May 2015

IJRSS

Volume 5, Issue 2

ISSN: 2249-2496

RELEVANCE OF TOTAL QUALITY MANAGEMENT FOR ENGINEERING ACADEMIC LIBRARIES IN BANGALORE CITY: AN OVERVIEW

Dr. T.R.Sridevi[*]

ABSTRACT

In the present working environment libraries are on par with other manufacturing sector, banking, hospitals etc. with regard to maintain and execute quality library services to its stakeholders. Libraries are constantly updating all their library services to meet its own stakeholders for retrieving of quality information from various sources namely books, e-journals, printed journals and e-books. The speed information is transmitted, it is the responsibility of the library professionals to update and enhance their skills in all areas to provide efficient quality information. Quality in any library depends on the physical facilities – ambience, library collection- apart from prescribed books availability of other books and reference books, duration of processing new books and displaying the same, enhancement of library professional skills. Total quality management is a continual endeavor for development of library staff, understanding their reader's requirement, understanding the work procedure to sustain, evaluate and improve performance continually. There were around 15 engineering colleges in Bangalore city considered for the study and around 500 respondents the questionnaires were circulated. This paper is a review of applying total quality management indicators and applications to library services in engineering college libraries.

Keywords: Quality management, Library services, Quality indicators, Academic libraries.

[*] Librarian, R.V.College of Engineering, R.V.Vidyanikethan Post, Mysore Road, Benguluru 560 059

A Quarterly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage, India as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Research in Social Sciences
http://www.ijmra.us

157

1. Introduction

Total quality management is created by W. Edward Deming, TQM is a method by which management and employees can become involved in the continuous improvement of its products and services. Joseph Juran has defined quality as fitness for use. Quality management system is a process to achieve maximum customer satisfaction at the lowest overall cost to the management while continuing to improve the process.

Quality management is an essential tool in any engineering library to provide better quality services to all its stakeholders in form of providing improved services, procurement of quality books and publishing quality work in any reputed journals.

For constant improvement of library services any engineering libraries should develop a model developed by Deming that is Plan, Do, Check, Act (PDCA). In a library environment plan indicates to design library functions and services that meets the objectives of library which in turn meets the requirement of the stakeholders in libraries. The second quality improvement is Do that means to implement the plan that is suitable to improve and measure library services. The third improvement is to check, that is to monitor and measure the process of library activities and services which meets the policies, objectives of the libraries and the institution. The last quality improvement is to Act that is to decide on changes that is needed to improve the library process and accomplish the continually improved library function and services.

The next section highlights about the application of quality management in engineering libraries for improving library services.

Total Quality Management Applications of Library Services through Quality Indicators:

1. Provide guidance through information literacy programme libraries are required to conduct information literacy programme to various group of readers in their institutions. This not only helps the library professional to get their readers know better also helps the readers know more on library activities and its service provided by the library professional.

2. Minimize time in retrieving books for borrowing - library professionals should ensure that the return books and readers referred books needs to be placed in its own place to avoid the readers taking longer time in retrieving the books from the rack.

3. Minimize transaction of books viz. issue / renewal or return time – separate counters can be kept for transaction of books /renewal and returns which in turn will not make the reader wait longer time.

4. To train library staff to be more approachable, available and courteous while handling readers query in library – library professionals need to have patience and good listener to help its readers get the required information.

5. To ensure books are correctly placed in respective racks for ease of the readers – to ensure that the returned books are stacked in its respective place, library professional need to check if the books have reached its right place and every reader get their required books.

6. To check the arrival of new documents to library within the time frame – to process new books on the stipulated time and make them reach the readers, to display the new arrivals for the reader's reference. To ensure books are made available to its readers immediately after processing.

7. To enhance on good use of information communication technology – to make use of good digital library usage – for accessing the e- resources by students / faculties.

8. To enhance on library ambience – The ambience of the library should be pleasant, calm and quiet place for reading with well stocked, arranged books, and e journals/ magazines.

9. Reader's feedback / suggestion to be monitored and necessary justification / corrective measures to be carried out systematically to provide a smooth functioning of library.

