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# USE OF ISO APPLICATION IN TOTAL QUALITY MANAGEMENT

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#### Abstract

The present information society is a knowledge-based society fully equipped with technological progress. Libraries and information centers play an important role in the development of the country. Slogans such as "Information is a power" greatly influenced the economic, social, political, and international cooperation environment. Online information resources have created the problem of authentication of information by policymakers before formulating the policy and program. The Random House Dictionary defined quality as an attribute, innate or acquired, which specifically determines the behavior and attitudes of individuals or things.

The concept of total quality management evolved in Japan after World War II when Japan was rebuilding its industries in the decades of scientific management of the 1880s. Total quality management is a human concept based on human emotion and recognition such as behavioral achievement is very important for people, people need to share choice and experience, group bonding and belonging in group achievements It has the effect of creating emotion,

Success breeds Success People are encouraged by achievement and feel the need to equal or surpass their best, people want them to be heard and felt important. No one wants to expand and expand like desk machines. Everyone wants opportunities for continued self-development and self-respect. If people treat them like humans responsible for their behavior then they behave like them. These principles are absolutely fundamental to the achievement of total competency management, almost the opposite of Taylorism and scientific management. Reference to this paper should be made as follows:

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#### Introduction

#### **International Organization for Standardization (ISO)**

"Total Quality Management is a management approach for an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society."

According to Martin L (1993), "Total Quality Management is a management approach for an organization, centered on quality based on the participation of all its members and aiming at long term success through customer satisfaction and benefits to all members of the Organisation and Society".

According to Ahire, S. L. (1997), "Total Quality Management is an integrative philosophy of management for continuously improving the quality of products and processes".

Total Quality Management is the organization-wide management of quality. We know that management consists of planning, organizing, direction, control of three qualities, quality of return to satisfy the need of the shareholders, quality of product, and total quality management article.

## Meaning of Total Quality Management (Tqm)

Total quality control refers to the participation of all members of an organization that can affect the quality of production, ie, the product or service. Its goal is to provide defect-free products 100 percent of the time, thus fully meeting customer needs. ISO 9000 is a quality assurance management system that is fast becoming the world standard for quality. The ISO 9000 series standard is a set of quality assurance with a set of four individual, but related, international standards on management standards and an application guidelines.

The system incorporates a comprehensive review process that incorporates the companies' design, production, installation, inspection, package, and market products. As a series of technical standards, ISO 9000 provides a three-way balance between internal audit, corrective action, and corporate management involvement, leading to the successful implementation of sound quality processes.

### The series of technical standards include four divisions:

- 1. ISO 9001 This is the broadest standard covering procedures from purchasing to service of the sold product.
- 2. ISO 9002 This is targeted toward standards related to processes and the assignment of subcontractors.
- 3. ISO 9003 These technical standards apply to the final inspection and test.

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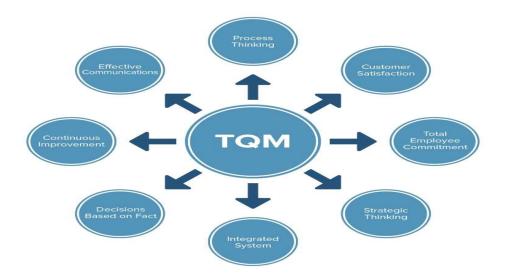
**4.** ISO 9004 – These standards apply to quality management systems.

#### **Principles of Total Quality Management**

There does not exist a single accepted body of knowledge for total quality management, as, for example, the Project Management Body of Knowledge (PMBOK) for the Institute of Project Management. Similarly, no prescribed action exists to implement the methods and tools of TQM. Organizations are free to deploy and customize TQM, giving way to multiple definitions of methodology. Despite these challenges to standardization, it is possible to describe commonly accepted principles:

- 1. Customer Satisfaction: The first of the total quality management principles focus on the people buying your product or service. Your customers determine the quality of your product. If your product meets a need and lasts longer or longer than expected, customers know that they have spent their money on a quality product.
- 2. Employee commitment: It builds empowerment through training and suggestion mechanisms.
- **3.** Fact-Based Decision Making: Teams collect statistics and process statistics to ensure that tasks meet specifications. Analyzing and collecting data leads to better decisions based on the information available. Making informed decisions creates a better understanding of customers and your market.
- **4.** Effective communication: There should be an open dialogue throughout the organization.
- 5. Strategic Thinking: Quality should be a part of an organization's long-term vision.
- 6. Integrated Systems: A shared vision, which includes a commitment to and commitment to the principles of quality, keeps everyone together from one company. In an integrated system, everyone in every department should have a deep understanding of policies, standards, objectives, and procedures. The integrated system helps the company look for continual improvement to gain a competitive edge.
- 7. **Process Approach:** You can turn every activity into processes, and therefore, find and repeat the best process. It is important to follow procedures in quality management. Procedures ensure that appropriate steps are taken at the appropriate time to ensure stability and accelerate production.
- **8.** Continuous Improvement: Every employee should always think about how to do their work better.

