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1.0 Objectives

After going through this lesson, you will be able to:

- Understand the rationale for designing organisation for quality and quality policy.
- Know the elements of quality management system.
- Understand the concept of quality objectives, quality manual and quality documentation.
- Get familiar with the implementation and benefits of quality management system.

1.1 Total Quality Management (TQM) and Senior Management

Total Quality Management (TQM) is introduced and led by top management. It is a management approach which is focused on quality. Its long term success is based on the quality culture of the organisation, the participation & commitment of the employees and the consistent delivery of quality products and services. The management take the help of TQM for customer satisfaction and benefits of all the stakeholders of the organisation. In other words, with the help of TQM philosophy, the management

manages an organisation in such a way that enables to meet stakeholder needs and expectations consistently in terms of quality. The total in TQM applies to the whole organisation as it is applied to every activity in the organisation. The management covers the soft issues such as ethics, attitude and culture through TQM. Generally, the management apply Quality Management System (QMS) to achieve the success of the total quality programme.

Simple statistics and random sampling were used to get the results from the production line in early days of Quality Management Systems (QMS). By the 20th century, the importance was shifted to team cooperation and dynamics due to the labour inputs as the most costly inputs. In the 21st century, the quality issues and customer satisfaction were become as important part of the QMS and considered as the primary task of it because of the sustainability and transparency initiatives. In this regime, the 'ISO 9000 family of standards' as well as 'quality audit' are used extensively worldwide for quality up-gradation. Besides this, it is assumed that other quality problems can be reduced as result of the systematic as well as analytical thinking, transparency in the processes, standard documentation and problem solving environment in the organisation.

1.2 Quality Management System

According to the American Society for Quality (ASQ), Quality Management System (QMS) is “the organisational structure, processes, procedures and resources needed to implement, maintain and continually improve the management of quality. It is also considered as a set of co-ordinated activities to direct and control an organisation in order to consistently improve the effectiveness and efficiency of its performance.”

An effective quality management system (QMS) helps the organisation in terms of implementation of total quality management as it covers quality policy, quality objectives, goals, documentation of information, business processes focused on consistently meeting customer requirements and enhancing their satisfaction. Its success is dependent upon its alignment with company's strategic planning. It is expressed as the total sum of organizational quality policies, standards/processes, objectives and goals, documented information, quality tools and resources needed to implement and maintain it.

1.3 Elements of Quality Management System

The quality management system consists of the following elements as under:

- Quality Policy
- Quality Objectives
- Quality Manual
- Organizational Structure and Responsibilities
- Understanding customers and fulfilling their satisfaction
- Continuous improvement of processes
- Facilitate employees' education and quality training
- Using quality tools, techniques and parameters
- Data/Record management through standard documentation
- Quality control

1.4 Quality Policy

“Quality Policy is a mirror, which shows the structure of QMS, which drives implementation. It monitors effectiveness, it guides working, it allows perceptions, it thinks future, overall quality policy is management's commitment towards QMS.”
(www.qualitygurus.com)

“Quality policy is the top management's expression of its intentions, direction, and aims regarding quality of its products and processes.” (www.businessdictionary.com)

Quality Policy is a written statement coined by the top management of an organisation with regard to manufacture or supply of quality product/service that meet the customer's expectations. The written quality policy is very much helpful to demonstrate that its internal quality controls are effective and to assure the stakeholders regarding the management of quality. The written quality policy assures all the stakeholders that the organisation can product and deliver the desired quality product or services with standard specifications on time and within budget.

In quality management system, a quality policy is a document designed by top management, senior managers and quality experts to express the quality statement of the organization. It clearly depicts the acceptable level of quality and the duties of specific departments to ensure consistency of quality production and delivery. Quality policy management is a long term strategic issue. The quality policy is thus a commitment from the top management to ensure compliance with the Quality Management System, and to ensure regularity in customer satisfaction.

