

**Improving library services through the application of business  
performance concepts**

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Service management

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Service performance

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Balanced Scorecard

Critical success factors

Service quality

User expectation

User satisfaction



## Abstract

In virtually any field of endeavour today, access to information is a prerequisite for success. Libraries form the repositories with user-friendliness their mission. This has led to the need for new ways to evaluate library performance. Astute library managers will plan for such developments, taking into account current and future trends that impact on library services. Library services are also affected, for example, by financial considerations and staffing problems. Further complicating matters are the demands of their clients who have developed increased expectations of improved service, and also a desire for more self-service opportunities. Such changes raise the question: “to what extent can libraries apply business performance management techniques to assess their performance.” This, then, is the research question for this study.

This work will evaluate library performance with the aim of improving service management. Its targets are the UWC library, and others, such as the Stellenbosch University, and the Cape Peninsula University of Technology. The application of selected service management techniques and measures used in business will be explored. These techniques include The Balanced Scorecard, critical success factors and service quality. The study also touches on transformation and change management. An obvious source of information about library management is the corps of managers. The secondary source of information is the community of library users.

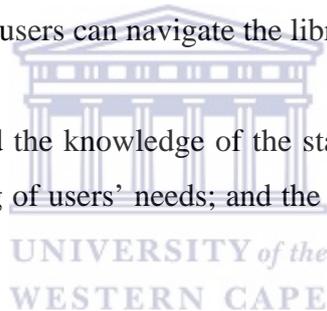
The selection of the correct instrument is important. There were initial concerns raised such as, which instrument is the most appropriate for the measurement of service levels in a library. In the literature, two instruments are deployed: ServQUAL and LibQUAL+. These are explained later. This study used ServQUAL and at a later stage compared the results of ServQUAL and LibQUAL+ methods.

Simple user surveys were conducted which enable library managers to monitor their user’s expectations and perceptions systematically, as the basis of an informed approach to improving services. The quantitative work concerned establishing the level of service as seen by library users, and the qualitative aspect considered the

ideas and views of library managers about library service management. A questionnaire was used to ascertain the views of library users about service level. They were asked to assess the actual service delivered by the relevant library; to establish the importance of the service to them as users/customers; and, to identify to what extent service meets their expectations. The instrument items covered various aspects of service, such as the reliability of the library to the user, staff responsiveness, user assurance, staff empathy and other tangible items.

The data was analysed. The sub-dimension of LibQUAL+ was used when comparing the results of the two instruments. Specifically, these were the “affect of service” (assessing the attitudes and abilities of employees), the “library as place” (evaluating the library environment and its facilities) and lastly, “information control” (investigating to what extents users can navigate the library and its resources).

Some of the questions probed the knowledge of the staff to answer users’ questions; the library staff understanding of users’ needs; and the way library staff handle users’ service problems.



The findings revealed that budget constraints impacted on service delivery. The lack of resources due to budget cuts played a role in contributing to user dissatisfaction. The findings also reveal a gap between expected service and perceived actual service. The users had higher expectations, but it appeared that libraries were in a position to meet these expectations. The findings also indicate that library managers should consider the merits of performance measurement, process management and decision-making techniques that could assist them to provide the expected range and levels of service. Furthermore, the study provided valuable experience in the application of the three approaches to performance management.

## Declaration

I declare that the work contained in this mini-thesis is my own original work and has not previously in its entirety or in part been submitted at any university for a degree, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.



Signature:.....

Date:.....

Nondumiso Constance Sinyenyeko-Sayo

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## Dedication

To my beloved son Onwabile Phiko Sayo, for the time you had to suffer and stay without me because of my studies. I owe this one to you.



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## **Chapter 1: Introduction to the study**

This section discusses the background of the study, develops the research question and concludes with an outline of the thesis.

### **1.1 Study background and rationale**

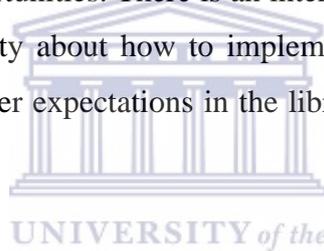
Higher education libraries cannot live in the past but must look to the future and attempt to anticipate what advances the next decade may bring. Modern libraries can benefit by being managed according to modern practices, taking account of market forces and the current economic climate.

Library managers who are serious about the future of library services will plan for such improvements. Allowing for current and future trends that impact upon library services. Library managers have concerns, similar to those facing business managers, regarding resource allocation, communication, funding and marketing. These issues are strategic in nature. Library managers, as their counterparts in industry, often fail to realise the value of strategic planning, until crisis situations develop. Furthermore, library services are affected by financial considerations and staffing problems.

One of the key challenges facing libraries is the need for a balance between a global understanding of a user's needs and local understanding related to specific services, locations, or user groups. For example, the library at the University of the Western Cape (UWC) presently caters for more than 12 000 users, including academics, researchers and students from UWC and other institutions in the area. Some students are disadvantaged regarding computer-based electronic services. UWC library is also experiencing inordinate increases in the cost of books and journals at a higher rate than the cost of other commodities and services. This means that the UWC library budget, already squeezed by inflation, has been further burdened by the necessity to provide a growing variety of computer-based bibliographic sources and information services to its users.

Altman and Herson (1996 a: 171) found a number of libraries engaged in restructuring and re-organising services. Unfortunately fiscal stringencies limit service options at a time when technological change offers new opportunities and challenges. Ceynowa and Corners (2003) point out that higher education libraries supply information for research, teaching and studies. They operate in a financial framework, which is presently undergoing transformation. The financial situation of higher education institutions limits their scope of action due to the growth in user demands regarding the extent and quality of services. The main tasks of library managers in the coming years will be to widen the spectrum of services but with fewer resources at their disposal. The critical financial situation of the typical higher education institution focuses attention on the management tools that promise to combine cost cutting potential and the optimal allocation of resources.

Complicating matters further, customers have an increased service expectation and desire more self-service opportunities. There is an interest in applying the concepts of service quality, but uncertainty about how to implement them in meaningful ways, and how to meet new customer expectations in the library, where the customer is, of course, the user.



Essentially, there are changes in the library as far as services, technologies, organisational constructs; ownership, access policies and values are concerned. The responsibility to set the “right direction” is now more complicated than ever before in the history of higher education facilities. Businesses are faced with similar challenges and many of them achieve great levels of success.

At this time of global change this study investigates whether it would be useful for managers to improve library services by applying performance enhancement concepts, similar to those used in businesses, with the aim to deliver the best possible performance. Progressive businesses have made enormous progress by adopting such methods. It is, therefore, a key issue for library management to understand how effective information management can support their function as they face business-like challenges. The problem is that there are not many instruments to measure effectiveness of the library from different perspectives. Instruments currently in use mainly

measure service delivery to the customers, and only to a lesser extent evaluate other issues such as the facilities offered and the effectiveness of library investments in people and equipment.

## **1.2 The research questions**

To what extent can business performance management techniques be applied in assessing library service management?

A secondary question is “what information can be gleaned from business performance management techniques application in evaluating service delivery”?

## **1.3 Aims and objectives of the study**

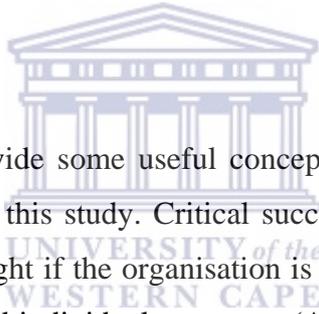
The aim of the study is to establish to what extent business performance management techniques can be applied in assessing service management in libraries. The objectives are to:

- 
- determine the strategic issues related to library management in higher education institutions in South Africa.
  - determine the key success factors in managing library service in higher education facilities.
  - evaluate the current user’s (customer) perceived value of library services.
  - evaluate the appropriateness of business performance management systems in managing service quality in the higher education environment.
  - propose an appropriate framework for the utilisation of business performance management systems.

The study will evaluate performance and service management in libraries by studying the UWC library and other higher education libraries, including that of the Stellenbosch University, and the Cape Peninsula University of Technology.

The application of selected service management techniques and measures used in business will be investigated, namely: Balanced Scorecard, Critical success factors and Service quality.

The **Balanced Scorecard** adopts four perspectives incorporating the customer, the shareholder, internal business efficiency and organisational development. An investigation of the applicability of these perspectives, taken from the world of business, could help to give more direction to information management strategies in the library. The Balanced Scorecard exemplifies the idea that performance style could contribute to barriers (Kaplan and Norton, 1996:68). Managers using the Balanced Scorecard do not have to rely on short-term financial measures as the sole indicators of the company's performance. The scorecard system introduces three management performance perspectives that, separately and in combination, contribute to linking long-term strategic objectives with short-term actions. Its application to libraries forms another objective for this study.



Assad and Duffy (1989) provide some useful concepts of **Critical success factors** that will be incorporated into this study. Critical success factors (CSFs) are the key areas where things must go right if the organisation is to prosper. CSFs can be determined for industries, firms and individual managers (Assad & Duffy, 1989:163). In a library striving to introduce new technologies, for example, one CSF could be the need for effective technology support; a CSF for a library trying to improve on user services could be adequate communication with users.

**Service quality** is the third area of special interest adopted for this study. In an organisation striving towards improving on service, the identification of appropriate criteria for use in evaluating the quality of service to customers is essential. In the case of a library the customers are the library users. Simple user surveys enable library managers to monitor user expectations and perceptions systematically as the basis of an informed approach to improving services. According to Nicketi (1996:182), service quality is generally the most relevant issue in this regard. The ServQUAL in-

strument for assessing service, developed by Zeithaml, Parasuraman, and Berry (1990) will be considered later for use in this study.

Applying management tools such as these to a library raises the possibility that libraries may enjoy the same benefits that have been demonstrated in businesses. Successful businesses can be models of efficient resource deployment, and where a library wishes to deploy resources efficiently they could benefit by trying to emulate what successful businesses do. These businesses aim to satisfy their key stakeholders such as suppliers, customers and employees. Similarly, no library will succeed if it fails to recognise and serve the needs of its stakeholders. This widens the need, from the simple question of customer (library user) service, to a much broader range of performance indicators, representative of the needs of other stakeholders. This raises the underlying aim of the study, which is to explore how useful business performance management ideas such as these, might be used in libraries.

#### **1.4 Business stakeholders**

One reason for increasing adoption of a stakeholder concept in setting objectives are the recognition that businesses are constrained by the environment in which they operate. Stakeholders are sometimes defined as those people or entities that can impact (positively or negatively) on the performance of an organisation. Businesses are in regular contact with customers, suppliers, government agencies and families of employees. Decisions made by a business are likely to affect one or more of these stakeholders. The stakeholder concept suggests that the managers of a business should take into account responsibilities to other groups when making decisions. This could also apply to libraries. For example, Johnson (1994:8) suggests, “a key starting point is identifying the objectives of the parent organisation or the local authority of which the library forms part. The issues which need to be identified in corporate planning are normally much larger than those found in the library context. Planning with the organisation, strategic planning, financial planning and intuition. When the institution has identified issues and how these are to be met, it will draw up a document that states its objectives - a corporate mission statement.”

Cullen and Calvert (1995) have taken a stakeholders' view of library performance management. This study will return to the question of stakeholders as the discussion proceeds.

### **1.5 The library as an organisation**

The literature provides definitions and explanations of what a library is. For example, a higher education library can be defined as a central service or unit of operation set up to provide a location, materials and facilities for the study, teaching and research being carried out in the parent institution.

The relationship of the library to its parent and to its users varies according to the way it is funded. Some institutions raise their own funds and allocate them to the operating departments solely according to how much they have raised. In this case the library would receive a fixed budget from the institution, and the institution can insist on the way the library is run. Other institutions get a certain percentage of their funds from the government. According to Baker (1997:2) if a library's operations are met from public funds then its services should be available to the public. In contrast to a public library, which is financed entirely by public funds for the benefit of everyone, higher education libraries that get no public funds would not have the same duty. For higher education libraries with mixed funding, it is problematic to be open to the general public at the same time that they are providing specialist services to academics. Traditionally, many higher education libraries have been funded on the basis of a percentage of the institutional expenditure, where the institutional funds come from central government. The balance of services provided to specialist users and the general public therefore needs to be planned and managed, and the level of service delivery to each might be different.

The State President of South Africa (Mbeki, 2002) has called for a focus on the improvement of the quality of service delivery and efficiency in the use of public resources in all areas of government, among other things to overcome the problem of spending, which continue to plague the country. Education and libraries generally

comprise a significant portion of public service expenditure and should be expected to heed this call.

Service delivery is an important element of organisational performance, seen principally by those outside. Productivity is another, but seen principally from the inside. Thapisa and Jain (2000:86) identify some of the critical factors that impact library productivity. These are job satisfaction, technological facilities, employee empowerment, good relationships among staff and an appropriate working environment. When these factors are not evident the organisation encounters problems in the attitude towards work, staff behaviour and lack of commitment. These authors suggest a cultural change in organisations might be necessary in order to achieve the best result. In order for any organisation to improve its productivity, it should train and develop its human resources and should encourage effective cooperation among staff and management.

This cursory examination of some of the performance issues suggests that there is merit in examining the potential benefits of business performance management tools and techniques as a means to improve library performance management.

### **1.6 Methodology of the study**

The study was undertaken, using qualitative and quantitative methods of research. The quantitative portion of the work was concerned with establishing the level of service as seen by library users, and the qualitative was concerned with the ideas and views of library managers about library service management.

Peer-reviewed books, journals and government documents were also consulted. The first part of the study was conducted through Online Public Catalogue resources and the Internet. In collecting information for the study, a questionnaire was used to test the perceptions of users, and semi-structured interviews with subject librarians and senior library managers were used to establish the management viewpoint. Prior permission to conduct interviews in these institutions was obtained by electronic mail and telephone calls to library managers libraries. Telephone calls and written corre-

spondence were also made with the heads of the libraries, to conduct the surveys that were used in the research study.

## **1.7 Organisation of the study**

This thesis is structured in the following manner:

**Chapter 1:** Provides a motivation for the investigation discusses the value of this work to libraries and gives a general overview of the study.

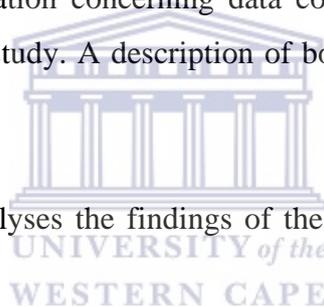
**Chapter 2:** Deals with the literature review relating to the evaluation of performance at all levels in a library. It introduces the relevant organisational performance measurement tools and discusses the relationship between them.

**Chapter 3:** Provides information concerning data collection as well as the details about the participants in the study. A description of both qualitative and quantitative methods is given.

**Chapter 4:** Presents and analyses the findings of the qualitative research (management).

**Chapter 5:** Presents and analyses the findings of the quantitative research (user perspective).

**Chapter 6:** Provides discussion, recommendations for further research and a conclusion.



## **Chapter 2: Literature review**

This section reviews the relevant literature that forms the basis of this study.

### **2.1 Introduction**

This chapter examines the literature relating to the performance evaluation at all levels in the library. Drawing on the literature, the discussion begins by exploring current cultural changes within the library as an organisation. It then introduces organisational performance measurement tools such as the Balanced Scorecard and other generalised business concepts that can be adapted for use in evaluating library performance. Critical success factors (CSFs) is one example. CSFs direct management attention to internal efficiency, transformation and change management, customer management and finance. ServQUAL and LibQUAL, instruments that have been used in service management, are discussed, as well as the relationship between these techniques. The chapter concludes with a summary of the literature review.

#### ***2.1.1 Cultural change within an organisation***

When focusing on cultural change within an organisation it is important to understand culture as a concept. Taylor and Farrell (1994:140) view organisational culture as a representation of the shared understandings of the members of an organisation or group with respect to the values, norms and beliefs implicit within that organisation. In addition to that, McNamara (1999) views culture as comprising the assumptions, values, norms and tangible signs (artefacts) of organisation members and their behaviours. For example, UWC library values are regarded as the core of its organisational culture, namely: collaboration, commitment, sensitivity, professionalism and learning. By setting goals and objectives and deciding on the style of management, it is part of the role of management to recognise and work within the prevailing organisational culture.

Should management need to change the culture (as may well be the case in a progressive library), there are special challenges such as understanding the specific organisational culture, how the organisation uses its resources, understanding the organisation's structure, the people within the organisation, and the process of completing the work in the organisation. With this understanding management can easily see the direction as to how an organisation goes about meeting its goal and mission. The organisational culture is also evident in the manner in

which an organisation solves problems, or as a deeply rooted value that shapes the behaviour of the individual within the group.

