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# Methodology for customer relationship management

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## Abstract

Customer relationship management (CRM) is a customer-focused business strategy that dynamically integrates sales, marketing and customer care service in order to create and add value for the company and its customers.

This change towards a customer-focused strategy is leading to a strong demand for CRM solutions by companies. However, in spite of companies' interest in this new management model, many CRM implementations fail. One of the main reasons for this lack of success is that the existing methodologies being used to approach a CRM project are not adequate, since they do not satisfactorily integrate and complement the strategic and technological aspects of CRM.

This paper describes a formal methodology for directing the process of developing and implementing a CRM System that considers and integrates various aspects, such as defining a customer strategy, re-engineering customer-oriented business processes, human resources management, the computer system, management of change and continuous improvement.

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**Keywords:** Customer relationship management; Methodology; Implementation; Lesson learning; Change management

## 1. Introduction

### 1.1. Changes in management systems in 1990s: ERP

The new framework for company activities that emerged in 1990s, characterised by the globalisation of markets, technological development, the larger number of competitors, and increased customer demands, obliged companies to renew their management systems in order to adapt themselves to the new competitive environment ([Chalmeta et al., 2001](#)).

The dynamic of the change was based on both methodological and technological elements. Firstly, concepts and methodologies directed towards reducing costs and improving the quality of operational activities, such as re-engineering business processes, supply chain management, and so forth, were consolidated. Secondly, innovative technologies became available, thus allowing companies to

manage an everincreasing volume of information in an efficient manner. One of the most important of these technologies was the ERP (enterprise resource planning) computer programs ([Kennerley and Neely, 2001](#)).

Consequently, companies have achieved a high level of maturity in the use of computer applications to improve the efficiency of the firm's everyday activities. It is therefore very common, depending on their size or the sector, for their operational level activities in the areas of accounting, sales, purchasing, warehousing, logistics, production and human resources to be computerised.

### 1.2. Changes in management systems in 2000: CRM solutions

The implementation of ERP produces an improvement in the quality and efficiency of business processes. However, when the majority of companies in a sector have optimised their internal processes, this improvement becomes a condition that is necessary to remain in the market, but ceases to be a competitive advantage ([Dyche, 2001](#)).

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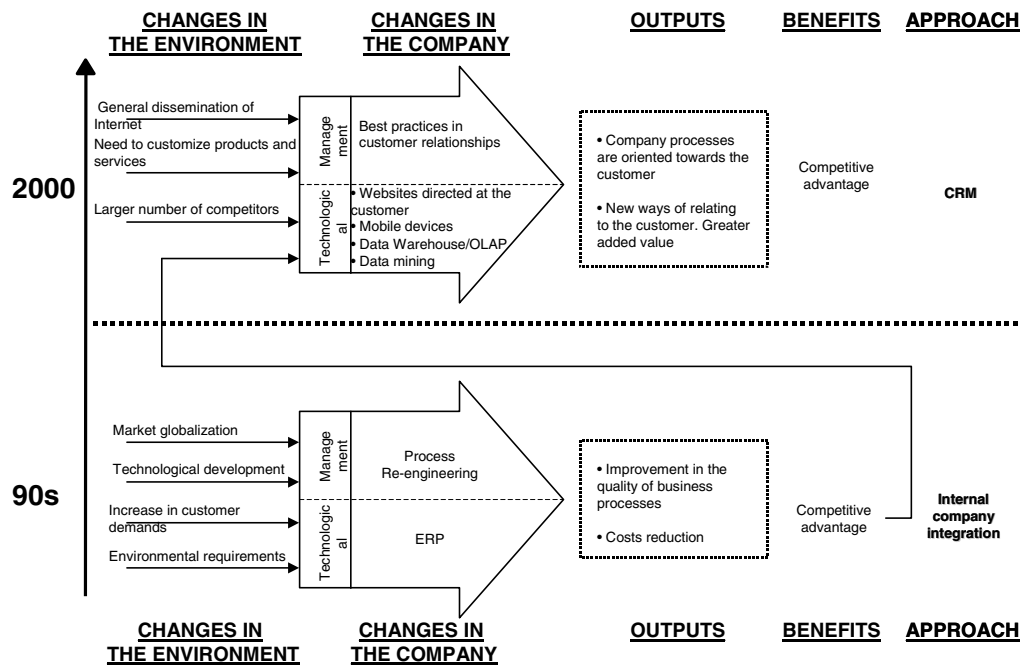


Fig. 1. Evolution of the technological and management approaches.

