Chapter – 4 Total Quality Management

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Chapter-4

TOTAL QUALITY MANAGEMENT

3.1 Introduction:

Library is an organization which is forth coming as customer oriented organization. It needs to provide quality product and services to their customer / users. Total quality management provides the tool and the direction to improve quality. It is the aim of the library to provide a high quality of services to its users. TQM is the best method which can help to achieve.¹

A customer are generally of two type – internal & External e.g. the works or group individuals who are directly involved on the works or input from other areas within the manufacturing organization are the internal; customers. On the other hand, the other hand, the outside people who desired to purchase the product or output of that organization or receive service in lieu of money as per their needs/ demands are called external customer. The teachers, students and outside users who come to the library casually for receiving the information are called external customers of that academic library and individual or team within the library that are dependent on the work of the library (i.e. catalogue, classifier, Asst. Librarian etc.)Are called the internal customers.²

TQM is to be accepted by a librarian to achieve continuous improvement by adopting the following measures. So that library can offer the qualitative services to readers and can get recognition in society TQM is a creation of library organizational culture committed to the continuous improvement of skill teamwork, process, output, services quality and users satisfaction.³

Total:

Everyone in the organization is involved in creating and maintaining the quality of the services and products offered.
Quality:

The organization through individual and collective actions focuses on meeting customer needs, recognizing that customer perception identifies quality.\(^4\)

Management:

In managing the system, the emphasis lies on continuously improving the system in order to, achieve the best results. TQM is a management philosophy embracing all activities through which the needs of the customer and the community, and the objective of the organization, are satisfied in the most efficient and cost-effective way by maximizing the potential of all employees in a continuing drive for improvement.\(^5\)

4.2 Quality concept:

Quality is a parameter to judge the needs. In other word “Quality is fitness for purpose”. British Standard (4778) (1987) (=ISO 8402. 1986) has define quality as, “the quality of features and characteristics of a product of services that bear on its ability to satisfy stated or implied needs.\(^6\)

Quality is customer satisfaction through product or by services. The customer in the academic library is the user/reader/students. Here the customer is not an outsider, but part of the academic community as a response of this challenge of quality. India’s University grants Commission has set up NAAC (National Assessment &Accreditation council). The National Accreditation on the quality of service provided by educational institution including library service. Grants are linked to the outcomes of this assessment in light of this; academic libraries must develop systems, philosophies, and strategies for managing quality.\(^7\)

The international organization for standardization (ISO): 8402-1994 defines quality as “The total features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.” \(^8\)
Quality is free or “conformance to requirement”. “Quality is a state of mind, difficult to explain without a long discussion but essentially a mental balance between what you do like and what (you) will do?

TQM means that the organization’s culture is defined by and supports the constant attainment of satisfaction through an integrated system of tools, techniques and training. Thus involves the continuous improvement of processes, resulting in high quality products and services.  

The concept of quality has given the concept of total quality management in the field of management organization. Total Quality Management (TQM) is a concept which make quality the responsibility of all people within an organization. All the persons involved are expected to contribute to the overall improvement of increase the productivity. The success of TQM effecting training effective implementation and executive involvement is essential.

4.3 Need for TQM

Quality Management is one of the Challenging and exhilarating and risky activity in the real world. People’s livelihood is linked directly or indirectly with quality of products or services, equipment, presence of good constructions or creation of environment etc. Especially in the lines of public health, safety, savings, enjoyment, journey, and transition, etc.

During 1960’s several developed and developing countries realized the need for TQM and giant companies like Xerox, IBM, and ford, Texas Instruments, Honda and Kawasaki etc. Launched full pledged quality program for survival in the global market.

4.4 Characteristics of TQM

- TQM is management philosophy to guide the Librarian in meeting the challenges of the time.
- TQM start at the top management of library.
- TQM call for strategic planning based on vision, mission, goals and objectives of academics libraries.
- TQM call for every one skilled and knowledgeable.
- TQM requires organization skilled and knowledgeable.
- TQM requires quality as a strategic priority along with other priorities.
- TQM promotes teamwork.
- TQM focuses on the users.
- TQM recognizes internal and external users of the library.
- TQM aims to install a “Prevention not and inspection” ethics.
- TQM is a process and activities based approach
- TQM emphasizes the importance of measurement through the measuring rod of user’s satisfaction.
- TQM reduces total cost of meeting user requirements.
- TQM is a disciplined. Continuous and system approach.12

4.5 Steps to Total Quality Management:

Based on his work with Japanese managers and other, Deming (1986; Walton, 1986) Outlined 14 steps that managers in any type of organization can take to implement a total quality management program.