Section 4.1.1 of ISO 9001 requires the organisation to define and document the Quality Policy and Quality Objectives for quality and commitment to quality. These must be relevant to the organizational goals and customer expectations. It is a brief statement or

document that defines the quality goals and objectives, a commitment to meeting them as well as continuous improvement. It should provide an outline for creating, stating, and measuring your performance of the quality objectives. The ISO standard requires a written, well defined quality policy that is communicated and understood within an organization. Section 5.3 also sets out some of the requirements for quality policies. The management should ensure that all employees are not only aware of, but fully understand the objectives stated through the Quality Policy.

1.5 Elements of Quality Management Policy Statement

The major elements described in quality policy are aimed at the following:

- To describe managements' commitment to maintaining standards of the company's product or service.
- To identify the ownership and involvement within the organisation of all staff and specifically those with key roles in maintaining the quality of the company's product or service.
- To state how the company's product or service is monitored to ensure that it continues to meet customer and market place needs.
- To state how the importance of meeting the customers' needs it communicated within the organisation.
- To state how the company ensures customer satisfaction is achieved.

- To detail how the company provides adequate resources to enable the above to happen.
- To state that the company systems or processes will be reviewed periodically to ensure that they remain effective in delivering customer satisfaction.

1.6 Examples of the Quality Policy

Most companies today have a written quality policy or mission statement. It is the established policy regarding the standards to be followed and the intention of the company to provide its customers regular quality products or services which conform to customer requirements and are delivered on time within the budget. This will be ensured through a defined quality program as detailed in the company quality manual.

Goodyear's quality policy is *“our mission is constant improvement in products and services to meet our customers' needs. This is the only means to business success for Goodyear and prosperity for its investors and employees.”*

Motorola's quality policy is *“Doing the right thing. Every day. No excuses.”*

Nestle's Quality Policy is *“To sustainably create value and to effectively and efficiently build customer and consumer trust, Quality at Nestlé is to: (i) Guarantee food safety and full compliance by respecting our policies, principles and standards with full transparency, (ii) Ensure preference and consistency to delight consumers and customers by valuing what they value and by offering products, systems and services that always meet or exceed their expectations, (iii) Strive for zero defects and no waste by constantly looking for opportunities to apply our continuous improvement approach*

to deliver competitive advantage, and (iv) Engage everybody's commitment across our complete value chain and at all levels of our organization to build the Nestlé quality culture.”

1.7 Quality Objectives

Quality objectives are measurable steps towards achieving the organisational quality policy. Quality objectives state the answer of what to do to meet the goals fixed in the quality policy? These can be the best way to spotlight the key elements of the quality policy. The quality objectives can be to improve on-time deliveries, reduction in internal scrap, lower down the defects in production, cost reduction through elimination of wastes by 90-95 percent within one year, etc. The objectives must be controlled by considering them as the part of a procedure and making them part of the quality manual. The quality policy is created with the customer requirements/needs in mind, then quality objectives are linked back to the customer requirements/needs through the quality policy. These quality objectives would then be communicated to each level of the organization. The quality objectives should be designed to be specific, measurable, achievable, realistic and time-based.

1.8 Quality Manual

Quality manual is an official document produced by a business that details how its quality management system operates. A typical quality manual will include the company's quality policy and goals, as well as a detailed description of its quality control system that might include staff roles and relationships, procedures, systems and

any other resources that relate to producing high quality goods or services. The purposes of the quality manual are as under:

- The quality manual identifies the scope of the Quality Management System. In fact, it identifies the limits of the QMS. This is the explanation of what the business is? Is it a fast food chain? Or Is it a retail store? Or Is it an automotive industry?
- The quality manual consists of flowcharts which explains the connectivity of the all the different processes. This in-depth flowchart may help the employees to better understand the interactions between processes in the organization.
- It includes a top-level management structure so that people can better understand how the organisation is controlled.

The quality manual should be smaller, more graphic, more informative and easier to read and understand. The mission and vision statements of the company, quality policy and quality objectives can be a part of the quality manual. A good quality manual gives a clear picture about the success of the Quality Management System.

