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AN OVERVIEW OF TQM IN LIBRARIES

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[*This paper discusses the evolution, principles, stages of TQM. It points out the difference between traditional organization and TQM organization. It also discusses the implementation of TQM in Libraries and the practice of TQM in Libraries*]

1. INTRODUCTION

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 has always been committed to provide a high quality of services to its users. In the past, consuming more resources, buying more books, and moving to large premises are considered as improving quality. But that approach is not valid today. One of the good solutions to improve quality is to provide right information to a right user at right time. This requires a through change in the approach – an approach based on user requirements and user satisfaction. It is believed that this can be achieved by implementing TQM. Thus, TQM approach is slowly getting popular in today's libraries.

2. DEFINITION

2.1. Quality

Quality is concerned with meeting the wants and needs of customers. One of the key and enduring definitions is that, "Quality is fitness for purpose." According to the British Standard (4778 (1987) (= ISO 8402, 1986)), quality is defined as, "the totality of features and characteristics of a product of service that bear on its ability to satisfy stated or implied needs."

2.2. TQM

According to British Standard BS 7850, TQM is defined as, "Management philosophy and company practices that aim to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization."

Capezio & Morehouse defines TQM as follows: "TQM refers to a management process and set of disciplines that are coordinated to ensure that the organization consistently meets and exceeds customer requirements. TQM engages all divisions, departments and levels of the organization. Top management organizes all of its strategy and operations around customer needs and develops a culture with high employee participation. TQM companies are focused on the systematic management of data of all processes and practices to eliminate waste and pursue continuous improvement."

In general, total quality management is defined as follows (Kanji):

Quality – is to satisfy customer's requirement continually

Total Quality – is to achieve quality at low cost

Total Quality Management – is to obtain total quality by involving everyone's daily commitment.

3. RATIONALE FOR TQM

Today's customers expects and accepts only high quality products and services. They Are ready to pay and even ready to change their supplier for high quality. The best way to produce quality is to continually improve people, processes, and environments – which is easily achievable through TQM.

4. EVOLUTION OF TQM

Four stages can be identified in the evolution of TQM. They are

- Inspection-based System
- System of Quality Control
- Quality Assurance
- Total Quality Manangement

Qulaity Management started with simple Inspection-based system, where a product was compared with a product standard by a team of inspectors. First revolutionary charge – System of Quality Control came along with II World War. At that time quality was achieved through control systems, product testing and documentation control. In the Quality Assurance stage, there was a change from product quality to systems quality. Typical of this stage were quality manuals, quality planning and advanced document control. Quality assurance is prevention-based.

The fourth stage of development was TQM. A clear and unamibiguous vision, few interdepartmental barriers, staff training, excellent customer relations, emphasis on continuous improvement, and quality of the company as a whole are typical in a TQM environment.

5. TQM ORGANIZATION .VS. TRADITIONAL ORGANIZATION

A Total Quality Management Organization is not the same as a Traditional Organization. The following table gives the actual differences between TQM Organization and Traditional Organization. (Bacal)

Traditional organization	**Total Quality Management organization**
1. Company-driven	Customer-driven
2. Short-term orientation	Long-term orientation
3. Opining-driven	Data-driven
4. Tolerence of waste	Elimination of waste
5. Fire fighting	Continuous improvement
6. Inspection	Prevention
7. Fortressed departments	Cross-function teams
8. Top-down hierarchy	High employee participation
9. Blame	Problem-solving
10. Isolation	Systems Thinking
11. Management	Leadership

6. TQM PRINCIPLES

TQM basically empahsis on continuous performance output. By adhering a set of general governing principles, TQM achieves this. The principles are (Kanji and Asher) :

6.1. Delight the Customer

This principle focuses on understanding and meeting the customer needs. The core concepts that relate to this principle are ‘Customer Satisfaction’ and ‘Internal customers are real.’