In simple terms, Martin (2006) suggests that organisational culture “is the way we do things around here”. In the case of libraries the challenges are directed to the assumptions that manifest themselves through the perceptions, thoughts, emotions and behaviours of the library staff. At UWC library one of the values is to be committed to delivering good service to customers.

On implementing cultural change, Deming (1993) says that in order to succeed in business, managers need to encourage “multiskilling” so that employees can understand their organisation from different perspectives, such as may be seen in different departments. In the case of libraries at the present moment the focus is on human aspects and the maintenance of the working environment. Multiskilling might work for the libraries if they need to improve on their overall library performance.

Customers are seen as an external environmental factor that drives change. In the literature, Schlesinger and Heskett (1991) argue that there is a relationship between internal service quality, employee satisfaction and customer retention. Customer retention is rooted in employee satisfaction and that the level of service quality provided by the other internal units to those dealing with customers, determines employee satisfaction. Nardini (2001) believes that library assessment is one part of cultural change. He argues that assessment is a critical tool for understanding library customers, and offering services, spaces, collections and tools that best meet their needs. He continues by saying that without good assessment, libraries could lose touch with a user’s desires and needs and these may even become irrelevant. He emphasises going beyond this aspect of culture to start hearing the voices of customers as part of cultural change. When evaluating library performance, technology often brings its own culture, which is very different from one accompanying manual systems. Because of fast development, a library must be able to keep up with developments in technology and with the ever-changing vocabulary of technology.

Cultural change could be affected by the internal activities of an organisation as well as by the external environment, as in the case where management choose to introduce technology in support of improvement programmes. Such programmes have clear objectives and managers should plan ways to respond to resistance from within the library. In cases like these, culture may prevent or undermine performance improvement.

### **2.1.2 Performance measures**

Performance is the degree to which a project or institution meets predefined criteria or quality standards, such as, efficiency, effectiveness and relevance. Similarly, library performance metrics could indicate to management how well it is performing in meeting its objectives. When choosing performance measurement systems these should be linked to a business strategy to be truly successful in helping managers make better decisions.

Traditionally, businesses have focused heavily on financial measures of performance. Profit, at the end of the day, used to determine whether it was a successful day or not, says Kaplan and Norton (2001). Today, new types of non-financial performance measures are needed for the effective measurement of performance of customer-focused strategies. This view is supported by Robertson (2000) who maintains that certain performance measures can be used to enhance the quality of service by informing the staff, in a very clear way, of customer needs and current levels of satisfaction. Such performance measures aim to make it possible to identify the actions that will improve quality as well as reduce costs. Once measures are agreed upon, teams and individual staff are free to manage their own activities to achieve the desired result. This, it is argued, creates a motivating environment for employees and makes everyone more accountable, eventually leading to improved management practices. St. Claire and Aluri (1993) support this view. They call for measures that reflect the user's perceptions about "the extensiveness (amount) and the effectiveness (quality) of the outputs or results received from the service". They recommend practical management tools that quantify user satisfaction so as to monitor the quality of the library service as a whole.

Not all attempts to measure library performance have been successful. There are several reasons for this failure. Cullen and Calvert (1995), for example, believe that there is no standard terminology with which to measure library effectiveness. They conclude that library effec-

tiveness is “not well described by a narrow range of dimensions”, because effectiveness is a multi-dimensional construct (Cullen and Calvert, 1995:438). Finding a good instrument to measure library performance, it appears, is elusive.

### **2.1.3 Management information systems**

The general approach to collecting and reporting management information is the “management information system”. In recent years great strides have been taken in the evolution and integration of management information systems that embrace almost everything that a business does. Regrettably, this does not seem to be true for all libraries. Information retrieval, electronic records management and document management are some of the business processes that occur within libraries that can be supported by information systems.

Assad and Duffy (1989:3) provide a traditional view that an organisation may contain many operating units or departments, each of which having its own information system. They define information systems as “structured ways of processing data and providing information, which are often but not always computer-based”. In addition to this definition, information systems are described as “collections of people, processes, stores and communicative data for processing transactions at operational level and to provide information in support of management decision-making”. An information system may even comprise a part of the product or service provided (Assad & Duffy, 1989:6).

The view of the above-mentioned authors may not compare well with a business that has fully integrated management information systems, but typically libraries are divided into departments that have their own information systems, for example, the *cataloguing unit* has systems that enable the librarians to enter and update catalogue records for items in the library, and can therefore be seen as the very heart of library operations. The *acquisitions unit* manages the library budget, controls material purchasing, and follows up on standing orders; they can be seen as the input side of the library, and will be dependent on financial and stock control systems. The *circulation unit* controls the borrowing of material and the *inter library loan unit* links with other institutions and makes it possible for users to get material normally unobtainable in their own library. Again, systems assist in dealing with the requirements and

these functions. Each system may be engineered to deliver measures of library performance, as well as to provide support to the basic library activity that they relate to.

Literature recommends that libraries should regard performance measurement as a strategic activity because only a strategic approach will turn operational activities into *measured* and *well-managed* services. Some scholars observe that managers work too hard on operational issues and do not spend enough time on strategy – this usually happens when managers do not have the requisite tools and competencies for strategic analysis. It is possible, that as in business, good information systems management; business planning and resource management could assist library managers considerably. The Balanced Scorecard is one strategic tool that has attracted a great deal of attention.

## **2.2 Balanced Scorecard**

The Balanced Scorecard serves as a general application in many organisations. This section discusses the merits of the measure.

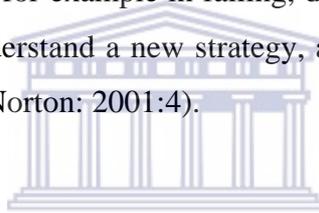
### **2.2.1 Introduction**

In the past, activity within organisations was often uncoordinated and directed at short-term operational goals. In the early 1990's the Balanced Scorecard performance management system was developed by Kaplan and Norton (2001:23). These authors developed and introduced the concept as a new framework for measuring organisation performance, beyond simple financial measures. It was not intended as a replacement for financial measures, but rather to complement them with other criteria that measured performance in three additional perspectives: customers, internal business efficiency, and learning and growth.

According to Kaplan and Norton (1996) the scorecard addresses serious deficiencies in traditional management systems, namely a company's inability to link long-term strategy with its short-term actions, and a pre-occupation with financial measures. Financial measures report on historical outcomes but do not communicate the drivers of future performance. These authors claim that "the Balanced Scorecard provide[s] a framework to look at the strategy used for value creation from four different perspectives: *Financial*: The strategy for the growth,

profitability and risk viewed from the perspective of the shareholder. *Internal business processes*: The strategic priorities for various business processes, which create customer and shareholder satisfaction. *Learning and Growth*: The priorities to create a climate that supports organisational change, innovation and growth. *Customer*: The strategy for creating value and differentiation from the perspective of the customer.” (Kaplan and Norton, 2001:23)

Kaplan and Norton studied (2001) more than 100 organisations, which implemented the scorecard for the first time, with the intention of developing new strategic management systems. The senior executives of those organisations discovered that the scorecard supplied a framework focused on many critical management processes, and that those processes referred to departmental and individual goals, business planning, strategic initiatives, feedback and learning. By using the scorecard, it is reported, the senior executives immediately started processes of change. Kaplan and Norton believe that the Balanced Scorecard can even be introduced in worst-case scenarios, for example in failing, demoralised organisations that need their workforces to learn and understand a new strategy, and need to change behaviour embedded for decades (Kaplan and Norton: 2001:4).



There has been much critical evaluation of the Balanced Scorecard idea since these early reports from the originators, including its use within libraries. Poll (2003), Self (2003), and Crawford, Kydd and Parker (1994) have all studied the implementation of the scorecard in a library environment. They found that the scorecard delivered a comprehensive management framework that could translate an organisation’s strategic objectives (including the library and information services) into coherent goals and performance measures for operational management to work with.

Poll (2003) discusses *financial* indicators dealing with costs. These financial indicators look carefully at the operation of the library, focusing on expenditure for print and collection development, acquisitions and electronic media. She continues by saying that despite the budget restriction, an internal *process* perspective allows space for investments into new developments and improvement of services. Regarding the *potential* perspective (organisational learning and growth) she looks at the capability of the library to deal with the challenges of the future and its ability to change and improve the service. Lastly she focuses on the *user*

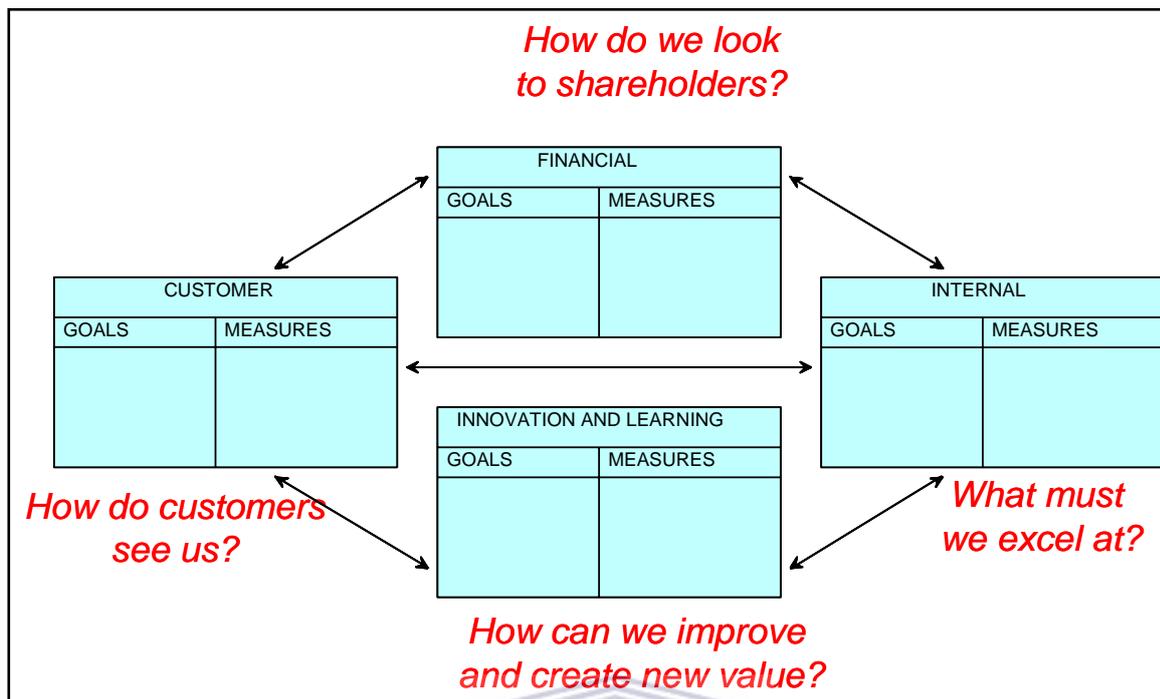
(customer) perspective. This perspective evaluates satisfaction of a population, for example, the user satisfaction rate and opening hours compared to demand.

A case study by Self (2003) reports and analyses the implementation of the Balanced Scorecard at the University of Virginia library. The following issues were identified: justification of use, sustainability to organisational background, Balanced Scorecard as an assessment tool, and the implementation of the Balanced Scorecard. Self found the Balanced Scorecard to be a suitable instrument, providing the solutions that the university needed. The project was looking for new ways to assess library services. Metrics were set up to evaluate specific targets. They identified the usual areas: user, finance, internal processes and learning.

Crawford, Kydd and Parker (1994) and Poll (2003) also agree that the Balanced Scorecard is suitable for use in library management. The literature provides evidence that the scorecard can be a useful tool with which to manage library performance. As has been shown, different authors describe the four areas of the scorecard using different words; this study uses the original terms defined by Norton and Kaplan: *customer, internal business processes, innovation and learning and finance*. Kaplan and Norton (1996) suggest the following questions to explain the four perspectives of the Balanced Scorecard:

- *How does the organisation look to its shareholders?* – Financial perspective
- *How does the client see the organisation?* – Customer perspective
- *What an organisation must excel at?* – Internal perspective
- *How can organisations improve and add value to its core business processes?* – Innovation and learning

Figure 1 shows the questions that are based on the four areas of the Balanced Scorecard:



*Figure 2.1: Using the Balanced Scorecard as a strategic management system (Kaplan and Norton, 1996)*

In the above figure the relationship between the four areas of performance management are shown. The paragraphs below describe these four areas in more detail.

### **2.2.2 Understanding the customer**

The literature defines the “customer” as a person who brings his/her wants to the organisation. It is the organisation’s function to handle them profitably to both the satisfaction of the customer and the organisation (Peter & Austin, 1987). In addition to this explanation Haksever (2000) maintains that whether the company is the manufacturer or a service provider, excellent companies know their customer; they know the customer’s needs and requirements. He continues by saying that each company may have a different way of knowing or discovering its customer’s needs, but usually they all go to great lengths to gather this information (Haksever, 2000:42).

As this work concerns libraries, the “customer”, as alluded to before, will be referred to as the “user”. Several other authors use this term (Poll, 2003; Cullen & Calvert, 1995).

Customer and service management can play a big role in transforming the organisation as Zeithaml, Parasuraman and Berry showed when they developed dimensions of service quality in order to better understand customer service (Zeithaml, Parasuraman & Berry, 1990:25-26). These authors are also discussed in a later section of this chapter covering their ServQUAL instrument. These scholars found that personal needs, past experiences, and external communication can shape service expectations. These expectations can be related to customer's attitudes but not necessarily to satisfaction.

With the knowledge of customers and their expectations it is now possible to say that libraries will benefit from redefining their relationships with customers. By teaching their workforce new skills they would be better placed to retain customers. Most importantly, by applying the Balanced Scorecard they have a measure and indicators of how well they are doing at dealing with their customers.

### ***2.2.3 Internal efficiency and process management***

Various researchers have identified the critical importance of sustaining customer loyalty by emphasising the capability of employees to deliver consistent service quality, bringing to mind the matter of internal organisational activities that actually deliver service. To measure internal business processes an organisation has to understand them. To deal with customers, a business has to have a direct link with the customer, and an understanding of customer objectives (Kaplan & Norton, 1996:37). The process (or processes) that serves customers, therefore, must be understood and be subject to measurement. Gronroos (1982) supports this argument by saying that in order to achieve customer satisfaction an internal marketing strategy is required to develop goals that will be meaningful to quality-conscious employees. Once employees understand all aspects of business operations and are motivated, they will operate efficiently and deliver a good service.

Automation is a factor which promotes internal efficiency. Libraries are rapidly moving towards an electronic environment in which computers are used for customers to access digital information. This factor can impact on internal processes, but will not contribute to efficiencies until staff are trained to use these new technologies that include electronic databases.

They will need to understand the impact of electronic resources in libraries and the benefits to library service delivery (Aluri, 1993). Electronic databases greatly increase access to information but implementation must be carefully planned to ensure optimal use of space, money and time.

It is evident that there is a need to measure internal service units through the business processes that they serve. Three components are of interest in managing internal efficiency: human resources, facilities, and information technology. Ensuring that information technology truly improves the use of human resources and other facilities is a critical issue for all management organisations.

#### ***2.2.4 Transformation innovation and learning***

Transformation is a change in the shape, structure and nature of something. The Balanced Scorecard invokes the idea of innovation and learning as the means to achieve transformation. It may require learning, but it also requires change management. For example, transformation of collection development activities is important to a library, and is presently undergoing very significant change with the adoption of new technologies. Intranets and web authoring tools, in conjunction with digital storage, enable libraries to achieve a greatly increased level of efficiency and accessibility (Level & Myers, 2003:162).

The concept of transformation refers to the integration and education of people, often as a result of the introduction of new technology that is focused on delivering business value, both operationally and strategically (Robertson, 2000:376). This study looks at transformation and change management in libraries. Libraries also provide information that itself can be viewed as a strategic tool for users, which guides not only the structure of their organisation but also constantly dictates change. Pienaar and Russell (1999) believe that true transformation only occurs when the people are no longer driven by change but when people drive change. This implies that library managers must put in more effort than merely arranging for education of their staff – they must develop programmes and activities that will persuade their staff members to change the way they think. It is relatively easy to motivate staff to perform their tasks very well; it is a different thing to persuade them to learn to change their way of working.

### 2.2.5 *Financial measures*

The literature reveals that no matter how well a company serves its stakeholders, it has little chance of survival if its financial performance is poor. Before the 1990s most managers would measure company performance, focusing solely on the financial performance of their organisation. They were not always integrating their strategic planning and budgeting processes. Kaplan and Norton introduced the idea of the Balanced Scorecard to complement financial measures with the other perspectives discussed above. But they did not intend to replace it (Kaplan & Norton, 1996).

