

Total Quality Management in Libraries and Information Centers

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Abstract : *Organizations all over the world today are becoming customer-oriented organizations to survive. There is, therefore, the need to provide quality products and services to their customers. Total Quality Management affords the relevant tools and the direction to provide and improve quality. Libraries and information centres are part of a service organization which delivers products personally to the customer. Libraries and information centres have always been implementing and continue to commit to providing a high quality of services to its users. The primary purpose of libraries and information centres is to support the teaching, research, and other academic programs of its parent organization. This study sought to discuss issues relating to total quality management and its application in libraries and information centres. Total quality management was discussed from the perspectives of quality; quality management (quality planning; quality control; quality assurance; and quality audit); libraries, information centres; and the application of total quality management in libraries and information centres. In other to achieve quality in libraries and information centres, the study discussed the 6Cs (Commitment, Culture, Continues improvement, Cooperation, Customer focus, and Control) of total quality management and how they relate to libraries and information centres. The study concludes that total quality management in libraries and information centres ensures that the products and service delivery to patrons should be consistent with the established standard. In light of this, LICs must develop systems, philosophies, and strategies for managing quality.*

Keywords: Total Quality Management, Libraries, Information Centers, Quality, Quality Management time, and the right price.

1. INTRODUCTION

Organizations continue to embrace a series of activities to meet the needs of their customer and the community. The objectives of this series of activities are geared toward the satisfaction of their customers most efficiently and cost-effectively by maximizing the potential of all employees in a continuing drive for improvement. The application of total quality management (TQM) principles has been the fundamental business strategy by organizations in achieving these objectives (American Society of Quality, 2018). They have adopted TQM as a way of life for the continuous improvement of the quality of their products and services to their customers.

TQM requirements may be defined distinctly for a specific organization or may be in adherence to established standards, such as the International Organization for Standardization's ISO 9000 series. TQM can be applied to any type of organization. It was originated in the engineering and manufacturing industry/sector and has since been adapted for use in virtually every type of organization imaginable, including schools, hotels, churches, libraries and information centres etc. As a current focus of information providers, TQM is based on quality management from the customer's point of view. Quality to these organizations is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. In the context of libraries and information centres (LICs), quality is concerned with the provision and delivering of the right (qualitative and quantitative) information to the right person at the right place, the right

The National Accreditation Board (NAB) of Ghana conducts audits and inspections on the quality of service provided by educational institutions, including libraries and information service. Grants are linked to the outcomes of these assessments. In light of this, LICs must develop systems, philosophies, and strategies for managing quality. The primary purpose of LIC's is to support the teaching, research, and other academic programs of its parent organization. LICs are part of a service organization which delivers products personally to the customer.

2. TOTAL QUALITY MANAGEMENT (TQM)

TQM consists of an organization-wide initiative to install and make permanent a climate in which an organization continuously improves its ability to deliver high-quality products and services to satisfy their customers (White, 2019). It embraces the view that there is a need for continuous improvement of systems, processes, and assuring quality in an organization. In other words, TQM is a philosophy or concept aiming at satisfying customer/user need continuously (quality first time, every time, all the time) by involving everything/everyone (total) in the system and at a lower cost (management) (Uduk, 2015). TQM aims at bringing cultural change to an organization.

TQM's nature can be explained by some basic guiding principles. These guiding principles of TQM are also referred to as the "pillars of TQM" and TQM can only be successful if these principles are embraced (American Society of Quality, 2018). These are:

1. Good leadership: this is the process of ensuring that all the staff and employees are well motivated and very enthusiastic enough to work towards meeting the objectives of the organization.
2. Employee empowerment: this involves the proper delegation of responsibilities and authorities as well as the continuous development of employees through well-defined training programs. The employee must understand what to do, how to do it, and must be ready to review the progress of work.
3. Strategic quality planning: this refers to the ability to plan through the development of strategic goals and activities that are geared toward achieving quality.
4. Human resource development: this involves the recognition of the employees' potential as well as providing an enabling environment that encourages self-development through training in order to update, develop or improve their skills
5. Customer delight: this is the process of ensuring that products and services rendered always delight and meet the requirements of the customer. Knowing the quality standards of the product is the first step in the process of customer delight.
6. Continues improvement: TQM aims at continuous improvement. Knowledge of facts at all levels is an essential aspect of continuous improvement.