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## Figure: Principles of Total Quality Management Element of Total Quality Management

To successfully implement total quality management, an organization must focus on eight elements. These elements drive the force behind reform, leadership, design, and planning initiatives. Elements of total quality management are:

### Foundation

The entire process of total quality management is based on the foundation of elements consisting of ethics, integrity, and trust. Total quality management includes each employee regardless of their designation.

## Ethics

Ethics is an element that relates to an understanding of good and evil in any situation at the workplace. It is a subject related to the organization as well as the individual. The ethics of an organization has established a business code that outlines the guidelines that every employee is expected to follow. Personal ethics involves rights and mistakes.

## Integrity

Integrity is an element that refers to a person's ethics, honesty, values , and honesty in an organization. This includes honoring fellow workers and the organization's policies. This is one of the important features that customers expect.

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## Believe

Faith is a by-product of ethical conduct and loyalty. The framework of total quality management cannot be built without trust. It encourages the full participation of all members of the organization. It improves relationships between employees which helps in making better decisions. It also promotes continuous improvement by taking personal risks.

## **Building Bricks**

Based on the foundations of ethics, integrity, and trust, bricks are a collection of elements that are placed to reach the ceiling of recognition. Elements of building bricks include:

## Training

To be highly productive, employees must be trained. This responsibility rests solely on supervisors who are responsible for implementing total quality management in their respective departments. Employees should be trained in decision making, problem-solving, interpersonal skills, technical skills, and business economics. This is done so that employees can work effectively and produce efficient results.

## **Team Work**

Teamwork is an important element of TQM. It helps the business to achieve effective and efficient solutions to problems. The teams also provide a permanent improvement in process and operation. TQM organizations typically adopt three types of teams.

#### Leadership

Leadership is the quality of a person who provides an inspiring vision to the team and sets a strategic direction for all to understand. This is one of the important elements that should be creative, effective, and positive.

#### **Binding Mortar**

A bonding mortar is an element that binds all other elements together. The major element of this category is communication.

### Communications

Communication binds the organization together and is a fundamental element of success. It is necessary to ensure that all levels of communication between suppliers, members, and customers are kept open.

### Roof

The roof has one final element that tops all other elements of TQM. This is called recognition.

#### Recognize

This element includes suggestions and achievements for teams and individuals, including positive feedback and encouragement. Every employee wants to be recognized and it is the duty of supervisors to locate and identify contributors and motivate them.

The Total Quality Management is central to quality management which ensures stop participation in full measure towards achieving the targeted goals of the organizations. The benefit of total quality management is to introduce new cultural change through changing the style of people management which is likely to bring about greater participation from the employees who would work with the management to achieve the organizational goals and objectives.

#### Objective

Total Quality Management's aim is to create an organization whereby everyone is working towards making their organization the best in its business, and to capitalize on the sense of achievement and working in a world-class organization. The principal objectives of total quality management are as follows:-

- **A.** Continuous improvement of the libraries which be equal to or greater than that of any competitor.
- **B.** Continuous and relentless cost reduction.
- C. Continuous and relentless quality improvement.

Total participation i.e. creating an organization whereby everyone is working towards making the organization the best in its area of activity and to capitalize on the sense of the achievement and working is a world-class organization.

Total Quality Management (TQM) is used for industries, factories, companies, and business organizations and is now being used also for social organizations such as Schools, Colleges, Universities, and Libraries.

## Steps

The steps of TQM are as under

- · Obtain CEO commitment
- · Educate level management
- · Outline the vision statement, mission statement, and guiding principle.
- · Prepare a flow of diagram of the company process.
- · Focus on the owner/customer (External) and surveys
- · Consider the employees as an Internal owner/customer
- Provide a quality training program

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- · Establish quality improvement teams
- · Implement process improvements.
- · Use the Tools of total quality management
- · Know the benefits of total quality management

## ISO 9000 Origin

ISO 9000 was established in 1946 with the objective of promoting trade and commerce between member nations. The actual standards are formulated by the ISO Technical Committee with over 3000 experts in their respective fields. The committee held a series of meetings and its 176 meetings required a standard of quality management. It was started by ISO in 1987 and revised in 1994. It was a set of common standards that met the state's requirements for an acceptable quality management system. The standards are of two types

- 1. Conformance Standard
- 2. Guidance Standard

Conformance Standards are ISO 2001, ISO 2002, ISO 2003. The Guidance Standard is ISO 9000 and ISO 9004. The Indian Standard IS 1400 and British Standard BS 5750 are equivalent to ISO 9000.

#### Structure of ISO 9000

The ISO 9000 includes the structures as under

- · Management responsibility.
- · Quality system.
- · Contact review.
- Design control.
- · Document and Data Control.
- · Purchasing
- · Control of customer-supplied products.
- · Products Identification and traceability.
- · Process Control
- · Inspection and testing.
- · Control of inspection measuring and test equipment.
- · Inspection and test status.
- · Control of non-conforming products.
- Corrective and preventive action
- · Handling, storage, and packaging.

