

REVIEW PAPER

Quality Assessment of Libraries

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ABSTRACT

The concept of quality is not a new phenomenon for library and information science professionals as it is entrenched in library philosophy and practice. Service quality is viewed as a comparison of what the customer expected prior to the use of services and the perceived level of services received. Quality of service and user satisfaction are two significant facets of effective service management. Although the concept of quality is not new, measuring service quality as a management technique has gained importance over the last few decades in service industries and libraries are no exception. The perception of library quality differs in the stakeholder groups and users who evaluate library quality according to their experience with the services they use. The present study discusses quality assessment process in library and information systems in modern age. A number of approaches have been made to quantify the library service quality.

Keywords: Service quality, SERVQUAL, LIBQUAL+, ISO 11620, ISO 2789, performance indicator, benchmarking, balanced scorecard, RODSKI

1. INTRODUCTION

A dramatic change is occurring in the scope and pace of technological advances that are contributing substantially to a fundamental shift in library and information products and services, thereby, affecting the roles and responsibilities of professionals. The information context in which libraries and information professionals may have to operate will be far more different than ever in the past.

As the shift from an industrial to an information-based economy takes place, there will be far more aggressive participants in the production, processing, dissemination, and distribution of information than ever before. The issues before library and information professionals are how to cope with the increasing demand for information from a variety of users and use of information technology (IT) to redefine services, roles, and responsibilities.

It is against this background, the quality of library should be assessed to keep going in the highly competing situation. The present study depicts the quality assessment process in library and information systems in modern age.

2. THE EVOLUTION OF QUALITY CONCEPT

Quality is an attribute, a characteristic or a trait or an excellence, the possession of which invests a thing, a person or an idea with a sense of superiority¹. Prior to assessment of service quality, it would be quite appropriate to know about the inherent characteristics of the quality as described below:

Intangible: Quality like value is imperceptible only when it manifests itself in a person, a matter, a method, or an idea that it is describable. But though intangible, its presence is evident and its loss eloquent.

Relative/Associative: There is nothing like "absolute" quality. Quality is associated with time, place, environment and the people. A quality product or a quality service in one milieu or environment may not necessarily be a quality product or a quality service in another. Similarly, one cannot impose one's own notion of quality on others.

Tendency to Deteriorate: Quality has a natural tendency to deteriorate with the passage of time, shift in environment, and change of values. It is highly perceptible to the facet of obsolescence. Standards are

therefore evolved not only to maintain the quality, but also to revise it from time-to-time to further improve it.

Dialectical Relationship between Quality and Quantity: Much is made of the fact that quality tends to go down as the quantity goes up. There is an element of truth in it. But one should not allow oneself to be overwhelmed by this notion and let the quality suffer under the onslaught of quantity. The managerial quality lies in keeping quality abreast of quantity, certainly not behind it and eventually creating conditions in which quantity can troublesome itself into quality. The relationship between the two is of dialectical nature and not of perpetual antipathy.

Quality is a Seamless Whole: Quality is indivisible. It cannot partly 'be' and partly 'not be'. Either it is or it is not. Also, it should not be judged in parts.

Gravin² discussed five approaches to define quality:

- (i) *Transcendent-based quality:* It is synonymous with innate excellence. Customers usually presume expensive products means high quality or high grade.
- (ii) *Product-based quality:* The product-based approach views quality as a precise and measurable variable.
- (iii) *Manufacturing-based quality:* In this approach the focus is on the supply side and is concerned primarily with engineering and manufacturing facilities.
- (iv) *Value-based quality:* It defines products in terms of cost and prices.
- (v) *User-based quality:* According to this approach the goods that best satisfy customer preferences are believed to be of high quality. This approach equates quality with maximum satisfaction.

Gravin² provides the following eight quality dimensions that he feels make up quality:

- ✘ *Performance:* This refers to how efficient a product is in achieving its intended purpose.
- ✘ *Features:* These are elements that supplement a product's basic performance such as cruise control on a car.
- ✘ *Reliability:* This refers to how a product performs consistently over its life-cycle.
- ✘ *Conformance:* This means that a product must meet or conform with the specifications for its use.
- ✘ *Durability:* The degree to which a products stands stress without failure.