2. Literature Review

In the study application of total quality management in university library, the author (1), discusses about the aim in developing the theoretical understanding of the basic principles and methods connected to total quality management, further the author (1), speaks about the five pillars of TQM that is the product (Services), process, organizations, leadership, commitment where the author (1), refers organization rights which relates to proper leadership. Each pillar depends upon the other four if one is weak then all are weak. Further the author(1), speaks about the benefit of total quality management in libraries in which the author highlights the enhancement of staff contribution in decision making which helps in increasing the feeling of ownership of decision and directions, author (1), concludes by speaking about the library services which is further been used for analyzing its effectiveness.

TQM in the present environment is not only been used in manufacturing sector but also in hospitals, banks, academic institutions, library and information centre's sectors. Author (2), in the paper TQM in libraries: challenges to stimulate changes for library which means effectively integrating all its activities and functions for the readers, further the author (2), speaks on the performance, excellence like leadership, strategic planning, customer focus and satisfaction, human resources development, management of process quality, information and analysis, business results, how the libraries here improved the services with TQM is highlighted by the author (2), which indicates the

principles of TQM to enhance library services by creating information literacy manuals, conducting readers orientation program and highlight various section of library through signage, further the author(2), highlights on advantage and disadvantages of total quality management and concludes that libraries are the suitable place

There is a steady increase in the amount of materials dealing with its applications to the service sector, but very little that relates to applications to TQM to libraries. The author (3), identifies the customer's needs and their problems to be solved and to ensure continuous satisfaction. The library should provide the best service possible and be willing to change. The other aspects the author (3), has covered is the tools of TQM namely flow chart, cause and effect analysis, histogram and bench marking, also highlights the relationship between library services and TQM like its definition, priorities, decisions, emphasis, errors, responsibility and manager's role. Further author(3), speaks about the benefits of TQM in libraries is to bring about incremental changes which leads to continual improvements, quick solutions may lead only partial results, improves the levels of training given to staff by increasing skills, breaks down barrier between library and departments to improves communications within the organization with this the author (3), concludes that by implementing the strategic plan and following it with commitment to continual quality improvements which in turn improves library professionals in providing effective library services.

In present generation we live in an information society and we are constantly receiving information from all scopes of our lives. In this paper quality based recommender system, the author (4), highlights on World Wide Web as a medium to collect information, disseminate and access the same. The author had various studies taken with regard to the dissemination of information. Among those studies the most important method to generate the recommendation to a user is based on the other user recommendation with similar user profiles.

Recent studies on total quality management shows there is a sudden shift in the application of TQM from manufacturing sector to service sector where a voluminous studies have been undertaken as stated by the author (5), says a strong place in all sections has emerged out as an approach for the process improvement, reduction in waste, business optimization and quality improvement. The author (5), explores the literature on TQM in service organizations, as well as records for its failure, further the author provides systematic guidelines for effective implementation of TQM in the service organization. The findings the author (5), highlights on the growth of service sector automation at every level within service organization, improvement in quality of life, entertainment, travel and hospitality. The author (5), concludes with implementation stating to identify the key TQM practices for the organization and create an environment to implement and restrain them by force to breakdown the TQM practices into sub – categories, activities or task and form

improvement teams, frequently review and improve the quality plans and measures performance. Further the author (5), concludes his study to make a real contribution in terms of understanding the service system and the reasons for its growth, understanding TQM in service organization and its impact knowing what causes TQM failure.

3. Objectives

1. To understand the basic principles of TQM that can be associated and practiced in library.
2. To study the progress of TQM applications in libraries through quality indicators.
3. To identify service quality indicators for academic libraries.
4. Analyzing the effectiveness of library services in academic libraries.

