
TOTAL QUALITY MANAGEMENT AND LIBRARIES AND INFORMATION CENTERS

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ABSTRACT

In this paper I am discussing Objectives in libraries, Quality Control, Quality Assurance systems in distance education, Quality component of Library services, TQM in LIS sector, TQM in distance education libraries, Policies, Resources, Processes, User satisfaction, Suggestions for services distance education. Discusses about the indispensability of TQM for betterment and even for survival Specifies essentials of TQM. Today, all kinds of organizations are becoming customer oriented organizations to survive in this world. So, they need to provide quality products and services to their customers. Total Quality Management (TQM), provides the tools and the direction to improve quality. Libraries have always been committed to provide a high quality of services to its users.

Keywords: Management, Library, Quality, Policies, Education.

INTRODUCTION

In today's competitive environment, how do you define quality? The answer is not simple Total Quality is even more difficult to define

“The term MANAGEMENT, defined in its elementary form, is getting work done through people by planning, organizing, influencing and controlling activities. Quality is an aspect that is to be affected through the efforts of all the people working in the organization. It is the product of individual quality efforts that leads to the final quality

The weakest link of the chain may substantially affect the total strength. Quality is to be managed with great effectiveness, paying attention right from micro to macro levels” N Ravichandran; (1989).

Hradeskey (1995) commenting on Quality writes that last 10 to 15 years defined quality as “conformance to requirements” The problem with this definition is that the requirements are

subjective. Only the customers can really determine the requirements by their expectations and acceptance of the product or service provided. Every parameter of the product or service you provide needs to be related in some way to the customer's needs and expectations. It is viewed with regard to the final output and how well that output will satisfy the customer.

Hence quality may be defined as the customer's expectations and requirements; it is determined by the customer and market place and includes all products and service attributes; quality includes anything the customer expects and requires, and is ever changing.

Who is the customer: The recipient of the material, data, information and/or service you produce.

The fundamental philosophy of TQM focuses on satisfying customers' expectations through people empowerment. TQM recognizes that it is the human ware that decides the software and the hardware and makes all these tools, techniques and technologies work. However, a number of leaders in the quality movement have provided definitions of the term quality.

THE QUALITY MOVEMENT

The scientific management theory, pioneered by Fredrick Winslow Taylor (1947) was the first systematic attempt toward increasing quality. In this theory, production improvement by scientific and technical methods is considered.

The behavioral approach to management (human behavior component of quality) has its origin in a series of studies performed at Western Electric's Hawthorne plant, which showed that workers increased their productivity when supervisors paid them special attention, reported by Roethlisberger and Dickson (1939).

W. Edwards Deming (1994), a physicist and later a statistician, gave attention to quality of industrial production and developed a 14-point principle in total quality management (TQM).

Juran J. M. (1986) contributing in TQM movement, emphasized the management and technical aspects of quality control and developed a 10-step approach to quality management.

Feigenbaum A. V. (1991), was the first to coin the term total quality control (TQC). In 1956 identified ten benchmarks for controlling quality. He introduced the concept of cost of quality.

Kaoru Ishikawa (1976) started quality circles in Japan in 1962.

Crosby P (1979) has a strong focus on behavioral and cultural aspects of TQM. He propounded on zero-defect approach; advocating quality with slogans such as "quality is free" and "do it right first time". His quality management philosophy is reflected in his 14-step program.

The extensive volume of literature about *TQM factors* in product manufacturing include quality leadership, human resource strategies, quality controls and tools, quality design, process improvement strategies, customer focus, satisfaction and involvement strategy, and benchmarking strategy.

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Customers are the recipients of the data, information, products and/or service we provide. Customer's satisfaction is gauged by precision, accuracy, specificity, completeness and on time. Coming to the quality aspect of Libraries and Information Services and interpreting as what Hradeskey (1995) has said it may be defined as the users' expectations and requirements; it is determined by the user and includes all service attributes. Hence quality includes anything the user expects and requires, and is a changing variable. Recognizing the importance of quality, commercial organizations take certificate of excellence. Since last decade of 20th century India has started process of Accreditation of Universities, which includes university libraries. This is a quality approach.

ISO 9000 series provides a set of standards on quality management. This requires correct interpretation, clarification and removal of certain misconceptions and myths; and extending philosophy related to library and information centers. To get ISO 9000 series certificate for libraries and information centers, we have to go a long way to achieve.