- ✘ *Serviceability:* The ease to which a product can be repaired.
- ✘ *Aesthetics:* The sensory characteristics of a product such as how it looks or how it sounds.
- ✘ *Perceived quality:* This is based upon customer perceptions and opinions.

As few products can claim to rank high on all eight dimensions at all times, it is clear that some dimensions can be achieved only at the expense of the other dimensions. Gravin's approaches to quality are largely based on goods. In contrast, Calvert and Herson³ focused their studies on service quality and proposed four perspectives of service quality as excellence, value, conformance to specifications, and meeting and/or exceeding expectations. Their research emphasised "meeting and/or exceeding expectations" and led them to develop a framework for service quality in academic libraries.

To achieve high quality in their products and services is essential not only for commercial firms, but also for all non-commercial institutions. Quality will have a different aspect in every institution, but there is a broad consensus in management literature. A short definition that has achieved acceptance is quality is customer satisfaction. "Fitness for use" is an alternate short definition. Unfolding the definition starts with defining the word "customer". A customer is anyone who is impacted by the product or process. A "product" is the output of any process⁴.

In the ISO 9000 standard quality is described as the consistent conformance of a product or service to a given set of standards or expectations⁵. In most definitions quality is defined in relation to the customer or user: "... the key issue is that quality becomes a meaningful concept only when it is indissolubly linked to the aim of total customer satisfaction"⁶. Quality of a product or service defined in relation to the customer must not necessarily mean the highest grade possible. A product of a simpler grade may have high quality because it meets the needs and expectations of its target customer group. Quality for one customer or customer group does not always mean quality for another customer or group⁷.

2.1 Parameters of Quality in Library and Information Science

Each subject or object of study has its own set of parameters and the same should be assessed or evaluated in terms of those parameters only. Library and information service too has its own parameters for assessment/evaluation as illustrated in Table 1.

Table 1. Library quality component and parameter

	Component	Parameter
Library	Reading materials	<ul style="list-style-type: none"> ▪ Best documents for the largest number at the least cost ▪ Right document for the right user at the right time ▪ Every document its user
	Library techniques	<ul style="list-style-type: none"> ▪ Logical but practical ▪ Easy to practice ▪ Simple to follow ▪ Purposive to the specific library ▪ Uniform application
	Library users	<ul style="list-style-type: none"> ▪ Document are for use ▪ Every user his/her document ▪ Save the time of the user
	Library building, furniture and equipments	<ul style="list-style-type: none"> ▪ Functional ▪ Aesthetic ▪ Comfortable
	Library environment	<ul style="list-style-type: none"> ▪ Conducive reading atmosphere
	Library staff	<ul style="list-style-type: none"> ▪ Academically qualified ▪ Professionally trained ▪ Update with information ▪ Motivated
	Library management	<ul style="list-style-type: none"> ▪ Having capacity to planning, organising, staffing, directing, coordinating, reporting, budgeting
	Education and training in library and information science	<ul style="list-style-type: none"> ▪ Current ▪ Relevant ▪ Having the potential to develop the skills
Research and development in library and information science		<ul style="list-style-type: none"> ▪ Relevant ▪ Productive ▪ Promote self-reliance
Library web-page		<ul style="list-style-type: none"> ▪ Content ▪ Language ▪ Structure ▪ Design ▪ Navigation ▪ Accessibility
Library association		<ul style="list-style-type: none"> ▪ That protects and promotes the instances of professionals representative

3. CHANGING CONCEPT OF QUALITY IN A LIBRARY

The concept of quality is not a new phenomenon for library and information science professionals as it is rooted in library principles, practices, and activities. Ranganathan's five laws of library science, particularly the fourth law (save the time of reader) implies the importance of quality in library services. The law emphasises that library administration be simple and efficient to save user's time. Knowledgeable staff provides seamless access to information regardless of format, whether the user is in the library or at a remote location⁸. Historically, the quality of library has been measured in terms of its collection (size, number of titles and breadth of subject coverage) and various

counts of its use, budget and manpower, and services. In recent past, this concept has been changed towards the nature of service rendered by the librarians and not merely on the library collection and size.