The concept of TQM can further be understood by identifying the key elements. These include quality and quality management

2.1. Quality

The term Quality is often used synonymously with many other terminologies such as performance; excellence and exceptional (high standards); consistency; fitness for purpose (meeting stated purposes); value for money; and transformative (transformation of the participant). Ibrahim (2012) identified five approaches to define quality:

1. Transcendent approach (Quality always exists)
2. Product-based approach (product meeting high-quality standard)
3. User-based approach (quality to meet user's requirements)
4. Manufacturing based approach
5. Value-based approach

ISO 8420-1986 defines quality as the totality of features and characteristics of a product, the process of service that bears on its ability to satisfy stated or implied needs". It also refers to the degree to which a set of inherent characteristics comply with a set of requirements or meets customer requirements and expectations (ISO 9000-2015). When it is associated with performance, quality denotes evaluation for comparative purposes; 'measures' of quality comprise norms and standards and judgments of quality are supported through the use of norm or criterion-referenced indicators. Where the measurement focuses on the student as a product

of education, quality is seen as 'value-based' by the process of education. When the emphasis is the management of quality, attention focuses on strategies for achieving or improving quality (Melby, 2014).

In the context of LIC, quality relates to

1. performance of the system (information system),
 - a. accuracy of the services;
 - b. adequacy of and need-based services;
 - c. timeliness of the services
2. quality and quantity of the material and information collection, processing, storage, retrieval, dissemination (textbooks, journals, Information Abstracts, Bibliographies, indexes, Bulletins, etc),
3. quality of information products judged in terms of defined norms or criteria, and
4. patrons (users) fulfillment/satisfaction in terms of value for money spent (cost-benefit) and value for information content (cost-effectiveness).

Therefore, TQM is dependent on how well the user or customer is informed about the opportunities and limitations of a product or service offered. User satisfaction level may also vary in terms of value for money and value for information content received.

2.2. Quality Management (QM)

QM is the process of ensuring that products or services are consistent with a set standard (UNMAS, 2016). Its focus is on both product and service quality and the means to achieve it. QM in LIC ensures that the products and service delivery to patrons are consistent with the established standard. TQM has four main constituents: quality planning; quality control; quality assurance; and quality audit.

Quality Planning (QP) according to ASQ (2018), is the process for identifying what quality standards are relevant to the production and delivery of product and services and who, when, why, and how to satisfy them. QP in LIC will usually design and formulate strategies concerning how to fulfil process, product, and service (deliverable) quality requirements. QP describes how to undertake the monitoring effort such as proper documentation of all procedures; training of staff and patrons; study design; data and information management and analysis; and specific quality control measures.

By planning the quality in LIC, one has to respect some principles:

1. Patrons (users) satisfaction comes first: Quality is defined by the requirements and satisfaction of the user of the LIC.
2. Prevention over inspection: It's better to avoid mistakes than to inspect the result and repair the defects. Mistakes can be costly and deadly. Give out or disseminate the only correct and right information to the patron.

3. Management responsibility: The costs of quality must be the responsibility of the management.
4. Continuous improvement: Becoming better is an iteratively structured process. Conscious efforts should be made to ensure continues quality and at all time to the patron.

