Introduction to quality and quality management

Course 01

Lectures for second-year Master's students in Economics and Business Management.

Department of Economic Sciences

– University of Biskra

What is Quality & Quality Management?

- **Quality** in general refers to the sum of a product's traits and characteristics that influence its ability to meet certain needs.
- The act of managing all activities and tasks that must be completed in order to maintain a particular degree of perfection is known as **quality management**.
- It is concerned with the products and services and the inputs like the tasks and processes that produce the results.

What is Quality Management?

- **Quality management** is the act of overseeing different activities and tasks within an organization to ensure that products and services offered, as well as the means used to provide them, are consistent. It helps to achieve and maintain a desired level of quality within the organization.

- There are four main components of Quality Management: **quality planning**, **quality assurance**, **quality control** and **quality improvement**. The process of implementing all four components in an organization is referred to as **Total Quality Management (TQM).**

- **Quality Management (and TQM)** focuses not only on the quality of the outputs (products & services) but also the inputs - the tasks and processes by which the outputs were created. Ideally, the quality of a product and/or service is not only increasing but the process by which the product and/or service is created is becoming better, thus achieving *more consistent*, higher quality products and services.

key components of QM

Quality management consists of four key components, which include the following:

- **Quality Planning** – The process of identifying the quality standards relevant to the project and deciding how to meet them.
- **Quality Improvement** – The purposeful change of a process to improve the confidence or reliability of the outcome.
- **Quality Control** – The continuing effort to uphold a process's integrity and reliability in achieving an outcome.
- **Quality Assurance** – The systematic or planned actions necessary to offer sufficient reliability so that a particular service or product will meet the specified requirements.

Understanding the Quality Management Process

- The definition of “quality” is just this—how well does a product meet the designated requirements? Quality management determines what those requirements are. Quality control encompasses the specific responsibilities people have over the project, and *when* they have them. Let’s define two of the major quality management process terms you should know:
- **Quality Management**—The *planning stage*; where quality standards are agreed upon, responsible parties are assigned, specs are decided, meetings are planned, and metrics are defined to determine how well the project meets the outlined specifications.

- **Quality Control**—*During* project implementation, responsible parties follow the plans and evaluate how well the project conforms to the specifications drawn up during the quality management phase above.
- If quality management is the canopy of an umbrella, quality control is the handle—they’re different parts of the same process—quality management dictates all quality assurance methods (like the spokes of the umbrella). The ENSUR document control system brings them together in one seamless, easy to use software package that your entire company can benefit from. This helps to ensure the original product discussed during the planning phase is top-quality in the end.

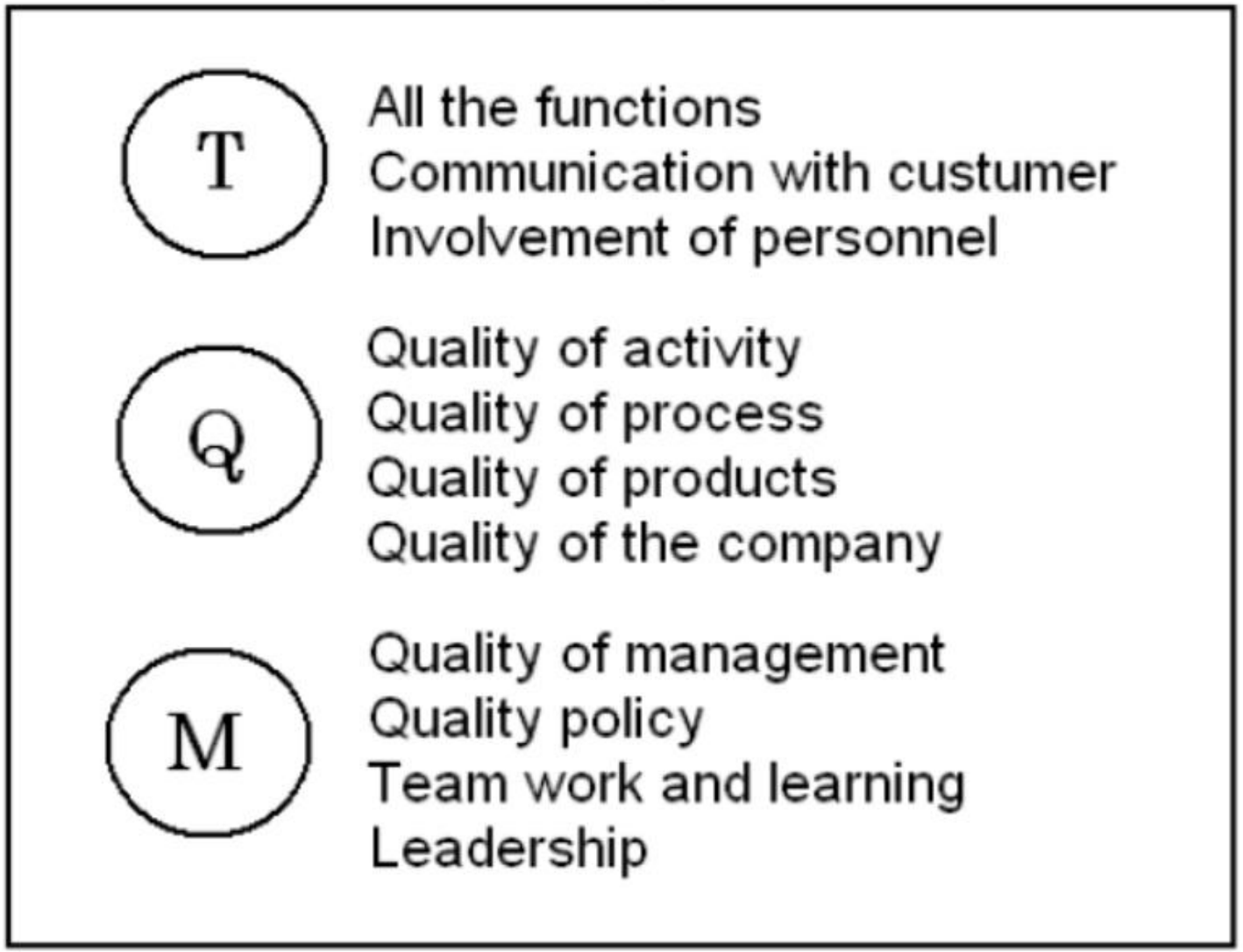
Quality Control vs. Quality Assurance

- It’s important to note that quality control and quality assurance are two sides of the same coin:
- **Quality Assurance**—QA focuses on fine-tuning the processes necessary to avoid defects in the end product.
- **Quality Control**—QC tests the end product to discover and root out defects.
- **So, if QC finds defects, QA may go back and reevaluate processes to eliminate those end errors.**

Benefits of TQM

- Greater customer loyalty and satifacation
- Market share improvement and domination
- Higher stock prices
- Reduced service calls
- Higher prices
- Greater productivity
- The aims of QM: It **helps an organization achieve greater consistency in tasks and activities that are involved in the production of products and services**. It increases efficiency in processes, reduces wastage, and improves the use of time and other resources. It helps improve customer satisfaction.

TQM aspects


T
All the functions
Communication with custumer
Involvement of personnel
Q
Quality of activity
Quality of process
Quality of products
Quality of the company
M
Quality of management
Quality policy
Team work and learning
Leadership