However, in the present-day context, satisfying the needs of the users is very important and the reliance on the traditional methods might not be sufficient to assess the quality and effectiveness of the library from customers' perspective. Today's academic libraries face competition from alternative, cost-effective information providers. Quality is the basic philosophy and requirement of library service, and all libraries strive to deliver the highest quality of service. If a library provides appropriate information to the user at the right time and in the required form, then it could be argued to be

maintaining quality⁹. In the light of this reality, it is imperative for libraries to seek means to ensure that their services meet, and preferably exceed user expectations. In service marketing literature, service quality is viewed as the comparison of what the customer expected prior to the use of services and the perceived level of services received⁸. Service quality and satisfaction are two significant facets of effective service management. Library and information science (LIS) researchers have followed the principles of marketing philosophy to focus attention on expectations and an alternative view of quality.

Although the concept of quality is not new, measuring service quality as a management technique has gained importance over the last few decades in service industries. Quality in library and information services can have many aspects. Peter Brophy, starting from the general management literature, has adapted a set of quality attributes to libraries. Table 2 relies for the most part of Brophy's set and shows the quality criteria with typical examples of their appliance to LIS⁷.

4. DETERMINANTS OF QUALITY OF SERVICES IN A LIBRARY

In services, it is the customer who defines quality. Therefore, human side of service is key to deliver quality.

No doubt many of the determinants for quality of products can be applied to the service, but the human side of service is missing to a considerable extent in case of services. A. Parasuraman *et al.*, a group of researchers in marketing have proposed quality dimensions¹⁰. Originally their study consisted of 10 dimensions. Table 3 depicts the dimensions, features, and sample questions to be asked in context of a library. Later on these 10 dimensions were pooled into 5 dimensions as given in Table 4. The five dimensions of services considered the following issues in library scenario (Table 5).

5. SCOPE OF QUALITY ASSESSMENT STUDY IN LIBRARIES

Library quality can have many aspects, and these aspects can change if seen from the point of view of the various stakeholders (are all groups that have an interest in functioning of an institution): for a library the different stakeholders are⁷:

- ✘ The users (actual and potential).
- ✘ Funding institutions (a university, a community).
- ✘ Policy makers.
- ✘ Library staff.

Table 2. Criteria of library quality

	Criteria of library quality	Examples
Performance	A service meets its most basic purpose	Making key information resources available on demand
Features	Secondary characteristics, which add to the service but are beyond the essential core	Altering services
Reliability	Consistency of the service's performance in use	No broken web links
Conformance	The service meets the agreed standard	Dublin core
Durability	Sustainability of the service over a period of time	Document delivery within 2 days
Currency	Up-to-datedness of information	Online catalogue
Serviceability	Level of help available to users	Complaint service
Aesthetics	Visual attractiveness	Physical library, website
Usability/Accessibility	Ease of access and use	Opening hours, website structure
Assurance/competence/Credibility	Good experience with staff' knowledgability	Correct reference answers
Courtesy/Responsiveness/Empathy	Accessibility, flexibility, and friendliness of staff	Reference service
Communication	Clear explanation of services and options in a language free of jargon	Website, Signposting in the library
Speed	Quick delivery of services	Interlibrary lending
Variety of services offered	May dash with quality, if the resources are not sufficient for maintaining quality in all services	Comprehensive collection, reference service in walk-in, mail and chat form
Perceived quality	The users' view of the service	User satisfaction

