

Elizabeth has the office by herself. Note that the Hartland Hospital IT system does a fairly good job of filtering out spam and junk mail. The occasional item does make it through, which Elizabeth immediately deletes. Additionally, however, there are the e-newsletters from The Kaiser Family Foundation, the Commonwealth Fund, ACHE, etc. to which Elizabeth subscribes, but which she rarely has time to read. She tends to let these pile up in her in-box, sometimes making it hard to find the critical material there. The newsletters that came in over her mini holiday are not included.

For each item, indicate the course of action you think Elizabeth should pursue. You can choose from one of the following action alternatives. Because you may not have all the information needed to make a decision, please make notes that explain your assumptions, thinking and justification for that item. Be prepared to defend your underlying rationale. If delegating a task, identify who should be responsible for each item. Work sequentially through each item.

Action Alternatives
_Call immediately
_Note to call within 2–3 days
_E-mail immediately
_E-mail within a day
_Meet with ASAP
_Forward to:

Note to meet within 2–3 days
_Other (Specify: ____)
_No response needed

12.0

EXHIBIT 3

Schedule of Appointments, Monday, October 7 (as of 7:45 A.M.; left on your desk by Wilma, Friday afternoon at 5 P.M.)		
8:00 а.м.		
8:30		
9:00	Meeting with Norm Sutter	
9:30		
10:00	Reg. Monday morning meeting with nursing supervisors	
10:30		
11:00	Meeting with Clement Westaway	
11:30		
12:00 р.м.	Lunch with Anne Armstrong	
12:30"		
1:00	Orientation talk to new nursing recruits	
1:30"		
2:00		
2:30	Meeting of infection control committee	
3:00"		
3:30		
4:00	Meeting with Allan Reid	
4:30"		
5:00		
5:30		

Elizabeth Parson's "Inbox" Monday, October 7

ITEM 1: E-mail

To: Elizabeth Parsons, VP-Nursing Service From: Scott Little, Assistant to the President

Date: October 4, 8:00 AM

Subject: Wandering patients—IMPORTANT!

On Thursday evening, Mrs. Grace O'Brien, a patient with diabetes and Alzheimer's disease, was missing from her room when her daughter came to visit her. It took the staff more than 3 hours to finally locate her. She was found naked and unconscious in the basement washroom of the Stuart Annex. Her daughter is extremely upset and is threatening to sue the hospital.

We don't need another lawsuit!!!

-Scott

606 Integrative Case 12.0

ITEM 2: Letter

September 26

President, Hartland Hospital

Eliz - Please note what actions are needed! ~A.

Dear Sir.

I have been a patient in your hospital on three different occasions over the last 4 years. In the past I have been very satisfied with the nursing care that I have received; however, my last stay there has left much to be desired. For the most part I have found that many of your nurses are very rude and arrogant. On a number of times when I asked these people for assistance, they would either refuse to help me, tell me they were too busy, or ignore me altogether.

I have great respect for Hartland Hospital and I trust that you would want to correct this problem. My late husband, Horace, was once a trustee at your hospital and would never have allowed this to happen.

Sincerely,

Mable Coleman Westfield

ITEM 3: Voice Mail

(Voice message left at 7:30 A.M. on office phone—you forgot to turn on your cell phone driving into work.)

"Elizabeth, this is Mom. I tried to get you before you left home this morning, but just missed you—Dad got up today upset and saying that he was 'a burden.' He's gone back to sleep now. What should I do? Please call when you get a chance!"

ITEM 4: E-Mail

To: Elizabeth Parsons, VP-Nursing Service

From: Allan Reid, President/CEO

Date: October 4 Time: 2:10 PM Subject: EOM

I have heard that a number of other hospitals have been very successful at motivating their staff by implementing employee recognition programs. These programs can go a long way toward increasing employee commitment and morale. I would like to institute an "Employee-of-the-Month" award here at Hartland. I have a few ideas and would like to discuss them with you. A.

120

ITEM 5: E-Mail

To: Elizabeth Parsons, VP-Nursing Service From: Sylvia Godfrey, R.N., Weekend Supervisor

Date: October 6 Time: 9:07 PM

Subject: Insufficient staffing

Again this weekend we had a number of nurses call in sick and we were subsequently short staffed. I had to call in nurses from the "availability list" that was provided by the Temp Placement Agency. I don't really think these nurses are any good because they are poorly trained and make too many errors. I am sick and tired of having to go through this hassle every week!

Sylvia

ITEM 6: E-Mail

To: Elizabeth Parsons, VP-Nursing Service From: Janet Trist, R.N., Supervisor-3 East

Date: October 4 Time: 1:23 PM

Subject: Scheduling problems

I am really having a problem with this new self-scheduling system that we adopted last month. A number of my senior nurses are refusing to go along with it and are threatening to quit unless we go back to the old system. It's affecting the morale on my unit and making my life miserable. We need to discuss this right away.

Janet

ITEM 7: Letter

WESTFIELD HIGH SCHOOL

September 28 Elizabeth Parsons Vice President-Nursing Service Hartland Hospital Westfield

Dear Mrs. Parsons;

The Future Careers Club of Westfield High School would like to invite you to be the guest speaker at our November meeting. The meeting will be held on November 14 at 8:00 P.M. in the school auditorium. We would like you to discuss "The Changing Role of the Professional Nurse."

We believe that your presentation will be quite informative for us because several of our students are interested in pursuing a nursing career.

We hope that you will be able to accept this invitation. Please call our sponsor, Mrs. Bonnie Tartabull, to confirm at your earliest convenience. Thank you.

