# TQM vis-à-vis USER SATISFACTION IN ACADEMIC LIBRARY: A CASE STUDY.

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**Abstract:** *Today every institution of higher learning in the country has a library and it covers almost the whole field of knowledge according to the requirement of its users for the benefits of its users. The image of the academic library, however, does not depend on mere existence of a library, its building and its architectural elegance. Rather it depends on the extent to which it attains its objectives. One of the foremost objectives of an academic library is to provide quality library services to its users to ensure user satisfaction. TQM is a management approach to facilitate user satisfaction in an academic library. The present paper describes user satisfaction(one of the different approaches of TQM) using different parameters(as per SERVQUAL Model) to measure user satisfaction out of using library services on the basis of a user survey on the users of B.C.Roy Memorial Library in IIM* Calcutta.

***Key Words****: TQM, SERVQUAL, User satisfaction, Library services**.*

## 1. Introduction:

Library and information services of higher education institutions play a central role in enhancing the quality of academic and research environment. The National Assessment and Accreditation Council (NAAC) strives for quality and excellence in higher education and advocates for enhancing the role of library and information services in improving academic environment. Quality is concerned with meeting the needs of users. Feigenbaum (1983), a key writer in the field of quality management, opined: Quality is the total composite product and service characteristics of marketing, engineering, manufacturing, and maintenance through which the product and service in use will meet the expectation of the customer. Quality would be better understood from the concept of Total Quality Management (TQM).TQM is a management philosophy. In LIS parlance TQM is a process whose output yields user satisfaction and sustainable improvement. TQM is a blend of Scientific Management and Participative Management principles.

TQM, however, is a pervasive issue and its measurement should be based on the view point of the users of an academic library. The different products and services that are used, whether printed or electronic including internet resources, must be judged for reliability, relevance, tangibility as well as their adequacy to meet the users' need. Criteria for measurement of

quality are directly related to the capability of providing library services for an academic library.

## 2. Objective of the study:

The objective of the study is to analyze the application of TQM to the institution studied(mentioned in the following section)through the quality dimension of :

- ✓ Reliability of library services.
- ✓ Responsiveness & Promptness.
- ✓ Tangibles.
- ✓ Access to library's product and services.
- ✓ Assurance from the staff of the library concerned.
- ✓ Communication measures of the library concerned.
- ✓ Empathy.
- ✓ Security while getting library services.
- ✓ Courtesy and Credibility.

## 3. Scope of the study:

The study was conducted on the users of B.C. Roy Memorial Library (BCRML), Indian Institute of Management Calcutta, D. H. Road, P.O. Joka, Kolkata-700104. The users were comprised of post-graduate, research scholars and faculty members. The quality dimensions were used in the study to measure quality of library services in relation to user satisfaction only. The ten quality dimensions were tangibles, reliability, responsiveness, assurance, access, empathy, communication, security, courtesy and credibility according to SERVQUAL model of TQM for measuring user satisfaction.

## 4. Hypothesis:

It was hypothesized that the institution studied had been partially applying the concept of TQM in their information management activities for its user satisfaction.

## 5. Methodology:

The study is based on primary data collected through user survey. However for eliciting data 'non-probability sampling' viz. **'Convenience sampling method'** was followed.

Each of the ten dimensions of service quality according to SERVQUAL model was measured under five scales: 1 for very poor, 2 for poor, 3 for average, 4 for good, and 5 for excellent. Weighted Average Mean (WAM) value, one of the measures of central tendency, was used to analyze the data.

## 6. APPLICATION OF TQM (vis-à-vis USER SATISFACTION) IN THE B.C.ROY MEMORIAL LIBRARY OF THE INDIAN INSTITUTE OF MANAGEMENT CALCUTTA -- AN INVESTIGATION

### 6.1. Data Analysis and Interpretation

For B. C. Roy Memorial Library, the library of Indian Institute of Management Calcutta (IIMC), data had been collected from the users (taking a sample of thirty two users) which

was computed and illustrated as under. However, the study was carried out on the basis of customer satisfaction only.

