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Quality Assessment of University Libraries of Assam with Reference to Technical Processing

[1]Mondita Borah, [2]Dr. Sanjay Kr. Singh
[1]Research Scholar, [2]Prof & Head, Department of Library and Information Science, Gauhati University,
[1]Department of Library and Information Science,
[1]Gauhati University, Guwahati, India

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ABSTRACT

Purpose – The intent of the research paper is to systematically analyze the quality or excellence of technical processing in the university libraries of Assam. By evaluating current practices, identifying challenges, and examining the effectiveness and proficiency of technical services in those universities, this research will explore the key aspects of quality, such as user focus, top management commitment, education and training of staff and the role of staff in service delivery.

Design/methodology/approach – The study employs mixed-methods which combines quantitative surveys and qualitative interviews, allowing for a comprehensive knowledge of the subject. A structured questionnaire was distributed which include likert scale questions to ensure representation from the groups.

Findings – The results reveal that there is strong support from top management in the concerned universities. The staff involvement in processing work is only 50%. Other dimensions of quality such as user focus, training and education of staff, good communication among staff are satisfactorily performed. The findings might accurately reflect the challenges and opportunities faced by universities in different settings within Assam.

Research limitations/implications – This study focuses exclusively on ten (10) universities in Assam based on their popularity, accessibility of data, age, and perceived importance.

Originality/value – Much of the literature on Total Quality management in libraries are available, but as per the knowledge of the researcher, there is no study undertaken for the assessment of quality in university libraries and technical processing concerned. This study will provide an understanding of the quality approaches and further entails the strength and opportunities the libraries can encounter with such approaches.

Keywords: Quality management, User Focus, University Libraries, Quality assessment

Introduction:

In order to survive in today's world, all kinds of organizations are becoming customer oriented. In that case, they need to provide quality products and services to their customers. Total Quality Management (TQM), is one approach that supplies the tools and the direction to improve quality (G. Jayamalini, 1999). The quality of university libraries is a critical determinant of academic success and research development, particularly in a rapidly evolving educational landscape. In Assam, where educational institutions play a vital role in fostering knowledge and innovation, the effectiveness of university libraries can significantly impact student and faculty outcomes. This study focuses on the quality assessment of university libraries in Assam, clearly with regard to technical processing, which enclose the organization, cataloguing, and management of library resources.

Technical processing is fundamental to enhancing the accessibility and usability of library collections, ensuring that users can efficiently locate the information they need. The methods and standards employed in this domain not only impact the operational regulation of the libraries but also determine the overall user experience. Surveying what the customer wants and finding the best way to provide it can be termed as quality service. (Quinn, B. 1997). Quality normally focuses on fulfilling needs, and preferences of customers. Customer-driven quality product and service ensure to satisfy the requirements of customer beyond their expectations. (Pradhan.S, 2014). Given the diverse and

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expanding needs of students and researchers, it is essential to evaluate how well these libraries are equipped to manage their resources and meet user expectations. For survival of an organization quality plays a vital role.

This assessment aims to explore various dimensions of quality in technical processing, including the involvement and efficiency of staff, the commitment of top management, user satisfaction, and the effectiveness of communication among library personnel. By analyzing these factors, this study seeks to provide insights into the current state of university libraries in Assam, identifying strengths and areas of improvement. Ultimately, the findings will contribute to the ongoing efforts to enhance the quality of library services, thereby supporting the academic and research objectives of the institutions they serve. Most of the literatures taken for the study are also reviewed and evaluated in this article. Besides that several e-resources available on Total Quality Management are studied in detail to fulfill the goal of the study.

Present paper deals with the current status of quality management and quality techniques applied in technical processing of University Libraries of Assam. The study aims to focus on how the quality is maintained and what approaches and methodologies of quality is being practiced in those libraries. Further an attempt has been made to know the staffs' opinion on quality management and in what way the total quality management can be implemented in those libraries and in what way the users are satisfied with those libraries.

1.1. Definition of Quality by Quality Gurus

Various definitions of Quality was forwarded by the quality gurus. A few definition is listed below for a clear understanding of quality.