Sincerely, Kathy Muller

President, Westfield High Future Careers Club

608 Integrative Case 12.0

ITEM 8: E-Mail

To: Elizabeth Parsons, VP-Nursing Service

From: Marion Simpson, Auditing

Date: October 4 Time: 9:45 AM

Subject: Hours of work for part-time nurses

Once again, many part-time nurses are working between 25 and 30 hours per week. If we permit this to continue, under the terms of the collective agreement, we must give full-time benefits to those involved.

The agreement slates that full-time benefits must be given to those working in excess of 25 hours per

week

The actual number of hours worked per week for part-timers averaged 24.5 hours for the month of

September.
Marion Simpson

ITEM 9: Written note from Wilma

To: Elizabeth Parsons

From: Scott Little, Assistant to the President

Time: 10:20

Mr. Little called, but did not leave a message.

ITEM 10: E-mail

To: Elizabeth Parsons, Vice President-Nursing Service From: Cynthia Nichols, Vice President-Human Resources

Date: October 2 Time: 4:45 PM

Subject: Sexual harassment charges

STRICTLY CONFIDENTIAL

We have just received a notification from a nurse employed here at Hartland alleging sexual harassment by one of our physicians on staff. The charges, if verified, are extremely serious. I would like to appoint you, along with Fran Nixon, from our staff relations department, and George Cross, union representative for the nurses association, to form a committee to investigate these charges. I have been told that the individual claiming harassment has already begun legal action, so we need to proceed with haste.

Cynthia Nichols, Vice President

120

ITEM 11: Hard Copy

MEMO

To: Elizabeth Parsons, Vice President-Nursing Service

From: Marion Simpson, Auditing

Date: October 3

Subject: Reimbursement for travel

Further to your request for travel reimbursement for your upcoming conference, I regret to inform you that you have already used up this year's travel budget allocation and therefore will not

be reimbursed from this account.

Marion Simpson

ITEM 12: Written note from Wilma

Telephone Message To: Elizabeth Parsons From: Norm Sutter Date: October 4 Time: 3:05 p.m.

Mr. Sutter called and asked if the next year's budget projections for nursing have been finished.

He needs these figures by Monday. Wilma

ITEM 13: Hard copy

MEMO

To: Elizabeth Parsons, VP-Nursing Service From: Scott Little, Assistant to the President

Date: October 3

Subject: United Way Campaign

This is a follow-up to our discussion of last week concerning the appointment of someone from your department to serve as a representative for our hospital's annual United Way Campaign. I need to have the name of your representative by Friday, October 4th. —Scott

ITEM 14: Written note from Wilma

To: Betty Parsons Date: October 4 Time: 2:12 p.m.

Mr. Stevens dropped in and was looking for you. He seemed quite upset and was muttering something about a lawsuit. He wants you to call him as soon as you get back from your trip.

Wilma

610 Integrative Case 12.0

ITEM 15: E-Mail

October 4 4:45 PM

Ms Parsons - Can you "please" bring the snacks for the team for Jimmy's tee-ball game Monday night? Several other moms have already said they couldn't! Please confirm if this is OK. Thanks so much!! You're the true "Super-Mom"! Regards, Coach Bailey

ITEM 16: E-mail

To: Elizabeth Parsons, VP-Nursing Service From: Jane Sawchuck, Clinical Nurse Specialist

Date: October 3

Subject: Nosocomial Infections

It has come to my attention that, again last month, we have recorded high levels of Staphylococcus and Pseudomonas in operating rooms B and C. It is becoming apparent that we need to review our standard procedures in this area before an epidemic breaks out.

Jane

ITEM 17: E-mail

To: Betty Parsons From: Allan Reid Date: October 3

My niece, Jennifer, just graduated from nursing school and will be in town just one day-Monday, October 7. She is looking for a job in her field and I have asked her to talk to you.

She is a delightful girl. Would you please see her? Allan

ITEM 18: E-mail

To: Elizabeth Parsons, VP-Nursing Service From: Scott Little, Assistant to the President

Date: October 4

Subject: Nurse working illegally

Carmen Espinoza, the woman I talked to you about, was working illegally for us. She was using a stolen Social Security number. The Immigration and Naturalization Services (INS) contacted me yesterday and

a representative will be corning Monday afternoon to inquire about the matter.

Please give me a call right away. Scott

ITEM 19: Telephone Message

(Wilma intercepted the call and took a message; put note in front of you)

To: Elizabeth Parsons, Vice President-Nursing Service From: Bernard Stevens, Chairman of the Board

Date: October 7 Time: 8:55 a.m.

Mr. Stevens just called and says that he needs to meet with you and Allan Reid this morning

at 10:00 a.m.

ITEM 20: E-mail

To: Elizabeth Parsons, Vice President-Nursing Service From: Dr. Clement Westaway, President-Medical Staff

Date: October 2

Subject: Nurse-physician relations

Further to our discussion last week concerning the pressing need to improve communication between physicians and nurses at Hartland Memorial, I am hoping that the suggestions that I gave you will be successfully implemented by your staff. Remember, we are all trying to

provide the best possible medical care for our patients. C.W., MD

ITEM 21: E-mail

To: Elizabeth Parsons, Vice President-Nursing Service

From: Cynthia Nichols, VP-Human Resources

Date: October 3

Subject: Firing Ms. Jean White, R.N.

As we discussed yesterday, it is important to conduct the termination interview of nurse Jean White as soon as possible. Her last day of work at Hartland will be October 18 and, according to our collective agreement, she requires 2 weeks' notice. Please call me when the deed is done.

Cynthia Nichols, VP-HR

STOP!!

Do not proceed to the next page until you have responded to all previous items.