1.9 Quality Documentation

Quality documentation means the process of documenting the information. The information is related with each and every process, procedure, quality objective, checklist, drawing, flowchart, forms, diagram, etc. These quality documents describe the functioning of the quality management system. It is also mandatory as per the provisions of ISO 9000 certification as some information/documents are required to get the quality certificate.

1.10 Pillars of Quality Management System

Each organization is unique in terms of the culture, management practices, and the processes used to create and deliver its products and services. The quality management strategy will then vary from organization to organization; however, a set of primary elements should be present in some format. ISO 9000 (which contains eight quality management principles) and quality audit are the two important pillars upon which the efficient, effective and adaptable quality management system is to base. The eight quality management principles are applicable throughout industry, commerce and the service sectors:

1.11 ISO-9000 (International Standards Organisation)

The ISO-9000 standard was published in 1987. It had undergone revision in 2000 and 2005. It covers definitions, requirements, and continual improvements. ISO-9000 standards are developed to effectively design and implement efficient quality systems. These provide a framework that can provide guidance for the processes to be made auditable. These standards help organisations to work effectively. ISO-9000 standards are market driven designed by experts. These standards are reviewed once in five years to decide whether to modify, maintained or withdrawn. ISO-9000 is helpful to show the customers that the organisation have adopted quality procedures, quality processes and quality standards. It helps external auditors to show that all the internal processes are in place and well documented. ISO-9000 standards implementation shows that all the processes used for manufacturing products are audited internally and well documented. The ISO quality standards are frequently followed for food safety, data security in

computers, agriculture, healthcare industry, education institutions etc. In fact, Quality Standards developed by ISO impact our lives by giving quality and standard products and raising standard of living. The standards are recognised internationally.

1.12 Eight Principles of Quality Management

ISO standards are based on eight principles of quality management that can be applied by senior managers to improve their organisation:

i) Customer Focus

Customers are the backbone of the organisation. The organisations must have clear understanding of the customers' needs and do their best to meet the needs. Through regular survey the customers' dissatisfaction can be known.

ii) Leadership

Leaders should be ready to take the front positions at the time of problems. Only best leaders can guide their employees the right vision.

iii) Involvement

At the time of requirement or problem, the employees can be involved and their talent as well as skills be utilised.

iv) Process Approach

Companies activities are managed in the form of processes. The input, transformation and output are managed as a process.

v) System approach to management

At this step, all the processes of the organisation are examined thoroughly.

vi) Continuous Improvements

At this step, the management should try to find the long-term and consistent solutions of the problems.

vii) Right approach of decision making

The decision making must be based on the relevant data and information subsequently.

viii) Long term relationships with Suppliers

Long term relationships with the suppliers create value.

1.13 Quality Audit

A good quality management system (QMS) will not function or improve without adequate audits and reviews. Quality audit is defined as a systematic and independent monitoring to determine whether activities and related results comply with planned manuals and whether these manuals are implemented effectively and are suitable to achieve objectives. A quality audit is a process by which the management reviews and evaluates an element of the business to ensure that the process is meeting certain standards. A quality audit can be applied to various aspects of a business, such as inventory, service, employees, management, or databases. The objectives of the quality audit are to monitor and drives continuous improvement in quality. It ensures quality of

the product and determines the required improvement. It assesses effectiveness of quality assurance system. The management knows problems or potential problems by quality audit. It ensures timely correction of problems. It shows management support of the quality program and establishes high degree of confidence, trust, understanding and communication among internal employees. There are three types of quality audits, namely, first party (internal), second party (external) and third party (extrinsic) audits. Quality audit ensures that the business is offering a value to the customers through high-quality product or services. It gives information to the customers that the company is committed to quality standards and performs regular audits programmes. It helps to increase consumer confidence in the business. Finally, regular quality audits help protect the business from issues that could arise from selling a poor quality product.