1. J.M Juran defined quality as 'fitness for purpose'.
2. Philip Crosby defined quality as 'conformance to specification'.
3. According to Robinson, "Quality is meeting the requirements of customer- now and in the future."
4. According to Sarkar "Quality of a product or service is the potentiality of the product or service to meet the customers' requirements.
5. Garvin explained that quality have different meanings in different contexts. According to him the following eight dimensions make up quality.
   i. Performance: This pertains to a product's effectiveness in fulfilling its intended purpose.
   ii. Features: "These are the facets that enhance a products core functionality, like cruise control in a car".
   iii. Reliability: This refers to a product's consistent performance throughout its life cycle.
   iv. Conformance: This means that a product must comply with the specifications defined for its intended use.
   v. Durability: The degree to which a product withstand stress without failure.
   vi. Serviceability: The ease with which a product can be repaired.
   vii. Aesthetics: The sensory characteristics of a product such as its appearance and sound.
   viii. Perceived quality: This is determined by customer perceptions and opinions.

1.2.Meaning and Characteristics of Quality

Quality can have different meanings for different customers as it could also reflect many different facts in one term. Quality is one of the most principal angle of a business or a product as it could be associated with many factors such reliability, delivery, usability, and an acceptable price. (Arikkok, M, 2017)

Before evaluating service quality, it is essential to understand the inherent characteristics of quality outlined below:

Intangible: Quality, similar to value often go unnoticed until it reveals itself through a person, a product, a process, or a concept that can be articulated. While quality is intangible and cannot be physically touched, its presence is evident and its absence is unmistakable.

Relative/Associative: Quality is inherently linked to various factors such as time, location, context, and the individuals involved. What is considered a high-quality product or service in one setting may not hold the same status in a different environment. Its important to realize that every person have their own perspective on quality, and one cannot force their definition onto others.

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Tendency to Deteriorate: Quality tends to decline as time progresses, environments change, and societal values evolve. Quality is particularly sensitive to the issue of becoming outdated. Certain standards are therefore formed to preserve the quality while periodically updating it to enhance it further.

The Interconnected Relationship between Quality and Quantity: As quantity increases, quality often tends to decrease. This relationship is complex and involves a deep interplay rather than being merely op-positional. Effective management involves ensuring that quality keeps pace with quantity, rather than lagging behind. This approach ultimately fosters an environment where quantity can evolve into quality on its own.

Quality is a Cohesive and Integrated Entity: Quality is indivisible; it either exists fully or not at all. It shouldn't be assessed in fragments or piecemeal.

dimensions that he feels make up quality:

1.3. Dimensions of Quality in Library and Information Science

Just like any subject or object of study has its own set of dimensions, library and information science too has its own parameters for evaluation and which can be assessed based on those parameters only. Below in table No 1, the parameters are mentioned clearly.

The problem in reaching consensus on dimensions is the broad range of approaches used by various TQM authors. For example, some authors focus on the technical and programmatic properties of TQM, while others examine it as general management philosophy.

Table I: Quality Dimensions in Library

SlNO	Quality Dimensions	Core features
1	Tangibles	The look and condition of the facilities, equipment, staff, and any printed or visual materials.
2	Reliability	The ability to deliver the promised service consistently and accurately.
3	Responsiveness	A readiness to assist customers and provide swift service
4	Competence	Having the necessary abilities and education to carry out the service effectively.
5	Courtesy	Personnel should demonstrate politeness, respect, thoughtfulness, and friendliness when interacting with customers.
6	Credibility	The service provider should be trustworthy, credible, and honest.
7	Security	Customers should feel free from any danger, risks, or uncertainties.
8	Access	The service provider should be approachable and easy to reach for assistance.
9	Communication	Actively listening to customers, recognizing their feedback, and ensuring they are kept informed in a language they understand.
10	Customer Insight	Taking the initiative to learn about customers and their specific requirements.

Source: © 2010, DESIDOC

1.4 Objectives of the Study

1. To form an impression of top management commitment in upholding quality in the libraries.
2. To evaluate the extent of staff involvement in technical processing work in all the universities of Assam
3. To identify users view on the integrity and competency of the library staff in the technical processing department.
4. To recognize the libraries appearance and safety and security conditions.
5. To examine the communication and relationships among the staffs of the department.
6. To know about the education and training of technical processing staffs of the universities.