612 Integrative Case 12.0

ITEM 22: Telephone Call (**LIVE**)

Time: 9:45 A.M., Monday, October 7

Allan Reid just calls, and tells you that Mrs. Grace O'Brien, the patient with diabetes and Alzheimer's disease, is again missing from her room, apparently since late last night. He advises you that he was just informed of this by a local newspaper reporter who had gotten wind of the story. He instructs you to call Mrs. O'Brien's daughter to tell her of this recent development before she hears or reads it in the media. Reid gives you no opportunity to respond, saying, "I have the reporter on the other line and have to go." He then hangs up the telephone.

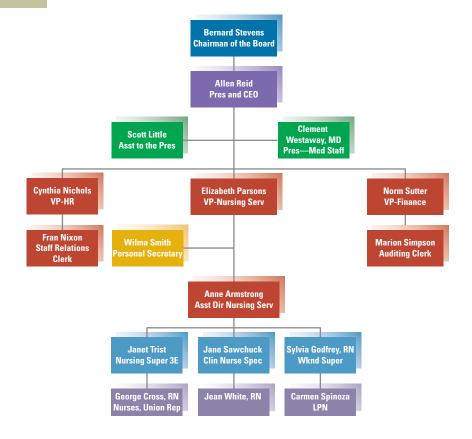
Exhibit 4 is a partial diagram of the formal organization structure at Hartland Memorial Hospital.

After completing your action alternatives and justifications for each inbox item, use your knowledge of relationships to construct an informal organization chart, or *sociogram*, for the hospital. Use the organization chart in Exhibit 4 to draw lines between Elizabeth Parsons and

other people. Portray positive/neutral/negative relationships with lines of different colors or thickness. Also indicate power relationships, the level of trust, frequency of communication, and criticality of relationships for her successful performance. Include all players about whom you have information. What does your diagram reveal about what is going on that day?

EXHIBIT 4

Hartland Memorial Hospital (Partial Organization Chart)





A

- **adaptability culture** a culture characterized by strategic focus on the external environment through flexibility and change to meet customer needs.
- adhocracy an organization form that develops in a complex, rapidly changing environment and is designed to support innovation and change.
- administrative principles a management perspective that focuses on the design and functioning of the organization as a whole.
- ambidextrous approach a design approach that incorporates structures and management processes that are appropriate to both the creation and the implementation of innovation.
- analyzability a dimension of technology in which work can be reduced to mechanical steps and participants can follow an objective, computational procedure to solve problems.
- analyzer a business strategy based on maintaining a stable business while innovating on the periphery.
- **authority** a force for achieving desired outcomes that is prescribed by the formal hierarchy and reporting relationships.

В

- balanced scorecard a comprehensive management control system that balances traditional financial measures with operational measures relating to a company's critical success factors.
- behavior control manager observation of employee actions to see whether the individual follows desired procedures and performs tasks as instructed.
- benchmarking the process of continually measuring products, services, and practices against tough competitors or other organizations recognized as industry leaders.
- blog a running Web log that allows an individual to post opinions and ideas.

- boundary-spanning roles activities that link and coordinate an organization with key elements in the external environment.
- bounded rationality perspective a perspective that describes how decisions are made when problems are ill-defined, numerous factors affect the decision, and time is limited.
- **buffering roles** activities that absorb uncertainty from the environment.
- bureaucracy an organizational framework marked by rules and procedures, specialization and division of labor, hierarchy of authority, emphasis on technically qualified personnel, and written communications and records.
- **bureaucratic control** the use of rules, policies, hierarchy of authority, written documentation, standardization, and other bureaucratic mechanisms to standardize behavior and assess performance.
- **bureaucratic culture** a culture with an internal focus and a consistency orientation for a stable environment.
- bureaucratic organizations organizations that emphasize designing and managing on an impersonal, rational basis through such elements as clearly defined authority and responsibility, formal recordkeeping, and uniform application of standard rules.
- business intelligence high-tech analysis of large amounts of internal and external data to spot patterns and relationships that might be significant in helping managers make better strategic decisions.

C

- Carnegie model organization decision making that involves many managers making a final choice based on a coalition among those managers.
- centrality a source of horizontal power for a department that is engaged in the primary activity of an organization.
- centralization refers to the level of hierarchy with authority to make decisions.

- centralized decision making decision making in which problems and decisions are funneled to top levels of the hierarchy for resolution.
- change process the way in which changes occur in an organization.
- chaos theory a theory that suggests that relationships in complex, adaptive systems—including organizations are nonlinear and made up of numerous interconnections and divergent choices that create unintended effects and render the whole unpredictable.
- charismatic authority authority based on devotion to the exemplary character or to the heroism of an individual person and the order defined by him or her.
- chief ethics officer a high-level company executive who oversees all aspects of ethics.
- clan control the use of social characteristics, such as shared cultural values, commitment, traditions, and beliefs, to control behavior.
- clan culture a culture with a primary focus on the involvement and participation of the organization's members and on rapidly changing expectations from the external environment.
- coalition an alliance among several managers who agree about organizational goals and problem priorities.
- code of ethics a formal statement of the organization's values concerning ethics and social responsibility.
- coercive forces the external pressures exerted on an organization to adopt structures, techniques, or behaviors similar to other organizations.
- **cognitive biases** severe errors in judgment that all humans are prone to and that typically lead to bad choices.
- collaborative network a perspective whereby organizations join together to become more competitive and to share scarce resources to increase value and productivity for all.
- **collective bargaining** the negotiation of an agreement between management and workers.
- collectivity stage the life cycle phase in which an organization has strong leadership and begins to develop clear goals and direction.
- **competition** rivalry among groups in the pursuit of a common prize.
- competitive advantage what sets the organization apart from others and provides it with a distinctive edge for meeting customer or client needs in the marketplace.
- confrontation a situation in which parties in conflict directly engage one another and try to work out their differences.
- consortia groups of independent companies (suppliers, customers, and possibly competitors) that join together to share skills, resources, costs, and access to one another's markets.
- contextual dimensions traits that characterize the whole organization, including its size, technology, environment, and goals.

contingency theory meaning that one thing depends on other things; for organizations to be effective, there must be a "goodness of fit" between their structure and the conditions in their external environment.