Table 3. Quality dimensions in library

Quality dimension	Core features	Samples of questions to be asked in context of library services
Tangibles	Appearance of physical facilities, equipment, personnel, printed and visual materials	<ul style="list-style-type: none"> • Are facilities attractive? • Are staffs dressed appropriately? • Does technology adopted look modern?
Reliability	Ability to perform promised service dependably and accurately	<ul style="list-style-type: none"> • If a response is promised in a certain time, does it happen? • Are exact specifications of user followed? • Are statements or reports free of error? • Is service performed right the first time?
Responsiveness	Willingness to help customers to provide prompt service	<ul style="list-style-type: none"> • When there is a problem, does Library respond to it quickly? • Are Library staffs willing to answer users' questions? • Are specific times for service accomplishments given to users? • Are public situations treated with care and seriousness?
Competence	Possession of required skill and knowledge to perform service	<ul style="list-style-type: none"> • Can library staff provide service without fumbling around? • Are materials provided appropriate and up-to- date? • Can library staff use the technology quickly and skillfully? • Does staff appear to know what they are doing?
Courtesy	Politeness, respect, consideration and friendliness of contact personnel	<ul style="list-style-type: none"> • Does staff member have a pleasant demeanor? • Does staff refrain from acting busy or being rude when clients ask questions? • Does staff observe consideration of the property and values of user?
Credibility	Trustworthiness, believability, honesty of the service provider	<ul style="list-style-type: none"> • Does library have a good reputation? • Do library staff members refrain from pressuring the client? • Are responses given accurate and consistent with other reliable sources? • Does the library guarantee its services?
Security	Freedom from danger, risk, or doubt	<ul style="list-style-type: none"> • Is it safe to enter the premises and to use the equipment? • Are documents and other information provided for the user held securely? • Are use records of users safe from unauthorized use? • Can user be confident that service provided was done correctly?
Access	Approachability and ease of contact	<ul style="list-style-type: none"> • How easy is it to talk to knowledgeable library staff member when user has a problem? • Is it easy to reach the appropriate staff person <ul style="list-style-type: none"> ○ in person? ○ by telephone? ○ by email? • Are service access points conveniently located?
Communication	Listening to customers and acknowledging their comments and Keeping them informed in a language they can understand	<ul style="list-style-type: none"> • When user contacts service point, will staff person listen to their problem and demonstrate understanding and concern? • Can library staff explain clearly the various options available to a particular query? • Does library staff avoid using technical jargon when speaking with clients?
Understanding the customer	Making the effort to know customers and their needs	<ul style="list-style-type: none"> • Does someone on staff recognise each regular user and address them by name? • Does staff try to determine what users' specific objectives are? • Is level of service and cost of service consistent with what user requires and can afford? • Are service providers flexible enough to accommodate to users'

Table 4. Redefined quality dimensions

Ten dimensions (original model)	Five dimensions (later model)
Tangibles	Tangibles
Reliability	Reliability
Responsiveness	Responsiveness
Competence	Assurance
Courtesy	
Credibility	
Security	
Access	Empathy
Communication	
Understanding the customer	

Table 5. Redefined quality dimensions in a library scenario

Dimensions	Definition
Tangibles	The physical appearance of the library: library staff, facilities and communications materials
Reliability	The ability of library staff to perform the promised service dependably and accurately.
Responsiveness	The willingness of library staff to help users and provide prompt service
Assurance	The knowledge and courtesy of library staff and their ability to convey trust and confidence
Empathy	The caring, individualized attention that library staff provide to users

- ✘ Library managers.
- ✘ General public.

The perception of library quality (Table 6) will differ in the stakeholder groups. Users see library quality according to their experience with the services they use. They will not care for the efficiency of background processes, but for the effective delivery of services.

The funding or parent institution will be interested in the library's benefit to the institution and in the library's cost-effectiveness. Staff, on the other hand, will rate the library's quality by their working conditions, by adequate offers for further education, and by an efficient organisation. Not all of the issues named here are indeed criteria of library quality. A good reputation for instance is rather an effective of quality services, but it is important for maintaining quality.

It is possible to assess library collections, services, and facilities from various vantage points. Adopting an organisational perspective, for instance, librarians might examine issues of extensiveness, efficiency, or effectiveness, perhaps even within a cost framework. Taking a customer perspective, they might examine service quality or satisfaction. One way of evaluation

Table 6. Library quality perceptions of the stakeholders

Users	<ul style="list-style-type: none"> - Access to information worldwide - Delivery of information to the desktop - Speed and accuracy of delivery - Good in-library working conditions - Responsiveness of staff - Reliability of services
Financing authorities	<ul style="list-style-type: none"> - Cost-effectiveness - Clear planning, effective organisation - Positive outcome on users - Benefits for the institution's goals - Effective cooperation with other institutions - High reputation of the library
Staff	<ul style="list-style-type: none"> - Good working conditions - Clear planning, straight processes - Systematic staff development - High reputation of library

does not preclude the use of others; rather, each offers different insights and opportunities to engage in planning and improved decision-making¹¹. There are various options for assessing the quality of library:

- (a) *Performance indicators*: it measures the effectiveness and cost-efficiency of library services. They produce quantified data and are therefore sometimes called "objective".
- (b) *User surveys*: measure the perceived quality, users' estimate of library services. They produce qualitative data and have a subjective bias.
- (c) *Outcome assessment*: tries to prove the value and benefit of libraries for individual users and society.