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2. Review of Literature

1. Jayamalini, G(1999), in her article, "An Overview of TQM in Libraries", focuses on the evolution, principles, and stages of Total Quality Management , and examines the implementation, practical application, and barriers faced in libraries operating under TQM principles. The article discusses several case studies where libraries successfully adopted TQM, leading to improved services, efficient workflows, and enhanced user satisfaction. A significant contribution of this article is its comparative analysis of traditional organizations versus TQM organizations. Traditional organizations often operate within a hierarchical structure emphasizing control and compliance, while TQM organizations prioritize collaboration, empowerment and a shared vision of quality. Despite the promising outcomes the article highlights several barriers to TQM implementation in libraries.
2. Dash & Padhi (2010), in their research article, "Quality Assessment of Libraries", offers a very comprehensive model that integrates various quality dimensions and parameters, essential for enhancing library services and meeting user expectations. Ranganathan's Fourth Law of library science, which underscores the importance of providing appropriate information to the right user at the right time and in the required form, serves as a foundational principle in this discourse on quality.
3. Talib, Faisal and et.al(2011),in their research article, " A study of total quality management and supply chain management practices", reviews existing research on Total Quality Management(TQM)and Supply Chain Management (SCM) to identify key practices and examine their interrelationship. From a pool of 50 TQM and 40 SCM practices, six major practices were identified, with management support, customer focus, and supplier partnership being the most common and impactful. The study suggests further research is needed to deepen the understanding of these practices, their integration, and the role of management in supplier selection and evaluation.
4. Pradhan, Srivastava(2014) in his article "Total Quality Management in Service Sector: Case Study of Academic Libraries", explores the application of Total Quality Management(TQM) in academic libraries, focusing on improving service quality for stakeholders despite limited resources. It highlights how TQM tools can help enhance cost-efficiency, productivity, teamwork, communication, and problem-solving. Emphasizing continuous improvement, the paper notes that effective TQM requires full staff involvement and proper training.
5. Quinn, B((2007), in the article, "Adapting Service Quality Concepts to Academic Libraries", highlights both the limitations and potential of applying the service quality model., originally designed for commercial settings, to academic libraries. While some adaptation is necessary due to differences in environment and existing models, integrating service quality concepts can be beneficial. Resistance may arise from librarians adhering to traditional models, but a hybrid approach could combine the strengths of both. The study suggests possible adaptations across library functions and notes that helping students become more independent, even by not always meeting immediate demands, is a key aspect of academic librarianship. Adapting service quality practices can improve user satisfaction, especially in reference service and collection development. Overall, the potential benefits of adapting the model may outweigh its limitations.

3. Methodology

The study scrutinize thoroughly only 10(ten) universities of Assam. The survey and the Interview method have been applied for the study. Two different types of structured questionnaires were designed and distributed among University Librarian working in university libraries and users of the universities. Questions were framed based on certain dimensions of quality in library and information science that have been redefined to present it in respect with technical processing in libraries of Assam. Apart from that, certain research paper related to Total Quality Management are reviewed to form an idea of implementing it in university libraries.

Total users taken for the Study =500 from each university

6. Scope and limitation of the Study

A list of universities of Assam based on its importance and age are taken for the study which is presented below

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Table II: List of Universities of Assam

SlNo	Name of the Universities	Code	Location	Year of Establishment
1	Assam Agriculture University	AAU	Jorhat	1969
2	Assam university	AU	Silchar	1994
3	Assam Women's University	AWU	Jorhat	2013
4	Bodoland University	BU	Kokrajhar	2009
5	Cotton College State University	CCSU	Guwahati	2011
6	Dibrugarh University	DU	Dibrugarh	1964
7	Gauhati University	GU	Guwahati	1948
8	National Law university & Judicial Academy	NLUJA	Guwahati	2009
9	Rabindranath Tagore University	RTU	Hojai	2019
10	Tezpur University	TU	Tezpur	1994

These universities are taken for the study considering certain factors, such as easy access, convenience, and availability of data covering a period of 1948-2020.

7. Research Questions:

RQ1. What are the key findings from the stated objectives?

RQ2. What are the different dimensions of quality invoked in technical processing?

RQ3. Are the employees involved in the area of technical processing work in the universities of Assam?

RQ4. Which methodology was used by the researcher in the selected studies?

RQ5. Is there good communication among the staff of the stated universities?

RQ6. Do the libraries focus on the requirements of the users?

8. Data Analysis

Considering the various methodologies and dimensions to measure the quality of a library some attributes of measuring the quality of technical processing are undertaken for the study. Analysis have been made to show the proportion of the responses which is measured using the likert scale. The data is collected from the librarians and users of the stated universities and questionnaires were framed based on certain research questions.