Verma (1996) analyzing the situation writes "Before us, the challenge is to provide the best possible service to the users and at the same time develop the service itself of affairs is that the principle of quality assurance and improvement in the form of total quality management and certification to ISO 9000 series already employed by the commercial organizations, are not easily interpretable as such in LIS sector".

TQM FACTORS AND THEIR RELEVANCE IN LIBRARY AND INFORMATION CENTERS

With a view to achieve success in total quality management of library and information centers (LI centers), following TQM factors may be examined.

- A Quality Leadership
- B Human Resource Strategies
- C Quality Control and Tools

- D Quality Design
- E Process Improvement Strategies
- F Customer Focus, Satisfaction, and Involvement Strategy
- G Supplier Relationship and Performance Evaluation Strategy
- H Benchmarking Strategy

A. Quality leadership

Leadership is recommended to be a judicious part of quality management by quality pioneers. Anderson ...et al (1994) review define the concept of visionary leadership AS "... ability of management to establish, and lead a long term vision for the organization, driven by customers' requirements as opposed to an internal management role. This is exemplified by the clarity of vision, long-term orientation, coaching management style, participative change, employee empowerment, and planning and implementing organizational change".

This is particularly important for library and information centers. Today these centers require information technology visionary leaders who could develop an integrated and reliable IT system that meets information seekers requirements- timely, accurately, and on-demand

Most of us assume that when we install new technology, new systems, structures, policies, functions and services, recruit technical personnel etc they will all give quality output. We confuse education with training, inspiration with habits, intention with behavior, and knowledge with skills. We need to bring a cultural change. Strong and quality leadership could only make this gap zero or minimize it.

B. Human Resource Strategies

Human resource strategies are even more judicious component of quality management systems. Three human resource factors- staff involvement, empowerment, and training are identified (by Anderson) to achieving employee fulfillment. Anderson ...et al (1994) review define employee fulfillment as

"... Degree to which employees of an organization feel that the organization continually satisfies their need. This is exemplified by job satisfaction, job commitment, and price of workmanship".

In LI centers require suitable quality infrastructure, and quality environment -staff involvement, empowerment, and training; that promotes quality values in staff which would impel staff to do their jobs well.

C. Quality Control and Tools

Juan(1986) focuses on the importance of planning and designing quality into products and services Monitoring quality on a continuous basis is an important aspect of quality management.

In LI centers all functions, products, and services need monitoring quality for translating users' requirements satisfactorily. For monitoring quality in LI centers usually survey methods; statistics; graphs and charts are used.

D. Quality Design

Taguchi(1989) has focused on designing quality into a system or product.

Ravichandran and Rai (2000) observed that formalizing design methods, are important ingredients of effective process management that increase performance quality in information systems.

TQM approach to LI centres involves stakeholders; users; software personnel/ programmers and all staff. An integrated system approach of all process, functions and services and activities could give quality information products and services. Each component within a system is important ingredient of effective process management that increase performance quality in the system. Formalizing design models of information disseminating products and services would also give good marketing.

E. Process Improvement Strategies

Quality management experts give number of process improvement strategies. Few of them are continuous improvement; reengineering; process management; zero defect; and

Software capability maturity model. Imai (1986) reported that continuous improvement has its origin in the Japanese concept of Kaizen which means “ ongoing improvement involving everyone- top management, managers, and workers”. The idea was developed by Shewhart and popularized by Deming. The cycle has four components: plan, do, check, and act.

Reengineering involves sweeping changes at functional level of an organization or institution. Hammer and Champy (1993) define reengineering as “ ... fundamental rethinking and radical design of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost quality, service and speed”.

Ravichandran and Rai (2000) observed that process management has a direct effect on quality outcomes in information systems.

Zero defects means quality efforts on reducing defects to zero.

Software capability maturity model (SW-CMM) was developed at the Software Engineering Institute at Carnegie Mellon University. It is a normative model for helping organizations gradually progress from an initial and ad-hoc process of software developments to a mature, optimized, and disciplined stage. Herbsleb ...et al (1997)

Give five levels in SW-CMM: initial, repeatable, defined, managed, and optimizing. At the managed level the focus is on product and process level. Optimizing level the focus is on continuous improvement level. SW-CMM addresses the quality of software development processes; hence has the perspectives of developers or producers of software systems.