There is much literature on financial controls in libraries. Baker (1997) provides a discussion on budgets, problems of flexibility and Ceynowa and Corners (2003) comment on cost analysis. However, higher education libraries are not typically set up to generate income. Their function is to perform a shared community service financially supported by some kind of allocation from general institutional income. There may be some revenue, for example, from fines on overdue loans, but typically 90% of library income comes from institutional allocations, and no more than 10% from income generation.

Baker (1997) also argues that there is a serious management problem when it comes to library budget allocation. Senior institutional managers assume that libraries only need sufficient big budget for purchasing books and journals, conveniently forgetting that the library should be maintained and that book prices increase annually. Library managers and budget managers engage in dialogues that sometimes make it impossible for the librarian to justify legitimate incremental needs except as solutions to crises. In this case, the library is condemned to marginal growth and internal resource shifts to meet ever-more demanding programme requirements. Based on this problem Seer (2000) encourages the library managers to be involved in pre-budget meetings with the finance department and the other administrative departments with similar budgetary responsibilities. Moving from a “historical” to a “dynamic” funding model of the higher education library could be beneficial, especially in times of growth, whether in terms of student numbers or research activity. At least the library will obtain additional funding for students under a formulaic approach, which recognises the inevitable price tag on central support services of increased class sizes (Baker, 1997:7).

Adopting a Balanced Scorecard approach may assist in putting library expenditure into a proper framework that allows it to be balanced with other expenditure, and to be balanced with strategic needs to manage user service, internal efficiency and transformation.

### **2.3 Critical success factors (CSFs)**

The Balanced Scorecard embodies the idea that there are different kinds of goals, each of which will have different measures. The critical success factor idea predates the Balanced Scorecard, but is based on very similar, but open-ended, thinking.

Rockart (cited by Ward and Peppard, 2002), defines critical success factors as being “*the limited number of areas in which results must be satisfactory*”. CSFs will ensure successful competitive performance in the few key areas where “things must go right” for the business to flourish. CSFs are related to critical areas of business activity that must receive constant and careful attention from management.

Ward and Peppard (2002) believe that the output from the construction of the Balanced Scorecard and the CSF analysis can be combined to provide a more comprehensive set of Information Systems (IS) requirements. The Balanced Scorecard links measures to business objectives while CSF analysis identifies what is critical to achieving results. Both techniques provide a rigorous assessment of prioritised IS opportunities, given the current business strategy. The combination of Balanced Scorecard and CSF analysis can lead to the derivation of improvements to operational activities.

CSFs highlight the things that are important to measure, and help to avoid measuring irrelevant things. Given the experience of some Balanced Scorecard implementations, which sometimes flounder on an excess of measures and an absence of ideas, what to do with them makes CSFs potentially extremely useful.

Financial expenditure is regarded as critical to library managers, especially in these difficult times when money seems to be in short supply. If it is agreed that the most critical thing is not to spend more than is necessary, then the ability of managers to speak and think in finan-

cial terms is also an aspect of the library's success. On the other hand, if it is agreed that the most critical thing is to adopt digital storage and dissemination, then the capability to manage digital technologies becomes the Critical Success Factor. CSFs may have limitations, as they risk focusing on management control rather than being creative, although, if being creative is the most important thing to do, CSFs that serve and support that intention are not difficult to find.

People remain important. Despite the intense current interest in business performance management, emanating from early ideas about Critical Success Factors and the Balanced Scorecard, service management is arguably just as important an issue. The value of service management became popular at about the same time as the Balanced Scorecard and Critical Success Factors, but was championed by different experts. Kyrillidou and Heath (2001:541), for example, consider service quality to be both a *project* as well as a *continuous process* that can be enhanced and improved.

Currently, organisations of all kinds are trying very hard to satisfy their customers by improving service quality. The most frequently cited work remains that of Zeithaml, Parasuraman and Berry (1990). This is also true for libraries, where the most frequently used approach is the measuring instrument, called ServQUAL, developed by Zeithaml, Parasuraman and Berry (1990).

## **2.4 Measurements of customer and service management**

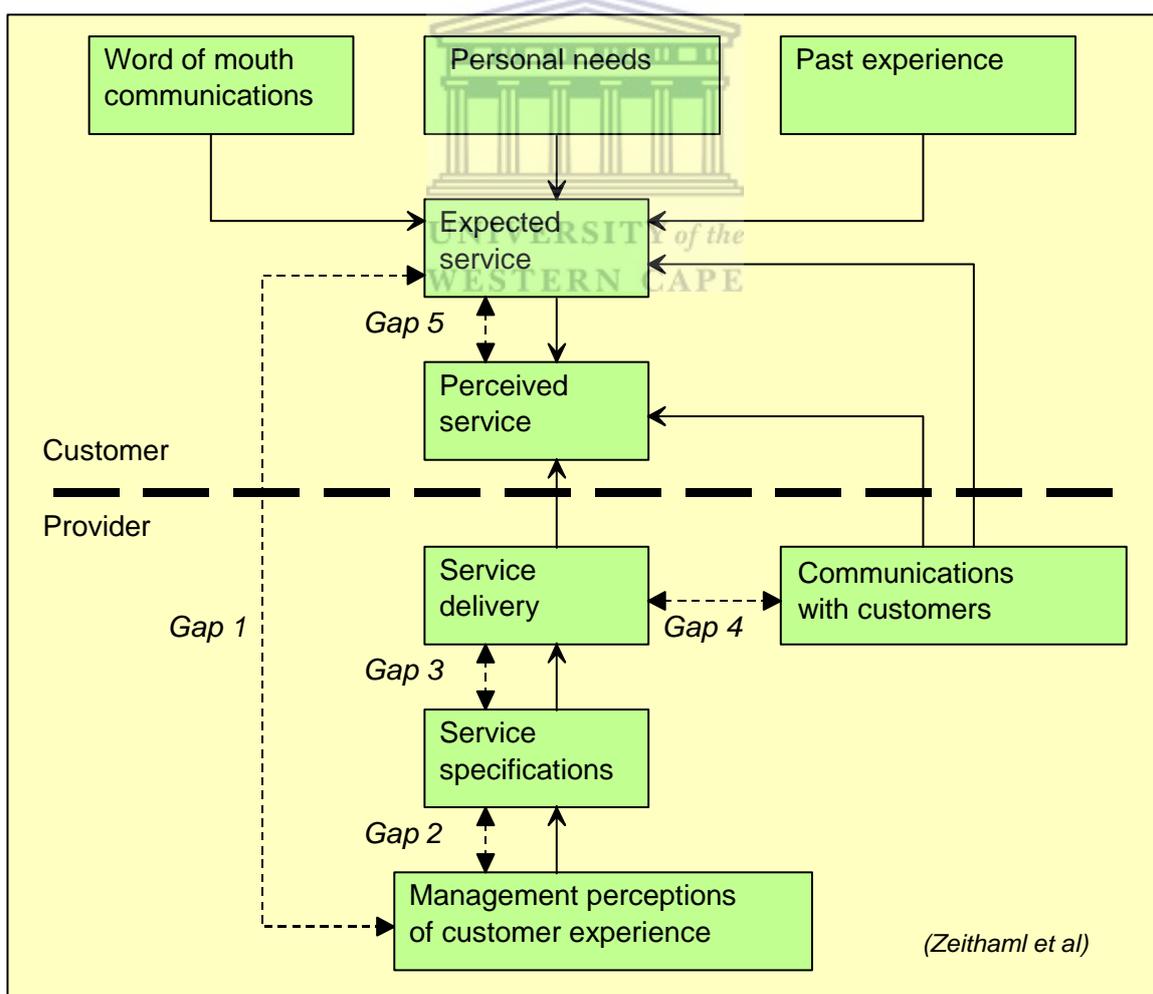
The following section reviews the instrument highlighting the role of the customer in service management.

### **2.4.1 ServQUAL – the definition**

Service quality can be defined as the difference between customers' expectations for service performance, prior to the service encounter, and their perceptions of the service received (Asubonteng, McCleary and Swan, 1996, 64). These authors cite Oliver (1980) who predicts that clients will judge that quality is low if performance does not meet their expectations and quality increases as performance exceeds expectations. ServQUAL has five different areas of measurement normally referred to as *dimensions*.

In introducing ServQUAL, Zeithaml, Parasuraman and Berry (1990) defined service quality as “the extent of discrepancy between customers’ expectations and their perceptions”. Thereby introducing the idea that understanding the *gaps* is the secret to good service measurement and management. Their model is often referred to as the “gaps” model of service management.

To measure user satisfaction these authors first developed three dimensions of service quality that they referred to as: *tangibles*, *reliability*, and *responsiveness*. To these dimensions they then added *assurance*, which encompasses communication, credibility, security, competence and courtesy, and *empathy*, which includes access and understanding the customer. Zeithaml, Parasuraman and Berry (1990) further argued that word of mouth, personal needs, past experiences, and external communications shape service expectations. The following diagram represents the gap model (Zeithaml, Parasuraman & Berry, 1990), which has been widely used and adapted.



## **Figure 2.2: Zeithaml service gap model**

The figure above illustrates the service gaps model developed by Zeithaml. Authors such as Haksever (2000) reviewed the dimensions of service quality that may serve well for most services. However, as was originally argued by Zeithaml, Parasuraman and Berry (1990) reinterpretation of the dimensions may be needed when applying the ServQUAL concept to a specific kind of service. The gaps model is a device that guides managers seeking to deliver higher quality services. This model conceptualises service quality on the basis of the differences between customers' *expectations* with respect to the five dimensions, and their *perceptions of what was actually delivered*. The following paragraphs examine each feature of the gaps model in more detail.

### **Gap 1: Not knowing what customers expect**

The first gap occurs because of the difference between what customers expect and what managers perceive they expect. Major reasons for this gap are: lack of marketing research orientation evidenced by insufficient marketing research, inadequate use of research findings and lack of interaction between management and customers. Inadequate upward communication from contact personnel to management and too many levels of management separating contact personnel from top managers are, therefore, the other two reasons for this gap. In the library setting, this applies to this gap as identified between the user expectations and the actual service they get from the staff and managers. When the users are not satisfied it may lead to gap 2, which is the wrong service quality standards.

### **Gap 2: The wrong service quality standards**

The difference between what managers think customers expect and the actual specifications they establish for service delivery leads to the second gap. Reasons for the emergence of this gap are inadequate commitment to service quality, lack of perception of feasibility, inadequate task standardisation and absence of goal setting. In the library situation, the library has to provide information to the users, and this should be its goal. If the library does not have goals this gap will exist, since the information is identified as an end product of the service delivered by the library. When there is a problem with the service that is delivered by the library the following gap, the service performance gap, will occur.

### **Gap 3: The service performance gap**

The discrepancy between service specifications and the actual service delivered creates this gap. In general this gap is created when employees are unable and/or unwilling to perform the service at the desired level. Various reasons for this include: role ambiguity, role conflict, poor employee-job fit, poor technology-job fit, and inappropriate supervisory control systems leading to an appropriate evaluation/compensation system, lack of perceived control on the part of employees, and lack of teamwork. In a library situation when the staff do not understand user's needs, it can result in gap number three. Again, when the libraries promise to perform some activities or provide certain service, and do not deliver gap 4 is caused.

### **Gap 4: When promises do not match delivery**

According to Zeithaml, Parasuraman and Berry (1990) the difference between what an organisation promises about a service and what it actually delivers is describes as Gap 4. Two factors contribute to this gap: (1) inadequate communication among operations, marketing, and human resources, as well as across branches; and (2) over-promise in communication. In the library situation this gap can be seen in the case of lack of communication between the librarian, staff and managers regarding library operations. Library staff should understand user's expectations. They should review what is expected of them (library managers) by the users, and review the actual service they are offering. If the library managers do not understand user's expectations, it could lead to gap 5.

### **Gap 5: Expected service - perceived service gap**

Gaps 1 through 4 contribute to the emergence of gap 5, which is the difference between what the customer expected to receive from the service and what they believe they actually did receive. Customers' perceptions are influenced by many sources, which include word-of-mouth communications, personal needs, past experiences, and communications from the service organisation. This is the most important gap because, if the perceived service falls short of the customer's expectations, they will be disappointed and dissatisfied.

Other work on service management exists. For example, Altman and Herson (1996b) introduced the idea of "user satisfaction". They say that service quality in higher education librar-

ies is usually associated with the question of user satisfaction, which in turn, is based on user perceptions of service quality. The relationship between service quality and customer satisfaction is a complex one. Service quality is defined as a component of user satisfaction. Elliot (1995) also uses this term and defines user satisfaction as the emotional reaction to a specific transaction or service encounter. He points out that satisfaction may or may not be directly related to the performance of the library on a specific occasion. Customers can receive an answer to a query but be dissatisfied because of an upsetting or angry encounter. Conversely, although the query might remain unanswered, another customer might feel satisfied because the encounter was pleasant, and the helper was interested and polite.

With the need to specifically measure library performance various instruments have been used, but appeared not effective for measuring library performance. Kyrillidou and Heath (2001) addressed this shortcoming by developing an instrument called LibQUAL+.

#### **2.4.2 Defining LibQUAL+**

LibQUAL+ is a standardised protocol that emphasises quality improvement specifically in libraries (Kyrillidou and Heath, 2001). A related case study by Walters (2003) highlights several advantages over earlier assessment instruments. He finds that:

- LibQUAL+ is designed to elicit responses from a random sample of both library users and non-users;
- It accounts for respondents' minimum and desired levels of performance rather than relying solely on their perceptions of current conditions;
- It provides multiple benchmarks for the comparison of institutions;
- It meets established criteria for reliability and uses questions derived from in depth interviews with library patrons; and,
- It identifies the various facets of perceived quality and provides an overall rating for each.

LibQUAL+ has been applied by different researchers. For example, Walter's case study attempted to identify areas, through a survey, for which current levels of service are less than optimal. Students were expected to give informed responses to the 25 items that appeared in the LibQUAL+ survey. Some items concerned the knowledge/ability of staff to answer users'

questions; others queried the library staff's understanding of user needs, and evaluated the way in which library staff deal with user service problems. Another question related to the use of a website that enabled users to locate information on their own.

The study reported that undergraduates were not familiar with the universe of information such as the range of resources that might be potentially useful to them. This means that students could not distinguish between high-quality service and inadequate service. According to the information, Walters (2003) argues that in order for a student or a searcher to locate information on a website the person must be familiar with the library environment information or else must get assistance from an expert searcher in order to decide whether a particular level of service is excellent, adequate, or inadequate, student must have some experience.

Walters (2003) pointed out that some students from a disadvantage background lacked experience in judging the level of service because they had not been exposed to other variations of service. Some shortcomings with the LibQUAL+ as a model in those respondents' perceptions did not match the real-world conditions. LibQUAL+ was focusing more on users' opinions, whereas it is not goal orientated. This means LibQUAL+ only focuses on the evidence that has been given by the library users without checking their knowledge and experiences. LibQUAL+ does not support decision-making and it only focuses on observable behaviour and outcomes rather than perceptions.

#### ***2.4.3 Comparison of ServQUAL and LibQUAL+***

LibQUAL+ is one of the instruments used to measure library service delivery performance, but the literature reports that there are issues such as costs in developing and administering the survey on an individual institutional basis (Hiller, 2001). Walters (2003) also raises two questionable assumptions that are not clear in the LibQUAL+ instrument. Firstly, whether the library users have the necessary expertise to make accurate assessments of quality, and secondly, whether perception serves as valid indicators of objective conditions.

This implies that bearing the above reasons in mind it might imply that students' lack of experience with academic libraries may result in an inability to make valid assessments of quality. The researchers argues that library users can recognise excellent service from poor service only once they have been exposed to both levels of service, and also only if they are

taught the difference between high and low quality. For example, in the case of LibQUAL + responses of the faculty may be significantly more useful than those of undergraduates (Walters, 2003; 99). However, some of the Republic of South African higher education libraries find LibQUAL+ as a better instrument to measure libraries such as the University of the Western Cape, Stellenbosch University, University of Johannesburg and Johannesburg libraries. They argue that LibQUAL+ is not only a list of 22 standardised items. It offers libraries the ability to select five optional local service quality assessment items. Secondly, the survey includes a comment box soliciting open-ended user views. These comment boxes provide valuable feedback, for example, policy changes in the libraries (UWC report, 2006: 11).