6.2. Management by Fact

Having the facts necessary to manage the business at all levels is the second principle of total qulaity. If we know where we are starting from, we can measure our management. Decisions must be based upon facts for contionous imporvement. The core concepts of Management by Fact are 'All work is a process' and 'Measurement.'

6.3. People-based management

The role of people is more important than systems, standards, and technology. Without people quality cannot be produced. 'Team Work' and 'People make Quality' are the core concepts of this principle.

6.4. Continuous Improvement

Growth of competitors and more expectations of customers necessiates the continuous improvement. The core concepts are 'Continuous improvement cycle' and 'Prevention.'

7. STAGES OF TOTAL QUALITY MANAGEMENT

The process of implementing total quality management in an organization can be developed in the following four stages (Kanji and Barker):

7.1. Identification and preparation

-- Identifying and collecting information about the organization in the prime areas where improvement will have most impact on the organization's performance.

-- Preparing the detailed basic work for the improvement of all the organization's activities.

7.2. Management understanding and commitment

-- To make sure that the management understands the objective and methodology of total quality management and are prepared to adopt them all the time.

7.3. Scheme for improvement

-- Identify and resolve quality issues by involving all management and supervision in a proper scheme of training and communication.

7.4. New initiative, new target and critical examination

-- Start new initiative with new targets and take the complete improvement process to everybody indicating supplier and customer links in the quality chain.

-- Obtain information about progress and consolidate success.

8. TQM IN LIBRARIES

Among the service industries such as Airlines, Banking institutions, Insurance companies and Health care providers, Libraries are the last to adopt TQM practices. For a long time, Librarians saw themselves as keepers of knowledge rather than active agents in information transfer. Though the main aim/objective of libraries is to satisfy the users, the library professionals often forget that. But todays libraries are pushed to a position where they have to provide quality services to its users, to justify their existence. So, now libraries are also started adopting TQM practices following other kinds of service industries.

8.1. Benefits of TQM in Libraries

If implemented carefully, quality management principles yield positive benefits libraries such as (Miller & Stearns):

- Incremental changes lead to continuous improvement – quick solutions may yield only partial results.
- Forces library managers to develop leadership skills interested of replaying on power within position to obtain results.
- Increase staff participation in decision-making, thus increasing the feeling of "ownership" of decisions and directions once charted.
- Improves the level of training given to staff, thus increasing skills.
- Helps break down barriers between library departments and improves communication within the organization.
- Provides a method of improving services to users in a period to similar resources.

8.2. Possibilities of TQM in Libraries

The rapid growth of the library-focused TQM electronic discusstion lists and TQM related articles in the library professional literature illustrates the interest of Library field in TQM and its various processes. A large number of libraries are at least considering if not actually implementing, this new-user oriented, teamwork-based process for continuous quality improvement.

Let us discuss, how the quality of library operations and services will be improved by implementing TQM. For example, let us see how the quality of acquisition service can be improved by TQM. Acquisition is one of the basic activities of a library. The process of ordering and acquiring the selected materials are known as acquisition. How TQM will help in improving the quality of acquisition function? A total quality tool 'Flow chart' will considerably improve the quality of acquisition.

In any acquistion system, one has to follow the following steps, to acquire a document. (For convenience purpose, the flow chart is not drawn with standard flow chart symbos, instead steps are written)

1. Receiving the suggestion for a document
2. Checking the bibliographic data with
   a) trade catalogue
   b) books in print
3. Check its avaialbility within the library
   a) by checking the catalogue
   b) by checking with the already ordered documents list
4. Determine its cost
   a) from the standard sources
   b) from the vendors
   c) from the publishers
5. Get the invoice, if required
6. Determine whether the fund is available

   If the answer is yes go to step 7

   If the answer is no then wait till the fund is available or try to get the extra fund
7. Select the vendor
   a) based on vendor rating studies
   b) based on other methods
8. Place an order
   a) with certain conditions
   b) without any condition
   c) if there will be any advance payment then clear the payment from accounts department and enter the details in file
9. Send reminders if the document is not received in time
10. If the vendor is taking long time or unable to provide the document then cancel the order and repeat steps 7 and 8

11. After receiving the document
    a) check its bibliographic data
    b) check its cost
    c) settle the payment if it is due
12. Enter the details in access register

The acquisition section staff member can easily understand the steps involved in the process with the help of a flow char, drawn based on the above steps. Now one can check till which stage the process has come. And with a flow chart one can determine where the problem occurs, if any, and why it occurs.