As a result, in the future, differentiation from competitors is going to be based on the speed with which a company is capable of responding to the requirements and demands of the market with innovative products and services (Boon et al., 2002). Therefore, although customer care has always been a basic rule of commercial activity, a new model of customer relationship management (known as CRM) is now necessary in order to adopt a customer-focused form of organisation, which maximises the value customers can expect from the company and sees in the information derived from the customer the opportunity to establish business strategies (Fig. 1) (Kenneth, 2002).

In addition, from the technological point of view, this new customer-focused organisational model makes it necessary to complement the ERP applications that have played a key role in the processes of optimising internal procedures (Business Process Re-engineering) and external processes relating to supply chain management with CRM Information Technologies (IT) solutions that play a key role in customer management procedures (Xu et al., 2002).

## 2. CRM (customer relationship management)

CRM refers to a *customer-focused business strategy*. This concept is not new and it is in fact a natural development of another concept that is very well accepted in the marketing sphere: *relational marketing*. However, it takes a wider view and is an attitude to customers and to the organisation itself which dynamically integrates sales, marketing and the customer care service to create and add value for the company and its customers.

There are various definitions of CRM in the literature. Among the most representative, we could quote (Scott,

2001), who defines CRM as “a set of business processes and overall policies designed to capture, retain and provide service to customers”, or (Injazz and Karen, 2004), for whom CRM is “a coherent and complete set of processes and technologies for managing relationships with current and potential customers and associates of the company, using the marketing, sales and service departments, regardless of the channel of communication”.

By analysing this definition, it can be deduced that CRM systems basically make three things possible (Greenberg, 2001).

- (1) Having an integrated, single view of customers, by using analytical tools.
- (2) Managing customer relationships in a single way, regardless of the communication channel: telephone, website, personal visit, and so forth.
- (3) Improving the effectiveness and efficiency of the processes involved in customer relationships.

As a result, the implementation of a CRM System will involve changes in the organisation and operation of each company, resulting in an improvement in its performance and competitiveness. The most notable improvements that can be predicted are the following (Bergeron, 2001).

- Greater customer satisfaction, through offering a better service.
- Greater business coherence, defining corporate objectives linked to customer satisfaction.
- Managing to increase the number of customers and secure greater loyalty thanks to the reorganisation and computerisation of business processes surrounding the

customer relations life-cycle (sales, marketing, customer care services).

- Improving and extending customer relationships, generating new business opportunities.
- Knowing how to segment customers, differentiating profitable customers from those who are not, and establishing appropriate business plans for each case.
- Increasing the effectiveness of providing customer service by having complete, homogeneous information.
- Lower costs.
- Sales and marketing information about customer requirements, expectations and perceptions in real time.

### 3. Diagnosis of the current situation

The change towards a customer-focused strategy is leading to a strong demand by companies for CRM methodologies and solutions capable of allowing them to expand their resources by using a model that is closer to their business requirements and demands and, consequently, the gradual move away from the traditional information technology infrastructure and the corresponding implementation methodologies.

However, many implementations of this new organisational model fail (Lee, 2000). Some of the main causes of the failure of CRM strategies can be seen in Table 1.

### 4. CRM-Iris project

As a result of the study of the current customer relationship management situation, the conclusion has been reached that to tackle a CRM project successfully it is essential to have an *overall integrated methodology* that begins by defining the company strategy and which includes aspects like planning, analysis of the strong and weak points of the processes oriented towards the customer, information technologies and financial control. However, the existing methodologies do not integrate and

complement the strategic and technological aspects of CRM properly (Hoffberg et al., 2003).

As a business strategy, CRM establishes the need to make customer satisfaction the company's ultimate objective. To do this, the company must try to establish genuine, lasting relationships of trust with customers which are not limited to mere commercial or financial exchanges. Only in this way, by offering this added value, will it become possible to achieve customer loyalty that is capable of resisting the offers and promotions of competitors.

In addition, as technology, CRM offers the possibility of improving the company's relationships with its customers and making them easier, since it can be used as a complete channel of communication with customers. To do so, the company must revise its processes that can potentially make use of the technologies provided by CRM systems, in order to achieve its objectives.

To solve this problem of lack of integration of the two aspects, the IRIS Group at the Universitat Jaume I in Castellón, Spain, has been working on a project entitled "CRM-Iris methodology" since 2000. The aim was to develop and validate a formal methodology to direct the process of developing and implementing a CRM System.

The methodology obtained as a result of the project considers various aspects of a CRM system, such as the definition of a customer strategy, the re-engineering of customer-oriented business processes, the human resources management, the computer system, the management of change and continuous improvement.