ServQUAL also has some controversial issues. One concern is that it does not allow for the possibility that customers may have *low* quality expectations. For example, if a customer expects poor quality and gets slightly better service than expected from a service organisation, the service could not logically be characterised as quality service. Also, the “satisfaction” approach to measuring quality runs into difficulty when services are evaluated in higher education libraries. In Cuthbert’s (1996) case study reports on managing service quality in higher education libraries, he highlighted a few criticisms concerning using ServQUAL as an instrument in evaluating higher education libraries. Cuthbert (1996) and other authors observed that service quality depends not on the absolute level of performance that is experienced but on the performance relative to the expected performance. This means that evaluations of service quality are based on the difference that the consumer perceives between what was expected and what was experienced. Secondly, ServQUAL is concerned with the delivery of the service rather than the final outcome. As can be seen from the above there are limitations to using ServQUAL to measure library services (UWC report, 2006:11). In spite of this Cuthbert (1996) finds it suitable to measure service in higher education libraries because it is the process that needs to be monitored rather than just the results of the students’ work. Babakus and Boller (1992), Haksever (2000), and Nicketi (1996) all report difficulties with service management. At a libraries symposium in October 2000 all these authors and others agreed that service quality, users and measurement are important components of libraries, but that no single measure would be sufficient to evaluate library services

## 2.5 Summary of the literature review

The literature review evaluated the various instruments available to measure service performance. Some of these have been applied to a library context. Three popular approaches to performance management are available: the *Balanced Scorecard*, *critical success factors* and *service management*. Experience with service management indicates only limited success in libraries. The more strategic approaches represented by the Balanced Scorecard and critical success factors show some promise for measuring service in the library environment. A combination of these methods is suggested in this study.

The next chapter of this thesis describes the research design and methodology, based largely on the ideas emanating from this literature review.



## **Chapter 3: Research design and methodology**

This section discusses the research design and methods that have been used in the study.

### **3.1 Introduction**

The main aim of the study is to look at an amalgam of service management and business performance management tools, such as the Balanced Scorecard, in order to find a combination of performance measures that will work for library management. The idea is based on the concept of managing a library like a business. In this approach both qualitative and quantitative methods are applied. Barnes (1992:115), cited by Hundermark (2004:53), defines a qualitative approach as “a tradition of enquiry concerned primarily with meaning and interpretation, compared to quantitative research that emphasises the importance of statistics.” It is important to choose suitable methods to evaluate service management and business performance. By adopting different approaches for the investigation of a small number of managers’ views and a large number of users’ views, there is the possibility of comparing results and methods in the sense that they give different perspectives on the same issues. In this chapter this dual approach to data collection and details about participants are discussed. A description of methods of data analysis is given. The chapter concludes with a discussion of the reliability of qualitative research as a methodology for the current study.

### **3.2 Qualitative research design**

One obvious source of information about library management is the managers themselves. The qualitative portion of the study was based on the views of library managers. Hackney (2002:1) states that qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena. The reason for doing qualitative research is that it helps researchers to understand people in the social and cultural contexts within which they live. Qualitative data sources include observation and participative observation (fieldwork), interviews, documents and texts. Carolissen (2003:36) found that interviewing is one of the most common powerful tools to use when undertaking qualitative research.

This study only used structured interviews. The aims of the interviews were to determine the strategic issues related to library management in the higher institutions in South Africa and also to determine the key success factors in managing library service in higher education fa-

cilities. In preparation for the interviews, formal letters were sent to the interviewees stating the research problem, the implications of the problem and the nature of the needed research data. The content of the letters included a general outline of questions in order for the managers to prepare for these meetings. Seven open-ended questions were prepared. Thirty minutes were allocated to each interview. The structure of the interviews was based on the four perspectives of the Balanced Scorecard (Kaplan & Norton, 1996). The interviews covered the customer perspective (customer satisfaction), financial perspective (budget), internal business process perspective (tasks which are performed) and learning and growth perspective (staff training and development). These interviews were used to obtain in-depth information from participants' experiences of running the libraries. The results of the interviews will be reported in the next chapter.

### **3.3 Quantitative research design**

A second source of information is the community of library users. A questionnaire was used to ascertain the views of library users regarding service levels. The questionnaire was based on the ServQUAL instrument and at a later stage the study compared the LibQUAL + results of the survey that was conducted by the University of the Western Cape and the survey that was conducted by the Stellenbosch University.

#### **3.3.1 Target population and sampling**

Initially the following academic institutions were selected to conduct the survey: UWC, Stellenbosch University, Cape Peninsula University of Technology, University of Cape Town and University of Johannesburg. Due to logistical problems only three institutions were able to participate in the study. These were the libraries at University of the Western Cape, Stellenbosch University and Cape Peninsula University of Technology (now merged with Peninsula Technikon and known as the "Cape Peninsula University of Technology"). Although all three institutions are included, the UWC library became the main focus of the study. The target population for the quantitative study was the community of users at each of these three libraries, including staff, researchers and students at each of the three institutions. Permission to conduct the study was obtained from the head of the library in each case.

### **3.3.2 Data collection and sampling**

A small proportion of the population was selected as a pilot sample and the results used to improve the approach to the wider population of users. By doing so time and costs could be saved without sacrificing efficiency, accuracy, and information adequacy in the research process. This process was in line with the view of other scholars (Busha & Harter, 1980:54) who recognised that it was generally impossible to question the entire library staff as well as the users.

Random sampling was used to select 1000 users from the UWC library out of 8000 users, which represent 12,5% of UWC library users, and 1000 users from the Stellenbosch University library to complete the questionnaires. A representative who is a senior executive member of the Stellenbosch University library was asked to collect the completed questionnaires.

### **3.4 Description of the measuring instrument**

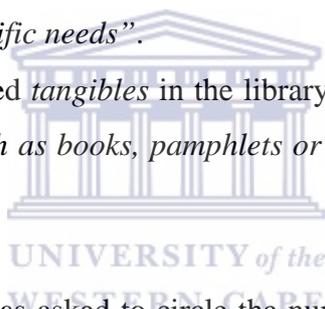
The study included an intensive literature search to determine what research has already been completed on the subject, and in order to gain a better understanding of the problems at hand. Scholars such as Cullen and Calvert (1995), Altman and Herson (1996b), Cook and Heath (2000), and Nicketi (1996) are acknowledged as having done extensive work in finding the best method or technique to be used to measure service performance in the libraries. The question, however, remains: what instrument is the best to measure service performance in libraries.

The survey questions used by Calvert and Herson (1996) could be categorised in a similar way to the categories in ServQUAL. Calvert's statements were not used directly in this study; instead, similar statements were developed. The same categories were used as found in the literature, but formulated slightly differently to fit the situation. This became the measuring instrument for user satisfaction.

Based on the literature a questionnaire comprising 23 statements was prepared (see Appendix B) with the intention of finding out what the selected users think of the library services that they use. In the first section the user was asked to view the library considering a highest-class library to be "7" and a lowest class to be "1". The user was asked to rate the service performance of that specific library on a 7-point scale.

In the second section the questionnaire then identified the five areas of concern, based on the service dimensions of Zeithaml, Parasuraman and Berry (1990). Each area had a number of statements that the user was required to assess whether the services are performed well, or not. They were also required to have a view about the importance of the services. Lastly they were required to say whether the library met their expectations. The questionnaire was laid out in four columns; the first column consisted of the following statements:

- Four statements covered the *reliability* of the library to the user. For example: “*the library provides its services at the time it promises to do*”.
- Four statements covered *responsiveness* of the library to the user. For example: “*staff in the library is willing to help*”.
- In this category three statements covered *assurance* that library give to the user. For example: “*staff in the library has knowledge to answer your questions*”.
- Four statements covered *empathy* to the user. For example: “*staff in the library understands your specific needs*”.
- Five statements covered *tangibles* in the library. For example: “*materials associated with service (such as books, pamphlets or notices) are visually appealing in the library*”.



In the second column, the user was asked to circle the number that indicates how important the user regards this service area. In the third column, the user was asked to indicate whether the delivered service is lower, equal to, or higher than their expectations.

There was a category where the user was required to select the frequency of their library visits, varying between daily use and never use the library.

The only demographic information that the user was required to provide, was to indicate his or her status within the institution, being one of the following:

- Full-time undergraduate
- Part-time undergraduate
- Postgraduate
- Academic staff
- General staff

- Other

### 3.5 Data analysis

The SPSS computer software was used to calculate the relationships between the variables under study. See Chapter five for the results.

### 3.6 Validity and trustworthiness of results

Collecting quantitative data (measurement) and performing the statistical analysis raises issues of reliability and validity. Parker (1999:10) gives a definition of *validity* as the degree to which what has been measured corresponds with other independent measures obtained by different research tools, and *reliability* as the extent to which the same results are obtained if the research is repeated (Parker, 1999:11). This study has applied generalisability in explaining the findings of other institutions. This was in line with Grbich (1999), as cited by Hundermark (2004:61), who defines generalisability as the usefulness of a one set of findings in explaining other situations. Hundermark also states that validity and generalisability are used as a way of judging quantitative research methodology.

To increase the validity of this investigation, a pilot study was undertaken to pre-test and refine the questionnaire, and to test the validity and reliability of the questionnaire before it was administered in the actual study. This was in line with the procedures of qualitative research methods. Campbell (1997) argues that the consistency of data will be achieved when the steps of the research are verified through examination of such items as raw data, data reduction products and process notes. The pilot study was administered to five library staff. Three further staff members from the Information Systems (IS) department were also asked to answer the questions. One academic from IS department was asked to verify the questionnaire. Lastly, an executive member from the Stellenbosch University was asked to do the final verification because the questionnaire was going to be distributed at their institution. To increase the validity of the study the comparison between the study and Stellenbosch LibQUAL+ survey and UWC libQUAL+ survey was done. The following chapter discusses the qualitative elements of the investigation.

## **Chapter 4: A management perspective (a qualitative approach)**

This section discusses the analysis and findings of the qualitative aspects of the research project.

### **4.1 Introduction**

The previous chapter described how interviews were conducted to elicit evidence of management perceptions of results. This chapter presents and analyses the findings of the qualitative aspects of the research. It is organised according to the management tools already identified: the Balanced Scorecard and the critical success factors.

The method used for qualitative analysis was content analysis. Content analysis is a way of coding and classifying data. Firstly, all the interview transcripts were scrutinised to get an impression of what was said by respondents. Codes representing every item of information were developed, in order to recognise the differences and similarities between all the different items. The purpose was to identify from the transcripts, the instances of data that are informative in some way about the research questions, and to sort out the important messages embedded in each interview.

Notes were written in the margins of the transcripts and were then thoroughly examined. A list of the different types of information that were found in each transcript was made. Information about the participants was grouped according to the institutions that they worked for.

The patterns of evidence within each category were identified, as well as the links between them. These patterns are discussed below.

### **4.2 Key strategic issues**

A colour-coding technique was used to categorise each item. While scrutinising for evidence of Balanced Scorecard techniques, four content categories were identified. These categories were:

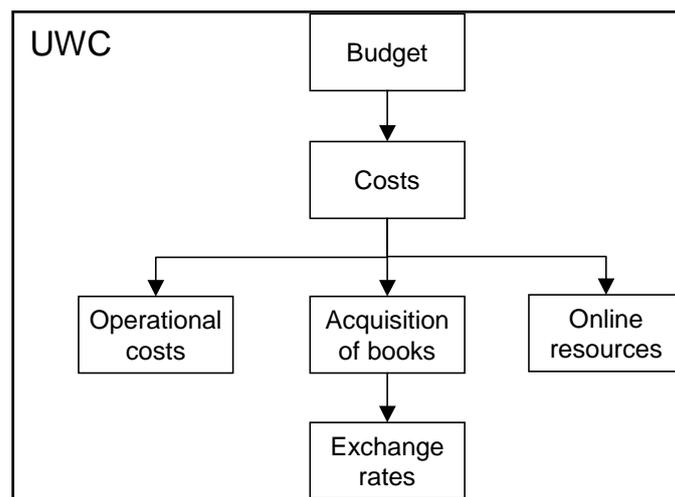
- *Budget*
- *User / Clients concerns*
- *Service improvement*
- *Staff skills and motivation.*

#### 4.2.1 Budget constraints

All respondents raised *budget constraints* as a barrier to delivering the best service. As Kaplan explains, integrating the Balanced Scorecard with the organisational planning and budgeting processes is critical for creating a strategy-focused organisation (Kaplan and Norton, 2001: 280-300), but, as has been discussed above, it balances budgetary issues with other issues relating to internal efficiency, user (customer) perceptions, and organisational learning. These authors continue by saying that most organisations use the budget as their primary management system for establishing targets, allocating resources, and reviewing performance (Kaplan and Norton, 200: 280-300).

In the case of UWC, the Stellenbosch University and Cape Peninsula University of Technology, respondents indicated that their budgeting and performance review is included in their strategic planning process. Budget constraints make it difficult for them to achieve their objectives. These constraints seem to override consideration of other areas of performance management as embodied in the Balanced Scorecard.

Each institution had a different view of the detail within budget constraints. The tree below shows the various budgetary components at UWC library.



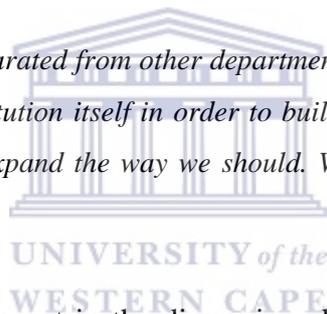
**Figure 4.1: Conceptualisation of UWC budget components**

This institution also raised the issue of exchange rates. Fluctuation of interest rates often causes an increase in the price increase. Most of their books are imported from overseas vendors or booksellers.

*“Budget cuts ....you know it is the time we can obviously import lot of our material designed by overseas vendors. First of all in terms of interest rates that has an immediate impact, even though your budget stay constantly consistent, we all find that you do not have enough funds because you have to accommodate increases from the publishers as well as inflation”.*

One of UWC respondents (a subject librarian) also highlighted that the collection of books and journals always needs development, and that there are special departments or sections within the library that need more money to be able to buy the books that are needed. These sections not only cater for the library’s own needs, they cater for all types of programmes within the institution itself. The librarian explained it like this:

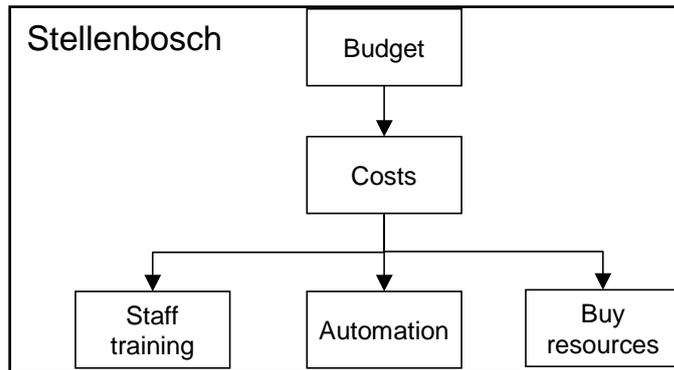
*“This section should be separated from other departments...this section should know types of the programmes of the institution itself in order to build the collection. For the little money we are getting we cannot expand the way we should. We need to organise important material”.*



Other important factors that came out in the discussion about budget constraints concerned online resources. Respondents mentioned that online resources do not actually cater for distance students, there are too few of them and they are really only available on campus.

*“due to budget constraints few databases can be accessed [even] on campus; there is a need for more budget”*

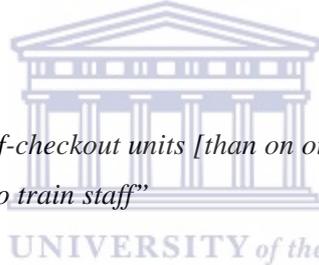
The tree below shows the categories of budget components as seen by the Stellenbosch University.



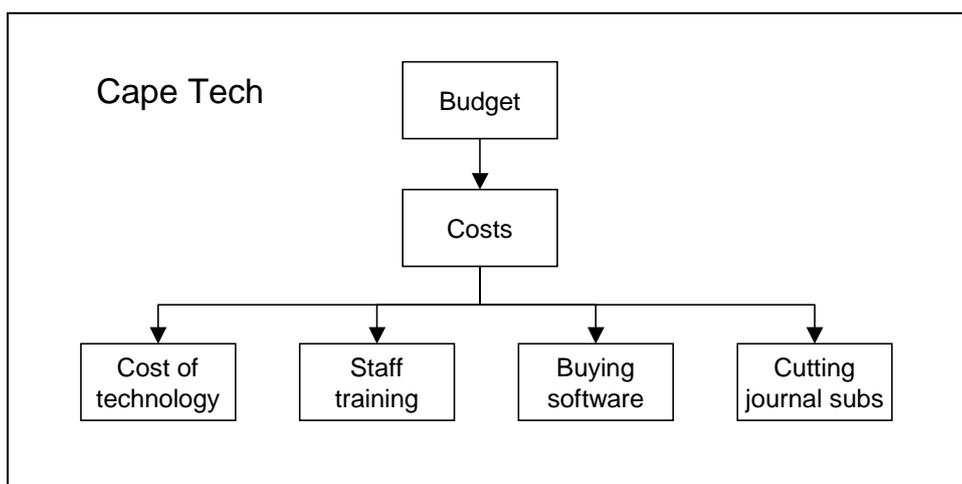
**Figure 4.2: Conceptualisation of Stellenbosch University budget components**

The Stellenbosch University identified some similar aspects of budget constraints, namely, acquisition of resources. Due to budget constraints they had to reduce staff. They mentioned that they need money to train staff. Also the factor that causes more impact on budget was automation.