4. Service Quality Indicators for Academic Libraries:

1. Library has to be a thoughtful place.
2. Library professional should be ready to respond to the users library related queries.
3. To provide timely document delivery / inter library loan facility.
4. Library professionals to provide library services at the stipulated time for any query raised by the readers.
5. To provide instruction and guidance for library use when requested by the readers.
6. To make information easily accessible for individual use.
7. Making electronic resources accessible from anywhere internet based through proper authentication.
8. To provide convenient and easy access to library collections.
9. To facilitate self directed research.
10. To provide prompt services to all the stakeholders.
11. Providing user's directions to self navigate the library.
12. Updating readers with up to date information about the library services, activities.

5. Analysis of library services in engineering academic libraries:

The effectiveness of library services was analyzed using percentage and represented in form of barcharts.

Below mentioned services were randomly collected from various engineering academic libraries, the same were considered as parameters for evaluating the effectiveness.

1. Document acquisition
2. Document circulation
3. Reference service
4. Library membership service

5. Library database (OPAC)

6. Digital library

7. Inter library loan facilities

8. Information literacy programme

9. Reprographic service.

Table 5.1 Effectiveness of Document Acquisition

Document Acquisition	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	200	40%
Very Good	500	150	30%
Good	500	100	20%
Average	500	25	05%
Below Average	500	25	05%
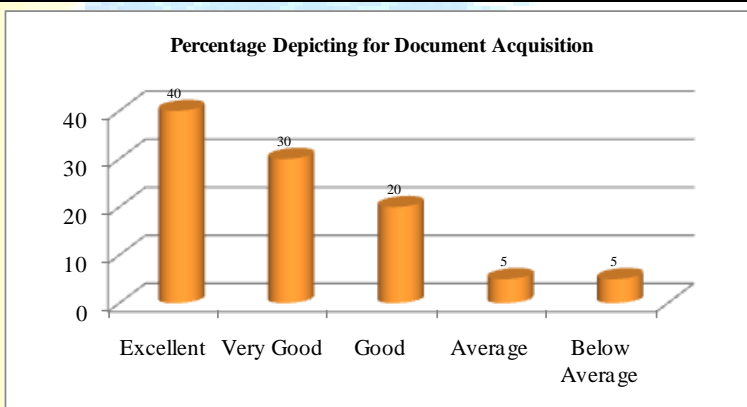
Figure 5.1 Percentage depicting for document acquisition

The above figure .5.1 provides information about the document acquisition in library. Out of 500 respondents 40% of the respondents feel that the service was excellent, 30% of the respondents feel the service was very good, 20% of the respondents felt the service was good and 5 % of respondents feel the service was below average.

Table 5.2 Effectiveness of Document Circulation

Document Circulation	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	350	70%
Very Good	500	100	20%

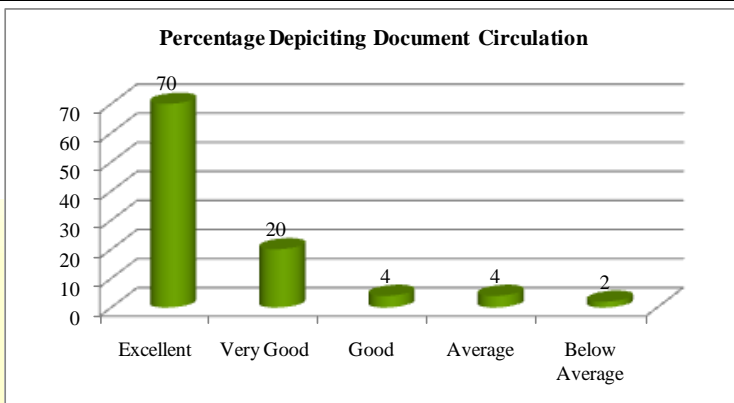| Good	500	20	04%
Average	500	20	04%
Below Average	500	10	02%

Figure 5.2 Percentage Depicting Document Circulation

The above figure 5.2, highlights on the information document circulation where it is seen that 70% of the respondents has said the document circulation service to be excellent, and 20% of the respondents have said it to be very good and 4% have responded as good, average service, these two needs to be strengthened by interacting randomly with the stakeholders and trying to modify accordingly.