In LI centers in setting an accurate and reliable information system the four components: plan, do, check, and act could support to improve quality in the processes, services and products. To set-up a digital library/ electronic library, reengineering of library and information system at process and functional level is extensively required. The task requires visionary leadership. Both continuous improvement and reengineering indicates the need of continuous professional education training programmers for filling the gap of knowledge and skill and also for bridging the divide of traditional and new modern library. Good process management give quality information products. Zero defects level of quality in LI centers may not be possible; but one could aim for giving maximum satisfaction to user community. Since later half of twentieth century good quality software packages are available in market. At the time of scrutinizing these should BE evaluated from the view of managed level (the focus is on product and process) level. And optimizing level (the focus is on continuous improvement level); which products and processes could be managed; how scholarly justified; after sale service; updating commitments.

F. Customer focus, Satisfaction, and Involvement Strategy

Customer satisfaction is the main intention of total quality approach and

Anderson....et al (1994) reviewed that measurements of customer satisfaction is mostly based on customers' perception of the quality of products and services.

Ahire... et al(1996) give four item scale to measure customer satisfaction in an organization-customer satisfaction survey feedback to managers; availability of customer complaints to managers; extent to which customer feedback is used for product improvement; and customer focus on quality management.

In LI centers we study users' satisfaction by survey method; to find extent to which users' are satisfied with library collection; services. Professionals could perceive the same survey to be quality performance. Customers' focus could be studied by surveying

'Who reads what'; 'Information need' and such other themes. Customers' involvement is noticed in considering their suggestions.

G. Supplier Relationship and Performance Evaluation Strategy

Suppliers' quality focus and involvement are important aspect of quality management. Product and services influences organizations' ability to satisfy customers' needs and demands. Ahire...et al (1996) suggests six indicators for measuring the extent of supplier quality-management efforts. They include- relative importance that a company places on the quality of purchased products, on supplier's technical capability, on supplier's financial capability, on supplier's delivery performance, on providing technical assistance to suppliers, and on long term relationships with suppliers. To measure supplier's performance related to quality management they propose a six- item set of indicators- the performance, conformance, reliability, and durability of supplied parts, cooperation of suppliers in resolving quality problems, and supplier's willingness to improve quality.

Vendor relationship and performance is also viewed as important factor in quality management. Ravichandran and Rai (2000) propose a two-item scale for measuring vendor participation in information systems- 1. Establishing long-term relationships with vendors and consultants 2. Making vendors and consultants an integral part of the system process.

In LI centers purchase of technology equipment and devices require effective negotiation relation management with suppliers; even when outsourcing some of the functions of LI centers these indicators and scales may help. When purchasing documents- both printed and electronic media few of these are useful. Supplier relationship and performance evaluation have become increasingly important in quality assurance.

H. Benchmarking Strategy

Benchmarking has a long history in China and Japan. 'Dantosu' a Japanese word meaning 'the best of the best' give a concrete idea of benchmarking. Juran (1978) compared Japanese and United States methods and results for quality management Camp (1989) noted that the first known comprehensive benchmarking in United States was carried out by Xerox in 1979; Motorola adopted this technique in 1980's. He noted,

Benchmarking

-is comparing one's own organization practices with the practices followed by Competitors and non competitors.

-is a part of continuous improvement process.

-it requires self-evaluation, identification of weak points... identification of processes, Policies and structures of interest.

Ideally in transforming conventional LI centers to new era modern LI centers and development of those already transformed, benchmarking the use of information technology is extremely useful. Since the technology changes rapidly and LI centers do not have adequate resources or time to internally evaluate the impacts of new technologies. Since centuries we are managing professional functions, services and activities with printed materials; a change in this raise several questions; however therefore we need to rely on the experiences of early adopters of the technology. It is wise to adopt best results from others experiences, than to undergo the trial and error process. Such examples are selection of software; adopting standards, methods and process, procedures, techniques, system planning, framing policies and rules.

CONCLUSION

Libraries and Information Centers is undergoing a paradigm shift. Comparing to the previous period of civilization, today the changes is totally different and rapid. The economic, political and social change and various technology innovations is affecting the ways to record, store and disseminate/distribute information to all people who need. In the new economy structure, the quality, efficiency of access, are becoming increasingly important

As like business firms LI centers are compelled to give more using lesser resources. These are also expected to generate revenues. Considering the trends dictated by experts in vast amount of literature published the reality in challenges and complexities in front of us; the above discussed factors of total quality management applicable in LI centers is analogous and significant.

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