### 6.1.1. Responses of Library Users of B. C. Roy Memorial Library towards Various Service Quality Dimensions

#### 6.1.1.1. Status of the Respondents

| Status | Frequency | Percentage |
|---|---|---|
| Faculty members | 3 | 9.37 |
| Research Scholars | 4 | 12.50 |
| PG Students | 25 | 78.13 |
| Total | 32 | 100.00 |

#### 6.1.1.2. Service Quality Dimension of Access

N=32

| Items | very poor | poor | aver-age | good | exce-llent | mean |
|---|---|---|---|---|---|---|
| Library Collection | --- | -- | 1(3) | 10(31) | 21(66) | 4.62 |
| Library Hours | -- | -- | -- | 9(28) | 23(72) | 4.71 |
| Computer Terminals | -- | -- | -- | 7(22) | 25(78) | 4.78 |
| Library Catalogue | -- | -- | 1(3) | 12(38) | 19(59) | 4.56 |
| Library Staff Availability | 2(6) | 2(6) | 12(38) | 13(41) | 3(9) | 3.41 |

As seen from Table 6.1.1.2. the respondents are satisfied to an 'excellent' measure about computer terminals (78%) and followed by library hours (72%), library collection (66%), and access to library catalogue (59%). However, library staff availability shows good satisfaction level for 41% responses though the mean value which is 3.41 expresses an average satisfaction level.

### 6.1.1.3. Service Quality Dimension of Assurance

N=32

| Items | very poor | poor | aver-age | good | exce-llent | mean |
|---|---|---|---|---|---|---|
| Library Staff Efficiency | -- | 1(3) | 2(6) | 10(32) | 19(59) | 4.46 |
| Consideration forUsers' Recommendations | -- | 1(3) | 2(6) | 9(28) | 20(63) | 4.59 |
| Cordial Library Staff | 1(3) | 1(3) | 4(12) | 5(16) | 21(66) | 4.38 |

Assurance, another service quality dimension, has been shown through the angles of library staff efficiency, consideration for recommendation from users and library personnel's cordiality. The highest scores, seen from the table for all the three parameters, go to the level of 'good' satisfaction. The mean values for these three parameters are 4.46, 4.59 and 4.38 respectively. Here it is also seen that some users have expressed their 'poor' satisfaction level, side by side, it is found out from the table that excellent satisfaction level of the users prevails for most of the parameters.

### 6.1.1.4. Service Quality Dimension of  Responsiveness & Promptness

| Items | very Poor | poor | aver-age | good | exce-llent | mean |
|---|---|---|---|---|---|---|
| Proper shelving of materials | 1(3) | 1(3) | 4(12) | 8(25) | 18(56) | 4.28 |
| Quick shelving | 2(6) | 1(3) | 5(16) | 9(28) | 15(47) | 4.06 |
| OPAC acquaintance | -- | -- | 3(9) | 15(47) | 14(44) | 4.34 |
| Prompt responses from contact personnel | -- | -- | -- | 11(34) | 21(66) | 4.66 |
| Complaint compliance | -- | -- | 4(12) | 15(47) | 13(41) | 4.28 |
| Maintenance of library materials | --- | --- | 7(22) | 12(37) | 13(41) | 4.18 |

It is found from Table 6.1.1.4. that the parameters to measure the service quality dimension of Responsiveness & Promptness are regarding how properly the materials are shelved, whether the shelving activities are carried out properly; whether there is OPAC familiarity; how quickly the responses are got from the contact personnel when they are contacted during service encounter; whether the users' complaints are regularly attended by the Library and

lastly whether the materials of the library are maintained. The investigation as shown in the Table shows that 56% respondents are satisfied for proper shelving with their excellent satisfaction level, 47% are with their good satisfaction level for OPAC familiarity, 66% respondents got quick responses from the contact personnel with their excellent satisfaction level, and for complaint compliance there are 47% respondents with their good satisfaction level and lastly 41% respondents express their excellent satisfaction in the matter of material maintenance.

