Models/Concepts

Conceptualizing an Integrated Service Quality Model (ISQM) for University Libraries

Arachchige, J. J.G.

Library, Faculty of Engineering, University of Ruhuna

***Corresponding author**: jagathga@lib.ruh.ac.lk*

Abstract

The rapid evolution of academic libraries necessitates ongoing refinement of service quality models to address contemporary demands. Traditional evaluation methods face challenges such as inconsistent data collection and limited direct user feedback. Consequently, there is a shift towards outcome-based assessments, which focus on the quality of services from the user's perspective. This article explores whether current service quality evaluation models for academic libraries meet today's complex measurement requirements. A comprehensive literature review was conducted to identify and analyze existing models used for evaluating academic library service quality. Databases such as ProQuest, Google Scholar, Shodhganga, and E-LIS were consulted, providing access to a broad range of peer-reviewed articles, theses, and reports. The models identified were subjected to qualitative analysis to examine their content, evaluation criteria, focus, framework, application, strengths, and weaknesses. This analysis offered insights into each model's effectiveness and limitations in the context of modern academic libraries. Key models evaluated include the Balanced Scorecard (BSC), European Foundation for Quality Management (EFQM) model, SERVQUAL, SERVPERF, and LibQUAL+™. Each model offers unique perspectives on service quality but shows varying degrees of effectiveness depending on the context. For instance, though the BSC and EFQM provide comprehensive frameworks for strategic planning and organizational performance, they require significant adaptation for library settings. On the other hand, models such as SERVQUAL and LibQUAL+™, which focus on user satisfaction and service quality, are more prevalent in the library sector but face criticism for relying heavily on subjective perceptions. Based on the findings, the article proposes a new Integrated Service Quality Model (ISQM) for academic libraries. This model integrates elements from existing frameworks to address their limitations and align with the evolving needs of academic institutions. Emphasizing a user-centered approach, technological integration, and outcome-based evaluation, ISQM aims to exceed stakeholder expectations. The model represents a significant advancement in creating a comprehensive and adaptable framework for assessing and enhancing library service quality. Further research is needed for effective implementation to develop a comprehensive framework for evaluating modern university library quality.

Keywords: *Academic Library, ISQM, Library Quality Models, Service Quality Measuring, Service Quality Tools*

Introduction

University libraries are rapidly evolving, driven by technological advancements, shifting user expectations, and the increasing importance of digital resources. Libraries now serve as dynamic hubs that provide access to a wide array of resources, both physical and digital, offer research support, and meet the diverse needs of students, faculty, and staff. This shift has led to a growing emphasis on service quality and performance measurement, moving away from traditional input-based assessments that focused on financial, human, and material resources.

Historically, library evaluations centered on inputs such as funding, staffing, and collection size, with larger collections seen as indicators of quality (Bottrill & Boraden, 1994). However, these assessments largely reflected the perspectives of library providers and were criticized for not capturing actual performance (Turk, 2007). By the late 20th century, process measures like operational efficiency began to be incorporated, assessing metrics such as circulation counts and visitor numbers. Despite these improvements, evaluations remained provider-centric and often failed to engage users meaningfully (Xi & Levy, 2005).

The 1990s marked a shift towards outcome-based approaches, emphasizing the library's contribution to institutional goals. Models like the Goal Attainment and Strategic Constituencies Models influenced library evaluation practices, stressing alignment with stakeholder expectations and measuring success through outcomes (Lindauer, 1998). However, traditional evaluation methods still face challenges, including inconsistent data collection and insufficient user feedback (Franklin et al., 2009).

Given these challenges, it is crucial to assess whether existing service quality models for academic libraries meet today's needs. This article reviews common evaluation models, examining their components and potential for developing a more comprehensive framework. The aim is to align library evaluation practices with the evolving role of university libraries and the demands of modern academic institutions.