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- · Control of quality records
- · Internal quality audits.
- · Training.
- · Servicing.
- · Statistical techniques.

The ISO 9000 Series is most relevant and applicable in the field of library and information science. Which means for document and data control of updating national and international standards? Review and approval of different quality system documents, availability of latest issues, and removal of old and obsolete documents.

## Steps of Total Quality Management in ISO 9000

ISO 9000 has an internationally accepted standard that recognizes institutions for their quality management systems and policies. ISO 9004 - 1992 has guidelines for services and was issued by ISO to establish and implement quality systems within service organizations such as libraries. The ISO 9000 series of standards are widely used on most recent international standards of quality management. It emphasizes quality which means that the product must fit for the intended purposes.

#### Principles of ISO 9000

- Put writing how task should be done
- · Keep records
- · Control the paperwork
- · Assign the responsibility
- · Do audits
- · Administer quality control

#### **Advantages of ISO 9000**

The major objective of an effective quality system is to inspire trust among customers in a contracted position. This is of great value to the suppliers themselves, as it enables them to achieve customer satisfaction cost-effectively.

A quality-system-standard assures the company to plan and consistently manage the required product quality standard. In a contractual situation, the implementation of the ISO 9000 system will clearly help the company to understand customer requirements. The operation of various functional departments will be successful in ensuring that the end product or service fully meets the contractual requirements.

Since ISO 9000 defines a system for managing quality in general terms. It is universally applicable to all products and services. This standard is equally relevant for companies producing different types of products; Organizations in various service areas

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such as hospitals, hotels, and airlines; And utilities providing electricity, water, and telecommunications services.

- · It is cost-effective
- It is helpful in preventing errors
- It is helpful in reduce stress among staff because they know what is expected of them
- · It could help to provide the library services more effective
- · It can bring a sense of order to business or service and prevent the problems
- · It could make the library better organized and more consistent
- · It brings customers closer & encourages good quality communication.
- · It is a universal standard suitable for every kind of organization.

## Benefits of ISO 9000 quality systems

ISO 9000 quality systems bring various benefits to their users. The major purpose of an effective quality system is to inspire confidence among customers in a contractual situation. It is also of immense value to the suppliers themselves, because it enables them to achieve customer satisfaction cost-effectively. If all tasks were carried out correctly the first time, there would be no waste, costs would be minimized and profit maximized. On the basis of the above discussion benefits from ISO 9000 are as under

- · Customer orientation.
- · Marketing advantage.
- · Recognition
- · Confidence creation.
- · Consistency in quality.
- · Legal aspects.
- · Productivity improvement.
- · Improve financial performance.
- · Creates an effective quality management system (Q.M.S.).
- · Brings clarity.
- · Traceability.
- · Documented.
- · Demonstrability.
- · Human resource development.
- · Monitoring.
- · Increases export potential.

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· Innovation and improvement.

## ISO 2709

ISO 2709 is an international standard documentation format for bibliographic information interchange for magnetic tape. This International Standard specifies the requirements for a generalized exchange format that will hold records describing all forms of material capable of bibliographic as well as related records such as authority records.

#### Principles and Coding of ISO 2709

The standard ISO 2709 (standard AFNOR 47300, December 1987) makes it possible to present any structured bibliographic record in a large variety of formats, in particular MARC or UNIMARC or CCF formats. A recording comprises in ISO the 2709 follow parts.

- The guide, continuation of 24 numbered nature from 0 to 20.
- The repertory which comprises a variable succession of numerical natures.
- · Bibliographical Data themselves.

## Advantage of ISO 2709

- It provides a small number of mandatory data elements, which are organized sectors of the Information community as essential in order to identify an
- It gives mandatory data elements that are sufficiently flexible to varying descriptive practices.
- It also provides a number of optional elements which may be useful to which creates the record.

It provides a mechanism for linking records and segment of records without on the originating agency any uniform practice regarding the treatment of records or data elements.

#### **Implementation of Total Quality Management**

The implementation of Total Quality Management in library and information activities gives the following results.

- · Better improvement of confidence among users of the libraries.
- Developing an inventory of all the documents available in a library.
- Developing a database that includes readers for all types of materials in the library.
- · Improving the quality of information analysis and consolidation products.
- Improving skills of and users to profitability interact with information system and services.

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- Integrating and networking all library resources into serviceable resources to users.
- Reduction in user complaints and efficient utilization of men, machines, and materials resulting in higher productivity.
- It reduces bureaucracy, empowers staff, and creates a team-based culture in the library.
- It helps in measuring user's needs and expectations in a proactive way and equips the libraries to provide more and better services.
- It is an evolutionary process and can easily be incorporated into the already existing management system of libraries.
- Reduction in user complaints and gain a competitive advantage over other providers of information.

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