The standards established by Tann¹² are valid for the general assessment of library quality:

- ✘ Knowing the customers' needs.
- ✘ Faultless delivery of service.
- ✘ Good facilities.
- ✘ Reliable equipment.
- ✘ Efficient administration.
- ✘ Efficient back-up service.
- ✘ Feedback loops to build in improvement procedures.

The best way for any library to measure quality is to⁷:

- ✘ Assess what its users (or non-users) expect from the services they use (or do not use because of bad experience).
- ✘ As the funding institution's opinion about what the library should do and how it should perform to support the institution's goals.

- ✂ Try to find measures that assess quality in the sense of stakeholder groups.

6. QUALITY ASSESSMENT IN LIBRARIES: APPROACHES

6.1 SERVQUAL

SERVQUAL (for SERVICE QUALity), which is grounded in the Gap Theory of Service Quality developed by the marketing research team of A. Parasuraman, V.A. Zeithaml and L.L. Berry. Introduced in 1988, the SERVQUAL is a diagnostic tool to measure service quality, defined as the difference between customer's perception and expectation of service¹³. The SERVQUAL approach has been "successfully" applied to a variety of service settings including library¹⁴. The developers applied numerous qualitative studies to this and finally evolved a set of five dimensions (mentioned earlier in this article), which have been consistently ranked by customers to be most important for service quality, regardless of service industry. Based on the five SERVQUAL dimensions, the researchers also developed a survey instrument (better known as 22-item SERVQUAL instrument) to measure the gap between customers' expectation for excellence and their perception of actual service delivered. SERVQUAL's customer-based approach for conceptualising and measuring service quality offers an alternative for defining the quality of library services. It emphasises the service nature of libraries, in which the traditional collection-based criteria of quality may be part of, but not the entire component, of excellence. Service quality contributes to value experienced by customers. Value becomes an outcome of excellent service. The SERVQUAL instrument, modified for use in library service settings, provides an outcome measure for managers to gauge their service activities.

SERVQUAL has also been subjected to a number of theoretical and operational criticisms. Despite all

these criticisms, studies have convincingly shown that subject to certain modification/adjustment, SERVQUAL can be applicable and useful for evaluating library services¹⁵.

6.2 Gap Theory of Service Quality

This model was developed by A. Parasuraman, V.A. Zeithaml, and L.L. Berry. The model claims that the consumer evaluates service quality experience as the outcome of the gap between expected and perceived quality. It emphasises on the key requirements for a service provider delivering the expected service quality. The model identified 5 (Table 7) gaps that can cause unsuccessful service delivery. By learning the flow of this model, it is possible to exercise greater management control over the consumer relationships. The study of this model should lead to an improved realisation of the key issues at which the service providers can influence the satisfaction of consumers¹⁶.

6.3 LibQual+

It is an emerging standardised measure of library service quality across institutional library contexts. It is adapted from SERVQUAL. This tool allows a web-based method of administration and analysis and eases the burden of administration locally, creating a scaleable, and replicable protocol. It also makes readily available large normative data on user perceptions, and expectations of library service quality. LibQUAL+ was initially developed as a self-financed pilot project by interested members of the Association of Research Libraries (ARL) in collaboration with the Texas A&M University Libraries (TAMU) and subsequently received substantial funding from the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE). The goals of three-year research and development project include:

- (a) Establishing a library service quality assessment

Table 7. Gap theory of service quality

Gaps		What is it?	What causes it?
Gap 1	Lack of understanding	It is the Gap between consumer expectation and management perception	Management's failure to correctly identify client expectations
Gap 2	Lack of development	It is the gap between management perception and service quality specifications	Limited resources, lack of operational tools to bring the client's voice to service specifications; management's indifference and rapid change in market conditions
Gap 3	Poor delivery	It is the gap between service quality specification and service delivery	Lack of knowledge about specifications, lack of ability to carry out the specified or lack of commitment by collaborators
Gap 4	Unrealistic expectation	It is the gap between service delivery and external communication	Lack of communication and the client does not know what to expect or more is promoted than actually delivered
Gap 5	Service gap	It is the gap perceived service and delivered service	A gap or a series of gaps from 1 to 4

program at ARL

- (b) Developing web-based tools for assessing library service quality
- (c) Developing mechanisms and protocols for evaluating libraries
- (d) Identifying best practices in providing library service. The dimensions of LibQual+ that make up a users perception of service quality include¹⁷:

Service affect: responsiveness, assurance, empathy, and reliability—the human dimensions of library service.