### 6.1.1.5.  Service Quality Dimension of   Reliability

| Items | very Poor | poor | aver- age | good | exce- llent | mean |
|---|---|---|---|---|---|---|
| Books | --- | --- | 5(16) | 8(25) | 19(59) | 4.43 |
| Reference books | -- | -- | 4(12) | 10(31) | 18(57) | 4.44 |
| Journals | -- | -- | 3(9) | 9(28) | 20(63) | 4.53 |
| E-resources | -- | -- | 2(6) | 8(25) | 22(69) | 4.63 |
| CD-ROM | -- | 1(3) | 4(12) | 5(16) | 22(69) | 4.50 |
| Internet Access | -- | -- | 3(9) | 8(25) | 21(66) | 4.56 |
| Reprographic facility | -- | 1(3) | 2(6) | 6(19) | 23(72) | 4.59 |
| Document delivery service | -- | -- | 4(12) | 7(22) | 21(66) | 4.53 |
| Newspaper clippings | -- | 1(3) | 3(9) | 6(19) | 22(69) | 4.47 |
| List of new additions | -- | 1(3) | 2(6) | 5(16) | 24(75) | 4.62 |
| Reading facility | --- | -- | 2(6) | 4(12) | 26(81) | 4.75 |
| Dissemination of theses | -- | -- | 1(3) | 3(9) | 28(88) | 4.84 |
| Circulation services | -- | -- | 3(9) | 2(6) | 27(85) | 4.75 |
| Print-out facility | -- | -- | 4(12) | 3(9) | 25(79) | 4.66 |
| Bibliographic facility | --- | -- | 3(9) | 5(16) | 24(75) | 4.65 |
| Other reference services | -- | -- | 4(12) | 6(19) | 22(69) | 4.55 |

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Reliability measurement has been done with sixteen parameters. It is found from the Table 6.1.1.5.  that all of these parameters show 'excellent' satisfaction level for maximum number

of respondents. For books 59% respondents express their excellent satisfaction level with an average satisfaction level for 16% respondents; for reference books it is for 57% respondents; for journals it is for 63% respondents; for e-resources, CD-ROM, internet access there are respectively 69%, 69% and 66% respondents who opine excellent satisfaction level. Reprographic facilities have 72% respondents for excellent level and 3% for poor satisfaction level. For document delivery service it is found from the Table that 66% respondents are in the opinion of excellent satisfaction level whereas 12% respondents are in the opinion of average level. For newspaper clipping service 69% respondents are there with excellent satisfaction level. Reliability of new addition list shows 75% respondents with excellent satisfaction level and so far as reading facility is concerned, it is 81% respondents where 88% and 85% respondents are for thesis dissemination and circulation services respectively. In case of print-out facility there are 79% respondents whereas for bibliographic facility there are 75% respondents and lastly for other reference services there are 69% respondents who express their satisfaction level as excellent.

## 6.1.1.6. Service Quality Dimension of Tangibles

| Items | very Poor | poor | aver- age | good | exce- llent | mean |
|-------|-----------|------|-----------|------|-------------|------|
| Computer systems | -- | -- | 2(6) | 3(9) | 27(85) | 4.78 |
| Photocopiers | -- | --- | --- | 8(25) | 24(75) | 4.75 |
| Library collections | 1(3) | 1(3) | 2(6) | 4(13) | 24(75) | 4.53 |
| Printers | --- | 1(3) | 1(3) | 3(9) | 27(85) | 4.75 |
| Library furniture | -- | 1(3) | 2(6) | 2(6) | 27(85) | 4.72 |
| Reading hall atmosphere | -- | -- | 3(9) | 11(35) | 18(56) | 4.47 |
| Toilet facility | -- | -- | 2(6) | 13(41) | 17(53) | 4.46 |
| Drinking water facility | -- | -- | 1(3) | 8(25) | 23(72) | 4.67 |
| Lighting and ventilation | -- | -- | 1(3) | 7(22) | 24(75) | 4.71 |