Methodology

A comprehensive literature review was conducted to identify existing models for evaluating academic library service quality. The review involved searching databases such as ProQuest, Google Scholar, Shodhganga, E-LIS, and other open-access platforms. These sources were chosen to provide access to a broad range of peer-reviewed articles, theses, and reports relevant to library service quality evaluation. Each identified model underwent qualitative analysis, focusing on its key features, including content, evaluation criteria, perspective, framework dimensions, application, strengths, and weaknesses.

This analysis helped assess the effectiveness and limitations of each model in the context of modern academic libraries. Based on the insights gained, a new framework is proposed for evaluating library service quality, designed to address the gaps in existing models and better meet the needs of contemporary academic institutions.

Results

The study reviewed several models for evaluating library service quality, highlighting their strengths and limitations in the context of academic libraries.

Balanced Scorecard (BSC): Developed by Kaplan and Norton in 1992, the BSC evaluates performance across four areas: financial, customer, internal processes, and learning and growth. While libraries like those at the University of Hull and Leeds University have used BSC for strategic decision-making, its complexity and the need for adaptation limit its broader application in academic libraries.

European Foundation for Quality Management (EFQM) Model: Introduced in 1991, the EFQM model focuses on continuous improvement and customer satisfaction. Though used by European academic libraries, the model's broadness and lack of quantitative support make it challenging to apply without significant modifications.

SERVQUAL Model: SERVQUAL, created by Parasuraman, Zeithaml, and Berry in 1988, measures service quality by comparing customer expectations with perceptions across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. It is widely adopted due to its adaptability but has been criticized for relying on subjective user expectations, which can vary and complicate analysis.

SERVPERF Model: SERVPERF, developed in 1992 by Cronin and Taylor, focuses solely on performance, simplifying assessment by excluding customer expectations. While efficient, it lacks critical customer input necessary for a comprehensive evaluation.

LibQUAL+™ Instrument: Based on SERVQUAL, LibQUAL+™ was developed by the Association of Research Libraries (ARL) in 2000 to evaluate library services using a 22-item survey. Though globally adopted for its quantitative and qualitative insights, it faces criticism for relying on subjective user perceptions. Despite this, LibQUAL+™ remains a standardized and widely used tool in academic libraries.

Each model offers valuable perspectives, but their limitations suggest the need for a more tailored approach to library service quality evaluation. The table 01 provides a summary of the main features of the existing service quality models reviewed.

Table 01: Main features of service quality models used for libraries

Model	Origin	Focus/ Perspective	Framework/ Dimensions	Application	Strengths	Weaknesses
SERVQUAL	Parasuraman, Zeithaml, and Berry	Assesses service quality by identifying gaps between customer expectations and perceptions	5 Dimensions: Tangibles, Reliability, Responsiveness, Assurance, Empathy	Widely used in libraries and other service industries	Comprehensive measure of user perceptions and expectations	May not fully capture the unique aspects of academic library services
LibQUAL+	Association of Research Libraries (ARL)	Measures the gap between user expectations and perceptions, emphasizing library service quality	3 Dimensions: Affect of Service, Information Control, Library as Place	Widely adopted for benchmarking and continuous improvement in academic libraries	Allows for peer comparison and benchmarking	Focuses on user perceptions, which may not address all aspects of service delivery
Information Systems Success Model (ISSM)	DeLone and McLean	Evaluates the success of library information systems	3 Dimensions: System Quality, Information Quality, Service Quality	Adapted for evaluating technological and service aspects in libraries	Comprehensive evaluation of both technological and service aspects	Limited application to digital library services