From the point of view of its practical application at a company, the proposed program for developing and implementing a CRM system, in accordance with the CRM-Iris methodology, is summarised in the following sections:

1. Project management and prerequisites.
2. Definition of the company's organisational framework.
3. Definition of a customer strategy.
4. Designing a customer relationship assessment system.
5. Process map.

Table 1

Main causes of the failure of CRM strategy

- |   |  |
|---|--|
| 1 | <i>Thinking that technology is the solution:</i> CRM is considered as being a new technology instead of a new way of doing things. This is a mistake, since technology only makes sense after the business objectives have been properly defined |
| 2 | <i>Lack of management support</i> due to a lack of knowledge about the opportunities offered by CRM  |
| 3 | <i>There is no "passion for the customer"</i> in the organisation's culture  |
| 4 | <i>Lack of vision and strategy.</i> It is common not to have a well-defined strategy and measurable business objectives in the area of CRM   |
| 5 | <i>Not redefining processes.</i> As with other technological projects, it is necessary to redefine the business processes for achieving the desired results  |
| 6 | <i>Poor quality data and information,</i> which means the right conclusions are not drawn by the organisation  |
| 7 | <i>Not managing the change properly.</i> As, with any complex project, proper management of change and of the organisational culture for achieving the success of the change is necessary  |
| 8 | <i>Not involving the final users in designing the CRM solution,</i> which means running the risk of developing a system that brings more problems than solutions to the users who are supposed to benefit from it                                |

Adapted from Strauss and Frost (2002).

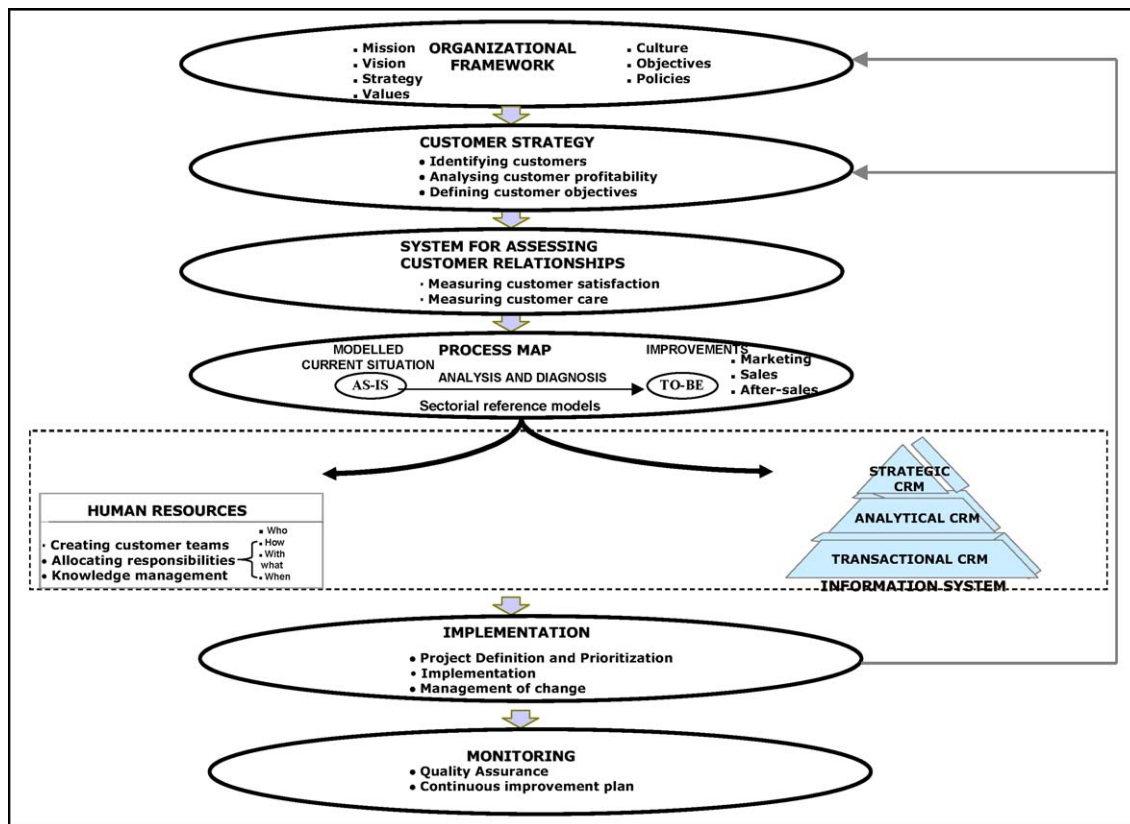


Fig. 2. CRM-Iris methodology.

6. Human resources organisation and management.
7. Construction of the information system.
8. Implementation.
9. Monitoring.