- **Create Constancy of profuse for improvement of product and service:**
  Constancy of purpose requires innovation, investment in research and education, continuous improvement of product and service, maintain of equipment, furniture and fixtures, and new aids to production

- **Adopt the new Philosophy:**
  Management must undergo a transformation and begin to believe in quality products and service.

- **Cease dependence on mass inspection:**
  Inspect products and service only enough to be identifying ways to improve to process.

- **End the practice of awarding business on price tag alone.**
  The lowest prices goods are not always the highest quality; choose a supplier based on its record of improvement and then make a long – term commitment to it.
• **Improve Constantly and forever the System of Product:**
Improvement is not a one-time effort; management is responsible for leading the organization into the practice of continual improvement in quality and productivity.

• **Institute Training and Retraining:**
Workers need to know how to do their jobs correctly even if they need to learn new skills.

• **Institute leadership:**
Leadership is the job of management; Managers have the responsibility to discover the barriers that prevent staff from taking price in what they do. The staff will know what those barriers are.

• **Drive out fear:**
People often fear to reprisal if they “make waves” at work. Managers need to create an environment where workers can express concerns with confidence.

• **Break down barriers between staff areas:**
Managers should promote teamwork by helping staff in different areas? Department work together. Forecasting interrelationships among departments encourages higher quality decision-making.

• **Eliminate slogans, exhortations and targets for the workplace:**
Using slogans alone, without an investigation into the process of the workplace, can be offensive to workers because they imply that a better job could be done. Managers need to learn real ways of motivating people in their organization.

• **Eliminates numerical quotas:**
Quotas impede quality more than any other working condition; they leave no room for improvement. Workers need the flexibility to give customers the level of service they need.
• **Remove barriers to pride of workmanship:**
  Give worker respect and feedback about how they are doing their jobs.

• **Institute of vigorous program of education and retraining:**
  With continuous improvement, job description will change, as a result, employees need to be educated and retrained so they will be successful at new job responsibilities.

• **Take action to accomplish the transformation:**
  Management must work as a team to carry out the previous 13 steps.  

4.6 **Tools of Quality Management**

  Management implements that can be used for evaluating and verifying quality the products, process and services:
  - Flow Charts
  - Pareto Charts
  - Cause and effect Diagram
  - Histogram
  - Control Charts
  - Run Charts
  - Scattered Diagram

4.6.1 **Flow Charts:**

  The flow chart is a graphical representation of a sequence of activities and decisions. A standard flow chart includes boxes for symbols of events or activities. It also includes diamonds for key decision and ovals for start and stop points.

  The flow chart is also a device of planning and control. It is a valuable tool for increasing efficiency, reducing cast and eliminating the waste. All these factors lead to maintain a total quality in management.
4.6.2 Pareto Diagram:

A Pareto diagram is a bar or column chart of problem due to different causes arranged in descending order of their magnitude. The use of Pareto diagram maximizes the impact of improvement efforts by concentrating on the “vital few” most significant problems identified by the highest Pareto bars. Pareto diagram is the first step in quality improvement as it is an indispensable diagram helps in identifying the targets on which efforts for improvement should be concentrated.

4.6.3 Cause- and-effect Diagram:

Cause- and –effect diagram helps to unify and systematize the thought of the team work. This method is very simple and easy to learn and to practice in any helps in identifying the problems which needs immediate attention. Cause-and effect diagram helps in identifying the cause for such problems.  

4.6.4 Histogram:

Histogram is a chart, which shows whether the repeated measurement of a given quality characteristic conforms to a standard bell-shaped curve. Deviation from the standard signal needs for corrective action. Abnormality in the grade distributions in histogram can be implemented.

4.6.5 Control Charts:

A control chart is a graphic comparison of process performance data with control limit live on the chart. This chart was first proposed by Dr. Welter A. Shewhart in 1924. The control chart has three lines. A center line is target value on average level of the quality characteristic two other lines are lower control limit and upper control limit. The quality characteristic measured periodically is plotted on the chart and status of control assessed whether the process is under control or not so that action can be taken to control the process.