SERVPERF	Cronin and Taylor	Measures service quality based solely on performance without considering customer expectations	Same 5 dimensions as SERVQUAL, but focuses only on performance	Used to measure library quality and user satisfaction with some adaptations	Simplifies evaluation by focusing on actual performance	May overlook the importance of user expectations
LibQUAL+ Lite	Shortened version of LibQUAL+	Provides a more concise assessment of library service quality	Retains core dimensions of LibQUAL+ but with fewer survey items	Easier to administer and less time-consuming for respondent	Simplifies the assessment process	Reduction in survey length may limit depth of analysis
Library Performance Indicators (LPI)	Various sources	Focuses on specific aspects of library services, such as usage and satisfaction	Customized indicators based on specific library contexts	Used for evaluating collection usage, user satisfaction, service efficiency	Allows for customized evaluation	May lack comprehensiveness compared to integrated models
Balanced Scorecard (BSC)	Kaplan and Norton	Strategic planning and management system	4 Perspectives: Financial, Customer, Internal Processes, Learning & Growth	Adapted for evaluating performance in libraries	Provides a holistic view and aligns with strategic goals	Complex and resource-intensive to implement
Digital Library Service Quality (DLSQ) Model	Developed specifically for digital libraries	Evaluates the quality of digital library services	Focuses on Access, Usability, Content Quality	Tailored to the unique characteristics of digital libraries	Specific to digital environments, ensuring relevance	May not be applicable to traditional library services
European Foundation for Quality Management (EFQM) Model	European Foundation for Quality Management	Focuses on customer orientation and continuous improvement	Principles include self-assessment, learning, innovation, teamwork, and CSR	Used in libraries across Europe for service quality assessment	Emphasizes continuous improvement and customer focus	May require adaptation for library-specific contexts
Quality Maturity Model (QMM)	Wilson (2013)	Focuses on developing a quality culture within libraries	7 facets of quality culture measured against 5 maturity levels	Helps in planning improvement strategies based on maturity level	Aligns with strategic planning and organizational alignment	Adaptation and application may be complex
FALU Model	Alharbi (2012)	Outcome-based model assessing library services' impact on personal performance	Examines relationship between library usage and personal performance	Focused on personal performance impact on students and staff	Outcome-based approach linking services to performance	May be narrow in focus, requiring specific conditions

Ahmad's Model	Ahmad (2016)	Focuses on digital library service quality	3 Quality Features: Environmental, Delivery, Outcome	Focused on assessing third-party digital services	Emphasizes internal and external factors	Limited to digital library services, may not cover all quality aspects
ISO 11620	International Standard	Measures service quality in university libraries	Based on standardized metrics and criteria	Provides a formal, standardized framework for quality measurement	Offers a systematic approach to quality	Implementation can be time-consuming and challenging
Hossain's Service Performance Index	Hossain	Focused on service performance	6 Zones: Service performance, excellent, improvement, standard, problematic, alarming	Prioritizes resource allocation based on performance	Supports targeted improvement efforts	May oversimplify complex service quality issues

Discussion

The discussion focuses on various models for evaluating library service quality, highlighting their strengths, weaknesses, and applicability to academic libraries.

The Balanced Scorecard (BSC) and the European Foundation for Quality Management (EFQM) models are two well-established frameworks in performance management. The BSC, developed by Kaplan and Norton, evaluates organizations through four key perspectives—financial, customer, internal processes, and learning and growth. It has been adopted by several academic libraries, such as those at the University of Hull and Leeds University, for strategic decision-making. However, the complexity and resource requirements of BSC can be barriers, especially for smaller libraries. Extensive data collection and staff training are necessary to balance the model's four perspectives, making it less accessible for institutions with limited resources.

In contrast, the EFQM model emphasizes continuous improvement through a more flexible and qualitative approach, dividing evaluation into "Enablers" (such as leadership and processes) and "Results" (such as customer and business outcomes). The model's focus on stakeholder satisfaction is highly relevant for academic libraries, where user experience is crucial. However, the broad scope of EFQM can lead to challenges in measuring precise improvements, as it lacks the quantitative rigor of other models.

The Quality Maturity Model (QMM) offers a more specialized approach, focusing on service quality and internal capacity building. It provides libraries with a roadmap for continuous improvement, making it ideal for institutions seeking long-term growth. The QMM is particularly effective for aligning library goals with strategic planning, enhancing organizational resilience.