Like this we can attempt to develop flow charts for many of the library functions. Let us take, another example, discharging of a document. The flow chart for that function will have the following steps.

1. Document returned by the user
2. Look for charge-out card
3. Check whether the document is overdue?
    a) if yes collect fine or send notice
    b) if no go to step 4
4. Check whether any other user reserved that document
    a) if yes, notify the user and place on hold shell
    b) if no, discharge the document and pass it on to shelving

Like flow charts, there are other total quality tools, such as fish-bone diagram, pareto analysis, control chart , which will help in identifying and solving the problems of library operations and thus improves the quality of the functions.

8.3. Barriers, Potential Problems, and Opponents

A number of barriers to the implementation of TQM has been encountered in all types of organizations, including libraries. Some of them are listed below (Miller and Stearns).

1. The view that this is only another management fad of the day
2. Management's fear of the loss control
3. Employee reluctance to recommend changes because of fear of the management
4. Business and industrial background of TQM might not lend itself to the non-profit sector, including libraries.
5. TQM requires a long-term investment of time over several years as processes are analyzed and an organization's culture is changed. This can cause resistence and other difficulties in these days of increasing financial and other pressures.

What are the problems in implementing TQM? Problems can exist in establishing a good relationship between management control and promoting employee empowerment. Another problem encountered is related to TQM statistical tools. An inappropriate emphasis on these tools in complex service organizations such as libraries may result in TQM and its goals being regarded as unattainable.

8.4. TQM process in Practice

To which extent TQM process is in practice in libraries? The two surveys, one conducted for the LAMA Total Quality Management for Libraries Discussion Group using the TQMLIB (1994), and the other conducted by the Association of Research Library's Office of Management Services for its SPEC kit and Flyer (1993) on Quality improvement programs in ARL libraries brings out the facts.

The fact that TQM is a recent understanding for most libraries is shown clearly in LAMA survey. Both of the surveys point out that libraries undertaking TQM are in a

variety of stages and are using a wide range of approaches, and a relatively small number of libraries were actively involved in formal quality programs.

The SPEC Flyer indicates, however, that,

> It is clear that those who have turned to quality improvement programs have done so eagerly and with a strong sense of commitment. The fact that they recognize the value of a philosophy that emphasizes quality of service to library users first is indicated by the wide variety of library functions in which they are currently applying quality improvement techniques. The number of members adopting quality improvement programs should increase rapidly in the next few years as those members currently considering a commitment to such a program make their decisions and others hear about the success of their fellow member libraries. (ARL, 1993)

8.4.1. Academic Libraries

The ARL Spec Kit provides a good deal of information on quality improvement programs in specific academic libraries. Duke University, the University of Minnesota, and the State University of New York at Buffalo are some of the good models for libraries implementing TQM.

Academic libraries are following different approaches in their TQM process. Some academic libraries undertaking TQM or CQI (continuous quality improvement) as a library-wide effort address established library procedures on a step-by-step basis. Example are: Oregon State University Library and Georgia Tech Library. Others take a broader and more far-reaching approach as far as impact on the library as an organization. Three good examples are the quality improvement activities at the Harvard College Library (HCL), Perkins Library at Duke University, and Davis Library at Sampson University. In some of the academic libraries they are concentrating on quality improvement in specific services only such as Reference service, Technical service and Access service.

