



Measuring and communicating the value of special libraries in KwaZulu-Natal provincial government departments, Pietermaritzburg

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(NDip.LIS, BAIS cum laude, MLIS)

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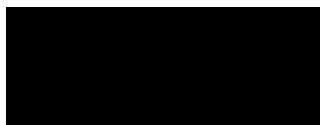
December 2024

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Abstract

The study examined the various methods used to measure and communicate the value of special libraries in KwaZulu-Natal (KZN) provincial government departments (PGDs), Pietermaritzburg. The main purpose was to measure the value of special libraries (SLs) in PGDs and communicate this value to management to advocate their need for redevelopment. In terms of literature to demonstrate the value of SLs, there is a paucity of research that explores this problem, especially in the South African context in which the study was based. The models that underpinned this research were strategic measurement, service quality (SERVQUAL), library quality (LibQUAL), and total quality management (TQM) models. The study adopted the pragmatic paradigm and applied a convergent parallel design through a mixed-methods approach. A sample of 369 employees was drawn from a population of 7,866. In addition, six information professionals (IPs) and six heads of departments (HODs) were purposively chosen as participants in the research. Online questionnaires were used to collect data from library users while interview schedules were used to conduct online interviews with the four IPs and the four HODs who participated. To ensure the reliability and validity of the research instruments, pre-tests were conducted with employees who did not form part of the sample. Computer software, that is, SPSS and NVivo, was used to analyze descriptive statistics and thematic content from the findings.

The major findings of the study reveal that there was significant awareness of the existence of the SL in the departments; however, the libraries are not being utilized regularly. The lack of library utilization may be due to the quality of the library being below the expected measures by users and below the zone of tolerance as per the desired-minimum (D-M) standard. However, there was a positive gap between service quality expectations and perceptions, which indicated that users' expectations were surpassed. Most SLs in government departments are operating with an outdated library policy or framework. Furthermore, there was a lack of methods used to measure and communicate library value to management. According to library users and librarians, not enough attention was paid by management to the development of the library. Conversely, management confirmed the importance of having an effective library and that there is a budget allocated for the libraries in their departments. While there was a significant awareness of the importance of SPLs in PGDs, the lack of an adequate budget to develop these libraries makes them less effective in helping to achieve organizational goals. Some of the libraries under study were found to be strategically aligned to organizational goals. However, there were no methods used by IPs to measure the value of SLs and there was a lack of communication channels to convey the value of SLs to management. The study also established that various aspects of

the library and its service affect how users determine the quality of the library. The functions of SLs are diverse based on the objectives of the parent organization. The roles of IPs in a special library involve determining the various methods that support the organization and its employees by enhancing information access.

The study concluded that the value of SLs in PGDs is visible; however, the lack of support from management in the development of these libraries hinders the ability of IPs to showcase the significance of these libraries to the organization. The study recommended that SLs in PGDs adopt and implement the proposed strategic framework for measuring and communicating the value of these libraries. Lastly, suggestions for further research were provided such as the need for further research under the same topic conducted with employees from the regional offices of these departments to get their perspectives on the significance of having a library that is only situated at their head offices.

Dedication

To my children, Unolwazi, Azi, Muzi, and Mazwi

With Love, Mama

Acknowledgments

Look at God, for without His divine interventions, this project would have been impossible to complete. *“In the same way, let your light shine before others so that they may see your good works and give glory to your Father who is in heaven”* [Mathew 5:16 English Standard Version].

I will forever be indebted to my parents, the late Mr. and Mrs. Nenungwi, for instilling in me the foundation of having a good education. *Mama, I Made It!!*

My greatest gratitude goes to my supervisor, Associate Professor Francis Garaba. I consider it a blessing for our paths to have crossed when you were nominated to be my supervisor, for you have made this academic journey much smoother. I am grateful for your leadership, guidance, and support during both the good and the bad moments of this project. Your intellectual advice enabled me to produce this piece of work; so, I thank you, Prof.