Table III: User Focus

SlNo	Dimension	Scale	No of Respondents	%
1	User Focus	Strongly Agree	4	40
2		Agree	6	60
3		Indifferent	-	
4		Strongly Disagree	-	0

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5		Disagree	-	0

It has been recognized from Table III that, 60 % of the respondents, agree that , the universities provide full user support and focus on their special requirements. While 40 % strongly agrees to it

Table IV: Attribute 1 Top Management Commitment

SlNo	Dimension	Scale	No. of Respondents	%
1	Top Management Commitment for Technical processing	Strongly Agree	6	60
2		Agree	4	40
3		Neutral	-	0
4		Disagree	-	0
5		Strongly Disagree	-	0

It has been stated in table IV,that 60%, of the respondents strongly agree that for the proper functioning of the technical processing of library materials, there is strong support and commitment from the Top Management. No population disagrees to it.

Table V: Attribute 4 Employee Involvement

SlNo	Attribute	Scale	No. of Respondents	%
1	Employee Involvement in Technical Processing	Strongly Agree	5	50
2		Agree	3	30
3		Neutral	1	10
4		Disagree	-	0
5		Strongly Disagree	1	10

Employee Involvement, an important aspect of quality management is represented in table V, which indicates that 50 % of the respondents strongly agree and 30 % agree to it. While 10 % of the respondents disagree to it.

Table VI: Attribute 2 Education and Training of the Technical Processing Staff

SlNo	Attribute	Scale	No of Respondents	%
1	Education and Training of the Technical Processing Staff	Strongly Agree	3	30
2		Agree	6	60
3		Neutral	1	10
4		Disagree	-	0
5		Strongly Disagree	-	0

In table VI, it indicates that 60% of the respondents agrees that the professional staffs are educated and trained in the area of technical processing. 30% of the population strongly agrees to it and only 10% of the respondents are indifferent about it, i.e they are not aware about it.

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Table VII: Attribute 5 Good Communication and Relationship among the Staff

SlNo	Attribute	Scale	Name of the Universities	%
1	Good Communication and Relationship Among Staff	Strongly Agree	4	40
2		Agree	6	60
3		Indifferent	-	0
4		Disagree	-	0
5		Strongly Disagree	-	0

Table VII shows that 40 % of the respondents strongly agree and 60 % agree that there is good communication and relationship among the technical processing staff. No university disagrees to it.

Table VIII: User's Statements Regarding Library Staff

SlNo	Statements	User's responses of the university Libraries	Scale									
			Strongly Agree	%	Agree	%	Indifferent	%	Disagree	%	Strongly Disagree	%
1	The library staff are friendly, polite and helpful		180	36	260	52	30	6	0	0	30	6
2	Efficiency of staff in service delivery		140	28	250	50	50	10	60	12	0	0
3	Understand the requirements of the users		140	28	280	56	20	4	40	8	20	4

In Table VIII, some statements are drawn regarding the users opinion on the libraries staff. It is noted that 52 % of the respondents agree that the library staff are friendly polite and helpful. While 6 % strongly disagree that the staff are helpful. 50 % of the users find that staff are efficient in service delivery, and 12 % disagree about it. Again 56 % of the users feel that the staff understand the needs of the users, while 8% disagree with it.

Table IX: Responses and Comments based on TQM practice in technical processing department

SlNo			Comments									
			Always (F)	%	To some extent (F)	%	Occasionally(F)	%	Never (F)	%	Can't Say (F)	

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1	Would a TQM programme will be beneficial to your library	User's responses of the university Libraries	8	80	2	20	0	0	0	0	0	0
2	Do you collect data to measure the performance of processing activities		5	50	3	30	0	0	1	10	1	10
3	The library is clean, orderly, hygienic		8	80	1	10	0	0	0	0	1	10
4	The university adopts regular repair and preventive maintenance to ensure efficient operation		7	70	3	30	0	0	0	0	0	0
5	Provision of adequate security to prevent theft and defacing of paper based material		9	90	0	0	1	10	0	0	0	0
Total (N)			37		9		1		1		2	

In Table IX, it is presented that, 80% of the respondents believe that TQM programme will always be beneficial for them. While 20% believe that TQM programme will be beneficial only to some extent. For continuous improvement, one of the principles of TQM, 50 % of the respondents collects data to measure the performance of processing activities. 30 % perform it to some extent, while 10 % never perform it. Next it is found that 80 % of the respondents are of the opinion that the library is clean, orderly and hygiene. 10 % comments that library is clean and hygiene only to some extent. Again, 70 % of the respondents comments that the library always adopts regular repair and preventive maintenance to ensure efficient operation. 30 % adopts it to some extent. Lastly, it is presented that 90 % of the population comments that the library always has provision of adequate security to prevent theft. While 10 % comments that there is provision only in times or need or occasionally.