The second constituent of QM is quality control (QC). ISO 9000 described QC as the process by which organizations review the quality of all factors involved in the production. In the LIC, QC includes the continue effort to review all the factors involved in the organization, processing and delivery of qualitative and quantitative information to the patron. In LIC, QC involves four major steps:

1. Setting performance and quality standards: the first step in the control process is to establish standards against which results can be measured. The standards the managers of the LIC desire to obtain in each key area should be defined as far as possible in quantitative terms. Standards expressed in general terms should be avoided. The standards need to be flexible in order to adapt to changing conditions.
2. Measuring actual performance (results/outcome): Measurement of performance can be done by personal observation, reports, charts and statements.
3. Compare actual performance with the set standards: If the control system in the LIC is well organized, a quick comparison of these with the standard figure set at step 1 is quite possible. A quick comparison of actual LIC performance with the standard performance is possible if the control system is well organized.
4. Take corrective actions when necessary: After comparing the actual performance with the prescribed standards and finding the deviations, the next step that should be taken by the manager is to correct these deviations. Corrective action should be taken without wasting of time so that the normal position can be restored quickly. These steps must be repeated periodically until the organizational goal is achieved.

According to Singh (2013), quality assurance (QA) It is a planned and deliberate action or activities instigated and carried out with the intent/purpose of maintaining and improving the quality requirement of a product or service. In the LIC which takes quality assurance seriously, QA is a means by which LIC can guarantee with confidence and certainty, that the standards and quality of its information provision and delivery are being maintained and enhanced. It aims at improving the quality of information delivery and learning for patrons. LIC's uses verification procedures (both formal and informal) in order to monitor quality and standards to a satisfactory standard and as intended. This act gives confidence and certainty to the patrons of the LIC.

The last constituent of QM is quality audit. Audit refers to the systematic and independent examination of data, statements, records, operations and performances of an

enterprise for a stated purpose. The audit process involves examining institutional procedures for assuring quality and standards and whether the arrangements are implemented effectively and meet stated objectives (Goodson, Mory & Lapointe, 2012). The underlying purpose of continuation audit is to establish the extent to which LIC's are discharging effectively their responsibilities for the standards of information retrieved and disseminated from their systems and the quality of the information provided to enable students to attain standards. In auditing any LIC, the auditor perceives and recognizes the propositions before him/her for examination, collects evidence, and evaluates the same. On this basis, the auditor formulates his/her judgment which is communicated through his/her audit report. The quality of the audit determines the quality of the information in the LIC system.

3. LIBRARIES AND INFORMATION CENTRES

The place for the collection of information (data) materials and resources in different formats properly processed and organized for effective use and easy retrieval by individuals or groups.

3.1. Libraries

Libraries are places in which reading materials, such as books, periodicals, and newspapers, and often other materials

such as music and video recordings are kept for use or lending. It can also be referred to as an organized collection of sources of information and similar resources, made accessible to a defined community for reference or borrowing (Chicago: ALA, 2010). Libraries are much more than a place to read books and journals. Libraries also house advanced electronic resources, including the Internet, digital library collections, remote access to a wide range of technology and instruction (Connel University Library, 2019). That is, they provide physical or digital access to material, and maybe a physical building or room, or a virtual space, or both. A library's collection can include books, periodicals, newspapers, manuscripts, films, maps, prints, documents, microform, CDs, cassettes, videotape, CDs/DVDs/VCDs, e-books, audiobooks, databases, and other formats. According to Alemna (2001), most libraries focus on one of the following:

- user services (connecting people to the information they need)
- technical services (ordering, cataloguing, and preparing materials)
- computer services (maintain library databases, software programming, web page design)
- administrative services (manage the library and services, negotiate contracts with vendors, supervise library employees, prepare budgets)

There are four major types of libraries:

1. **Academic libraries:** These are libraries that serve as the central or integral part of a college, university, or

other institution of higher/postsecondary education, managed to meet the information, teaching and research needs of its students, faculty, and staff. Larger institutions may have several academic libraries on their main or other campuses dedicated to serving specific schools/faculties such as law, engineering, and science libraries.

- Special libraries:** They are highly specialized libraries that serve a distinct user group with a restricted/limited collection area. Special libraries can be found in firms or special institution/organizations such as law, medical, government, nongovernmental organization, military/armed forces, corporate, museum or any others owned and operated by an organization.
- School libraries:** They exclusively serve the needs of a public or private school. They are usually part of the school system and serve students between Kindergarten to grade 12 or secondary schools. The primary purpose of these libraries is to support the students, teachers, and curriculum of the school.
- Public libraries:** As the name implies, public libraries serve the general public (communities, districts, cities and towns of all types). They serve from cradle to grave. Public libraries often have departments that focus on areas of service, such as youth, teens and adults.