4.6.6 Run Chart/ Time Plot/ Trends Chart:

Run chart from control charts, which were originallyplanned by Weller Shewhart. Run charts evolved from the development of these control charts, but run charts focus more on time patterns while a control chart focuses more on acceptable charts limits of the process.
4.6.7 Scatter Diagram:

Scatter diagram are used to study possible relationship between two variables. Although these diagram cannot prove that one variable causes the other. They do indicate the existence of a relationship, as well as the strength of that relationship. A scatter diagram is composed of a horizontal axis contains the measured values of one variables and a vertical axis representing the measurements of the other variables.\textsuperscript{19}

4.7 Quality Assurance:

Carley and Waldron (1984) define quality assurance as “planned deliberate actions or activities instigated and carried out with the intent and purpose of maintaining and improving the quality of learning for participants”. Quality assurance as expressed in the literature higher education reveals that quality assurance is a continuing active and integrative process for maintain and improving quality rather than simply a system of evaluation and checking for errors.\textsuperscript{20}

4.8 Quality Standards:

Within quality management a variety of quality management standards, valuation forms and schemes for self-appraisal have evolved. These standards are practice oriented tools whose basic function is to create and sustain confidence in a customer- supplier relationship and provide a systematic approach to quality management. The ISO 9000 series of standards is widely used as the most recent international standards for quality management. In the LIS sector, the common communication format (CCF) evolved as the bibliographic format.\textsuperscript{21}

4.9 Barriers to TQM

The following obstacles maximum regularly mentioned in the collected works reviews. Reference to related works are mentioned with each barrier, administrations applying TQM can find more information on these barriers by investigative these resources.

1. Absence of Management Assurance
2. Insufficient information or considerate of TQM
3. Incompetence to modification administrative culture
4. Unsuitable preparation
5. Absence of constant training and education
6. Inability to build a learning organization that provides for continued improvement.
7. Incompatible organizational structure and isolated individual and departments.
8. Insufficient resources.
9. Inappropriate reward system.
10. Use of a prepackaged program or inappropriately adopting TQM to the organization.
11. Ineffective measurement techniques and lack of access to data and results.
12. Temporary attention or by a band aid solution
13. Giving insufficient devotion to internal and external customers.
14. Inappropriate conditions for implementing TQM.
15. Inadequate use of empowerment and teamwork. 22
16. Objectives to term such as “total”, “Quality” and “Management” which imply that high standards are not already being met.
17. TQM takes several years to implement and require a long term commitment by library managers.
18. Our culture tends to be impatient and we try to solve problem quickly, contrary to TQM’s careful process analysis.
19. Professional staff can be resistant to turning over their practices and services to what they perceive as the “Union formed whims of the customer”. 23

4.10 Benefit of TQM for academic Libraries

1. TQM reduces bureaucracy empower staff and create a team base culture, which is designed and suited for mechanistic hierarchical organizational structures like university libraries. Librarian’s role becomes one of support and coaching.

2. TQM helps in gauging user’s needs and expectations in a proactive way and equips the Librarian’s to provide more and better services with the same resources efficiently and effectively, resulting increased user satisfaction and loyalty.
3. TQM is an evolutionary process and can easily be incorporated into the already existing management system of libraries.

4. Brainstorming exercise helps to know what functions are necessary to the efficient operation of a library and who should perform these, resulting increased employee involvement and dedication.

5. Reduction in user complaint and gain a competitive advantage over other information providers.

6. TQM helps in breaking down intersectional barriers/status in a library and promise cooperation and team work instead of competition.

7. In TQM quality is a high profile management tool. Its implementation in libraries improves the image of the library staff and help in public relations and marketing.

8. TQM ensures consistent qualitative library and information services to the users and defines user’s satisfaction issues.

9. TQM ensures a non-threatening environment for open debate for problem solving for change for H.R.D. and clearly indicates power responsibility and accountability of each employee.

10. Empowerment staff members develop a sense of self determination a sense of meaning a sense of competence, a since impact become more effective innovative transform motional and characteristic.24
Reference