Table X: User Satisfaction in terms quality dimension

SlNo	Services	User's responses in the University Libraries	Scale									
			Very Satisfied	%	Satisfied	%	Indifferent	%	Dissatisfied	%	Very dissatisfied	%
1	Easy access of reading materials		160	32	250	50	50	10	40	8	-	
2	Individual attention to user needs		30	6	270	54	20	4	180	36	-	

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3	Quality of the furnishings and library hall		100	20	290	58	60	12	30	6	20	4
4	Space and Hygiene		120	24	240	48	60	12	50	10	30	6
5	Time Management		170	34	240	48	40	8	30	6	20	4

In table X, some statements are drawn to understand the users satisfaction in terms of quality. It has been found that half of the respondents express satisfaction with easy access of reading materials. While 40% are dissatisfied with it. 54 % are satisfied about the individual attention given to user needs, and 36 % are dissatisfied about it. Again 58 % are satisfied with quality of furnishings and library hall and only 6 % are dissatisfied with it. In case of area and hygiene, 48 % are satisfied and 10 % are dissatisfied with it. 48 % of the users are satisfied with the time managed by the staff in providing the required services and only 6% are dissatisfied about it.

6.1 Graphical Representation of the Analysis

A graphical presentation is provided below which is created with the help of Excel and data analysis is done with the app named ChartExpo, to statistically analyse the likert five scale data format. To form the statistical presentation, in ChartExpo, the categorical data column contains the questions, the numerical data columns contains the likert scale values and the numerical data columns contain the record count values.

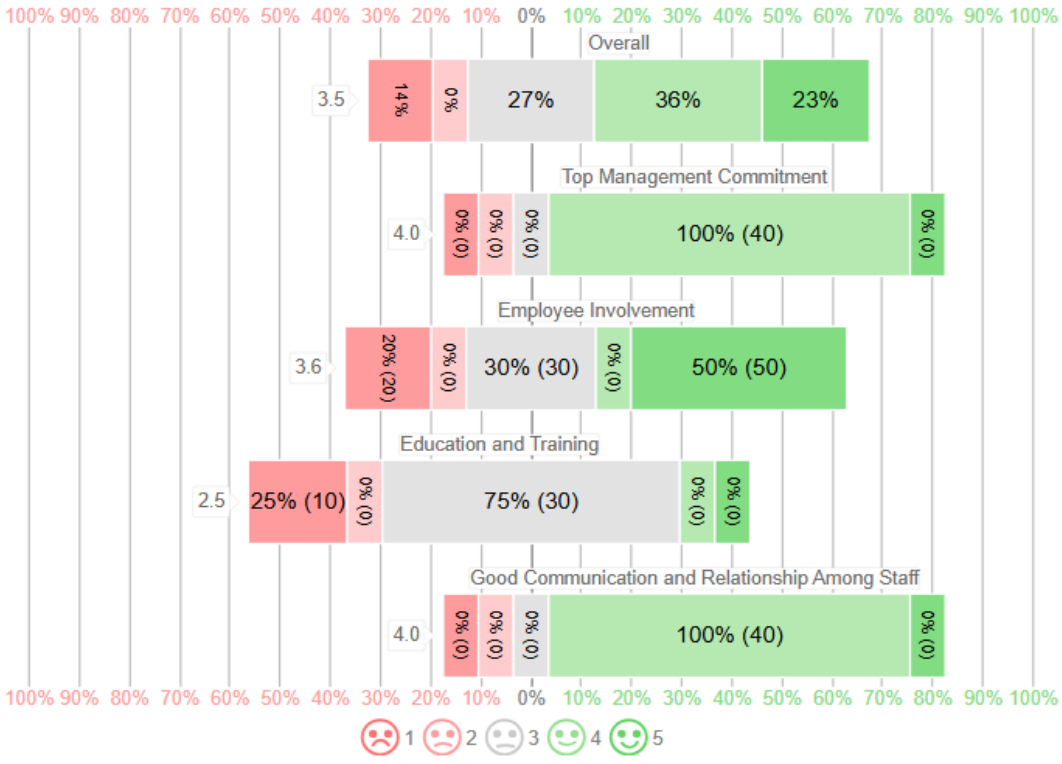

Fig 1: Overall representation of data analysis

In the above figure, it has been found that 36% of the users are satisfied with the various dimensions of Total Quality management taken for the study. 27 % are indifferent about it. Again 23% of the users are fully satisfied with it and a minimum of only 14% shows full dissatisfaction with it.