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Service quality dimension of Tangibles is measured with nine parameters. Computer terminals have amassed 85% respondents in favour of excellent satisfaction level. The mean value for printers and photocopiers are both 4.75 which implies that there are satisfaction levels that are above 'good' measure. So far as the physical condition of library collection is concerned there are 75% respondents, where library furniture gets 85% responses for excellent satisfaction level and reading hall atmosphere gets 56% responses for excellent satisfaction level. For toilet facility, drinking water facility and lighting & ventilation there are average, good, and

excellent satisfaction levels but excellent satisfaction level prevails for maximum number of respondents.

### 6.1.1.7. Service Quality Dimension of Empathy

| Items | very Poor | poor | aver- age | good | exce- llent | mean |
|---|---|---|---|---|---|---|
| Sincere interest at heart in solving users' library-related problem | -- | 1(3) | 2(6) | 7(22) | 22(69) | 4.56 |

Empathy means the power of projecting one's personality into the object of contemplation for others. Here it is measured with 'sincere interest at heart in solving users' personal library related problems'. There are good (22%) and excellent (69%) satisfaction levels.

### 6.1.1.8. Service Quality Dimension of Security

| Items | very Poor | poor | aver- age | good | exce- llent | mean |
|---|---|---|---|---|---|---|
| Confidentiality of library use | -- | -- | -- | 7(21) | 25(79) | 4.78 |
| Safety at library premises | -- | -- | 2(6) | 4(13) | 26(81) | 4.75 |

Security, one of the SERVQUAL dimensions, is measured, here again, with safety at library premises and confidentiality of library uses. The former parameter has 81% respondents and the latter has 79% respondents with excellent satisfaction level.

### 6.1.1.91 Service Quality Dimension of Communication

| Items | very Poor | poor | aver- age | good | exce- llent | mean |
|---|---|---|---|---|---|---|
| Location map for library | -- | -- | 2(6) | 7(21) | 23(73) | 4.66 |
| Service awareness | -- | 1(3) | 2(6) | 5(16) | 24(75) | 4.63 |
| User education | -- | 1(3) | 3(9) | 7(21) | 21(67) | 4.50 |

| | very Poor | poor | average | good | excellent | mean |
|---|---|---|---|---|---|---|
| Communication ability of staff | -- | -- | 2(6) | 3(9) | 27(85) | 4.78 |
| Suggestion box/feed-back systems | -- | -- | 4(13) | 3(9) | 25(78) | 4.65 |

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It is found from Table 6.1.1.9. showing service quality dimension of Communication that library location map there are 73% responses, service awareness 75% responses, user education 67%, staff communication ability 85% and for suggestion system there are 78% respondents who express their excellent satisfaction level.

## 6.1.1.92. Service Quality Dimension of Courtesy and Credibility

| Items | very Poor | poor | average | good | excellent | mean |
|---|---|---|---|---|---|---|
| Pleasant personality of the staff | -- | -- | 1(3) | 4(13) | 27(84) | 4.81 |
| Credibility of the staff | -- | -- | 1(3) | 5(16) | 26(81) | 4.78 |

Service quality dimension of Courtesy and Credibility shows 84% respondents for excellent and 13% for good satisfaction level in matter of the pleasant attitude of the staff. And 81% respondents are for excellent and 16% for good satisfaction levels in the matter of credibility of the staff.

## 7. Suggestions & Conclusion:

IIMC's BCRML is undoubtedly delivering quality services to its esteemed users. The users are satisfied with library facilities to a great extent what is rated at 4 plus level as per scale technique as is used in the study. However, there is shortage in number of library personnel in the library. So emphasis is to be given at this aspect so as to ensure user satisfaction.

Long-term success and sustenance of academic as well as special libraries rely on the capability for becoming more dynamic so that they can prove their indispensable position in today's every academic and research activity. The only way left to these libraries is to adopt Total Quality Management in all the library and information activities so that they can be effective and efficient in fulfilling user expectations.

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