*“Money is spent more on self-checkout units [than on other things] ...we need a big budget to do that and we need money to train staff”*



The last institution, which was the Cape Technikon (now part of the Cape Peninsula University of Technology), raised these issues:



**Figure 4.3: Conceptualisation of CPUT budget components**

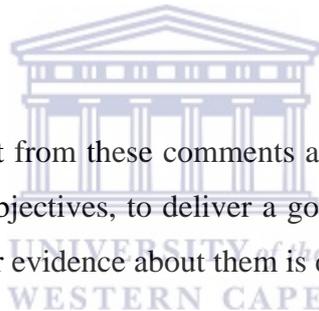
This institution complained about the constant change of technology, which is very costly. Their respondents mentioned money that needs to be spent on staff training to keep up with technology. They find that buying software is expensive. The costs increase with every order:

*“Technology is good and bad. When I say technology is bad I mean changes and we have to keep up with it. It is costly. In terms of staff time and resources - it means money has to be spent, [to] take staff for training and also to buy software increases every time”*

They also mention other issues that are encountered because of insufficient budget, they are cutting journal subscriptions. The head of CPUT library, for example, says:

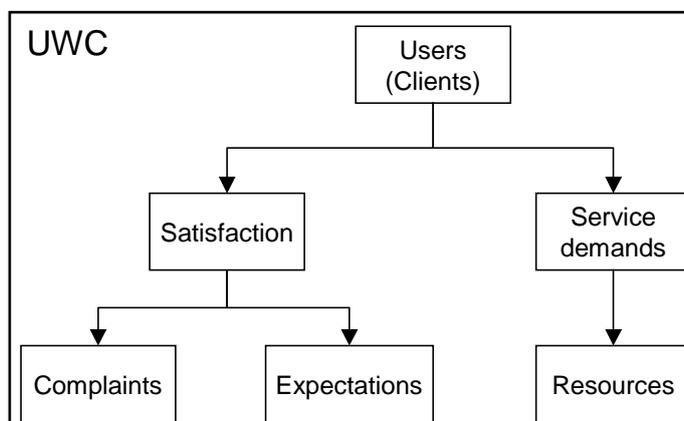
*“We simply cut all journal subscriptions by R1. 3 million because institutions cannot afford expensive libraries so, the budget is in question only in so far as to buy some new resources so what it means the library staff have to find some new ways to still continue to provide the service without the resources”*

In summary, what was also learnt from these comments about budget constraints was that it affects one of the library’s key objectives, to deliver a good service to users. Users were an important factor, and some further evidence about them is discussed below.



#### 4.2.2 Users’ / Clients’ concerns

This tree represents UWC library issues relating to their users (clients).



**Figure 4.4: Conceptualisation of UWC user issues**

This institution recognises the importance of satisfaction of its clients. They mentioned the expectations, complaints, service demands and limited resources they have to deal with. They encounter an increase in the number of students and are striving to satisfy them. The manager is quoted saying:

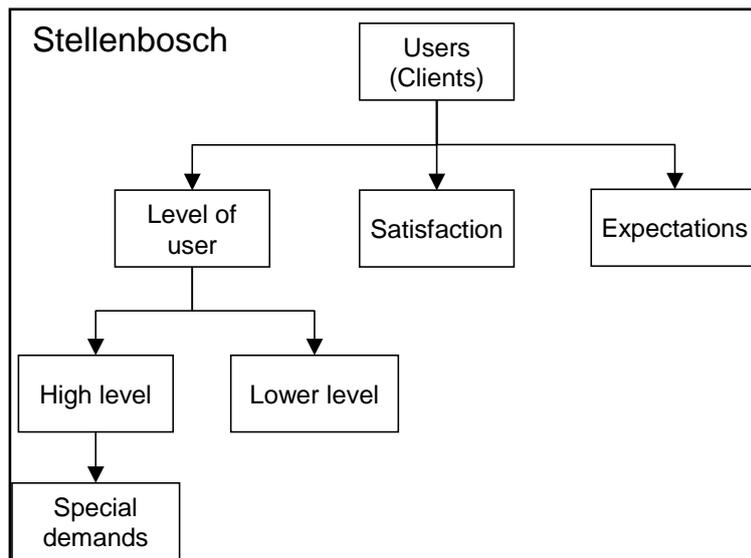
*“...again because of the demands that are faced on the resources and increasing student numbers. In our case we had a situation now where we have to meet the demands of the services from the students which are getting higher”*

During the interviews, respondents mentioned that no survey of user perceptions had been conducted. The institution had formal structures such as a Senate library committee and faculty librarians. Through these structures they get to know the expectations of their clients. They also get complaints from their users from time to time.

*“I think we do need to work on that. We also need to make specific more formal user surveys in particular areas. That is something that will be required because it is one way of really getting feedback from users”*

It has been noted that all three institutions share one primary goal: that is, to deliver the best service to their users. Key words such as “user satisfaction” and “user expectations” came out strongly from comments made by respondents at the Stellenbosch University. There they cater for different categories of users, for example, they have high-level researchers who demand more than the average user would.

*“ ... high level researchers would ask for more”*

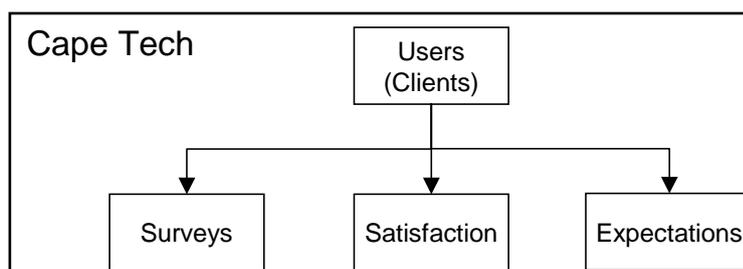


**Figure 4.5: Conceptualisation of Stellenbosch University user issues**

At Stellenbosch they highlighted the fact that they are striving to provide value services for users, catering for all categories of users.

*“our goal is to meet user needs through surveys...”*

The Cape Peninsula University of Technology also emphasised client expectations and client satisfaction as can be seen in the figure below.



**Figure 4.6: Conceptualisation of Cape Peninsula University of Technology user issues**

At Cape Peninsula University of Technology there was a difference of opinion between the senior staff and subject librarians regarding surveys. The senior manager said they do surveys at all times through record-keeping, statistics and ask graduate students at various level to comment and rate the library services.

*“ all the time... it is done through record keeping, statistics...not only the library but all the functions; everything from the bookshop to the lectures”*

The senior manager also mentioned that this institution gets a lot of input from their clients.

*“yes, we get a lot, especially if we do a survey that measures a specific aspect such as surveys about books, we get a lot of feedback.”*

The subject librarians were asked the question whether they conducted surveys in the library. The answer, quite emphatically, was:

*“no”*

This probably indicates that management is relying on the flow of routine operational information to tell them how well their service is being delivered. The subject librarians do not see it in quite the same way; they recognise the potential value of surveys that specifically probe the users' perceptions of service delivered.

In summary, it appears that all three institutions are experiencing budget constraints. However, all are aware of their responsibility to meet their users' demands and provide a good service. The other category that was mentioned by all three institutions was the improvement of service.

#### **4.2.3. Service improvement**

The UWC library took upon itself the challenge that it is their responsibility to make sure that students achieve their goals. Having the constant change of technology in mind, they have to make sure that students find it easy to learn and to acquire critical analysis skills.

*“ there is a need to train first [year] students, especially those who are coming from disadvantaged background for example. the library should introduce training on the 1<sup>st</sup> or 2<sup>nd</sup> week of January before the academic programme. Part-timers are struggling most. Users should be trained to gain critical analysis skills”*

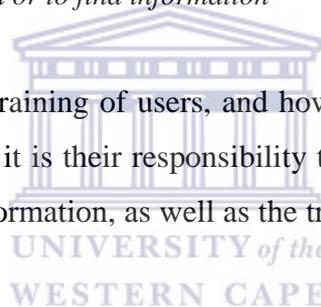
The Stellenbosch University stated strongly that they felt there is room for improvement. They need to deliver the best service to their clients and they need to train their clients as well. They mentioned that they have an on-going training programme whereby the librarians provide individual training, for example: librarians vs. students and librarians vs. lecturers.

*“ we need to give a best service to our clients. We need to train our clients...”*

The Cape Peninsula University of Technology library saw a strong need for improvement in the delivery of service. Information literacy came as an important challenge that needs to be addressed. The respondent mentioned that information literacy is necessary for students to be able to proceed and use services – there can be no quality of service delivery if users are not able to use the services offered.

*“the challenge is through information literacy... we train them to use our resources and we train them to use information or to find information”*

This section shows the value in training of users, and how essential this is to improved service. All respondents agreed that it is their responsibility to make sure that the resources are in place for students to access information, as well as the training that users need to be able to use those resources effectively.

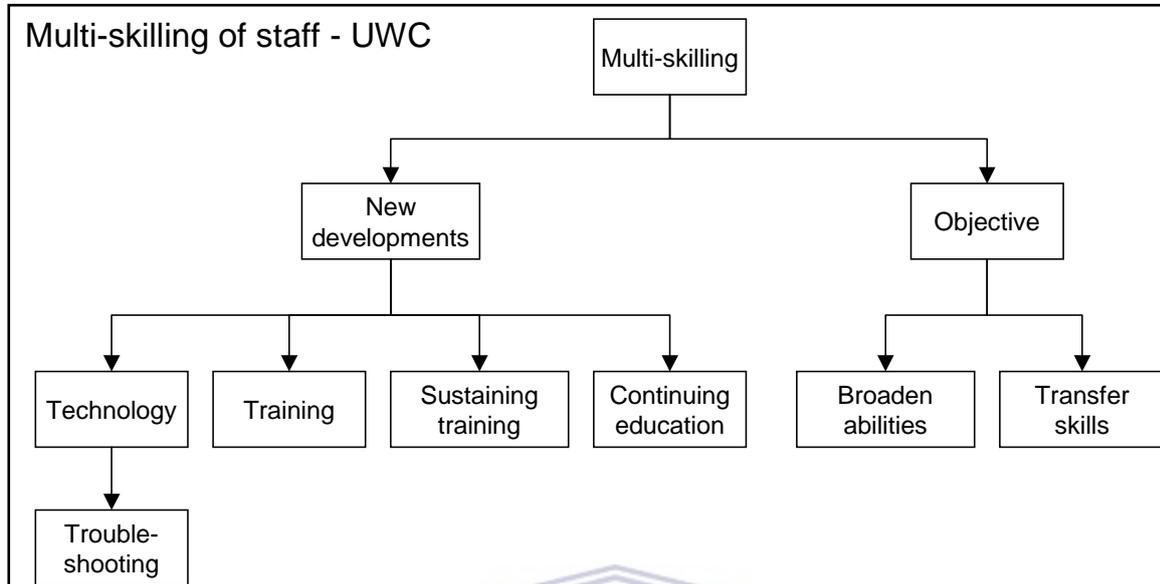


#### **4.2.4 Staff skills and motivation**

The final category that emerged from management-level interviews concerned the skills and motivation of library employees, and the role of information technology.

Respondents identified strategic objectives such as core competency and skills, including the *multi-skilling* of staff. This was considered to encourage and enable staff to gain a broader understanding of how to meet service demands of users. For example, one management respondent said:

*“In order for staff to keep up to date with the new requirements, new technology etc., they should have continuing education. [We need] staff development programmes where people can learn and carry out all those skills”*

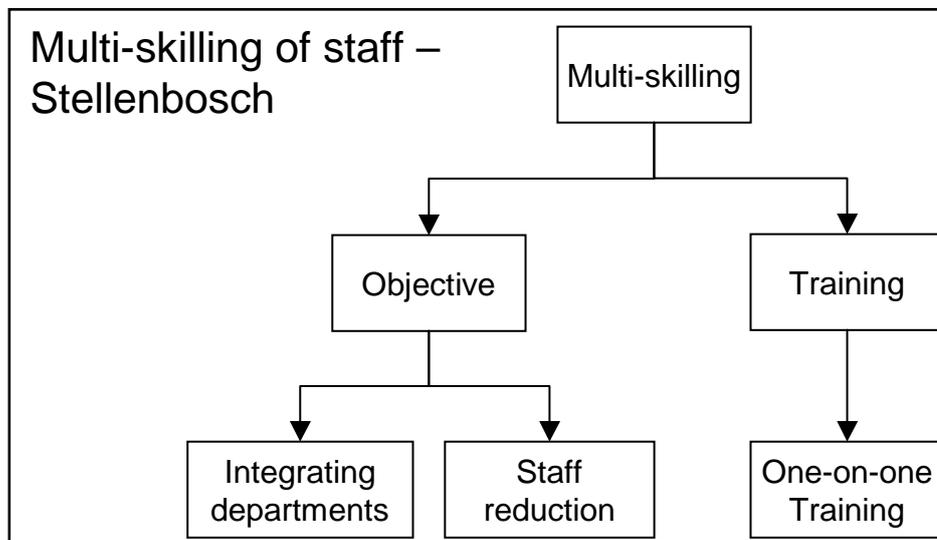


**Figure 4.7: Conceptualisation of UWC multi-skilling issues**

Technology was shown to be an area where new staff skills are needed to ensure a good service. Troubleshooting also came out as a factor that the subject librarians needed to be trained in:

*“employees should be able to use resources. Knowledge of software packages and troubleshooting training should be provided”.*

The Stellenbosch University were also concerned about multi-skilling, but with a different view of the detail and the purpose:

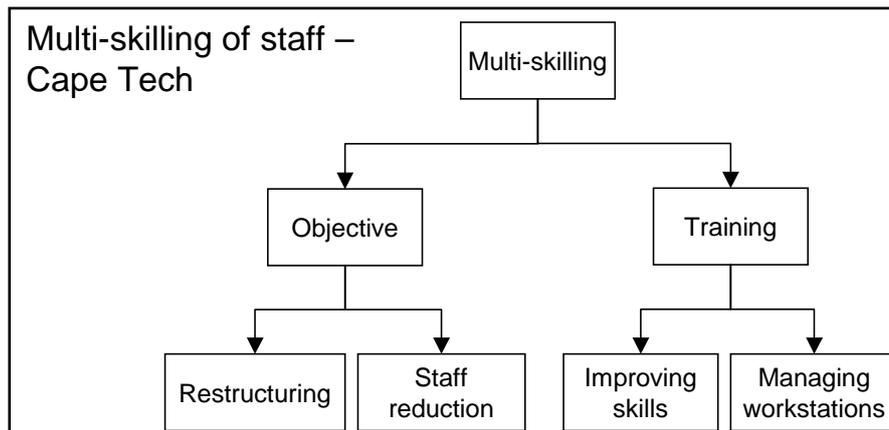


**Figure 4.8: Conceptualisation of Stellenbosch University multi-skilling issues**

Respondents from this institution mentioned that they have been able to integrate the two departments of circulation and short loans, using multi-skilling principles.

The respondents felt that the multi-skilling was effective, especially during the time when they were busy reducing staff because of budget constraints. They did not have internal training programmes but did refer to one-on-one training. Though they agreed on multi-skilling they mentioned disadvantages, such as higher expectations from their employees for remuneration. The more responsibility employees get, the more they will expect.

*“Multi-skilling is good especially now, we are reducing staff... the disadvantage is that...the more responsibilities they get the more they will have a lot of expectations... cleaners would want to move to the library assistant level”*



**Figure 4.9: Conceptualisation of CPUT multi-skilling issues**

Cape Peninsula University of Technology also had the objective to reduce staff and to re-structure, and specifically mentioned the need to train staff in the proper use of workstations.