Table 5.3 Providing Effective Reference Service

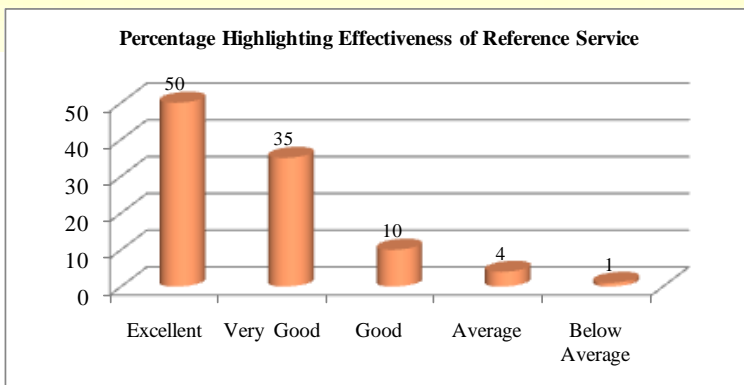| Reference Service	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	250	50%
Very Good	500	175	35%
Good	500	50	10%
Average	500	20	04%
Below Average	500	05	01%

Figure 5.3 Percentage Highlighting Effectiveness of Reference Service

The above figure 5.3, highlighting on the effectiveness of reference service, out of 500 respondents 50% of the respondents have said as excellent, 35% respondents have replied as very good, and a small 1% of the respondents have responded to below average, it is clear that the reference service is been utilized to the maximum level.

Table 5.4 Membership Service

Membership Service	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	200	40%
Very Good	500	150	30%
Good	500	100	20%
Average	500	25	05%
Below Average	500	25	05%

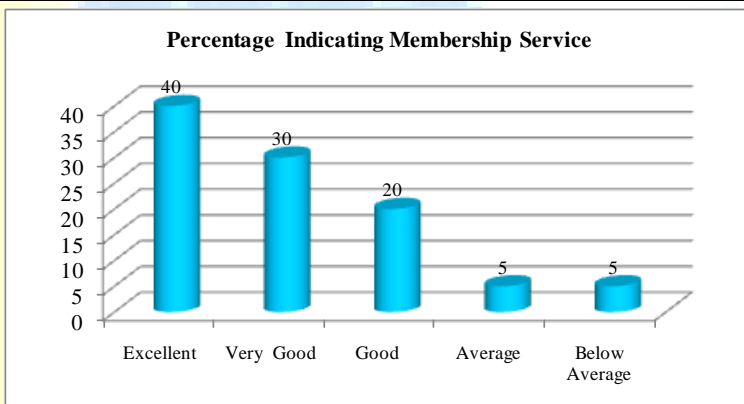**Percentage Indicating Membership Service**

Figure 5.4 Percentage Indicating Membership Service

The above figure 5.4 speaks about the membership services in the institutions, it clearly denotes that 40% of the respondents have excellent service and 30% have indicated as very good, the inference we see is that the libraries are providing good services to its stakeholders and there is a regular utilization of library. The least is the 5% indicates below average.

Table 5.5 Highlighting Usage of Library Database (OPAC)

Library Database (OPAC)	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	175	35%
Very Good	500	150	30%

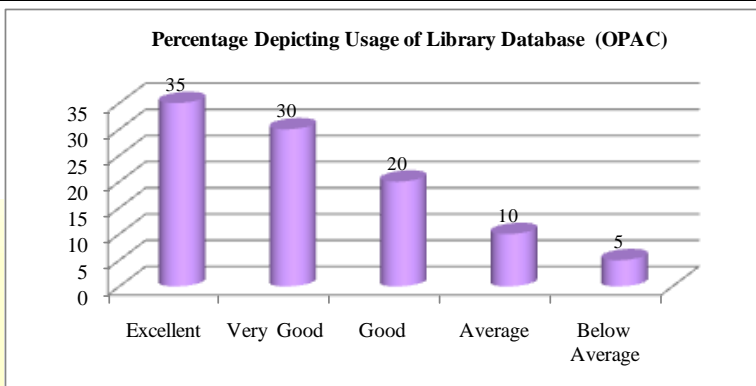| Good | 500 | 100 | 20% |
| Average | 500 | 50 | 10% |
| Below Average | 500 | 25 | 05% |