The activities into which a CRM project is broken down, according to the proposed methodology, are not independent of one another and are not carried out sequentially. The relationship between the different activities is shown in Fig. 2. The activities into which the CRM-Iris methodology is divided are detailed below.

#### 4.1. Project management and prerequisites

The eight great technical activities of the CRM-Iris methodology must be managed and monitored in a similar way to an engineering project (Chalmeta and Grangel, 2003). Because of this, in contrast to an organisation's routine activities and tasks, a CRM project must be conceived as a set of activities for which specific resources are set aside and which are expected to produce results within a particular time period. To achieve this, the project management must be supported by the techniques and methodologies used in an engineering project to help with the formulation, evaluation, management and monitoring stages.

For this reason, it is necessary to meet the following basic prerequisites for success:

- *Before beginning the project:* Awareness-raising among management, defining the objectives pursued and the vision of what the results will be, creation of a committee, official appointment of a coordinator, development and approval of the project plan and internal dissemination.
- *While the project is being carried out:* Carry out monitoring to control time slippage, prevent resistance to change, motivate staff, measure the degree of participation and assess the results.

#### 4.2. Organisational framework

The starting point within a customer relationship management project is always the analysis of the company's objectives (mission, vision and strategy) and its culture (policy and values).

The fact that a company is already functioning and has satisfactory financial results does not mean it is efficient, nor does it mean that it has its objectives and responsibilities properly defined. Because of this, it is fundamental before beginning any CRM project, to understand and spell out the company strategy, defining where the company is, where it wants to go and where it is actually going, as well as analysing its culture and the level of organisation and internal control. During the design of the CRM-Iris methodology, suitable templates were developed to identify

the Vision, Mission, Organisational Strategies and Company Aims, following a traditional approach.

#### 4.3. Customer strategy

Creating an effective system for managing relationships means companies need to radically change their own behaviour and define a real CRM strategy. To do this, a company must:

- (a) *Identify customers.* Who customers are must be defined and only those customers whose behaviour can be influenced should be considered.
- (b) *Analyse the profitability of customers.* This involves working out, customer by customer, the profitability offered by each one of them. This analysis includes the following tasks:
  - Structuring the customer types into different segments based on an easily obtainable variable, like income.
  - Assigning costs to the different segments using a customer-based cost model (CRM Costs) that includes all the cost factors attributable to customer relationship management.
  - Analysing customer value, obtaining the income, profits and total profitability of customers, by segment and by individual customer.
- (c) *Defining customer objectives.* This involves carrying out income and cost simulations per customer to discover the company's future profitability and to define objectives for the customers, per segment and per individual customer (in the short, medium and long terms).

#### 4.4. System for assessing customer relations

Customer satisfaction is essential for increasing the competitiveness of companies and achieving customer objectives. To improve it, it is necessary to identify customer needs and expectations and ensure they are met. This requires the construction of a measurement system fed by information, part of which will come directly from the customer and part will be extracted from the company's computer system.

Consequently, the methods for obtaining and using this back-up information must be determined, and will probably involve increasing communication with the customer, establishing mechanisms to make customer feedback possible in order to obtain information about customers' perception of how the organisation affects their needs and deals with their complaints.

In designing the system of indicators to measure customer relationship management, the following must be considered:

- Defining the appropriate measurement criteria.
- Preventing failures to identify the right quality dimensions. Value must be placed on what is really important

for customers, and not the things the company *thinks* are important.

- The proper weighting of the dimensions. The customer satisfaction system must be directed towards proper management, avoiding the deployment of valuable resources for things that in fact do not matter to customers.
- Comparison with leading competitors. Quality is relative, and what matters is how well a company does things compared with its competitors.
- Measuring non-customers.

#### 4.5. Process map

Once the organisational framework, customer strategy and customer satisfaction assessment have been defined, the next step is similar to a re-engineering project. It involves redesigning the business processes of the customer-oriented company (marketing, sales and after-sales) to achieve the objectives that have been previously defined and to improve customer satisfaction and loyalty. It is important to point out that the aim is not for companies to study and computerise their current way of working with customers, but to take advantage of the possibilities of new information technologies to redesign and improve their processes that involve customers.

To build this new process map, it is necessary to (1) analyse the current situation—the AS-IS—using questionnaires and interviews with company staff, and (2) design what the company's CRM processes should be like in the future—the TO-BE.

Although there are authors who suggest that a re-engineering project must forget the AS-IS and focus itself on the ideal operational model when it comes to designing the TO-BE, the experience obtained by the IRIS group in carrying out re-engineering projects at various companies demonstrates that the existing means (human and technological resources, and so forth), as well as the company's culture and psychology, are a great restriction, so when it comes to defining the CRM processes for the TO-BE it is necessary to understand the AS-IS and choose the best realistic solution rather than suggesting ideal ones. The level of detail and depth of these models is high because all the activities in the process must be identified together with the inputs and outputs (information and materials), resources and controls.