In summary, it can be seen that the categories emerging from the interviews were similar between institutions, but by no means identical. It is interesting to note that they are more or less in line with the four perspectives that are seen on the Balanced Scorecard:

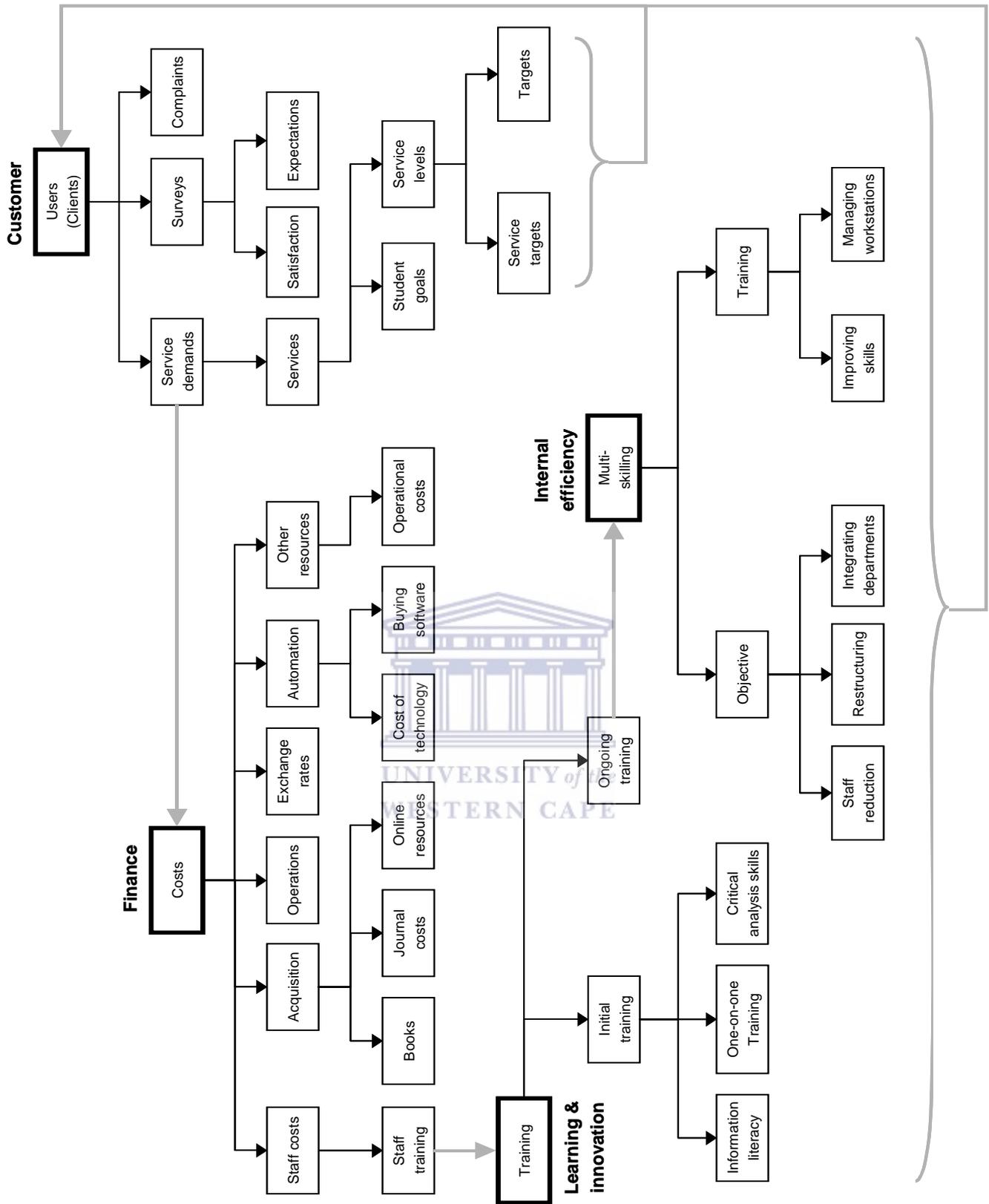
- Budget constraints correspond to the *finance perspective*, although in discussion with library managers the notion of revenue never arose; the idea that some kind of “revenue” might be identifiable that would provide library managers with a clearer view of the value that they had delivered is an interesting one.
- Users correspond to the *customer perspective*, and it is interesting that users are sometimes referred to as “clients”, less often as “customers”; some of the evidence suggests that management’s view of the user as a customer is less important than their view of, for example, internal resource utilisation.
- Improvement of services corresponds to the *internal efficiency perspective*; there is a high level of awareness about this, but variable efforts to gather and collate performance information about internal efficiency.
- Multi-skilling corresponds to the *learning and growth perspective*; here there seemed to be a general effort to reduce staffing levels through multi-skilling, however, not necessarily in line with learning and growth for more progressive reasons.

Themes were developed, and major categories and minor themes were identified. Major themes are present in more than one institution, while minor themes were found at varying levels in the different institutions.

The complete relationship between the various management issues is illustrated in Figure 4.10.



**Figure 4.10: A consolidated view of all expressed managerial issues**



- The four themes revealed through the management interviews were adopted in the Balanced Scorecard perspectives. Figure 4.10 presents an overview of all the expressed management issues, consolidated as a single collation of all that was said in the interviews. As can be seen from the figure, **Finance** was highlighted as a theme although the focus was very clearly on *cost* as the principal feature of financial management. The major category within it was *budget constraints*, which consisted of staff costs, *acquisitions*, operations, and the management of exchange rates, the cost of automation and other necessary resources. The minor themes – not found in all institutions are summarised in the figure at the next level down.
- **Internal efficiency** was highlighted as a theme and the major categories were the objectives set for efficiency improvement and the multi-skilling training that was intended to improve service at the same time as reducing costs. This combined with improvement of service, including the capability of the library to deal with the challenges of the future so as to improve service to users. Minor themes were staff reduction, restructuring, service level management and helping students to achieve their goals, although (as indicated in the figure by the faint lines) these issues are now overlapping from one theme to another.
- **Learning and innovation** was identified as a theme at the simple level of *training*, and the major categories really separated out the one-time initial training that was associated with newly hired staff, and the ongoing training associated with the changing context for library operations and the desire for multi-skilling.
- Lastly, **customers** were identified as a theme although in the form of library users. The major categories were service demands, surveys of user attitudes, and dealing with complaints. User satisfaction and user expectations were recognised as different issues that needed to be managed so as to minimise the difference between them.

As can be seen from the figure (and as discussed above) these findings “populate” the Balanced Scorecard perspectives with the expressed concerns of library managers, although there is an inevitable overlap and connection from one perspective to the next.

A strong circularity can be seen in traces of the path from *users* (top left), through *service demands* to the inevitable impact of service demands on *costs*. A major cost item is the cost of staff *training*, which (as well as the initial training for new hires) includes a considerable effort to achieve *multi-skilling*. This in turn will impact on users, and it is evident (more clearly than would otherwise be possible) in the consequences of actions in one area of management concern upon the other areas. The overall shape and size of the figure also gives a clear indication of the potential complexity that faces library managers, especially when compared with the relative simplicity of the earlier figures (4.2.1 through 4.2.4).

Perhaps the most significant general issue was multi-skilling. Multi-skilling emerged as a prominent category for most managers, but some of them emphasised that there should be procedures and policies in place before implementation of a multi-skilling policy. Their concern related to the question of professionalism. One of the respondents said that:

*“Multi-skilling is good at certain levels but it is not a necessity. In our profession we must limit and [even] prescribe multiskilling: it can lead to a conflict of interests”.*

This comment reminds one that not all the participants share the same views. Using the Balanced Scorecard has helped to identify and organise some of their key concerns and issues, but it is not a prescription for success. For that, we have to turn to *critical success factors*, the second of the two management tools that was identified for the purposes of this study.

### **4.3 Critical success factors**

Each of the respondents was invited to talk about the things that are, in their view, critical to success. For many this led to an enumeration of their successes, rather than the failures that had in a different way pointed to things that had to be done right, to achieve success. The senior *library managers* listed their achievements as follows:

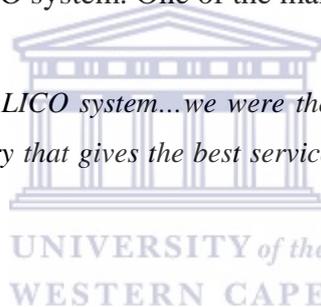
- Leadership (Senior management)
- Staff and management relationships (Transparency, accountability, participation )
- Policies and procedures implemented
- Interdepartmental cooperation (integration)
- New Systems (WEB marketing, CALICO)

This is a diverse collection of critical success factors, each of which seems to be self-evidently true. These managers spoke about their leadership role in successfully achieving appointments of senior managers, in building up staff relationships as well as implementing policies and procedures. Websites were mentioned as a marketing tool which was very useful. One of the managers is quoted mentioning what she had achieved:

*“Appointment of senior management, building relationships between managers and staff, putting policies and procedures in place, and development of a Website as a tool for marketing”*

Integration of the circulation and short loans departments came out as one of their achievements. These managers made it their business to be successful. They were proud to mention the implementation of the CALICO system. One of the managers is quoted saying:

*“ ...we implemented the CALICO system...we were the first in five institutions...our clients told us this is the best library that gives the best service. They are very happy about the service”*



The immigration from paper to electronic systems came out as another achievement of these managers. The senior manager said:

*“... [we are] moving from paper to electronic running...we have gone electronic in a big way. In a survey that was conducted by the institution using students, the library ranked as high in service delivery.”*

Evidence of “critical success factor” thinking was limited, given the preoccupation of library managers with operational issues. Perhaps it is indicative of the natural caution of library managers that they were keen to illustrate critical success factor by focusing on success, but not by focusing on the failures that can be doubly enlightening about what must actually be done well.

#### **4.4 Verification of findings**

To verify the qualitative results thick description was used. Major categories and minor categories were listed on one column of the table and each institution was matched with the list.

#### **4.5 Results of verification / conclusions**

All the four perspectives of the Balanced Scorecard were represented. The following chapter will discuss the quantitative investigation



## **Chapter 5: The user perspective (a quantitative approach)**

This section discusses the analyses and findings of quantitative research, beginning with an introduction of the quantitative investigation.

### **5.1 Introduction**

This chapter presents the findings to reflect the comparison between the survey that was conducted by the University of the Western Cape LibQUAL+, 2006 and Stellenbosch University LibQUAL+, 2005. The study also highlights the similarities between the results of the current study which was conducted in 2002.

The quantitative survey was conducted at only two institutions, Stellenbosch University and UWC. Cape Peninsula University of Technology was unable to participate in the quantitative study because they could not administer the survey within the time frame allowed.

### **5.2 Analysis**

Both surveys (UWC LibQUAL+ and US LibQUAL+) were conducted using online. The questionnaire at UWC was prepared and posted online. There was communication between the library and the university community which includes (academics, students, non-academic staff, researchers and other UWC library users). The questionnaire was divided according to the user group which includes (undergraduates, postgraduates, academic staff, library staff and staff in general). These user groups were categorised into sub-groups, for example:

- Undergraduates – first, second, third, fourth fifth and above and non-degree.
- Post graduate – taught master degree, research masters degree, doctoral research degree, non- degree and undecided.
- Academic staff – professor, reader, senior/principal lecturer, lecturer, research staff, and other academic status.
- Library staff – senior management, departmental head/team leader, professional staff, support staff, and other.
- Staff – administrative or academic staff and other staff positions.

The questionnaires were explained and the users were given a month to complete a questionnaire. Reminders were sent via e-mails and the university community board (Thetha board).The University of the Western Cape library received 541 respondents. ( UWC report, 2006:30).

Stellenbosch University conducted their study similar to the University of the Western Cape library and received 1511 respondents (Stellenboch report, 2005: 28).

### **5.3 Results interpretation**

This section will compare the results between the two surveys UWC LibQUAL+ report and US LibQUAL+ report using a table to reflect the item statements that have been used by both institutions.

#### ***5.3.1 Comparison of UWC LibQUAL+ results and Stellenbosch LibQUAL+ results***

The text was divided into three categories as LibQUAL+ sub dimensions, for example, affect of service (AS), information control (IC) and library as a place (LP).

The following table will compare LibQUAL+ results of the University of the Western Cape and Stellenbosch University LibQUAL+ results both conducted by their respective institutions.

Table 1 has 11 columns. The columns are categorised as follows:

- Column1- illustrates question text for both institutions
- Column 2 – illustrates minimum mean for the University of the Western Cape library
- Column 3 – shows desired mean for UWC
- Column 4 – shows perceived mean for UWC
- Column 5- shows adequacy mean for UWC
- Column 6- shows superiority mean for UWC
- Column 7- shows minimum mean of Stellenbosch University (US)
- Column 8 – shows desired mean for US
- Column 9-shows perceived mean for US
- Column10 – shows adequacy mean for US
- Column 11- shows superiority mean for US

**Table 1: Comparison of means – all respondents UWC and US, respectively**

Item	UWC Minimum mean	UWC Desired mean	UWC Perceived mean	UWC Adequacy mean	UWC Superiority mean	US Minimum mean	US Desired mean	US Perceived mean	US Adequacy mean	US Superiority mean
<b>Affect of service</b>										
AS-1 Library staff who instil confidence in users	5.78	7.58	5.74	-0.04	-1.84	5.72	7.50	6.40	0.68	-1.10
AS-2 Giving users individual attention	5.77	7.25	5.87	-0.10	-1.38	5.86	7.33	6.52	0.65	-0.81
AS-3 Library staff who are consistently courteous	6.27	7.54	6.15	-0.12	-1.39	6.43	7.82	6.87	0.43	-0.95
AS-4 Readiness to respond to users' enquiries	6.28	7.63	6.26	-0.03	-1.37	6.72	8.00	7.24	0.52	-0.76
AS-5 Library staff who have the knowledge to answer user questions	6.58	7.74	6.61	-0.02	-1.14	6.54	7.86	6.97	0.43	-0.89
AS-6 Library staff who deal with users in a caring fashion	6.22	7.55	6.04	-0.18	-1.52	6.34	7.64	6.92	0.58	-0.72
AS-7 Library staff who understand the needs of their users	6.49	7.74	6.36	-0.14	-1.38	6.43	7.74	6.79	0.36	-0.95
AS-8 Willingness to help users	6.52	7.74	6.49	-0.03	-1.25	6.59	7.91	7.11	0.52	-0.80
AS-9 Dependability in handling users' service problems	6.30	7.50	6.31	-0.01	-1.19	6.45	7.70	6.96	0.51	-0.74
<b>Information control</b>										
IC-1 Making electronic resources accessible from my home or office	6.10	7.65	6.10	-0.01	-1.55	6.36	7.98	6.53	0.17	-1.45
IC-2 A library website enabling me to locate information on my own	6.66	7.88	6.90	-0.24	-0.97	6.65	8.07	6.93	0.27	-1.14
IC-3 The printed library materials I need for my work	6.31	7.70	6.15	-0.16	-1.54	6.50	7.80	6.69	0.20	-1.11
IC-4 The electronic information resources I need	6.43	7.81	6.51	-0.07	-1.31	6.67	8.02	6.85	0.19	-1.17
IC-5 Modern equipment that lets me easily access needed information	6.59	7.91	6.40	-0.18	-1.50	6.65	8.02	6.95	0.30	-1.07
IC-6 Easy – to – use access tools that allow me to find things on my own	6.57	7.75	6.56	-0.00	-1.19	6.52	7.96	6.71	0.19	-1.25
IC-7 Making information easily accessible for independent use	6.45	7.70	6.44	0.01	1.26	6.48	7.83	6.82	0.34	-1.01
IC-8 Print and/or electronic journal collections I require for my work	6.52	7.78	6.26	-0.26	-1.52	6.61	7.98	6.68	0.07	-1.31

Item	UWC Minimum mean	UWC Desired mean	UWC Perceived mean	UWC Adequacy mean	UWC Superiority mean	US Minimum mean	US Desired mean	US Perceived mean	US Adequacy mean	US Superiority mean
<b>Library as a place</b>										
LP-1 Library space that inspires study and learning	6.36	7.84	6.23	-0.13	-1.61	6.28	7.74	6.80	0.52	-0.94
LP-2 Quiet space for individual work	6.18	7.79	5.55	-0.63	-2.24	6.58	7.86	6.92	0.33	-0.95
LP-3 A comfortable and inviting location	6.41	7.65	6.40	-0.01	-1.25	6.28	7.64	7.60	1.31	-0.04
LP-4 A haven for study, learning, or research	6.48	7.89	6.22	-0.26	-1.67	6.49	7.84	6.93	0.44	-0.91
LP-5 Space for group learning and group study	5.88	7.27	5.80	-0.08	-1.48	5.73	7.15	6.34	0.61	-0.82



The above findings may be biased due to a student's lack of experience with academic libraries, and may result in inability to make valid assessments of quality. Walters(2003) argues that library users can only recognize excellent service from poor service only if they have been exposed to both levels of service, and also only if they are taught the difference between high and low quality. However, the researcher will select the similarities and the differences between the two studies. In order to see the differences and similarities, the study will scrutinise each item from each institution to point out differences and similarities between customer's desires and their perceptions. The results of both institutions were categorised according to service adequacy gap and superiority gap.