8.4.2. Special Libraries

Quality improvement efforts have a longer history in special libraries in other types of libraries, as the professional literature indicates. Because quality assurance process have been well-established in the health care field for some time, some of the earliest library quality improvement efforts are seen in medical and hospital libraries. Quality efforts in libraries in the corporate sector, however, are not far behind.

8.4.3 Public and School Libraries

Although the literature on quality improvement in public or school libraries is not prevalent, there is good evidence that these libraries are also undertaking quality efforts.

In public libraries, current efforts that are taking a TQM approach are often, but not always, part of a city-wide quality improvement initiative. A good example is the Austin Public Library. The fruits of these efforts are seen in the financial support the library receives, with a budget that is a bit better than budgets for most urban public libraries in the financially strained state. The St. Paul Public Library is another library that is undertaking quality improvement as part of a city-wide effort. Evidence of other quality efforts in public libraries is seen in accounts of the use of qulaity circles in libraries, including some Chicago Public Library branches, the Duluth Public Library, and the East Brunswick Public Library in New Jersey.

TQM efforts for school libraries often are part of the movement in education toward what some in the field call “total quality education.” This has involved changing the management structure to provide educators, including school library media specialists, with the opportunity to become active participants in site-based management. This means empowering them “to make local decisions on curriculum as well as management.”

9. CONCLUSION

From the review of the current status of quality improvement activities in libraries, it is evident that TQM or closely related approaches are not just "flavours of the month" or "fads of the day." Many libraries are practising quality in the form of Quality Assurance, Continuous Quality Improvement, User Satisfaction, etc., if not in the form of TQM. The success of TQM will vary from library to library as each library is different from the others. The realities of the current library situation indicates that quality improvement is essential not only for survival but for facing major changes and growth required for the libraries of today and tomorrow.

10. REFERENCES

1. Bacal, Robert TQM in The Public Eye www.escape.ca/~rbacal/tqm1.htm
2. Boelke, J.H. Qulaity Improvement in Libraries: TQM and Related approaches, Advances in Librarianship, Vol. 19
3. Bossink, B.A.G., Gieskes, J.F.B. and Pas, T.N.M. Diagonising TQM – Part I, Total Quality Management, 1992, Vol. 3, No. 3
4. Brockman, J.R. Just another management fad? The implications of TQM for library and information services, ASLIB Proceedings, 1992, Vol. 44, No. 7/8
5. Brophy, Peter and Coulling, Kate Quality Management for Information and Library Managers
6. Dotchin, John A. and Oakland John S. Theories and concepts in TQM, Total Quality Management, 1992, Vol. 3, No. 2
7. Elshennawy, A.K., Maytubby, V.J. and Aly, N.A. Concepts and attributes of TQM, Total Quality Management, 1991, Vol. 2, No. 2
8. Encyclopedia Of Library and Information Science, Quality Management principles and methods in Library and Information Theory & Practice, Vol. 56
9. Encyclopedia Of Library and Information Science, Total Quality Management, Vol. 61
10. Kanji, G.K. and Asher, M. Total Quality Management Process: a systematic approach, a supplement to Total Quality Management Vol.4, 1993
11. Kanji, G.K. Education, training, research and consultancy – the way towards for total quality management, Total Quality Management, 1991, Vol. 2, No. 3
12. Kanji, G.K. TQM: the second industrial revolution, Total Quality Management, 1990, Vol.1, No.1
13. Kehoe, D.F. The Fundamentals of Quality Management
14. Miller, R.G. and Stearns, B. Quality Management for Today's academic library, College and Research Library News, 1994, Vol. 55

15. Morrison, C.M. and Rahim, M.A.Adopt a new philosophy:the TQM challenge, Total Quality Management, 1993, Vol. 4, No. 2
16. Porter, L.J. and Parker, A.J. TQM – the critical success factors, Total Quality Management, 1993, Vol. 4, No.1
17. Stuart, C. and Drake, M.A. TQM in Research Libraries, Special Libraries, 1993, Vol.84
18. Wilkinson, Adrian and Redman, Tom Managing with TQM – Theory & Practice