Figure 5.5 Percentage Depicting Usage of Library Database (OPAC)

The figure 5.5, highlights about the percentage depicting usage of library database (OPAC) now a days all the institution are acquiring library software and are continuous updating their service by providing the stakeholders use the OPAC at their workstation to check the availability of library resources. The above figure 4.5 indicates excellent with 35% been the highest and the least is the 5% which highlights as below average

Table 5.6 Usage of Digital Library

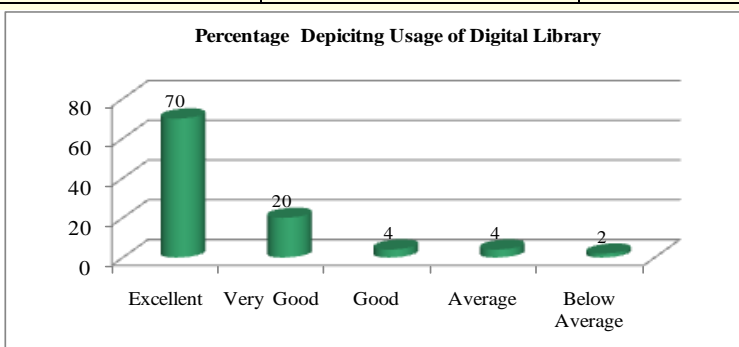| Digital Library	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	350	70%
Very Good	500	100	20%
Good	500	20	04%
Average	500	20	04%
Below Average	500	10	02%

Figure 5.6 Percentage depicting usage of digital library by the stakeholders

Percentage depicting the usage of digital library by the stakeholders in the figure 4.6, indicates 70% of the respondents have responded to excellent usage of digital library, where they are satisfied with various different kind of electronic resources being utilized in the digital library, the stakeholders are able to access to all the resources to meet their educational objectives of the institute.

Table 5.7 Inter – Library Loan facility

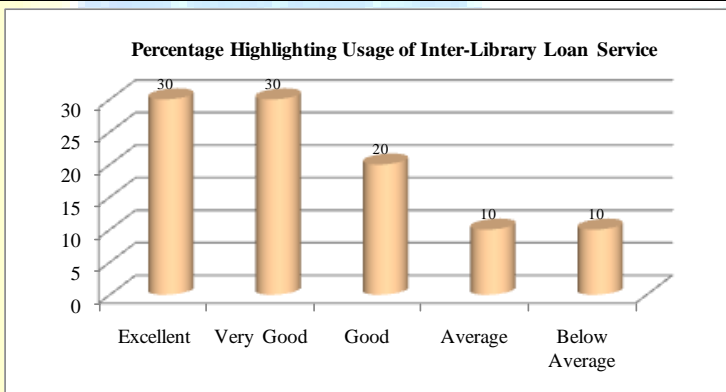| Inter-Library Loan Service	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	150	30%
Very Good	500	150	30%
Good	500	100	20%
Average	500	50	10%
Below Average	500	50	10%

Figure 5.7 Percentage Highlighting Usage of Inter –Library Loan Service

In the above figure 4.7, highlighting percentage on usage of inter – library loan services by the stakeholders shown as 30% of the respondent marked on excellent and very good, where as 20% of the respondents have marked as good followed by 10% of the respondents marked as average and below average. The respondents are satisfied with the service as they are able to get on time the non availability of materials through inter-library loan from their own libraries.