1.14 Generic Model for Implementing Quality Management Systems

The American Society for Quality (ASQ) has given a generic model for implementing quality management systems which is given below:

- Top management learns about and decides to commit to TQM. TQM is identified as one of the organization's strategies.
- The organization assesses current culture, customer satisfaction, and quality management systems.
- Top management identifies core values and principles to be used, and communicates them.
- A TQM master plan is developed on the basis of steps 1, 2, and 3.

- The organization identifies and prioritizes customer demands and aligns products and services to meet those demands.
- Management maps the critical processes through which the organization meets its customers' needs.
- Management oversees the formation of teams for process improvement efforts.
- The momentum of the TQM effort is managed by the steering committee.
- Managers contribute individually to the effort through planning, training, coaching, or other methods.
- Daily process management and standardization take place.
- Progress is evaluated and the plan is revised as needed.
- Constant employee awareness and feedback on status are provided and a reward/recognition process is established. (www.asq.org)

1.15 Benefits of implementing a Quality Management System

The benefits of implementing a quality management system are as under:

- QMS ensures that all the quality processes are operating efficiently and effectively.
- QMS ensures consistent quality output in terms of products or services. Hence, the customer loyalty is generated when he/she is getting consistent good quality products/services.

- An effective QMS is helpful in generating value for both the organisation and its customers.
- QMS ensures that all the processes are aligned together which is helpful in getting good desired results.
- The QMS ensures good operational results such as increase in revenue and increase in market share.
- The organisation is ready to response to market opportunities if QMS is operational.
- It reduces costs through the effective and efficient use of resources.
- QMS ensures improved organisational capabilities which is helpful for the companies to get competitive advantage.
- QMS is helpful in the communication of quality motives of the top management to all the stakeholders. It helps in proper understanding of the corporate philosophy regarding quality and its culture.
- QMS is helpful in motivating employees towards achieving the company's quality objectives.
- QMS is helpful in the continuous improvement of the processes.
- QMS increases confidence of interested parties in the effectiveness and efficiency of the business and reputation.

1.16 Summary

The top management apply Quality Management System (QMS) to achieve the success of the total quality programme. Quality Management System (QMS) is the organisational structure, processes, procedures and resources needed to implement, maintain and continually improve the management of quality. It is also considered as a set of co-ordinated activities to direct and control an organisation in order to consistently improve the effectiveness and efficiency of its performance. The quality management system consists of the following elements as under: Quality Policy, Quality Objectives, Quality Manual, Organizational Structure and Responsibilities, Understanding customers and fulfilling their satisfaction, Continuous improvement of processes, Facilitate employees' education and quality training, Using quality tools, techniques and parameters, Data/Record management through standard documentation and Quality control. Quality Policy is a mirror, which shows the structure of QMS, which drives implementation. It monitors effectiveness, it guides working, it allows perceptions, it thinks future, overall quality policy is management's commitment towards QMS. Quality objectives are measurable steps towards achieving the organisational quality policy. Quality objectives state the answer of what to do to meet the goals fixed in the quality policy? Quality manual is an official document produced by a business that details how its quality management system operates. A typical quality manual will include the company's quality policy and goals, as well as a detailed description of its quality control system that might include staff roles and relationships, procedures, systems and any other resources that relate to producing high quality goods or services. Quality documentation means the process of documenting the information. The information is related with each and every process, procedure, quality objective,

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1.17 Keywords

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control system that might include staff roles and relationships, procedures, systems and any other resources that relate to producing high quality goods or services.

1.18 Self Assessment Questions

1. What is the role of senior management in Total Quality Management (TQM)?
2. Define the concept of Quality Management System.
3. Enumerate the elements of Quality Management System.
4. Define the concept of Quality Policy.
5. Elaborate the elements of Quality Management Policy Statement.
6. Discuss the examples of the Quality Policy.
7. Define Quality Objectives.
8. Define Quality Manual.
9. What is the use of Quality Documentation in the organisation?
10. Enumerate and discuss the pillars of Quality Management System.
11. Discuss the role of ISO-9000 in the organisation.
12. Enumerate the eight principles of Quality Management.
13. Define the concept of Quality Audit.