ISO 9000

QUALITY SYSTEM
MANAGEMENT
ISO 9000 (2000)

CONCEPTS OF QUALITY MANAGEMENT SYSTEM (QMS) – ISO 9000:2000

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The concept of ‘quality’ has existed for many years, though the meaning has changed and evolved over time.

Quality viewed as something that encompassed the entire organization and not only the production process. Since all functions were responsible for product quality and all shared the costs of poor quality and finally quality was considered as a concept that affected the entire organization.

• ISO stands for “International Standards Organization”
• The source of ISO 9000 and more than 13,000 international standards for business government and society
• A network of national standards institutes from 140 countries working in partnership with international organizations governments industry business and consumer representatives. A bridge between public and private sectors.

ISO has an website: http://www.iso.ch

ISO 9000 is defined as a set of international standards on quality management and quality assurance developed to help companies effectively document the quality system elements needed to maintain an efficient quality system. They are not specific to any one industry and can be applied to organizations of any size.

ISO 9000 can help a company satisfy its customers, meet regulatory requirements, and achieve continual improvement. It should be considered to be a first step or the base level of a quality system.

ISO 9000 VS. 9001

ISO 9000 is a series or family of quality management standards, while ISO 9001 is a standard within the family. The ISO 9000 family of standards also contains an individual standard named ISO 9000. This standard lays out the fundamentals and vocabulary for quality management systems (QMS).

This International Standard describes fundamentals of quality management systems, which form the subject of the ISO 9000 family and defines related terms.
This International Standard is applicable to the following:
1. Organizations seeking advantage through the implementation of a quality management system;
2. Organizations seeking confidence from their suppliers that their product requirements will be satisfied;
3. Users of the products;
4. Those concerned with a mutual understanding of the terminology used in quality management (e.g. suppliers, customers, regulators);
5. Those internal or external to the organization who assess the quality management system or audit it for conformity with the requirements of ISO 9001 (e.g. auditors, regulators, certification / registration bodies);
6. Those internal or external to the organization who give advice or training on the quality management system appropriate to that organization;
7. Developers of related standards.

The **ISO 9000** family of quality management systems (QMS) is a set of standards that helps organizations ensure they meet customer and other stakeholder needs within statutory and regulatory requirements related to a product or service.

ISO 9000 series of Standards

The ISO 9000 family contains these standards:

- ISO 9001:2015: Quality Management Systems - Requirements
- ISO 9000:2015: Quality Management Systems - Fundamentals and Vocabulary (definitions)
- ISO 9004:2018: Quality Management - Quality of an Organization - Guidance to Achieve Sustained Success (continuous improvement)
- ISO 19011:2018: Guidelines for Auditing Management Systems

ISO 9000 history and revisions: ISO 9000:2000, 2008, and 2015

ISO 9000 was first published in 1987 by the International Organization for Standardization (ISO), a specialized international agency for standardization composed of the national standards bodies of more than 160 countries. The standards underwent major revisions in 2000 and 2008. The most recent versions of the standard, ISO 9000:2015 and ISO 9001:2015, were published in September 2015.

ISO 9000:2000

ISO 9000:2000 refers to the ISO 9000 update released in the year 2000.
The ISO 9000:2000 revision had five goals:

1.Meet stakeholder needs
2.Be usable by all sizes of organizations
3.Be usable by all sectors
4.Be simple and clearly understood
5.Connect quality management system to business processes

ISO 9000:2000 was again updated in 2008 and 2015. ISO 9000:2015 is the most current version.

ISO 9000:2015 principles of Quality Management

Basic Definition and Terminology Quality: The quality of something can be determined by comparing a set of inherent characteristics with a set of requirements. If those inherent characteristics meet all requirements, high or excellent quality is achieved. If those characteristics do not meet all requirements, a low or poor level of quality is achieved. Quality is, therefore, a question of degree.

Quality characteristic: A quality characteristic is tied to a requirement and is an inherent feature or property of a product, process, or system. A requirement is a need, expectation, or obligation. It can be stated or implied by an organization, its customers, or other interested parties.

Quality assurance (QA): Quality assurance is a set of activities intended to establish confidence that quality requirements will be met. QA is one part of quality management.

Quality control (QC): Quality control is a set of activities intended to ensure that quality requirements are actually being met. QC is one part of quality management.

Quality improvement: Quality improvement refers to anything that enhances an organization's ability to meet quality requirements. Quality improvement is one part of quality management.

Quality management: Quality management includes all the activities that organizations use to direct, control, and coordinate quality. These activities include formulating a quality policy and setting quality objectives. They also include quality planning, quality control, quality assurance and quality improvement.

Management: The term management refers to all the activities that are used to coordinate, direct and control an organization. In this context the term management does not refer to people. It refers to activities. ISO 9000 uses the term Top Management to refer to people.