SERVQUAL, introduced by Parasuraman, Zeithaml, and Berry, remains one of the most widely used models for evaluating service quality in libraries. It assesses user experiences across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. While SERVQUAL is useful for understanding customer satisfaction, it relies heavily on subjective user expectations, which can vary widely, thus complicating the evaluation process. SERVPERF, a simplified version of SERVQUAL, focuses solely on performance, eliminating the expectations element, but it may overlook crucial feedback that helps improve services.

LibQUAL+™, an adaptation of SERVQUAL for academic libraries, assesses service quality through three dimensions: Service Affect, Information Control, and Library as Place. Developed by the Association of Research Libraries (ARL), it is widely used to benchmark libraries against their peers. Its use of the "Zone of Tolerance" concept helps libraries identify acceptable service levels and gaps, but it shares SERVQUAL's reliance on subjective user perceptions.

The FALU Model, developed by Alharbi, focuses on the impact of library services on academic performance. This outcome-based approach is particularly relevant in academic libraries, where supporting student and faculty success is a priority. By assessing factors such as collection quality and library facilities, the FALU Model provides insights into how libraries contribute to academic achievement.

Ahmad's Model (2016) targets digital library services, a growing area of importance. It evaluates both internal and external factors related to digital resources, offering a specialized framework for libraries with significant digital holdings. However, its focus on digital services limits its broader applicability.

Lastly, ISO 11620, an international standard for library service quality, provides a comprehensive evaluation framework but can be difficult to implement due to its complexity and resource demands. Similarly, Hossain's SPI offers a practical, performance-based tool for identifying areas for improvement, helping libraries prioritize services and allocate resources effectively.

Conclusion

In conclusion, even though various models offer valuable frameworks for evaluating library service quality, each has limitations in terms of complexity, adaptability, and user feedback. Libraries must select models that best align with their specific goals, resources, and user needs. The analysis shows that tools like SERVQUAL, SERVPERF, and LibQUAL+™ provide useful insights. However, they struggle with capturing subjective user expectations and adapting to the specific needs of academic libraries. Broader models like the BSC and the EFQM require significant adaptation and may be too complex for many libraries.

The study highlights the need for a comprehensive framework that integrates multiple perspectives, addressing the limitations of existing models and aligning with the evolving role of academic libraries. A more balanced and adaptable approach is required, one that considers both strategic alignment and user-centered outcomes. This framework would enable libraries to assess and improve their services effectively, meeting the needs of modern institutions and their stakeholders.

Recommendations

A conceptual framework like the Integrated Service Quality Model (ISQM) could combine the strengths of various models to offer a comprehensive and flexible approach tailored to academic libraries. ISQM can be developed with more research and testing. The ISQM should incorporate the following key features.

1. Integration of Existing Models: ISQM incorporates SERVQUAL's five dimensions—tangibles, reliability, responsiveness, assurance, and empathy—and adapts LibQUAL+'s library-specific focus on service effect, information control, and library as place.

2. Dimensions of ISQM: Key areas assessed include service delivery, information resources, user experience, technological infrastructure, and staff competence. These dimensions reflect the diverse aspects of library services, from resource quality to user satisfaction.

3. User-Centered Approach: Emphasizing user feedback, ISQM ensures library services meet the expectations of students, faculty, and researchers. Surveys and focus groups play a vital role in this continuous feedback loop.

4. Benchmarking and Improvement: ISQM promotes benchmarking against best practices and peer institutions, fostering innovation and ongoing service enhancement.

5. Customization: The model is adaptable to the unique needs of different libraries, ensuring relevance across varied academic contexts.

6. Technological Integration: ISQM includes the latest Gen AI advancements to improve resource management, personalized services, and user interactions.

7. Outcome-Based Evaluation: Focuses on the impact of library services on academic success, research output, and user satisfaction.

ISQM offers a flexible, comprehensive approach that integrates technology and user feedback to enhance library services.

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