3.2. Information Center

It is a place designed specifically for collecting, storing, processing, and retrieving information for dissemination at regular intervals, on-demand or selectively, according to the express needs of users. The centre may contain hard copy materials and or soft copy materials. In some cases, only electronic and online materials are made available and accessible by users or visitors. Just as libraries, an information centre may serve as the central or integral part of an institution, managed to meet the information and research needs of its customers and staff. Traditionally, it is sometimes referred to as libraries. However, modern professionals call it a learning resource centre or an information resource centre. The centre is usually staffed and managed by information specialists/professional called information officer or manager.

Sometimes, information centres are dedicated centre serving specific institution/organization such as law, engineering, and science libraries. The information stored in an information centre is usually in a summarized form. It may be in card files, on film, on punched cards, or on tape. The centre is less concerned with retaining large volumes of the collection of books, journals, and other publications since these materials are presumably available in libraries.

4. ELEMENTS OF TOTAL QUALITY MANAGEMENT IN LIBRARIES AND

INFORMATION CENTERS

The most important purpose for the implementation of a TQM process is to get the assigned task completed at the right time and with quality improvement. TQM in LIC consists of systems that use people, strategy, data, and effective communications to incorporate the quality discipline into the culture and activities of the LIC. In other to achieve quality in LIC's, some basic elements need to be implemented. These are known as the six (6) C's: Commitment, Culture, Continuous improvement, Cooperation, Customer focus, and Control.



Akrani (2012): The 6Cs of TQM

4.1. Staff Commitment

To ensure quality in LIC's, policies and objectives must be developed and implemented. These policies must be communicated to the staff of the LIC for them to understand and work with it. Effective communication of the policies plays a large part in maintaining morale, motivating, and commitment of staff at all levels of the LIC. The communications involve strategies, method, and timeliness. It will then be binding on all staff of the LIC and all the staff will participate in working toward achieving these common objectives. Furthermore, complete commitment from the staff of LIC can only be obtained after fear has been driven from the workplace, when empowerment has occurred, and management has provided the proper and conducive environment. High-performance work systems integrate continuous improvement efforts with normal business operations. Self-managed work teams are one form of empowerment. This will ensure a quality improvement commitment from all the staff of the LIC for the work assigned to them.

4.2. Quality Improvement Culture

The culture of improving quality in the LIC should be established. Quality culture is usually implemented due to the needs to be modernized in the LIC continuously to inspire staff to generated quality feedback. This will ensure staff comfort towards effective administration of assigned task.

4.3. Continuous Improvement in all Processes

TQM in LIC is a continuous process and not a program. This requires continual enhancement in all the related policies, procedures and controls laid down by the management of the LIC. There should be an endless pursuit of proficiency to do the task better.

4.4. Staff Cooperation

The application of TQM in LIC has a direct relationship with the total staff involvement during and after the implementation of the same. The experience and cooperation of the staff are utilized in the development of improved strategies and performance measures. This cooperation is realized much easier when the staff are involved in the policy formulation process and fully commit themselves to them.

4.5. Focus on Customer Requirements

The customer eventually determines the level of quality. No matter what a LIC does to foster quality improvement (training employees, integrating quality into the information management and design process, upgrading computers or software, or buying new materials) it is the customer who decides whether the efforts were worthwhile or not. TQM processes in LIC's are usually prepared by focusing on customers' needs, taste and preference, requirements and their expectations from the products and services delivery. The focus on customer requirement is significant to survive in the long-term and to build a prominent relationship between the LIC and the customers.