- contingency decision-making framework a perspective that brings together the two organizational dimensions of problem consensus and technical knowledge about solutions.
- **continuous-process production** a completely mechanized manufacturing process in which there is no starting or stopping.
- **cooptation** occurs when leaders from important sectors in the environment are made part of an organization and thus are more engaged in that organization's interests.
- **coping with uncertainty** a source of horizontal power for a department that reduces uncertainty for other departments by obtaining prior information, prevention, or absorption.
- **core competence** describes what the organization does especially well in comparison to its competitors.
- core technology the work process that is directly related to the organization's mission.
- corporate social responsibility (CSR) the concept of management's obligation to make choices and take action so that the organization contributes to the welfare and interest of all organizational stakeholders.
- craft technology technology characterized by a fairly stable stream of activities, but the conversion process is not analyzable or well understood.
- creative departments departments that initiate change, such as research and development, engineering, design, and systems analysis.
- **creativity** the generation of novel ideas that may meet perceived needs or respond to opportunities.
- culture the set of values, norms, guiding beliefs, and understandings that is shared by members of an organization and taught to new members as the correct way to think, feel, and behave.
- culture change change in the values, attitudes, expectations, beliefs, and behavior of employees.
- culture strength the degree of agreement among members of an organization about the importance of specific values.
- customer relationship management (CRM) systems that help companies track customers' interactions with the firm and allow employees to call up a customer's past sales and service records, outstanding orders, or unresolved problems.

D

data warehousing the use of huge databases that combine all of a company's data and allow users to access the data directly, create reports, and obtain responses to what-if questions.

decentralized decision making decision making in which authority is pushed down to lower organizational levels.

- decision learning a process of recognizing and admitting mistakes that allows managers to acquire sufficient experience and knowledge to perform more effectively in the future.
- decision premises constraining frames of reference and guidelines placed by top managers on decisions made at lower levels.
- decision support system (DSS) an interactive, computerbased system that relies on decision models and integrated databases.
- **defender** a business strategy that is concerned with stability or even retrenchment.
- departmental grouping a grouping in which employees share a common supervisor and common resources, are jointly responsible for performance, and tend to identify and collaborate with one another.
- dependency an aspect of horizontal power, in which one department is dependent on another and the latter is in a position of greater power.
- devil's advocate the role of challenging the assumptions and assertions made by the group.
- differentiation the cognitive and emotional differences among managers in various functional departments of an organization and formal structure differences among these departments.
- differentiation strategy a business strategy that attempts to distinguish an organization's products or services from others in the industry.
- direct interlock occurs when one individual is the link between two companies, such as when a member of one company's board also sits on the board of another company.
- diversified form an organization form that occurs when large, mature firms are subdivided into product or market groups.
- **divisional grouping** a grouping in which employees are organized according to what the organization produces.
- divisional structure structure in which divisions can be organized according to individual products, services, product groups, major projects or programs, divisions, businesses, or profit centers; sometimes called a *product structure* or *strategic business units*.
- domain the chosen environmental field of action; the territory an organization stakes out for itself with respect to products, services, and markets served.
- domains of political activity areas in which politics plays a role. Three domains in organizations are structural change, management succession, and resource allocation.
- domestic stage the first stage of international development in which a company is domestically oriented while managers are aware of the global environment.

downsizing intentionally reducing the size of a company's workforce by laying off employees.

dual-core approach an organizational change perspective that identifies the unique processes associated with administrative change compared to those associated with technical change.

E

- e-business any business that takes place by digital processes over a computer network rather than in physical space.
- economies of scale achieving lower costs through large volume production; often made possible by global expansion.
- economies of scope achieving economies by having a presence in many product lines, technologies, or geographic areas.
- effectiveness the degree to which an organization achieves its goals.
- efficiency the amount of resources used to achieve an organization's goals; based on the quantity of raw materials, money, and employees necessary to produce a given level of output.
- **elaboration stage** a mature stage of the life cycle in which a red tape crisis is resolved through the development of a new sense of teamwork and collaboration.
- empowerment the delegation of power or authority to subordinates in an organization, also known as *power* sharing.
- engineering technology technology that tends to be complex because there is substantial variety in the tasks performed, but activities are usually handled on the basis of established formulas, procedures, and techniques.
- enterprise resource planning (ERP) a system that collects, processes, and provides information about a company's entire enterprise.
- entrepreneurial stage the life cycle stage in which an organization is born and its emphasis is on creating a product and surviving in the marketplace.
- entrepreneurial structure an organization form that consists mainly of a top manager and workers in the technical core; occurs typically in small start-up companies.
- escalating commitment persisting to invest time and money in a solution despite strong evidence that it is not working.
- ethical dilemma the result of when each alternative choice or behavior seems undesirable because of a potentially negative ethical consequence.
- ethics the code of moral principles and values that governs the behaviors of a person or group with respect to what is right or wrong.
- ethics committee a cross-functional group of executives who oversee company ethics.

ethics hotline a telephone number employees can call to seek guidance as well as report questionable behavior.

- evidence-based management a commitment to make more informed and intelligent decisions based on the best available facts and evidence.
- executive dashboard a software program that presents key business information in graphical, easy-to-interpret form and alerts managers to any deviations or unusual patterns in the data; sometimes called a *business* performance dashboard.
- executive information system (EIS) a higher-level application that facilitates decision making at the highest levels of management, these systems are typically based on software that can convert large amounts of complex data into pertinent information and provide that information to top managers in a timely fashion.
- explicit knowledge formal, systematic knowledge that can be codified, written down, and passed on to others in documents or general instructions.
- **external adaptation** the manner in which an organization meets goals and deals with outsiders.
- **extranet** an external communications system that uses the Internet and is shared by two or more organizations.