To identify improvements in the company's customer-related processes, it is very useful to have a reference model with best working practices. Models with practical improvements may be either general, that is, valid for any company, or sectorial. General models are not very detailed, so their use is rather limited in re-engineering CRM processes, and a guide to the objectives to be achieved is better. What is really useful for the fifth phase of the CRM-Iris methodology is having a sectorial model available.

Within the CRM-Iris project, a reference model for CRM processes at a tile company was drawn up. This



model can be used for re-engineering CRM processes both at a ceramics company and at companies in other sectors with similar marketing, sales or after-sales features.

The methodology for constructing the model was as follows. Firstly, information was collected through interviews and questionnaires on the way of working in the critical CRM processes at various ceramics companies. Then, based on the information thus compiled, a model was generated that provided a detailed description of the way of working in the CRM processes at a typical ceramics company. Next, each process was analysed and a series of improvements intended to make these processes more efficient and effective were put forward (best practices). Table 2 shows a summary with the main changes that take place in customer-related processes at a typical tile company if best working practices are implemented.

#### 4.6. Human resources

The company's people are, ultimately, the key to the whole CRM strategy. They are the part that determines its success or failure and they must not be undervalued. It is therefore fundamental that they know about the project and resolve their fears, worries and doubts before it is implemented. They must be made to see the importance of CRM but, above all, they must be trained in this new customer service philosophy. It is a case of creating a corporate culture with a defined approach focused on the customer that enjoys the commitment of management and employees.

As well as changing the company culture, the CRM project requires a restructuring of the company's job manual

and organisational diagram, as "customer teams" made up of staff from different departments, like marketing, design, sales, and so forth, will be created. It is a less hierarchical means of organisation similar to management by processes.

#### 4.7. Computer system

To achieve real implementation of the CRM strategy it is important to have the right technology for automating and improving the business processes associated with managing the company's relations with its customers, largely in the areas of sales, marketing and after-sales service.

All activities carried out with customers must be stored in an activities database. This history enables the organisation's staff to know at all times who the customer is and what he or she has requested to be done, which allows personalised service to be rendered by anyone at the company. An automated CRM system is therefore vital for maintaining an up-to-date record of all these movements with customers, including preferences, purchases, requests, complaints, queries and, in general, their direct or indirect contacts with the company.

A CRM IT solution combines the acquisition of customer information from the company with the application of a series of technologies for managing that information and converting it into business knowledge (like data warehousing/OLAP (Chalmeta and Grangel, 2005), data mining (Berson et al., 2000), statistical analysis, and so forth).

The key to designing a CRM computer system is the intelligent integration of technological and functional components that allows a connection between the *front office*

Table 2  
Main changes occurring with the implementation of best practices in a tile company

Activity	Current situation	With CRM
Order collection	<ul style="list-style-type: none"> <li>On paper support</li> <li>Subsequent entry into the computer system</li> <li>Possibility of errors</li> </ul>	<ul style="list-style-type: none"> <li>Single data entry</li> <li>Directly from the customer into the computer system</li> <li>Salespeople with customer information</li> </ul>
Order confirmation	<ul style="list-style-type: none"> <li>By telephone or fax</li> </ul>	<ul style="list-style-type: none"> <li>The customer directly by the Internet</li> </ul>
Document generation	<ul style="list-style-type: none"> <li>Pre-established forms</li> </ul>	<ul style="list-style-type: none"> <li>Separation of content and presentation</li> <li>Full internationalisation</li> <li>Customised design</li> </ul>
Pursuing unpaid bills	<ul style="list-style-type: none"> <li>Outside the computer system</li> </ul>	<ul style="list-style-type: none"> <li>Integrated into the Computer System</li> <li>Information available to all employees</li> </ul>
Marketing campaign management	<ul style="list-style-type: none"> <li>Outside the computer system</li> </ul>	<ul style="list-style-type: none"> <li>Full computerisation</li> <li>Making use of data from previous campaigns</li> <li>Making use of customer data</li> </ul>
Customer analysis	<ul style="list-style-type: none"> <li>Basically, financial information is used</li> </ul>	<ul style="list-style-type: none"> <li>Richer, more complete information</li> <li>Customisation</li> </ul>
Programming sales trips	<ul style="list-style-type: none"> <li>Outside the computer system</li> <li>Equal treatment of customers</li> </ul>	<ul style="list-style-type: none"> <li>Prior study of customers</li> <li>Personalised offer</li> </ul>
Managing commission	<ul style="list-style-type: none"> <li>Sales bonus</li> </ul>	<ul style="list-style-type: none"> <li>New criteria: number of complaints, loyalty, etc</li> </ul>
Attending to customer queries	<ul style="list-style-type: none"> <li>There is no specialised department</li> </ul>	<ul style="list-style-type: none"> <li>Plenty of information available when attending customers</li> <li>Personalised attention</li> </ul>