Table 5.8 Effectiveness of Information Literacy Programme

Information Literacy Programme	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	350	70%

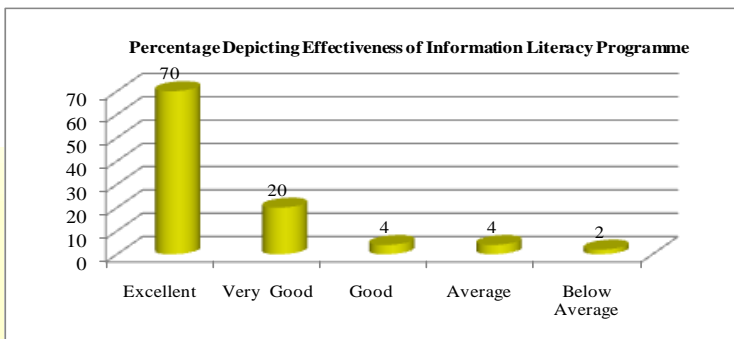| Very Good | 500 | 100 | 20% |
Good	500	20	04%
Average	500	20	04%
Below Average	500	10	02%

Figure 5.8 Percentage depicting effectiveness of information literacy programme

The figure 5.8, depicts on the effectiveness of information literacy programme, 70% of the respondents have responded for excellent as they are been guided as to how to use the library and the library resources at the time of orientation.

Table 5.9 Effectiveness of Reprographic Service

Reprographic Service	No. of Respondent	No. of Response Received	Percentage %
Excellent	500	150	30%
Very Good	500	200	40%
Good	500	50	10%
Average	500	50	10%
Below Average	500	50	10%
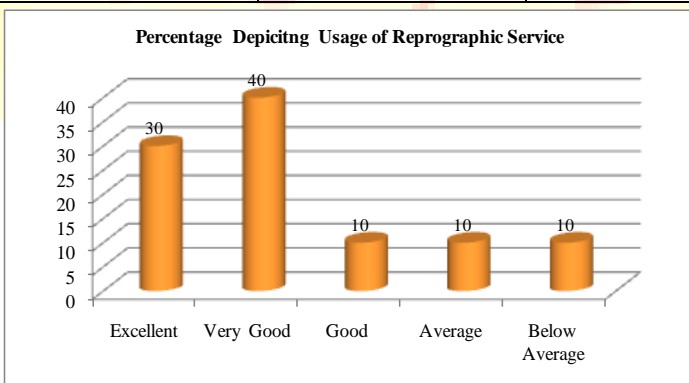
Figure 5.9 Percentage depicting usage of reprographic service

International Journal of Research in Social Sciences
http://www.ijmra.us

The above figure 5.9 indicates the usage of reprographic service highlights that 40% of the respondents have replied for very good service and 10% of the respondents have responded for three categories that is good, average and below average. There are partially stakeholders with the kind of service while certain stakeholders are moderate due the kind of service which might not serve their expectation.

6. Recommendations

1. Newly acquired books to be informed to all the stakeholders of library through library updates and the same to be displayed in the library notice board for reference.

2. To check the stakeholders transacted books and referred, the same to be circulated to all the departments for their reference in usage of library service.

3. To display new arrival books for reader's reference.

4. To create awareness among the readers in usage of OPAC service for locating books with ease.

5. To update readers in new addition of e- books and journals in digital library.

6. To conduct information literacy programme for students and faculties in using library and proving effective services.

7. Conclusion

This paper reviews on applying total quality management indicators and application to library services in engineering college libraries. These indicators in terms of library service helps in evaluating the effectiveness and recommend how the evaluation process helps in providing better quality service to all its stakeholders.

8. References

1. Senthilvelan, M; Balasubramani, R,"Application of Total Quality management in University Libraries with Respect to the Library Services", 2013,Vol 3,(4), pp 218-220.

2. Giriraj, Halkar; Govindrajulu, K,"TQM in Libraries: Challenges to Stimulate Change, Asian Journal of Multidisciplinary Studies,"2014, Vol 2, (1), pp 150-154.

3. Deepak Khera; Shiv Narain Sharma, "TQM: an over view in academic libraries", International journal of librarianship and administration, 2012, Vol 3,(1) pp81-86.

4. Alvaro Tejeda-Lorente; Carlos Porcel, "A Quality based recommender system to disseminate information in a university", digital library, Information Science, 2014, Vol 261, pp 53-69.

5. Faisal Talib, "An overview of total quality management: understanding the fundamentals in service organization", International journal of advanced quality management, 2013, Vol 1, (1), pp 1-20.