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.....*Ndo livhuwa ngamaanda (thank you very much)!!!*

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List of acronyms and abbreviations

4IR	Fourth Industrial Revolution
ABET	Adult Basic Education and Training
AS	Affect of Service
ASR	Assurance
CAQDAS	Computer-assisted Qualitative Data Analysis
CAS	Current Awareness Services
CF	Conceptual Framework
COVID-9	Coronavirus Disease 2019
D-M	Desired-minimum
DM	Desired Mean
E	Expectations
EM	Empathy
FGDs	Focus Group Discussions
GDs	Government Departments
GL	General Library
H	Hypothesis
HOD	Head of Department
HRD	Human Resources Development
HSSREC	Human Social Sciences Research Ethics Committee
HTML	Hypertext Mark-up Language
IC	Information Control
ICT	Information and Communication Technology
IDC	International Data Corporation
IFLA	International Federation of Library Associations and Institutions
IMR	Internet-mediated Research
IPs	Information Professionals
IRC	Information Resource Centre
IT	Information Technology
KM	Knowledge Management
KZN	KwaZulu-Natal
LIASA	Library and Information Association of South Africa

LibQUAL	Library Quality
LP	Library as Place
LSQ	Library Service Quality
MDU	Maharshi Dayanand University
MM	Minimum Mean
MM	Minimum Mean
MMR	Mixed-methods Research
N/A	Not Applicable
NHS	National Health Service
P	Perception
PAs	Personal Assistants
PGDs	Provincial Government Departments
PM	Perceived Mean
PO	Parent Organization
Q	Quality
RL	Reliability
RO	Research Objective
ROI	Return on Investment
RQ	Research Question
RS	Responsiveness
SAG	Service Adequacy Gap
SCM	Supply Chain Management
SERVPERF	Service Performance
SERVQUAL	Service Quality
SLs	Special Libraries
SPSS	Statistical Package for the Social Sciences
SSG	Service Superiority Gap
SWL	Satisfaction with the Library
TF	Theoretical Framework
TQM	Total Quality Management
UK	United Kingdom
UKZN	University of KwaZulu-Natal
USA	United States of America
ZoT	Zone of Tolerance

CHAPTER 1: INTRODUCTION

1.1 Background of the study

The purpose of this study was to determine the value of special libraries (SLs) in provincial government departments (PGDs) and investigate how the value of these libraries was being communicated to management. The aim was to use the findings to inform management about the value of SLs in these departments to advocate their need for redevelopment. This study was required especially given that the advancement of technology can diminish the value of SLs and their services. For this study, SLs are libraries that enhance the objectives of their parent organizations (POs) by satisfying the specific information needs of their users through access to specialized information resources, both physically and electronically (National Library of South Africa 2014:83). Semertzaki (2011:6-8) and Black and Gabb (2016:192) state that the evolution of SLs emerged during the 18th and 19th centuries when companies were established, and such libraries were required for support as employees needed extensive specialized information reference services to provide direction in their work. Therefore, SLs were developed in these companies to provide access to information resources thereby saving the time of employees who, previously, would have had to visit libraries outside of their workplace to access information (Semertzaki 2011:8). Thus, the motivating factors for companies to have SLs were the obligation to utilize subject-oriented collections of books, and the benefits of having specialized and tailored information services, which were essential for the effective achievement of company goals (Semertzaki 2011:8; Black and Gabb 2016:200; Sullivan 2018:339). Before long and with the help of advanced technology, SLs were operating in different categories of institutions such as GDs, businesses, and other types of organizations to provide up-to-date and immediate information to improve service delivery.

It was due to technological developments and financial pressures that government service delivery approaches started to change and advance (Gillian and Faraker 2016:19). Similarly, the roles of SLs were bound to change from their traditional roles as custodians of information to the roles of being a partner and possibly the main facilitator of information in this technology and internet-based society (Semertzaki 2011:8; Lougee 2007:311). This technological growth requires information professionals (IPs) to continue and adapt their skill sets to enable them to successfully help their PO achieve its goals. Hence, IPs working in government sectors need to reinforce the value of services

they offer to the PO in reaching their goals. Adjusting to the modern environment and adopting new mechanisms to deal with the increase of information on the internet and the overload of knowledge that results (Semertzaki 2011:9) are challenges for IPs internationally (Huwe 2020:2).