Library as place: campus centre of intellectual life, but may not be a concern if the physical facilities are adequate.

Personal control: ability to navigate both the information universe in general and the web in particular.

Information access: ubiquity of access meaning information delivered in the format, location, and time of choice and comprehensive collections.

6.4 Performance Indicators

Measuring performance means collecting statistical and other data that describe the performance of the library and analysing these data to evaluate the performance of the library. Or, in other words: comparing what a library is doing (performance) with what it is meant to do (mission) and what it wants to achieve (goals). Performance or quality indicators (also called performance measures) have been developed and applied by libraries since several decades and have been published in handbooks and standards.

The international standard ISO 11620 defines a performance indicator as “numerical, symbolic or verbal expression, derived from library statistics and data used

to characterise the performance of a library”. Performance indicator includes both simple counts and ratios between counts⁷. The criteria for performance indicators are established in the ISO 11620. Performance indicators should be:

- ✘ *Informative:* helpful for identifying problems and possible actions to be taken.
- ✘ *Reliable:* producing the same results when used the same circumstances.
- ✘ *Valid:* measuring what they are intended to measure.
- ✘ *Appropriate:* compatible with the library’s procedures and working environment.
- ✘ *Practical:* easy to use and understand, applicable wit a reasonable amount of effort in terms of staff time, staff qualifications, operational costs and users’ time and patience.
- ✘ *Comparable:* allowing comparison of results between libraries of similar mission, structure and clientele.

Performance indicators measure on one side, the effectiveness in delivering services to user and on the other side the cost-effectiveness, the efficient use of existing resources. Quality would then mean what a service is “good” as well as “cheap”.

6.5 Benchmarking

Benchmarking is a process of identification of best practices in another organisational unit, followed by their analysis and adoption. It is the systematic search for best practices, innovative ideas, and highly effective operating procedures. Benchmarking considers the experience of others and uses it. From library point of view, benchmarking is a total quality tool used to

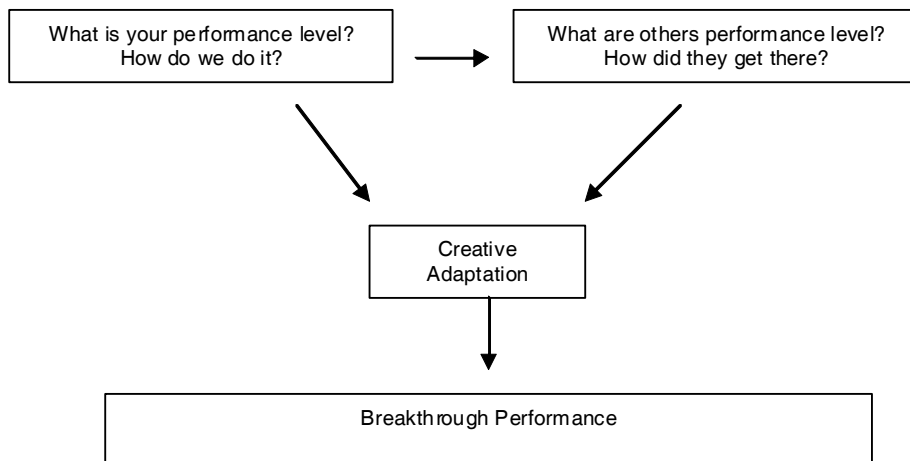


Figure 1. Benchmarking concept.

measure and compare your library's work with those in other libraries. The goal of benchmarking is to increase library's performance by adopting the best practices of library's benchmarking partners. Since best library practices are always evolving, every library should apply benchmarking¹⁸. Benchmarking is a well proven tool for quality study. In library scenario, it brings the following benefits:

- ✘ Improves library's performance.
- ✘ Gains/improves upper management support.
- ✘ Builds professional relationships.
- ✘ Meets strategic goals.
- ✘ Proves library's value.

6.5.1 What to Benchmark in a Library?

Library resources and processes can be benchmarked. Throughout time, library has been associated with the resources they hold. Library processes means any service or function in the library that takes certain inputs, acts upon these and produces an output. For example, reference service, online searching service, inter-library loan, journal routing service, circulation procedure, shelving/re-shelving procedures, and collection development.