(sales, marketing and customer service) and *back office* (financial, logistics, warehousing, accounting, human resources, and so forth) systems (Strauss and Frost, 2002). Customer contact management through any channel should enable a large quantity of information to be obtained and allow it to flow through the system with its own logical organisation, thus making it easier to apply data analysis tools.

As a result of studying CRM technological solutions and analysing the company's needs, a model of what a CRM computer system should be like was designed within the CRM-Iris project. This solution is expressed in terms of four main areas (see Fig. 3):

- *Transactional (operational) CRM*. This includes marketing (contact management, sales management and customer opportunity teams, monitoring of interactions with the customer, campaigns), sales (collected by different order, delivery note and bill channels) and after-sales (queries, complaints, and so forth).
- *Analytical CRM*. This corresponds to the integration and processing of the data acquired, converting it into information that is useful for diagnosing customer relationship management and defining improvement projects.

The core of the application is similar to a performance measurement system based on a set of indicators. It

shows graph and textual comparisons between the actual and the desired situation in various aspects of customer relationship management and helps with drawing up an integrated plan for improving customer relations.

- *Strategic CRM*. This is directed at evaluating customer profitability and defining short-, medium- and long-term customer objectives (Curry and Curry, 2000). It is used so that a company can:
  - structure its customer types into different segments;
  - analyse their value using a customer-based cost model that is different to the traditional product-based one;
  - calculate income, profits and total profitability for customers, by segment and by individual customer;
  - evaluate the cost-effectiveness of investment in marketing and sales;
  - construct a historical matrix of customer migration;
  - simulate customer flow forecasts in the matrix.
- *e-CRM*. This allows access to customer-related information in real time and at any time and place through a web service and the Internet using a browser. This business portal makes it possible for both company staff and customers to access all customer, marketing, sales and after-sales information (for example, customers can place orders and check their status, resolve queries or process incidents).