Service adequacy gap score is calculated by subtracting the minimum score from the perceived score on any given question, for each user. In general, service adequacy is an indicator of the extent to which you are meeting the minimum expectations of your users. A negative service adequacy gap score indicates that your users' perceived level of service quality is below their minimum level of service quality. (UWC LibQUAL+ Report, 2006:10).

Service superiority gap score is calculated by subtracting the desired score from the perceived score on any given question, for each user. In general, service superiority is an indicator of the extent to which you are exceeding the desired expectations of your users. A positive service superiority gap score indicates that your users' perceived level of service quality is above their desired level of service quality (UWC LibQUAL Report, 2006:10). In order to identify service gaps the study listed the lowest scores from each institution, according to the items. The following table shows the adequacy gap of service which was calculated by subtracting the minimum score from the perceived score and superiority gap which was calculated by subtracting the desired score from the perceived score from both institutions (see Table 1).

**Table 2: Comparison of adequacy of service and superiority of service at U.W.C and US.**

Line	Item	Adequacy of service		Superiority of service	
		U.W.C n=541	US n=1511	U.W.C n=541	US n=1511
	<b>Affect of service</b>				
A	AS-1 Library staff who instil confidence in users	-0.04	0.68	-1.84	-1.10
B	AS-2 Giving users individual attention	0.10	0.65	-1.38	-0.81
C	AS-3 Library staff who are consistently courteous	-0.12	0.43	-1.39	-0.95
D	AS-4 Readiness to respond to users' enquiries	-0.03	0.52	-1.37	-0.76
E	AS-5 Library staff who have the knowledge to answer user questions	0.02	0.43	-1.14	-0.89
F	AS-6 Library staff who deal with users in a caring fashion	-0.18	0.58	-1.52	-0.72
G	AS-7 Library staff who understand the needs of their users	-0.14	0.36	-1.38	-0.95
H	AS-8 Willingness to help users	-0.03	0.52	-1.25	-0.80
I	AS-9 Dependability in handling users' service problems	0.01	0.51	-1.19	-0.74
	<b>Information Control</b>				
J	IC-1 Making electronic resources accessible from my home or office	-0.01	0.17	-1.55	-1.45
K	IC-2 A library website enabling me to locate information on my own	0.24	0.27	-0.97	-1.14
L	IC-3 The printed library materials I need for my work	-0.16	0.20	-1.54	-1.11
M	IC-4 The electronic information resources I need	0.07	0.19	-1.31	-1.17
N	IC-5 Modern equipment that lets me easily access needed information	-0.18	0.30	-1.50	-1.07
O	IC-6 Easy-to-use access tools that allow me to find things on my own	0.00	0.19	-1.19	-1.25
P	IC-7 Making information easily accessible for independent use	-0.01	0.34	-1.26	-1.01
Q	IC-8 Print and/or electronic journal collections I require for my work	-0.26	0.07	-1.52	-1.31
	<b>Library as a place</b>				
R	LP-1 Library space that inspires study and learning	-0.13	0.52	-1.61	-0.94
S	LP-2 Quiet space for individual work	-0.63	0.33	-2.24	-0.95
T	LP-3 A comfortable and inviting location	-0.01	1.31	-1.25	-0.04
U	LP-4 A haven for study, learning, or research	-0.26	0.44	-1.67	-0.91
V	LP-5 Space for group learning and group study	-0.08	0.61	-1.48	-0.82
<b>Overall:</b>		-0.08	0.44	-1.43	-0.95

The selected adequacy means ranges from -0.04 to -0.24. The selected superiority means ranges from -0.97 to -2.24. These findings illustrate that there are more similarities in service delivery between these two institutions.

### **5.3.2 Similarities between UWC and US LibQUAL+ report**

The findings show that in line O (IC-6) the users believe that there is a service gap in both institutions' ability to make electronic resources accessible from home or the office. Line O also shows a gap in the capability to deliver easy-to-use tools that allow users to find things on their own. This means that the managers need to look at the strategies to cater for users who need to access library services from home. The users also require training to be able to access these services from home. From line P (IC - 7) users indicated a gap in these institutions' ability to make information easily accessible by the independent user. In the case of UWC the independent user cannot access information without passwords. There are certain databases that cannot be used without consulting an expert or a librarian. The users, therefore, have to come to the library, which could be problematic due to the library hours and public holidays. This gap could be linked to gap 4 of Zeithaml, Parasuraman and Berry (1990) which states that this could be due to a lack of communication between the librarian, staff and managers regarding library operations (see p. 25).

Line N (IC- 5) was seen as a gap at the both institutions in their ability to offer modern equipment which allows users easy access to library collections. By providing easy-to-use tools, that permits the users to find information on their own. At UWC library the new material is received by the acquisitions department and processed by this department and passed on to the cataloguing department to be returned to the shelves. During this process the status of the material will reflect "in process" and the user is not able to access the material until it is physically returned to the shelves. This means that the library managers need to find strategies to communicate with the users so that they can access the material while still "in process" by means of modern equipment). According to line Q (IC-8) a major gap was identified at UWC and US in their ability to deliver comprehensive print collections. This gap could be linked to gap 1 in the Zeithaml, Parasuraman and Berry model (1990). According to these authors this gap is caused by the lack of interaction between the management and customers and also lack of communication from top managers in terms of budget (see p. 24). The library managers do not know the quality of the information that the customer need unless they consult the lectures or the experts on the subject field. When top management allocating funds during the budgeting process they are not concerned about the quality of material that the library buys, but they are more concerned with the amount of money they are allocating to the

libraries. This leads to the dissatisfaction of the customers, therefore, the library managers should find some strategies that will involve top management in the library businesses.

By using gap model the findings revealed a gap between expected services and perceived actual service. The users had higher expectations and it seemed that the libraries could not deliver according to their expectations. The following table illustrates the scores of users' expectations.

**Table 3: Desired service (users' expectations)**

Line	Item	UWC	US
A	LP-4 A haven for study, learning, or research	7.88	8.07
B	IC-2 A library Web site enabling me to locate information on my own	7.81	8.02
C	IC-4 The electronic information resources I need	7.91	8.02
D	IC-5 Modern equipment that allows easy access to needed information	7.91	8.02
E	LP-1 Library space that inspires study and learning	7.84	7.74
<b>Overall:</b>		<b>7.89</b>	<b>7.84</b>

Despite strong investments in electronic resources over the past few years in both institutions, the students have indicated that there are never enough electronic resources(IC-4).Walters (2003) argues that most undergraduate students are not aware of available information, for example, the range of resources that might be useful to them. He continues by saying that without this knowledge, students will not be able to distinguish between high-quality service and inadequate service. In this case the findings illustrate that although the institutions have improved on their resources and have websites that can accommodate all users, the students still have high expectations, which lead to gap 5 (see p. 25). This gap explains the difference between what the customer expected to receive from the service and what they believe they actually did receive. This is a very important gap because, if the perceived service falls short of the customer's expectations, they will be disappointed and dissatisfied. In the instances such as the resources in these two libraries, the students might lack knowledge of information technology to gain access to the databases. This would mean that the students need training on how to use electronic databases. The library managers might need to run workshops or to run more user education programmes that will cater for all the users. These strategies might improve service delivery in these higher education institutions.

The following table shows service delivery at the University of the Western Cape and Stellenbosch University.

**Table 4: Perceived service delivery**

		U.W.C	US
A	LP-2 Quiet space for individual work	-0.63	0.33
B	LP-4 A haven for study, learning, or research	-0.26	0.44
C	IC-8 Print and/or electronic journal collections I require for my work	-0.26	0.07
D	AS-6 Library staff who deal with users in a caring fashion	-0.18	0.58
E	IC-5 Modern equipment that allows easy access to needed information		

Table 4 shows that in both studies the minimum score was subtracted from the average perceived score. Concerns such as print collections, complete runs of journals titles were not unexpected (see.4.2.1) the managers mentioned budget cuts some times. For the question that examined satisfaction with the way respondents were treated by the staff, respondents had low scores. The literature model (see. figure 2.2: p23) says the discrepancy between service specification and the actual service delivered creates gap 3 in Zeithaml, Parasuraman and Berry gap model. In this case (AS-6) in line D was identified as an area where the users were not satisfied with the service delivered by the staff. This factor could be linked with the budget cuts that could lead to staff shortage and affect the service delivery.

### **5.3.3 Comparison of ServQUAL and LibQUAL+ results**

As small scale study using ServQUAL to collect data, was used at UWC. In comparing the results between the two instruments were identified from all surveys. The results show that out of 23 statements from ServQUAL and 22 statements from LibQUAL+, 13 statements were similar and there was a slight difference between scores.

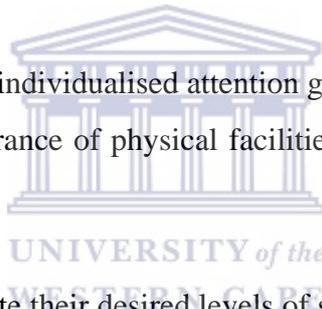
These results endorse the values found in this work and reported in this thesis.

As discussed before (see section 2.4.1) ServQUAL is an instrument designed to measure service quality from the point of view of the customer's desired and perceived levels of service. This survey is based on the concept of the Gaps Model of Service Quality (see 2.4.1), which

posits that the discrepancy between customers' expectations for excellence and their perception of actual service delivered is a customer-oriented definition of service quality.

The questionnaire used for this study was adapted from that of Calvert and Herson (1996). It consisted of 23 questions in different categories. The first group of questions covered the status of the participants and their use of the library, and the second group comprised twenty questions grouped into the five service "dimensions" that, according to the ServQUAL literature (Zeithaml, Parasuraman and Berry, 1990), have been consistently ranked by customers in various service industries to be essential to service quality. The five dimensions of service are:

- **Reliability** – the ability to perform the promised service dependably and accurately.
- **Responsiveness** – the willingness to help customers and provide prompt service.
- **Assurance** - the knowledge and courtesy of employees and ability to convey trust and confidence.
- **Empathy** - the caring, individualised attention given to customers.
- **Tangibles** - the appearance of physical facilities, equipment, personnel and communication materials.



Respondents were asked to indicate their desired levels of service for each question, and indicate their perception of the service level delivered by the library. The scoring of each question is then based on the comparison of the delivery score with the importance of the delivered service to the customer. Scores from the twenty questions are then weighted according to the expectation the customer attached to each dimension.

Questionnaires were distributed to the libraries of the institutions. Two thousand (2000) questionnaires were distributed to both institutions. Half of the questionnaires were distributed to UWC library, and the other half to the Stellenbosch University. A 5% response rate was received from UWC and 5.2% from Stellenbosch University.

The aims of the survey were to:

- assess the actual service that is delivered by the library to the users/customers.
- establish the importance of the service to the users/customers.

- identify to what extent the service meets user expectations.

The interpretation of results will be reflected by means of illustrating relationships or associations between ServQUAL and LibQUAL+ similarities drawn from the results.

As mentioned earlier (see 5.2) the subject of the present study consisted of a sample of two thousand (2000) questionnaires from both institutions. The response rate at UWC consisted of 32.7% full-time undergraduates, 24.5% part-time undergraduates, 22.4% postgraduates, 8.2% academic staff and 10.2% general staff.

The response rate at the US was 80% full-time undergraduates and 20% postgraduates. There was no response from other categories.

Although there is a difference in the needs of staff, postgraduates and undergraduate students, the numbers were too small to separate them. All the results were combined to get an overall impression. The main purpose was to get a general idea of the service delivery in the library. It is not intended to be an in-depth analysis.

In comparing the results between the two instruments (ServQUAL+ and LibQUAL+) similar statements were identified from all surveys. The results show that out of 23 statements from ServQUAL and 22 statements from LibQUAL+, 13 statements were similar and there was a slight difference between the scores.

The following table shows these similarities and illustrates aggregate results of ratings for the 13 items.

The table consists of 9 columns. The statements in the tables are categorized according to LibQUAL+ sub-dimensions. Statements are derived from the LibQUAL+ and ServQUAL dimensions of *reliability*, *responsiveness*, *assurance*, *empathy* and *tangibles*. Codes in the first column reflect the statements, and in each case the statement is compared to the minimum, desired and perceived mean attached to it by the user.

**Table.5: ServQUAL (current study) and LibQUAL+**

Dimension	Statement	Minimum	Desired	Perceived
AS-1	1.The behaviour of the staff in the library instils confidence in you about the library	4.82	7.00	4.62
AS-3	2.The library staff are consistently courteous with you	4.82	7.00	4.93
AS-5	3.Staff in the library have the knowledge to answer your questions	5.23	7.00	4.89
AS-9	1. Librarians give you prompt service	5.14	7.00	4.70
AS-8	2. Staff in the library are willing to help you	5.18	7.00	4.96
AS-4	3. Librarians are never too busy to respond	5.28	7.00	4.74
IC-2	4. Web-based library services give me good response	5.28	7.00	4.88
AS-2	2.The library has staff who gives you individual attention	4.81	6.00	5.02
AS-6	3.The library has your best interest at heart	5.27	6.00	4.68
AS-7	4.Staff in the library understand your specific needs	5.21	7.00	4.94
IC-5	1.The library has modern facilities and equipment	5.94	7.00	6.34
LP-1	2.The library physical facilities are visually appealing	5.62	7.00	5.87
LP-3	3.Materials associated with service (such as books, pamphlets or notices) are visually appealing in the library	5.59	7.00	5.60

**Key:** Minimum = Actual service  
Desired = Importance of service  
Perceived = Level of expectation

Looking at the Table 5.1 in the perceived column (representing expectations of users), there is not much difference between the findings of the study and UWC and US LibQUAL+ results.

Regarding “Affect of Service” (items AS-5, 9, 8 and 4) the findings of the current study showed that the minimum mean was larger than the desired mean. In the US LibQUAL+ study the opposite was found that the minimum was smaller than the desired mean. The ac-

tual service was similar in the two studies but in the US study the importance attached to these items was higher than the importance in the current study.

This is also true for facilities (indicated by LP-1 and LP-3) except that in the findings of the current study there was not much difference between the minimum and the desired means of these items.

For all items in all studies the actual level of service (minimum) was lower than the expectation (perceived).

The aims of the survey were to assess and improve library services, change organisational culture and market the library. Drawn from the literature (see.2.1.1 - p. 10) Nardini (2001) believes that library assessment is one part of cultural change. He argues that assessment is one critical tool for understanding library customers, and offering services, space, collections and tools that best meet their needs. The second reason gap analysis in the LibQUAL+, adapted from ServQUAL, would allow analysis of current user perceptions within a range of minimum and desired expectations to facilitate understanding.

The response rate to the LibQUAL+ survey were lower than expected in both institutions but were consistent with those reported at other institutions (Cook, Heath, Thompson, Kyrillidou, Sousa and Webster; 2003, 2004 and 2005). Undergraduate students perceived only one negative gap in response to the question on the convenience of the libraries' hours of operation. However, this did not result in any negative gaps in the aggregates of undergraduates.

#### **5.4 Summary of quantitative findings**

The findings from both surveys (ServQUAL and LibQUAL+) show that undergraduates were satisfied with most of the services provided to them, although the quality of service did not always meet their every expectation. These results could have been affected (biased) should some of the students have come from disadvantaged backgrounds. If that is the case, it will be an experience that other researchers have also come across. For example, Walters (2003) has pointed out that some students coming from a disadvantage background lacked experience in objectively judging the level of service, because they were have not previously been exposed

to other variations of service. Based on the study, however, some users were not happy with the business hours. However, guided by the larger of the gap scores between desired and perceived levels of services UWC and US may want to change their strategies by improving on the following:

- By improving collection resources. In order to do that the managers need to involve all library stakeholders, to give an input in collection development.
- By renovating the library to provide more space to accommodate users, for example, by increasing the number of study rooms and discussion rooms.
- By developing services that equip the user for independent control of their information interactions. For example, the users should be trained to access information from home. This is line with other researchers such as Aluri (1993) who states that electronic databases greatly increase access to information but implementation must be carefully planned to ensure optimal use of space, money and time.
- By improving student search skills by giving more training on electronic databases on a monthly basis.