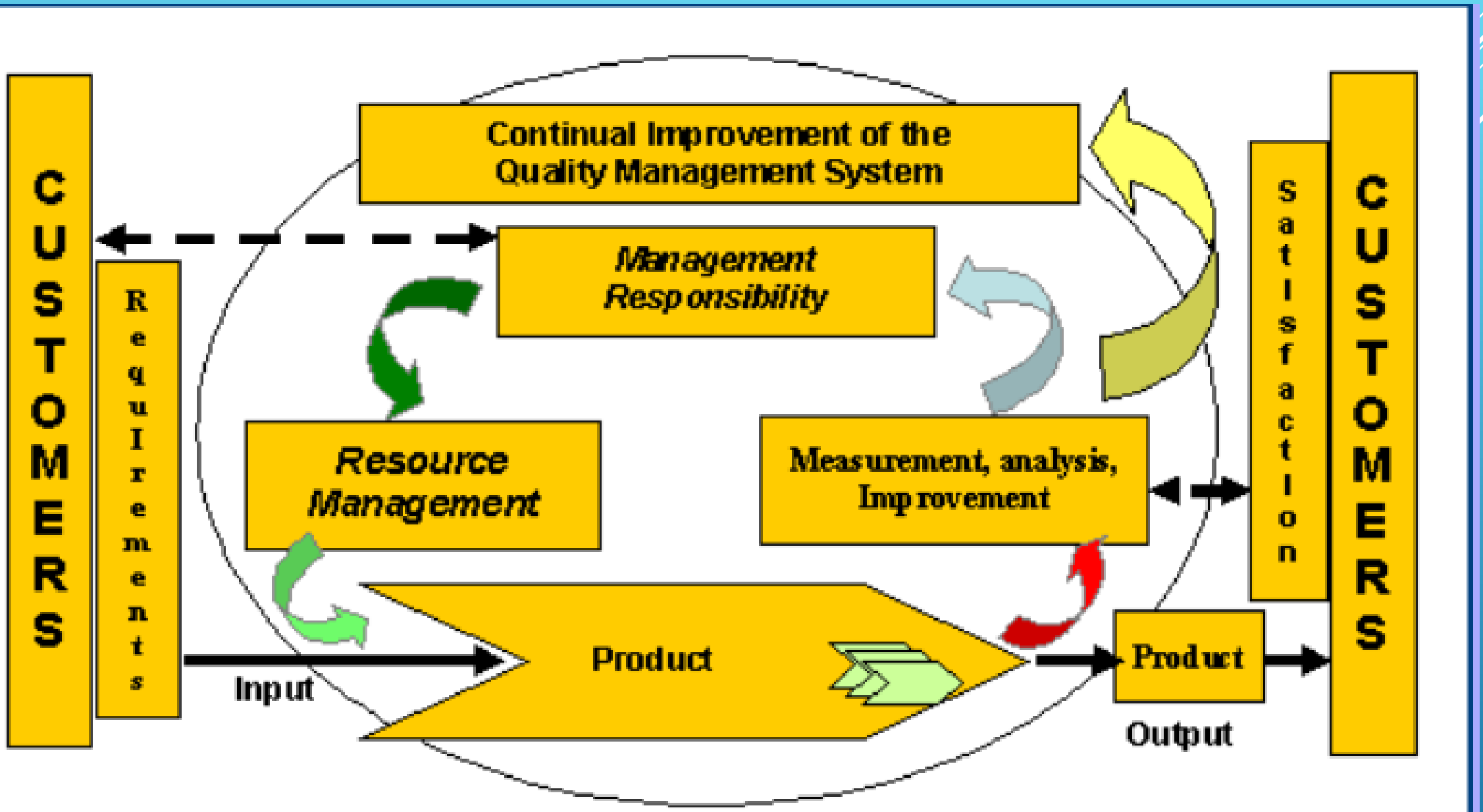
Process: A process is a set of activities that are interrelated or that interact with one another. Processes use resources to transform inputs into outputs. Processes are interconnected because the output from one process becomes the input for another process. Organizational processes should be planned and carried out under controlled conditions. An effective process is one that realizes planned activities and achieves planned results.

Quality management system (QMS)

A quality management system is a set or network of many of interrelated or interacting and interconnected processes (elements) that organizations use to direct and control how quality policies are implemented and quality objectives are achieved. A process-based quality management system uses a process approach to manage and control how its quality policy is implemented and how its quality objectives are achieved. A process-based QMS is a network of interrelated and interconnected processes.

Top management is called to establish a customer oriented organization:

- By defining the systems and processes that can be managed and improved effectively and efficiently.
- Acquiring and using process data and information on a regular basis.
- Directing the whole process towards continual improvement and
- Using suitable methods to evaluate process improvement.


CUSTOMERS
Requirements
Continual Improvement of the Quality Management System
Management Responsibility
Resource Management
Measurement, analysis, Improvement
Input
Product
Product
Output
Satisfaction
CUSTOMERS

TQM concept is in literature and it is widely and thoroughly considered as the unity of several approaches such as:

1. Approaches that act on the removal of the burden created by the traditional way of work.

2. Approaches that allow science method usage in working process.

3. Approaches that allow equal distribution of work functions.

4. Approaches that provide the engineering of the process.

5. Approaches that allow transparency of the organization and

6. Group of approaches to TQM that enable competing ability.

The benefits of a QMS A fully documented QMS will ensure that two important requirements as follow:

1. Customers' requirements: Confidence in the ability of the organization to deliver the desired product and service consistently meeting their needs and expectations.
2. The organization's requirements: both internally and externally and at an optimum cost with efficient use of the available resources – materials, human, technology and information.

A good QMS will ensure the following in organization:

i) Set direction and meet customers' expectations
ii) Improve process control
iii) Reduce wastage
iv) Lower costs
v) Increase market share
vi) Facilitate training
vii) Involve staff
viii) Raise morale

Just by enforce quality management system following benefits of strategic quality planning could be achieved by dairy industry:

A	Product quality	Improved product design; Reduced liability risk; New product introduction; Improved reaction to competition; Enhanced reputation; Improved after sales service; Better advertising strategies
B	Production quality	(i) Reduction of rework and other operating losses; (ii) Decreased labor/ material cost; (iii) Improved managerial control of operations; (iv) Better employee morale; (v) Smoother production flow; (vi) Improved reliability.
C	Business for performance	(i) Improved delivery times; (ii) Reduced order processing times; (iii) Reduced cycle times for new product introduction; (iv) Improved return on investment; (v) Higher market share; (vi) Customer relation

Thank you for your attention