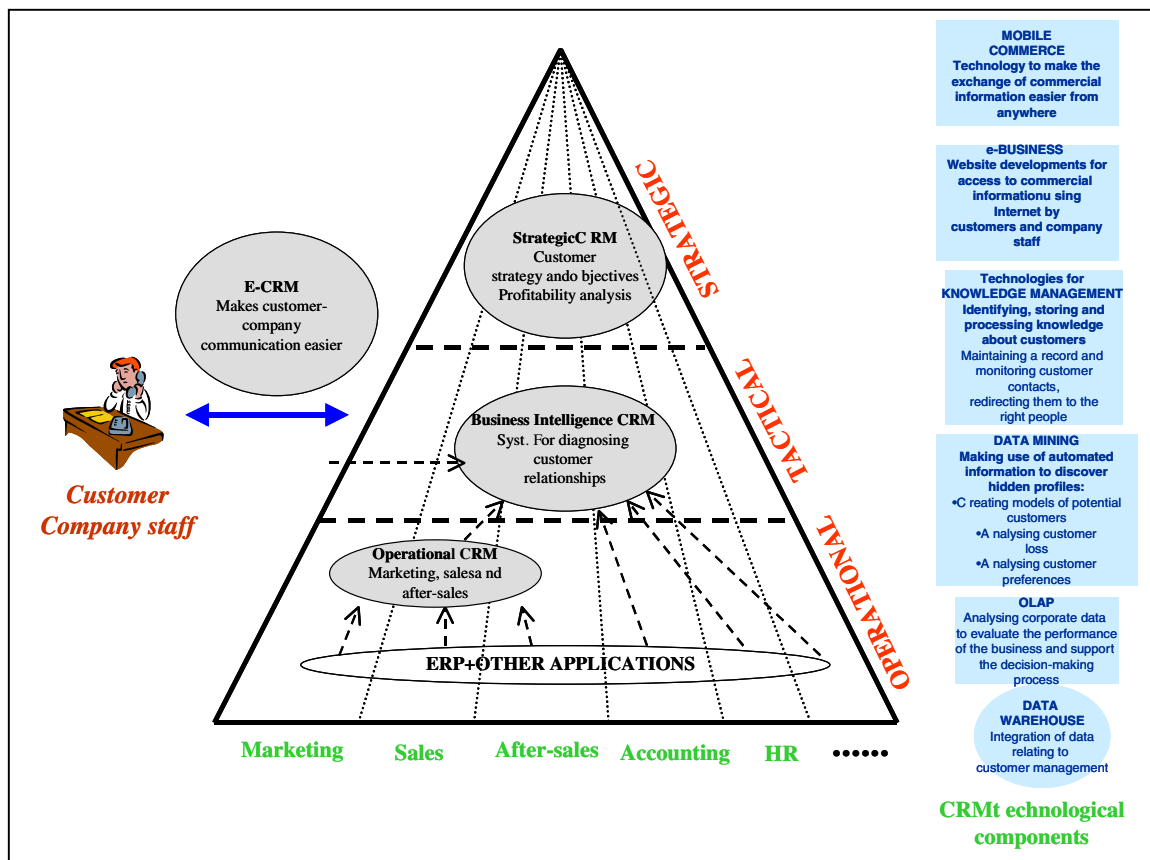


Fig. 3. CRM-Iris computer system model.



It is not, therefore, a simple e-commerce website but rather a solution which has to bring together communications, security, web services and integration with the ERP for the publication, management and production of all customer-related company information using the Internet. e-CRM makes the work of company members who find themselves in contact with customers easier and makes it possible for customers to solve their problems through Internet queries.

#### 4.8. Implementation

The next stage in the CRM-Iris methodology concerns a Total Quality Plan and consists in implementing and controlling migration from the old (AS-IS) system to the new (TO-BE) one. Fig. 4 shows an example of a template for carrying out AS-IS/TO-BE analysis. The GAP + Restrictions column shows the differences between the current way of working, the proposed new one and the restrictions existing for moving from the current to the future situation. In this way, the implementation plan may be broken down into a set of viable projects within the company's financial and physical capacity.

The improvement projects may be placed in order of priority, according to a viability study, and they will make up the transition from the AS-IS to the TO-BE. Additional

sections can be added to the template in Fig. 4 to show the status, priority and the investment needed to support this prioritisation of projects. Once prioritised, the short-term projects must be implemented. This will involve changing attitudes, both of management and workers, defining new job roles and redesigning the company organisational diagram. The result has to be that everyone in the company has their function allocated, and know what they have to do and how to do it.

Proper management of change is fundamental in this section. It often happens that managers in an organisation clearly see that the organisation has to change but do not manage to achieve this properly, since a lot of time and knowledge are invested in developing the plan and very little time is put into making sure the organisation implements, is involved in and develops this change. To increase the chances of success it is necessary to:

- (a) *Develop a communication plan* that includes the entire definitive vision of the project and then communicate it in order to achieve:
  - The integration of all members of the organisation.
  - A starting point and a finishing point so as to be aware at all times where the organisation was, where it wants to go and where it actually is.

<b>AREA:</b> Sales		<b>DOCUMENT CODE:</b> EncAsisTobe		<b>FILE:</b> EasisTob.doc
<b>MACROPROCESS:</b> Order management		<b>AUTHOR:</b> Pilar García García		
<b>MICROPROCESS:</b> Order processing		<b>CREATION DATE:</b> Apr-03		<b>MODIFY DATE:</b> Apr-03
ACTIVITY <sup>(1)</sup>	AS-IS <sup>(2)</sup>	TO-BE <sup>(3)</sup>	FIT <sup>(4)</sup>	ESTRICTIONS <sup>(5)</sup>
1. Collect data about the order.	The order is received via fax or telephone from the client. If the order is received via telephone, data is written down in an orders notebook to be introduced into I.S. afterwards.	If the order comes via telephone, data must be introduced straight into the I.S.	NOT OK	The I.S. doesn't allow real time performance due to the complexity of the consultation be carried out during the data introduction. Restriction: I.S.
2. Consult the client risk.	Before introducing the order into the I.S., data about client risk must be consulted. If client risk exceeds the credit assigned, the I.S. doesn't allow the introduction of any more orders. For this reason, it is necessary to write down the order.	The order risk consultation option must be accessible from the order introduction option and must be updated with the introduction of each new detail line. The I.S. must allow the introduction of high risk client orders and the block them in order to avoid processing until their situation changes or a person in charge decides to block them.	NOT OK	The I.S. doesn't allow the introduction of high risk and it obstructs its consultation. Restriction: I.S.
3. To introduce order data into the information system.	Through the option "New order", the head data and detail lines of the order are introduced.		OK	
<b>NOTES:</b> <sup>(1)</sup> The activity must coincide with the activities shown in the textual description and the DEM. <sup>(2)</sup> Describes how the activity is carried out at present. <sup>(3)</sup> Describes how the activity must be carried out in the future. <sup>(4)</sup> It must be shown as follows: <ul style="list-style-type: none"> <li>• OK: if the activity is carried out at present in a desirable manner.</li> <li>• NOT OK: if the activity is not carried out in a desirable way.</li> </ul> <sup>(5)</sup> Describes the differences between the TO-BE and the AS-IS, showing possible restrictions to go from the AS-IS to the TO-BE.				