Benchmark a library process that:

- ✘ Is important to library staff, customer and higher management.
- ✘ Emphasises librarian's skills.
- ✘ Faces competition from outside sources.
- ✘ Is not transitional.

- ✘ Has room for improvement.

Benchmarking process pros:

- ✘ Benchmarks libraries in different environments.
- ✘ Tells how to improve.
- ✘ Explains why you need libraries.
- ✘ Uses business approach.

6.6 Balanced Scorecard

The concept for the balanced scorecard was introduced in an article in the *Harvard Business Review* by Kaplan and Norton¹⁹. It is a conceptual framework for translating an organisation's strategic objectives into a set of performance indicators distributed among four perspectives: Financial, customer, internal business processes, and learning and growth²⁰. Some indicators are maintained to measure an organisation's progress toward achieving its vision; other indicators are maintained to measure the long term drivers of success. Through the balanced scorecard, an organisation monitors both its current performance (finance, customer satisfaction, and business process results) and its efforts to improve processes, motivate and educate employees, and enhance information systems—its ability to learn and improve. In a library scenario the balanced scorecard allows a library to concentrate on a small number of measures.

Taken together, these measures provide a quick but comprehensive picture of the health of the organisation. Balanced scorecard provides a framework that the library believes can be easily explained and understood by staff and others. It has been given increased relevance within the library environment through the

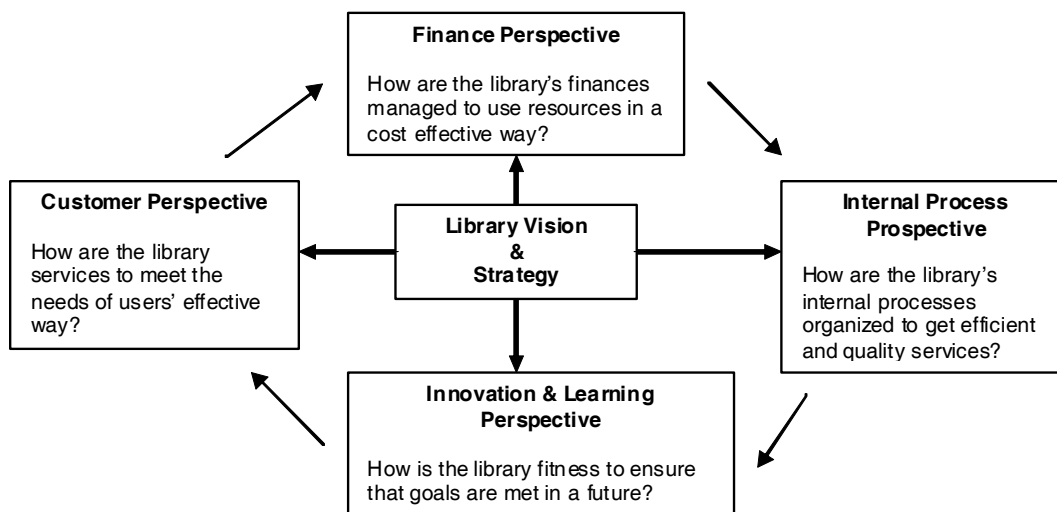


Figure 2. Balanced scorecard structure adapted to a library.

Table 8. Rodski customer satisfaction survey variables

Areas	Variables
Communication	Library staff describe clearly the services on offer Library staff provide clear and accurate answers/responses to my queries Library catalogue provides clear and useful information Library information guides are clear and useful Library web pages provide clear and useful information Adequate signage exists within the library
Service quality	Library staff provide quality service Books and journals are re-shelved quickly Prompt corrective action is taken regarding missing books and journals Services for clients with disabilities are adequate Library staff are proactive in their dealings with me
Service delivery	Opening hours meet my needs Service staff respond in a timely manner Inter-library loan requests are filled promptly Requests for inter-campus loans are filled promptly The library collection is adequate for my needs Library staff are readily available to assist me
Facilities and equipment	Photocopying and printing facilities are adequate Individual seating is adequate Group study facilities are adequate Access to computers to support study/research is adequate Quiet study facilities are adequate Facilities for using personal laptops are adequate Wireless facilities are adequate
Library staff	Library staff treat me fairly and without discrimination Library staff display professionalism Library staff are friendly and helpful
Virtual library	The library website is easy to use The library catalogue is easy to use Course-specific resources are easy to find and access Access to electronic resources is adequate Off-campus access to electronic information resources and services is adequate Online help services are adequate

addition of a fifth perspective, information resources (satisfying demand for information from Library and other resources), to the existing categories specified by the library as Clients ('providing value to clients to help them achieve their goals); financial resources (building financial strength to develop Library services and assets); internal processes (excelling at processes for fast, effective delivery of services and resources); and learning and growth (enabling staff to lead and innovat')²¹.