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9. Findings

1. It has been discovered that, there is strong commitment and support from the top management for technical processing in libraries as 60% of the respondents strongly agrees to it and 40% agrees to it. Not a single respondent disagree to it.
2. In case of staff involvement in technical processing, it brings to light that, 50% of the respondents strongly agrees to it, and 30% agrees to it. While 10% disagrees to it, which is minimal.
3. From table VIII, the staff credibility and competency can be identified. It is noted that 50% of the users are of the view that the staff are efficient in service delivery and only 12% disagree on it.
4. The libraries appearance and safety and security conditions can be known from table IX, and table X, respectively. From table IX, it is shown that 58% of the users are satisfied with the quality of the furnishings and library hall and only 6% are dissatisfied about it. Again from table X, it can be located that, 90% of the users' opined that there is provision of adequate security.
5. In table no VII, we come upon that, 40% of the respondents strongly agree that, there is good communication and relationship among staff and 60% agrees to it. Not a single respondents disagree to it.
6. From table no VIII, it can be known that, 30% of the respondents strongly agree that the technical processing staff are educated and trained, and 60% agree to it.

8.Recommendations and Suggestions

1. It is strongly recommended to implement TQM philosophy for ISO certification in future.

2. The Top Management provided effective support to the universities, which is very essential for growth and important for implementation of TQM. Therefore, for the management of libraries very efficient managers should be chosen for continuous development.

3. Regular and timely training programs should be conducted for more involvement of staff in technical processing.

4. Besides conducting seminars and workshops on Library and Information Science topics, it is necessary to conduct certain training programs on improving communication skills to deliver ideas appropriately.

5. The libraries should always maintain a clean and hygienic environment to attract more and more readers, although reader's satisfaction cannot always be equated with the success or failure of the system, but it is necessary to point out certain loopholes of the services and facilities provided by the library.

6. It had been noticed that the university libraries under study provided efficient and effective user support and it should be a continuous process to maintain the quality of the library.

7. More elements of Total Quality Management (TQM) such as detecting errors, unified system approach should be adopted to identify areas of improvement.

8. Certain Total Quality Management (TQM) tools, such as Flow Chart, Pareto Chart, Histogram, Fishbone Diagram, Check Sheet etc ., should be used to detect the performance of both internal working professionals and external users.

9. Various methodologies and mechanisms should also be evolved to form a good model of Total Quality Management (TQM).

9. Conclusion

The analysis of the "Quality Assessment of University Libraries of Assam in Technical Processing", revealed several noteworthy strength that underline the effectiveness of the stated universities. Firstly, the strong commitment from top management is a pivotal factor that fosters an environment conducive to continuous improvement and innovation in library services. This foundational support is crucial for implementing strategic initiatives aimed at enhancing operational efficiency and user satisfaction.

Moreover, the focused approach on user needs reflects a commendable alignment with the core mission of university libraries, emphasizing the significance of adapting services to fulfill the evolving demands of patrons. With

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50% of the staff actively engaged and efficient in service delivery, it is clear that the workforce is not only committed but also capable of maintaining a high standard of quality in their functions. This level of involvement bodes well for collaborative efforts and the overall morale within the library settings.

The satisfactory physical appearance of the libraries contributes positively to the user experience, indicating a well-maintained and inviting environment for learning and research. Furthermore, the reported 60% agreement on good communication among staff highlights the importance of teamwork and collaboration in the technical processing operations, which enhances overall performance and service quality.

In summary, the quality assessment presents an optimistic picture of university libraries' technical processing capabilities, suggesting they are well-positioned to provide effective and efficient services to their users. Continuous investment in staff development, maintaining open channels of communication, and further encouraging user engagement will be essential in sustaining and improving these positive trends. Moving forward, the libraries should leverage these strengths to address any remaining challenges and further enhance their quality of service, ensuring they meet the needs of their academic community effectively.

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