F

- factors of production resources necessary for production, such as land, raw materials, and labor.
- feedback control model a control cycle that involves setting goals, establishing standards of performance, measuring actual performance and comparing it to standards, and changing activities as needed based on the feedback.
- financial resources a source of horizontal power when a person or department has control over money in an organization.
- flexible manufacturing systems (FMS) using computers to link together manufacturing components such as robots, machines, product design, and engineering analysis to enable fast switching from one product to another.
- **focus strategy** a business strategy that concentrates on a specific regional market or buyer group.
- formalization the degree to which an organization has rules, procedures, and written documentation.
- formalization stage the life cycle stage that involves the installation and use of rules, procedures, and control systems.
- **functional grouping** a grouping that consists of employees who perform similar functions or work processes or who bring similar knowledge and skills to bear.
- **functional matrix** type of matrix structure in which the functional bosses have primary authority and the project or product managers simply coordinate product activities.

functional structure organization structure in which activities are grouped together by common function from the bottom to the top of the organization.

G

- **garbage can model** decision-making model that describes the pattern or flow of multiple decisions within an organization.
- **general environment** those sectors that might not have a direct impact on the daily operations of a firm but will indirectly influence it.
- **generalist** an organization that offers a broad range of products or services or serves a broad market.
- **global companies** companies that no longer think of themselves as having a single home country; sometimes called *stateless corporations*.
- global geographic structure structure that divides the world into geographic regions, with each geographic division reporting to the CEO.
- global matrix structure a form of horizontal linkage in an international organization in which both product and geographical structures are implemented simultaneously to achieve a balance between standardization and globalization.
- global product structure structure in which the product divisions take responsibility for global operations in their specific product area.
- global stage the stage of international development in which the company transcends any one country.
- **global teams** cross-border work groups made up of multiskilled, multinational members whose activities span multiple countries; also called *transnational teams*.
- globalization strategy the standardization of product design, manufacturing, and marketing strategy throughout the world.
- goal approach an approach to effectiveness that is concerned with an organization's outputs and how well the organization has met its output goals.
- **groupthink** the tendency of people in groups to suppress contrary opinions for the sake of group harmony.

Н

- Hawthorne studies a series of experiments on worker productivity begun in 1924 at the Hawthorne plant of Western Electric Company in Illinois; attributed employees' increased output to managers' better treatment of them during the study.
- heroes organization members who serve as models or ideals that illustrate and support desired cultural norms and values.
- high-velocity environments industries in which competitive and technological change is so extreme that market data is either unavailable or obsolete, strategic

windows open and shut quickly, and decisions must be make quickly with limited information.

- horizontal coordination model a model of the three components of organizational design needed to achieve new product innovation: departmental specialization, boundary spanning, and horizontal linkages.
- horizontal grouping a grouping in which employees are organized around core work processes, the end-to-end work, information, and material flows that provide value directly to customers.
- horizontal linkage communication and coordination horizontally across organizational departments.
- horizontal structure organization structure that organizes employees around core processes rather than by function, product, or geography.
- hybrid structure structure that combines characteristics of various structural approaches tailored to specific strategic needs.

ı

- idea champions organization members who provide the time and energy to make change happen; sometimes called *advocates*, *intrapreneurs*, and *change agents*.
- idea incubator a safe harbor in which ideas from employees throughout the organization can be developed without interference from company bureaucracy or politics.
- imitation the act of adopting a decision tried elsewhere in the hope that it will work in this situation.
- incremental decision model decision-making model that describes the structured sequence of activities undertaken from the discovery of a problem to its solution.
- indirect interlock occurs when a director of company A and a director of company B are both directors of company C.
- information reporting system the most common form of management information system, this type of system provides mid-level managers with reports that summarize data and support day-to-day decision making.
- **inspiration** an innovative, creative solution that is not reached by logical means.
- institutional environment norms, values, and expectations from stakeholders (customers, investors, boards, government, community, etc.).
- institutional perspective the view of how organizations survive and succeed through congruence between an organization and the expectations from its institutional environment.
- institutional similarity the emergence of a common structure and approach among organizations in the same field; called *institutional isomorphism* in the academic literature.
- integrated enterprise an organization that uses advanced IT to enable close coordination within the company as well as with suppliers, customers, and partners.

integration the quality of collaboration among departments or organizations.

- integrator a position or department created solely to coordinate several departments.
- intellectual capital the sum of an organization's knowledge, experience, understanding, relationships, processes, innovations, and discoveries.
- intelligence team cross-functional group of managers and employees, usually led by a competitive intelligence professional, who work together to gain a deep understanding of a specific competitive issue.
- intensive technology technology that provides a variety of products or services in combination to a client.
- interdependence the extent to which departments depend on each other for resources or materials to accomplish their tasks.
- intergroup conflict the behavior that occurs among organizational groups when participants identify with one group and perceive that other groups may block their group's goal achievement or expectations.
- interlocking directorate formal linkage that occurs when a member of the board of directors of one company sits on the board of directors of another company.
- internal integration a state in which members develop a collective identity and know how to work together effectively.
- internal process approach an approach that looks at internal activities and assesses effectiveness by indicators of internal health and efficiency.
- **international division** a division organized to handle business in other countries.
- international stage the second stage of international development, in which the company takes exports seriously and begins to think multidomestically.
- interorganizational relationships the relatively enduring resource transactions, flows, and linkages that occur among two or more organizations.
- intranet a private, companywide information system that uses the communications protocols and standards of the Internet and the World Wide Web but is accessible only to people within the company.
- intuitive decision making decision making based on experience and judgment rather than sequential logic or explicit reasoning.