6.6.1 Advantages of using the Balanced Scorecard

This tool is being used by several organisations throughout the world because of certain advantages this scorecard has been able to deliver which are cited below²⁸:

- ✘ It translates vision and strategy into action.
- ✘ It defines the strategic linkages to integrate performance across organisations.

- ✘ It communicates the objectives and measures to a business unit.
- ✘ It aligns the strategic initiatives in order to attain the long-term goals.
- ✘ It aligns everyone within an organization so that all employees understand how they support the strategy.
- ✘ It provides a basis for compensation for performance.

The scorecard provides a feedback to the senior management if the strategy is working.

6.7 Rodski Survey

The Rodski Customer Satisfaction Survey has been used as a performance and benchmarking tool by Australian university libraries since 1998. Since its inception almost every university library in Australia and New Zealand has used the tool to measure and benchmark their performance (Table 8). The Rodski

survey methodology gives library management the opportunity to measure and assess any gaps between client expectations and service delivery. This data can be used to improve levels of service delivery by redistributing resources and efforts to services clients' rate as very important but performing to a lower standard. Thirty-three Variables are grouped into the following areas²²:

- ✂ Communication .
- ✂ Facilities and equipment.
- ✂ Service quality.
- ✂ Library staff.
- ✂ Service delivery.
- ✂ Virtual library.

The name has been changed from Rodski to Insync survey²³.

7. INTERNATIONAL STANDARDS FOR LIBRARY QUALITY

ISO has designed standards dealing with library statistics and indicators (ISO 2789, ISO 11620 and others projects which are still under development). These can be used as reference documents and strategic tools in a performance assessment process in library.

ISO 2789—assessing quantity (*International Library Statistics*), and ISO 11620—assessing quality (*Performance indicators for libraries*), which is based on an international consensus of experts, takes into account, as much as possible, the recent evolutions in library structures and services. In addition, they are related to classical and shared assessment models. So, although their aim is not to draw up an assessment framework, they prove themselves useful for basic operations in such a framework: to define objects and services, and to classify, count, and build appropriate indicators²⁴.

7.1 ISO 2789

The first edition of **ISO 2789** dates back to 1974. It was based on work begun at the end of the 1960's by experts from IFLA and ISO, at the request of UNESCO, which needed general guidelines for library statistics aggregation at an international level. The fourth version was published in September 2006. It deals with the assessing quantity in library in terms of collection size, number and types of users, usage of services, staff, space, equipment, and training.

7.2 ISO 11620

The first version of this standard was published in 1998. A new one was completed in 2008. The main sources of the library performance indicators are: (a) resources, infrastructure—what services does the library offer; (b) use—how are the services accepted; (c) efficiency—are the services offered cost-effectively; (d) potentials and development—are there sufficient potentials for future development.

8. CONCLUSIONS

Libraries must execute evaluation programmes as management tools oriented to identify services requiring improvements, as new ones to be implemented. The credibility and respect that the information service has among the community can only be certified through the systems' auditor: the user. The ability to learn and to develop library activities from a customer's point of view as well as involvement of the library staff can help to improve the quality of library. To deal with the customer the development of the role of the librarian as an inspirer, a mentor/coach and/or the contact creator is essential. The ability for library to create quality improvements is highly dependable of its ability to verify its activities from a customer's point of view. The difficulty lies in trying to find a single model or set of simple indicators that can be used by different institutions, and that will compare something across large groups that are by definition only locally applicable—i.e., how well a library meets the needs of its institution. Librarians have either accepted oversimplified national data or have undertaken customised local evaluations of effectiveness, but that has not been devised an effective way to link the two. Quantifiable data obtained from any tool is not an end in itself. Library staff should discuss user perceptions and expectations, using their experience to interpret service quality data and suggest how perceived shortfalls could be addressed.

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