Fig. 4. Example of a template for carrying out the AS-IS/TO-BE analysis.

- Knowledge of whether objectives are being achieved and awareness of the resources used and how this compares with the plan at all times. All components of the communication plan will have to be defined, that is to say, objectives, who it is aimed at, which messages and supports it is using, how often, and so forth.
- (b) *Creation of working teams.* To manage change properly it is essential to create working teams to take responsibility for the change and transmit it throughout the organisation, acting as catalysts. The functions and responsibilities of these teams must be defined precisely, along with who will make them up, what each of them will contribute to the project, who will lead them and how often the meetings will be held.

Finally, a continuous improvement system must be constructed (see the feedback in Fig. 2 from the implementation phase to the organisational framework and customer strategy phases) that will allow (1) the future implementation of improvement projects classified as medium- and long-term, and (2) the company to adapt to changes occurring in its environment. When these projects have been completed, the implementation of the CRM system has been completed.

#### 4.9. Monitoring

During the implementation of the project, it is critical that the indicators that have been defined at the initial project management stage are monitored and that action is taken as a consequence of any mismatches that may occur. In this task, a control panel-type tool is fundamental for proper monitoring. In this control panel, different types of indicators of success are used to monitor each activity. For example, to control the progress of the project against the implementation plan, it is necessary to have indicators to compare start dates, due dates and target times. However, to analyse the success of the customer strategy, we need indicators to measure improvements in customer value.

In addition, a quality assurance method must be established to check that the desired changes have been implemented effectively.

### 5. Discussion

Different qualitative and quantitative methods were used to build the methodology. In the first place, the literature related to this line of research was reviewed and the results of different projects involving CRM were analysed. In this way, both a clear view and a better understanding of the topic were obtained.

After this, information about CRM was collected by means of the interview and questionnaires applied to

managers of 26 independent small and medium-sized companies from various sectors that collaborated in the CRM-IRIS project. Once this information had been put together and processed, a first version of the CRM-IRIS methodology was constructed.

Finally, the results were applied to the above 26 companies in order to (1) validate and document the benefits and lessons learned in the form of a properly understandable business case, and (2) to improve the initial results by applying the conclusions drawn from those results to them.

As well as improving the methodology as a result of applying it to different companies, the potential for developing research in this area has been proved and a series of lessons have been learned:

- In order for companies to integrate CRM management effectively with all their existing business processes (including the supply chain, the product development cycle, the financial systems, the delivery of services and internal organisational structure), both management and employees must understand and assimilate the strategic business value of the CRM project. These key participants must understand that CRM management is not simply a technological strategy but rather an essential business strategy for the success of their individual departments and of the organisation as a whole.
- The customer-oriented business model is seldom practised and little known, at either the operational or management level.
- Difficulty in defining a customer strategy. Companies are not ready to act in a coordinated and participative way with their customers. Companies feel safer acting on the basis of their own objectives.
- Limitations concerning the systemic vision of customer relationships. This behaviour is the result of historical factors that conditioned people and companies to focus on their own objectives. Consequently, initiatives directed at managing customer relationships in an integrated way among all those involved remain far from the actual situation in business.
- The need for more scientific production showing business experiences and formal methodologies.
- The need to encourage the training of staff in integrated customer relationship management. It has been shown that staff training programmes do not include the participation of employees in courses or other types of events related to CRM.

All these difficulties are related to the low level of awareness of the importance of CRM and, therefore, of the benefits that proper customer relationship management can generate.

### 6. Conclusions

CRM (customer relationship management) can be defined as a set of business, marketing and communication

strategies and technological infrastructures designed with the aim of building a lasting relationship with customers, which involves identifying, understanding and meeting their needs.

To tackle a CRM project successfully, it is fundamental to have a *formal methodology* directing the development and implementation process. However, the current paradigms are not adequate, as they do not properly integrate and complement the strategic and technological aspects of CRM.

Within this framework, this paper has offered a description of the methodology obtained as a result of the CRM-Iris Project. This methodology considers various aspects of a CRM system. Some of the most important are the definition of a customer strategy, the re-engineering of customer-oriented business processes, human resources management, the computer system, the management of change and continuous improvement.

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