J

- **job design** the assignment of goals and tasks to be accomplished by employees.
- **job** enlargement an expansion of the number of different tasks performed by an employee in a job.
- **job enrichment** designing a job to provide greater responsibility, recognition, and opportunities for growth and development.

job rotation moving employees from job to job to give them a greater variety of tasks.

job simplification the variety and difficulty of tasks performed by a single person are reduced.

joint optimization the goal of the sociotechnical systems approach, which states that an organization functions best when the social and technical systems are designed to fit the needs of one another.

joint venture a separate entity created with two or more active firms as sponsors.

K

knowledge a conclusion drawn from information that has been linked to other information and compared to what is already known.

knowledge management the ability to systematically find, organize, and make available a company's intellectual capital and to foster a culture of continuous learning and knowledge sharing so that organizational activities build on what is already known.

L

labor-management teams a cooperative approach designed to increase worker participation and provide a cooperative model for union-management problems.

large group intervention an approach that brings together participants from all parts of the organization, often including key stakeholders from outside the organization as well, in an off-site setting to discuss problems or opportunities and plan for change.

large-batch production a manufacturing process characterized by long production runs of standardized parts.

lean manufacturing a process that uses highly trained employees at every stage of the production process, who take a painstaking approach to details and problem solving to cut waste and improve quality.

learning organization an organization that promotes communication and collaboration so that everyone is engaged in identifying and solving problems, enabling the organization to continuously experiment, improve, and increase its capability.

legends stories of historic events that may have been embellished with fictional details.

legitimacy the general perception that an organization's actions are desirable, proper, and appropriate within the environment's system of norms, values, and beliefs.

level of analysis in systems theory, the subsystem on which the primary focus is placed; four levels of analysis normally characterize organizations.

liaison role a role in which a person is located in one department but has the responsibility for communicating and achieving coordination with another department.

life cycle the concept that organizations are born, grow older, and eventually die.

long-linked technology the combination within one organization of successive stages of production, with each stage using as its inputs the production of the preceding stage.

low-cost leadership strategy a strategy of increasing market share by keeping costs low compared to competitors.

M

machine bureaucracy an organization form suited to a simple, stable environment, in which there is extensive formalization and specialization, a tall hierarchy, a goal of efficiency, and a technical core typically oriented to mass production.

management champion a manager who acts as a supporter and sponsor of a technical champion to shield and promote an idea within the organization.

management control systems broadly defined as the formal routines, reports, and procedures that use information to maintain or alter patterns in organizational activities.

management information system (MIS) a computer-based system that provides information and support for managerial decision making.

management science approach organization decision making that uses quantitative models to analyze numerous variables and arrive at the best solution; the analog to the rational approach by individual managers.

managerial ethics principles that guide the decisions and behaviors of managers with regard to whether they are right or wrong.

market control the use of price competition to evaluate the output and productivity of an organization or its major departments and divisions.

mass customization using mass-production technology to quickly and cost-effectively assemble goods that are uniquely designed to fit the demands of individual customers.

matrix structure organization structure in which both product division and functional structures (horizontal and vertical) are implemented simultaneously.

mechanistic an organization system marked by rules, procedures, a clear hierarchy of authority, and centralized decision making.

mediating technology technology that allows each department to work independently by virtue of providing products or services that mediate or link clients from the external environment.

meso theory an approach to organization studies that concerns the integration of both micro and macro levels of analysis.

mimetic forces the pressure to copy or model other organizations that appear to be successful.

mission the organization's reason for existence; describes the organization's shared values and beliefs and its reason for being.

mission culture a culture characterized by emphasis on a clear vision of the organization's purpose and on the achievement of goals, such as sales growth, profitability, or market share, to help achieve the purpose.

- multidomestic manager mindset in which competitive issues in each country are viewed independently of other countries; the company deals with each country individually.
- multidomestic strategy strategy in which competition in each country is handled independently of competition in other countries.
- multifocused grouping a grouping in which the organization embraces two or more structural grouping alternatives simultaneously, often called *matrix* or *hybrid*.
- multinational stage the stage of international development in which a company has marketing and production facilities in many countries and more than one-third of its sales outside its home country.
- myths stories that are consistent with the values and beliefs of the organization but are not supported by facts.

N

- **negotiation** the bargaining process that often occurs during confrontation and that enables the parties to systematically reach a solution.
- **network centrality** a source of power based on being centrally located in the organization and having access to information and people that are critical to the company's success.
- **networking** electronically linking people and departments within a particular building or across corporate offices, enabling them to share information and cooperate on projects.
- **new-venture fund** a fund that provides financial resources for employees to develop new ideas, products, or businesses.
- niche a domain of unique environmental resources and needs.
- **non-core technology** a department work process that is important to the organization but is not directly related to its primary mission.
- **nonprogrammed decision** novel and poorly defined, these decisions are required when no procedure exists for solving a problem.
- **nonroutine technology** technology characterized by high task variety, and the conversion process is not analyzable or well understood.
- **nonsubstitutability** a source of horizontal power when a department's function cannot be performed by other readily available resources.
- **normative forces** pressures to achieve standards of professionalism and to adopt techniques that are considered by the professional community to be up to date and effective.