The following chapter will discuss the findings and make some appropriate recommendations.



## **Chapter 6: Discussion, conclusion and recommendations**

This study set out to address the key question: “*To what extent can business performance management techniques be applied in assessing library service management.*”

The purpose of this chapter is to use the findings to point to an answer to the key question, and service delivery that academic libraries may reflect upon. With the comparison of data gathered from the UWC LibQUAL+, US LibQUAL+ and the current study based on ServQUAL, as well as discussions with senior managers and subject librarians at three universities, the outcomes of this study could be important and useful.

### **6.1 Research findings**

As discussed in Chapter 5, the survey was conducted at two institutions (Stellenbosch University and UWC). In general, both were found to deliver good service, but the service did not meet all the users’ expectations. The application of the business measures was applied quite appropriately as indicated below.

Not meeting user service expectations could be an inadequate communication among operations; marketing and human resources, and staff reduction and restructuring at the Stellenbosch University. These factors could lead to a lack of teamwork, which in turn could impact on service delivery (critical success factors).

The findings revealed that budget constraints had an impact on service delivery. The lack of resources due to budget cuts played a role contributing to user dissatisfaction. This is the “Financial perspective” of the Balanced Scorecard.

In using the gap model, the findings revealed a gap between expected services and perceived actual service. The users had higher expectations and it seemed that the libraries could not deliver according to their expectations.

Comparing the study results and LibQUAL+ results, the focus was more on determining the user’s opinions, and less in supporting decision-making. This problem can be identified with the report highlighted in the literature review (see p.2.4.2). The literature points out that there

were some problems with the LibQUAL+ as a model in those respondents' perceptions did not match the real-world conditions. LibQUAL+ was focusing more on users' opinions, rather than being goal-orientated. LibQUAL+ does not support decision-making and it only focuses on observable behaviour and outcomes rather than perceptions.

The findings also indicate that library hours are inconvenient for users (Balanced Scorecard customer perspective). This lead to dissatisfaction amongst some users.

Staff shortages were identified as one factor that contributed to the service delay and therefore to dissatisfaction (critical success factors).

Furthermore, users do not get attention from those staff members who serve them (Balanced Scorecard customer perspective). The results illustrate that some staff members do not understand user needs. This means that the library should prioritise users' needs and ensure that staff do understand them. The library should be able to provide specific services to meet the needs of users, and to provide them on time (Balanced Scorecard – learning and growth perspective).

Carbone (1993) says that the term “library performance measurement” should include two aspects, namely, effectiveness of service rendered by the library, and the efficiency in the utilisation of resources. In this study the value of library use is determined by the users' perception of its effectiveness. The results showed dissatisfaction in certain areas of service delivery and lack of resources.

More research would be useful for further insights into the evaluation of library performance. There is also a need to investigate strategies that can be helpful in taking the libraries forward from a library manager's point of views.

Caveat: These business performance measures should not be applied without careful consideration of the user's background. The above findings may be biased due to a student's lack of experience with academic libraries, and may result in an inability to make valid assessments of quality. Researchers argue that library users can only recognise excellent service from poor service only if they have been exposed to both levels of service, and also only if they are taught the difference between high and low quality. For example, in the case of LibQUAL+

responses of faculty may be significantly more useful than those of undergraduates (Walters, 2003:99). This aspect is not effectively addressed in the uninformed application of business performance measures.

The literature also indicates that ServQUAL has some shortcomings, for example, a customer may have a low quality expectation. If a customer expected poor quality and got slightly better service than expected from a service organisation, the service cannot logically be characterised as quality service. Also, the “satisfaction” approach to measuring quality runs into difficulty when services are evaluated in higher education libraries.

From the findings of the qualitative investigation it was noted that themes could be organised, similar to those of the Balanced Scorecard perspectives:

- budget constraints, categorised as the finance perspective;
- users which was categorised as the customer perspective;
- training, which was categorised as the learning and innovation perspective;
- multi-skilling, which was categorised as the internal efficiency perspective.

Several themes were identified. *Budget constraints* were shown as a theme equivalent to financial management. Financial management relies mostly on vision and plan. Vision can be associated with strategy. This study has observed that there is a relationship between strategic planning and budgeting. From the findings some of the library managers mentioned that budget and performance review is included in their strategic planning process. Managers consider that budget constraints make it difficult for them to achieve their objectives. One of the managers’ objectives is to deliver a *good service to the users*, which came out as a second theme. These institutions recognise the importance of satisfaction of its clients. They mentioned the expectations, complaints, service demand and limited resources they have to deal with. This means that there is a problem in assessing performance.

Based on the findings of this study, as is common in well-run businesses, library managers could consider the merits of performance measurement, process management and decision-making as aides to balancing the conflicting issues of budget and service.

The study has also established that service delivery is important to users and the users are after all the subjects of libraries' efforts. It is the library management's responsibility to make sure that users' expectations are met, and then to improve their service where there is a significant gap between expectations and actual delivery.

*Improvement of service* evolved as another theme. This poses a challenge to library management. All institutions identified the importance of helping students to achieve their goals, but this came as a challenge to library managers of improving services and taking responsibility to make sure that students receive support from the institutions. The UWC library has programmes that support the first-year students. These programmes help the students to learn how to search for and manage information. Managers recognise that the students should get support from the libraries. All the institutions mentioned their special programmes that support students in achieving their goals. The UWC has a user education programme, Cape Peninsula University of Technology has an information literacy and Stellenbosch gives training and support to users. All institutions have acknowledged that it is their responsibility to make sure that the resources are in place for students to access information and that training should be given to the users.

The *innovation and learning* perspective investigated how continued improvements and added value could be applied to enhancing core business processes. Since the libraries are in a constant state of positive change, an integral part of their efforts are to continue to deliver service successfully. Feedback and learning empower libraries to become true information centres, but only through modified strategies that accommodate the feedback and adopt the learning.

*Internal efficiency* was identified as a last theme under the concept of "*multi-skilling*". The managers identified strategic objectives such as core competencies and skills. These competencies and skills are the multi-skilling of staffs, which encourages and enables the staff to gain a good understanding of how to meet different aspects and levels of demands of service to the users.

Since most of the libraries experienced budget problems, it is interesting to see where investments were actually made. UWC invested in more material, which is increasing every year because of inflation. Cape Peninsula University of Technology spent their funds by buy-

ing material and was considering cuts to their journal subscription. The Stellenbosch University invested in library automation, limiting the budget available for staff; thus the concept of multi-skilling was seen as a possible solution to budget constraints. There were also some concerns in terms of the library profession, such as staff expectations. Staff expect to be promoted from time to time, and promotion means higher salary costs.

## **6.2 Implications of the study**

It has been found from the quantitative study that there are gaps in service when assessed against user expectations. Limited budgets lead to the risk of staff shortages, which have a direct impact on customer satisfaction. The results indicate that staff are under-performing because of the pressure of restructuring, and there is evidence that multi-skilling causes problems because of the demands it makes on staff when they have to perform many tasks.

In terms of appropriate techniques to measure service, the Balanced Scorecard seems to provide a useful means to organise and manage a wide range of issues that are of concern to library managers. However, university libraries are not readily familiar with it. There are some adaptations that could be made to make the Balanced Scorecard effective in libraries. This would make a significant contribution to their strategic planning.

Critical success factors technique has also been investigated in this study. The literature highlights factors such as job satisfaction, technological facilities, employee empowerment, relationships among staff and the working conditions as critical to any organisation. In order for any organisation to improve on its productivity, it should train and develop its human resources and should encourage effective cooperation among staff and management. Libraries are no different. Based on the study results, staff training and effective communication between management and staff is important. However, the concepts associated with critical success factor techniques did not seem to resonate strongly with the managers who were interviewed. Perhaps a more focused study would reveal ways to make it relevant and useful.

## **6.3 Limitations of the study**

Although the study had its limitations, its conclusions are useful and provide a basis for more informed management and for further work in the same general area. It found that there is

only limited research into library performance management using business management techniques. There is good reason to look more carefully at extending these ideas.

#### **6.4 Recommendations**

The results found were similar to those of Walters (2003). In his findings he emphasises that library users should have the necessary expertise to make accurate assessments of quality; and secondly, whether perception serves as a valid indicator of objective conditions. Based on these findings it is suggested that a wider survey could be conducted that will represent the whole population of users and managers.

Resources for this study were extremely limited, and with more support and the involvement of more people the general understanding of the potential for better performance of management in libraries would be advanced.

Another recommendation is to ensure that the service measurement instrument should discriminate the different respondents to see whether there are differences between them. For example, frequent users may have significantly different needs and expectations than the less frequent users. There seems to be a reasonable presumption that new students need training, but what about specialised training for specialised needs? This will enable library managers to identify which user groups' needs should be considered in terms of collection development and which group should be targeted for promotion.

The study has observed that there are no clearly defined mission statements, strategic plans, or long-term and short-term goals and objectives in current management practice. Library managers should consider the merits of performance measurement, process management and decision-making techniques that might assist them to provide the expected range and levels of service.

It is recommended that a continuous evaluation process be conducted to monitor the progress of library performance management and evaluation to track the extent to which specific users' needs are met, and their expectations are delivered. Both quantitative and qualitative methods have the potential to further research these important issues, especially as the pres-

sure on library management mounts with further fundamental changes in the nature of intellectual property management, copyright, publishing and distribution.

From this study, it is the researcher's view that quantitative methods could be repeated at the two institutions to accommodate wider inputs from academic staff and others in the university community. This will enhance benefits of library performance management.

## **6.5 Summary and conclusion**

The provision of information is critical to the success of a library, and it is the library's mission to provide that information effectively. Therefore, there can be no doubt that applying service management and business performance systems can be used in library management to indicate solutions to library performance problems. The Balanced Scorecard can be a useful tool using the framework presented in Chapter five. The Balanced Scorecard has been shown to be a potentially useful tool to measure and manage library effectiveness; by balancing potentially conflicting interests and issues. The merits of critical success factor techniques were, on the other hand, much more limited. It is therefore suggested that the Balanced Scorecard be given serious consideration for management in a library setting, but that the need for strategic planning before implementation be fully understood.

Gap analysis is a good strategic framework for identifying key service factors in managing higher education libraries in South Africa. ServQUAL and LibQUAL+ is a good tool to evaluate user needs and to communicate user needs to management. The Balanced Scorecard cannot, however, replace the sort of survey technique exemplified in ServQUAL and LibQUAL+. Surveys will always be an important way to establish the facts about actual service delivery and shifting expectations on the part of users, and so it can be concluded that these two techniques, the Balanced Scorecard for strategic purposes and service management survey for operational purposes, should be used in combination.

In conclusion, business performance management tools could be strategically used in the modern networked economy to drive ongoing performance in tertiary library systems.

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## Appendix A – Research permission

Dear Madam

Re: Research permission

I, Nondumiso Sinyenyeko, student no. (9219347) hereby wish to ask permission to conduct a research study at your institution. I am enrolled for MComm (Information Management), my topic is: Managing the library as a business: *Improving service management in Libraries*.

The study will involve staff members and students answering a questionnaire. The questionnaire should take approximately 15 minutes to complete. I hope to interview 15 UWC library staff members, 20 academics and 65 students. The interviews need to be conducted between Wednesday 15 May 2002 and Friday 31 May 2002.

I am positive that the results of my research will be beneficial to UWC library. I therefore ask for your kind assistance in my academic endeavour.



Yours sincerely

.....

Nondumiso Sinyenyeko

## **Appendix B – Survey instrument**

University of the Western Cape – a survey of service levels

This survey intends to find out what you think of the University of the Western Cape library services. There are five areas where service can be assessed by asking you whether you agree or disagree with statements relating to that area.

### **Question 1**

First, what is your overall view of the library? Considering a “highest class” library to be a “7” and a “lowest class” library to be “1”, how would you rate the University of the Western Cape library

1	2	3	4	5	6	7
< lowest			highest >			

service performance? Check the number that indicates your view:

### ***The five areas***

In the table below, there are five areas of service concern, each of which has a number of statements that you may agree are done well, or not. You may also have a view about their importance, and whether your expectations are being met.

- In the first column, circle the number that indicates how good the service is by “agreeing” or “disagreeing” with the statement.
- In the second column, circle the number that indicates how important this service area is to you.
- In the third column, indicate whether the delivered service is lower, equal to, or higher than your expectations.

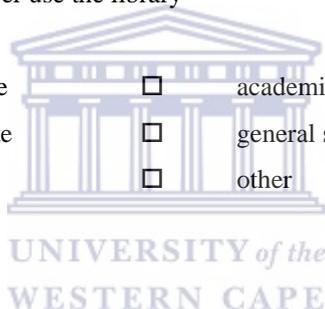
Statement	Actual service <disagree agree>	Importance of service <low high>	Equaling expectations lower equals higher
<b>Reliability dimensions</b> <ul style="list-style-type: none"> <li>• When the library promises to do something by a certain time, it does so</li> <li>• When you have a problem, the library shows a sincere interest in solving it</li> <li>• The library provides its services at the time it promises to do so</li> <li>• The library keeps customers informed about when services will be performed</li> </ul>	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Responsiveness dimensions</b> <ul style="list-style-type: none"> <li>• Librarians give you prompt service</li> <li>• Staff in the library are willing to help you</li> <li>• Librarians are never too busy to respond</li> <li>• Web-based library services give me good response</li> </ul>	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Assurance dimensions</b> <ul style="list-style-type: none"> <li>• The behavior of the staff in the library instills confidence in you about the library</li> <li>• The library staff are consistently courteous with you</li> <li>• Staff in the library have the knowledge to answer your questions</li> </ul>	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Empathy dimension</b> <ul style="list-style-type: none"> <li>• The library recognises you as an individual</li> <li>• The library has staff who gives you individual attention</li> <li>• The library has your best interests at heart</li> <li>• Staff in the library understand your specific needs</li> </ul>	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

<b>Tangibles dimensions</b>			
• The library has modern facilities and equipment	1 2 3 4 5 6 7	1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
• The library physical facilities are visually appealing	1 2 3 4 5 6 7	1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
• The library staff appear neat	1 2 3 4 5 6 7	1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
• Materials associated with service (such as books, pamphlets or notices) are visually appealing in the library	1 2 3 4 5 6 7	1 2 3 4 5 6 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
• The library has convenient business hours			

**About you**

- I consider myself to be a
- frequent library user (at least daily)
  - occasional user (at least weekly)
  - Infrequent user (less than weekly)
  - I never use the library

- I am a:
- full-time undergraduate
  - part-time undergraduate
  - postgraduate
  - academic staff
  - general staff
  - other



**PLEASE RETURN TO THE BOX IN THE LIBRARY ENTRANCE  
BEFORE FRIDAY 27 September 2002**

**Thank you for your time. If you have any questions, or if you would like to see the results of this survey,  
please contact me:**

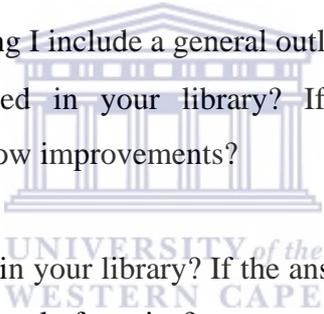
**Nondumiso Sinyenyeko, phone 959 2937, nsinyenyeko@uwc.ac.za.**

## **Appendix C – Letter of introduction**

I am Nondumiso Sinyenyeko (student no. 9219347) enrolled for the MComm (Information Management) degree at the University of the Western Cape, and my topic is Managing the Library as a Business: Improving Service Management in Libraries. This research is looking at service management and business performance measures such as the Balanced Scorecard and critical success factors techniques in order to find a combination of performance measures that will work for library management. One idea is to manage a library more like a business.

I am now at a point of my research where I need to conduct a number of interviews with senior library managers. If you are willing to grant me 30 minute of your time for this interview, I would like to make an appointment with you through your secretary to meet you during the week of 2-6 December 2002.

In order to prepare you this meeting I include a general outline of questions:

- 
- Can services be improved in your library? If the answer is Yes, what resources/changes would allow improvements?
  - Impacts on budgets?
  - Can services be improved in your library? If the answer is No, what resource/changes were used to achieve this level of service?
  - Impact on budget?
  - What additional resources would you need to improve service in your library?
  - What are your views on skills related issues such as multi-skilling of existing staff and the use of skills development programmes?
  - What are your views on the constant change and evolution of the library and information technology?
  - What business principles might work well in order to help libraries to function like businesses?

The information you will provide will be very important in helping library managers understanding the strategies that can be used to improve library services and will guide other library managers in making decision in their libraries.