4.6. Implement Effective Control Measures

Control refers to the checking of actual and current performance/results against pre-determined standards contained in the plans, intending to ensure adequate progress and satisfactory performance. In the LIC, controlling consists of ensuring that all activities and output is being carried out per the plan which has been adopted, the orders which have been given, and the principles which have been laid down. Its object is to point out mistakes so that they may be rectified and prevented from recurring. The control helps in monitoring and measuring the performance of the LIC. The controls also help to rectify the deficiencies, if any, in the information delivery process. Usually, a checklist of control policies is formulated and included in all the documents or manuals of the LIC business practices.

5. CONCLUSION

Quality depends on factors such as raw materials, the process of production among others. LIC's are just like any organization/business that must be operated efficiently and well and also depends on many factors of production. They (LIC's) have adopted various management principles from business, industry, religion, and government in the management of the centres. Similarly, quality depends on collection development, technical process (applied to the collection, equipment, services rendered), information

dissemination, customer service, staff support and management, among others. This demonstrates that TQM is not only applicable to manufacturing industries but can also be applied to service industries such as LIC's.

The TQM in LIC is connected with services, product as well as staff and facilities. High-quality staff can transform even the poorest LIC into an operation offering excellent service. Because LIC's are service institutions, the quality in the context of LIC is often treated as the quality of service. In a service organization like LIC, customer satisfaction means fulfilling expectations. Librarians and information managers in LIC's need to be proactive by finding out what their readers want and ensure that they concentrate on providing it to their satisfaction. In a LIC, there are two types of customer: those who are in a hurry and those who want to kill time. A LIC has to identify these and serve them accordingly.

One of the possible means of ensuring quality and continuing improvement of products and services in LIC'S is the application of the ISO 9000 and 9001. The ISO 9000 family of quality management systems standards is designed to help organizations such as LIC's to ensure that they meet the needs and satisfy their customers and other stakeholders while meeting statutory and regulatory requirements related to their product are service delivery. The ISO 9001 deals with the requirements that organizations wishing to meet the standard must fulfil. All of the requirements of the ISO 9001 are generic and are intended to be applicable to all organizations such as LIC's, regardless of the type, size and product/services provided. The requirements are to fulfil the:

1. needs to demonstrate its ability to consistently provide products that meet customer and applicable statutory and regulatory requirements, and
2. aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

LIC's are the heart and centre stage of every institution (academic setup). Their prime purpose is to support the teaching, research, learning, and other academic programs of its parent institution. The quality of any LIC system depends on the satisfaction derived from the system by the customer. Therefore, the LIC's roles are very important and it is highly recommended to control their quality of services. Quality in LIC's depends on:

1. the collection of documents and their technical processing by applying certain techniques and methods,
2. the skills of employees,
3. equipment and processing,
4. the period of service to be rendered, and
5. the attributes of services which are to be rendered.

In the LIC's, TQM can be implemented by the head librarian or information manager. The information manager must find out what the patrons want and concentrate on providing it. In practising TQM in the LIC, the information manager must always remember that the customer/patron is the most important visitor on our premises. Thus, the customer/patron is not dependent on us (information providers). Rather, we are dependent on them. The information manager practices TQM by putting some systems and structures in place. They include:

1. Asking the vendors to give product demonstrations
2. conducting a patron/user survey about LIC's services
3. creating service brochures, posters, and handbill,
4. developing an active and effective outreach program,
5. implementing and promoting effective interlibrary loan facilities,
6. improving the signage and physical layout of the LIC,
7. offering electronic document statement,
8. publicizing new or changed and improved services,
9. smoothing the acquisition and collection development procedures,
10. designing target services to specific groups,
11. implementing and using new technologies for easy information retrieval,
12. developing patron/user and staff training materials,
13. developing and organizing effective orientation for new staff and users,
14. motivating the staff,
15. training and development of staff,
16. using flexibility in staff assignment.

Successful application and implementation of TQM principles in LIC require deciding on the customers/patrons to whom LIC aims to serve, assessing their needs, and deciding on the services. In light of this, LICs must develop systems, philosophies, and strategies for managing quality. The primary purpose of LIC's is to support the teaching, research, and other academic programs of its parent organization. LICs are part of a service organization which delivers products personally to the customer.

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