0

- official goals formally stated definition of business scope and outcomes the organization is trying to achieve.
- **open innovation** an approach that extends the search for and commercialization of new products beyond the boundaries of the organization.
- **operative goals** goals stated in terms of outcomes sought through the actual operating procedures of the organization.
- organic an organization system marked by free-flowing, adaptive processes, an unclear hierarchy of authority, and decentralized decision making.
- organization development (OD) a behavioral science field devoted to improving performance through trust, open confrontation of problems, employee empowerment and participation, the design of meaningful work, cooperation between groups, and the full use of human potential.
- organization structure designates formal reporting relationships, including the number of levels in the hierarchy and the span of control of managers and supervisors; identifies the grouping together of individuals into departments and of departments into the total organization; and includes the design of systems to ensure effective communication, coordination, and integration of efforts across departments.
- **organization theory** a macro examination of organizations that analyzes the whole organization as a unit.
- **organizational behavior** a micro approach to organizations that focuses on the individuals within organizations as the relevant units of analysis.
- **organizational change** the adoption of a new idea or behavior by an organization.
- organizational decision making the process of identifying and solving problems.
- organizational decline a condition in which a substantial, absolute decrease in an organization's resource base occurs over a period of time.
- organizational ecosystem a system formed by the interaction of a community of organizations and their environment.
- organizational environment all elements that exist outside the boundary of the organization and have the potential to affect all or part of the organization.
- **organizational form** an organization's specific technology, structure, products, goals, and personnel.
- **organizational goal** a desired state of affairs that the organization attempts to reach.
- organizational innovation the adoption of an idea or behavior that is new to the organization's industry, market, or general environment.
- organizational politics the activities of acquiring, developing, and using power and other resources to influence others and obtain the preferred outcome when there is uncertainty or disagreement about choices.

- organizations social entities that are goal-directed, designed as deliberately structured and coordinated activity systems, and are linked to the external environment.
- organized anarchy extremely organic organizations characterized by highly uncertain conditions.
- outcome control a management focus on monitoring and rewarding results rather than on how those results are obtained.
- outsourcing contracting out certain functions or tasks, such as manufacturing or credit processing, to other companies.

P

- personnel ratios the proportions of administrative, clerical, and professional support staff.
- point-counterpoint a decision-making technique that divides decision makers into two groups and assigns them different, often competing responsibilities.
- political model a definition of an organization as being made up of groups that have separate interests, goals, and values in which power and influence are needed to reach decisions.
- political tactics for using power these include building coalitions, expanding networks, controlling decision premises, enhancing legitimacy and expertise, and making a direct appeal.
- pooled interdependence the lowest form of interdependence, in which work does not flow between departments.
- **population** a set of organizations engaged in similar activities with similar patterns of resource utilization and outcomes.
- **population-ecology perspective** focuses on organizational diversity and adaptation within a population of organizations.
- power the potential ability of one person (or department) to influence other people (or departments) to carry out orders or to do something they would not otherwise have done.
- **power distance** the level of inequality people are willing to accept in an organization.
- power sources the five sources of horizontal power in organizations are dependency, financial resources, centrality, nonsubstitutability, and the ability to cope with uncertainty.
- problem consensus the level of agreement among managers about the nature of a problem or opportunity and about which goals and outcomes to pursue.
- problem identification the decision-making stage during which information about environmental and organizational conditions is monitored to determine if performance is satisfactory and to diagnose the cause of shortcomings.

- **problem solution** the decision-making stage during which alternative courses of action are considered and one alternative is selected and implemented.
- problemistic search search that occurs when managers look around in the immediate environment for a solution to quickly resolve a problem.
- process an organized group of related tasks and activities that work together to transform inputs into outputs that create value for customers.
- professional bureaucracy a form of organization made up primarily of highly skilled professionals, such as in hospitals, universities, law firms, and consulting firms.
- **product and service change** change that pertains to the product or service outputs of an organization.
- product matrix type of matrix structure in which the project or product managers have primary authority and functional managers simply assign technical personnel to projects and provide advisory expertise as needed.
- programmed decisions repetitive and well defined, these decisions are used when procedures exist for resolving the problem.
- **prospect theory** theory that suggests that the threat of a loss has a greater impact on a decision than the possibility of an equivalent gain.
- prospector a business strategy of innovating, taking risks, seeking out new opportunities, and growing.

R

- rational approach decision-making process based on systematic analysis of a problem followed by choice and implementation in a logical sequence.
- rational model a model of organization characterized by rational decision processes, clear goals and choices, centralized power and control, an efficiency orientation, and little conflict among groups; an ideal not fully achievable in the real world.
- rational-legal authority authority based on employees' belief in the legality of rules and the right of those elevated to positions of authority to issue commands.
- **reactor** a response to environmental threats and opportunities in an ad hoc rather than strategic fashion.
- reciprocal interdependence the highest level of interdependence, in which the output of one operation is the input of a second, and the output of the second operation is the input of the first (for example, a hospital).
- reengineering the redesign of a vertical organization along its horizontal workflows and processes.
- resource dependence a situation in which organizations depend on the environment but strive to acquire control over resources to minimize their dependence.
- resource-based approach an organizational perspective that assesses effectiveness by observing how successfully the organization obtains, integrates, and manages valued resources.

- resource-dependence theory theory that organizations try to minimize their dependence on other organizations for the supply of important resources and try to influence the environment to make resources available.
- **retention** the preservation and institutionalization of selected organizational forms.
- rites and ceremonies the elaborate, planned activities that make up a special event and are often conducted for the benefit of an audience.
- role a part in a dynamic social system that allows an employee to use his or her discretion and ability to achieve an outcome or meet a goal.
- **routine technology** technology characterized by little task variety and the use of objective, computational procedures.
- rule of law that which arises from a set of codified principles and regulations that describe how people are required to act, that are generally accepted in society, and that are enforceable in the courts.

S

- satisficing the acceptance of a satisfactory rather than a maximum level of performance, enabling an organization to achieve several goals simultaneously.
- scientific management emphasizes scientifically determined jobs and management practices as the way to improve efficiency and labor productivity.
- sectors subdivisions of the external environment that contain similar elements.
- selection the process by which a new organizational form is determined to suit the environment and survive, or is "selected out" and fails.
- sequential interdependence a serial form of interdependence in which the output of one operation becomes the input to another operation.
- service technology technology characterized by simultaneous production and consumption, customized output, customer participation, intangible output, and being labor intensive.
- **simple–complex dimension** the number and dissimilarity of external elements relevant to an organization's operations.
- Six Sigma a highly ambitious quality standard that specifies a goal of no more than 3.4 defects per million parts; also, a set of control procedures that emphasizes the relentless pursuit of quality.
- skunkworks a separate, small, informal, highly autonomous, and often secretive group that focuses on breakthrough ideas for the business.
- small-batch production a manufacturing process, often custom work, that relies heavily on the human operator and is not highly mechanized.
- social audit measures and reports the ethical, social, and environmental impact of an organization's operations.

social capital the quality of interactions among people and the degree to which they share a common perspective.

- social networking a peer-to-peer communication channel, where people interact in an online community, share personal data and photos, and produce and share a variety of information and opinions.
- sociotechnical systems approach an approach that combines the needs of people with the organization's need for technical efficiency.
- sources of intergroup conflict factors that generate conflict, including goal incompatibility, differentiation, task interdependence, and limited resources.
- **specialist** an organization that provides a narrower range of goods or services or that serves a narrower market.
- **stable-unstable dimension** refers to whether elements in the environment are dynamic.
- **stakeholder** any group within or outside of an organization that has a stake in the organization's performance.
- **stakeholder approach** integrates and balances diverse organizational activities by looking at various organizational stakeholders and what they want from the organization.
- **standardization** policies that ensure all branches of the company at all locations operate in the same way.
- stories narratives based on true events that are frequently shared among organizational employees and told to new employees to inform them about an organization.
- strategic contingencies events and activities both inside and outside an organization that are essential for attaining organizational goals.
- **strategic intent** a situation in which all the organization's energies and resources are directed toward a focused, unifying, and compelling overall goal.
- **strategy** a plan for interacting with the competitive environment to achieve organizational goals.
- **strategy and structure change** change that pertains to the administrative domain in an organization.
- **strategy map** a visual representation of the key drivers of an organization's success that shows how specific outcomes in each area are linked.
- **structural dimensions** describe the internal characteristics of an organization, and create a basis for measuring and comparing organizations.
- **structure** the formal reporting relationships, groupings, and systems of an organization.
- struggle for existence the concept that organizations and populations of organizations are engaged in a competitive struggle over resources, and each organizational form is fighting to survive.
- **subcultures** cultures that develop within an organization that reflect the common problems, goals, and experiences that members of a team, department, or other unit share.
- supply chain management managing the sequence of suppliers and purchasers, covering all stages of processing from obtaining raw materials to distributing finished goods to consumers.

switching structures an organization creates an organic structure when such a structure is needed for the initiation of new ideas and reverts to a more mechanistic structure to implement the ideas.

symbol something that represents another thing.
symptoms of structural deficiency signs that the organization structure is out of alignment, including delayed or poor-quality decision making, failure to respond innovatively to environmental changes, and too much conflict.

T

tacit knowledge knowledge based on personal experience, rules of thumb, intuition, and judgment; knowledge that is difficult to put into writing.

tactics for enhancing collaboration these include techniques such as integration devices, confrontation and negotiation, intergroup consultation, member rotation, and shared mission and superordinate goals that enable groups to overcome differences and work together.

tactics for increasing power these include entering areas of high uncertainty, creating dependencies, providing resources, and satisfying strategic contingencies.

task a narrowly defined piece of work assigned to a person. task environment sectors with which the organization interacts directly and that have a direct impact on the organization's ability to achieve its goals.

task force a temporary committee composed of representatives from each organizational unit affected by a problem.

team building activities that promote the idea that people who work together can work as a team.

teams permanent task forces, often used in conjunction with a full-time integrator.

technical complexity the extent of mechanization of the manufacturing process.

technical knowledge the degree of understanding and agreement about how to solve problems and reach organizational goals.

technology the work processes, techniques, machines, and actions used to transform organizational inputs into outputs.

technology change change in an organization's production process, including its knowledge and skill base, that enables distinctive competence.

time-based competition competition based on delivering products and services faster than competitors, giving companies a competitive edge.

traditional authority authority based on a belief in traditions and in the legitimacy of the status of people exercising authority through those traditions.

transaction processing system (TPS) a system that automates the organization's routine, day-to-day business transactions.

transnational model a form of horizontal organization that has multiple centers, subsidiary managers who initiate strategy and innovations for the company as a whole, and unity and coordination achieved through corporate culture and shared vision and values.

U

uncertainty condition that exists when decision makers do not have sufficient information about environmental factors, and they have a difficult time predicting external changes.

uncertainty avoidance within a cultural group, the degree to which members are uncomfortable with uncertainty and ambiguity and thus support beliefs that promise certainty.

V

values-based leadership a relationship between a leader and followers that is based on shared, strongly internalized values that are advocated and acted upon by the leader.

variation the appearance of new, diverse forms in a population of organizations.

variety in terms of tasks, the frequency of unexpected and novel events that occur in the conversion process.

venture teams a technique used to foster creativity within an organization by setting up a small team as its own company to pursue innovations.

vertical information system a strategy for increasing vertical information capacity.

vertical linkages communication and coordination activities connecting the top and bottom of an organization.

virtual network grouping a loosely connected cluster of separate components.

virtual network structure the firm subcontracts many or most of its major processes to separate companies and coordinates their activities from a small headquarters organization, sometimes called a modular structure.

virtual team a team made up of organizationally or geographically dispersed members who are linked primarily through advanced information and communications technologies.

W

whistle-blowing employee disclosure of illegal, immoral, or illegitimate practices on the part of the organization.

wiki a Web page or collection of pages designed to allow people to freely create, share, and edit content using any Web browser.



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