SLs must prove that they are capable and effective in meeting the goals of the organization together with those of its employees as users of the library (Hiller 2012:41). Feldman and Sherman (2008:1) reported in their International Data Corporation (IDC) report that “company executives overwhelmingly agree that good access to information is the basis for improved decision making, save time and frustration, and leads to less duplication of effort in the enterprise.” Ardis (2012:17) concurs that delivering efficient services that corroborate good decision-making by the PO might be the only dominant technique SLs can use to add value to their organizations in this Fourth Industrial Revolution (4IR).

SLs are created to provide support to GDs by affording the information essential to ensure the existence of that department and its continued efficient delivery of services. However, not all SLs are equipped to do so, as some are severely disadvantaged by restrictions that negatively influence their capability to produce the required customer services (Mostert 2009:68). The poor perceptions of library and information services (LIS) by management create a barrier for SLs to be an essential part of the PO (Huwe 2020:2; Brown 2017). If SLs fail to bestow any substantial evidence of their success and provide proof of their value, management in the PO starts to question their worth, which results in doubt being conferred on LIS (Mostert 2009:77). According to Sykes (2001:15), the involvement of IPs and their services to the success of the organization may not be recognized to be of high value if the results of their services are not in line with the objectives of the PO.

The discrepancy between management’s perceptions and those of IPs concerning the value of the SL is reflected in a report by the Financial Times Corporate and Special Libraries Association (2013:12). It was found that while over half of the IPs (55%) indicated that they add “a lot of value” to their PO, only a third (34%) of senior managers agreed with the statement. It appears that there is a lack of communication regarding the perception of the value of SLs (National Library of South Africa 2014:84). Identifying measures to communicate the value of SLs to management and how libraries meet the goals of the POs are essential tasks that IPs should adopt through assessing the services delivered and initiating changes that prove the library’s value (Ardis 2012:17-18; Sullivan 2018:342).

Jin (2011:11) and Million, Hatchell and Sarmiento (2012:11) are of the view that the proof of the value of SLs should be demonstrated by way of connecting the libraries' activities and the PO's strategic goals. McCreadie (2013:328) concurs by pointing out that the basics of changing the shifting mindsets of management regarding their perceptions of the value library services provide, is interaction and developing the connection linking the library contributions to the PO's success. Thus, questions for SLs arise in terms of where they fit into the wider organization and what strategic role they play to help achieve the objectives of their POs.

Internationally and within the African context there is a dearth of literature on the impact of SLs and how they can be measured to demonstrate their value to the PO (Poll 2018:84-88). Thus, there is a lack of "evidence" of their support for organizational goals, their relevancy, and the influence of their information services in achieving strategic objectives (Poll 2007:83). There is also a paucity of research for accurate methods to measure the value of SLs (Woldring 2001:294) and how this value should be communicated to management. This study aimed to address this gap.

1.2 Context of the study

South Africa (SA) is a country situated in the southern part of Africa and bordered by the Atlantic and the Indian Oceans with Namibia, Botswana, Zimbabwe, and Mozambique as neighboring countries (Geoscience news and information 2021). According to Gordon (2021), the country is prominent for its diverse landscape, abundant natural beauty, and diversity in culture and spoken languages, which include Afrikaans, Pedi, Sotho, English, Tsonga, Venda, Xhosa, Ndebele, Swati, Tswana, and Zulu as official languages under the 1996 Constitution of the Republic of South Africa. The South African climate is mostly dry in the moderate temperature zone; however, there are infrequent excesses of cold and heat. Formerly, South Africa was divided into four provinces until 1994 when, in the new democratic dispensation, nine provinces were formed (Alexander 2019). These provinces are the Free State, Gauteng, Eastern Cape, KwaZulu-Natal (KZN), Northern Cape, Mpumalanga, Limpopo, Western Cape and North West. The KZN province formed part of the scope of this study. Figure 1.1 illustrates the nine provinces. Each province has its population, languages, history, cities, and government (Alexander 2019:1).

The KZN province has the second-largest population (Official Guide to South Africa 2019/20:4). It is the only province with a kingdom and this is precisely stipulated in the Constitution (South African Government 2021). Pietermaritzburg is the capital city of the province and covers an area of approximately 126.15 km² (Census 2011).

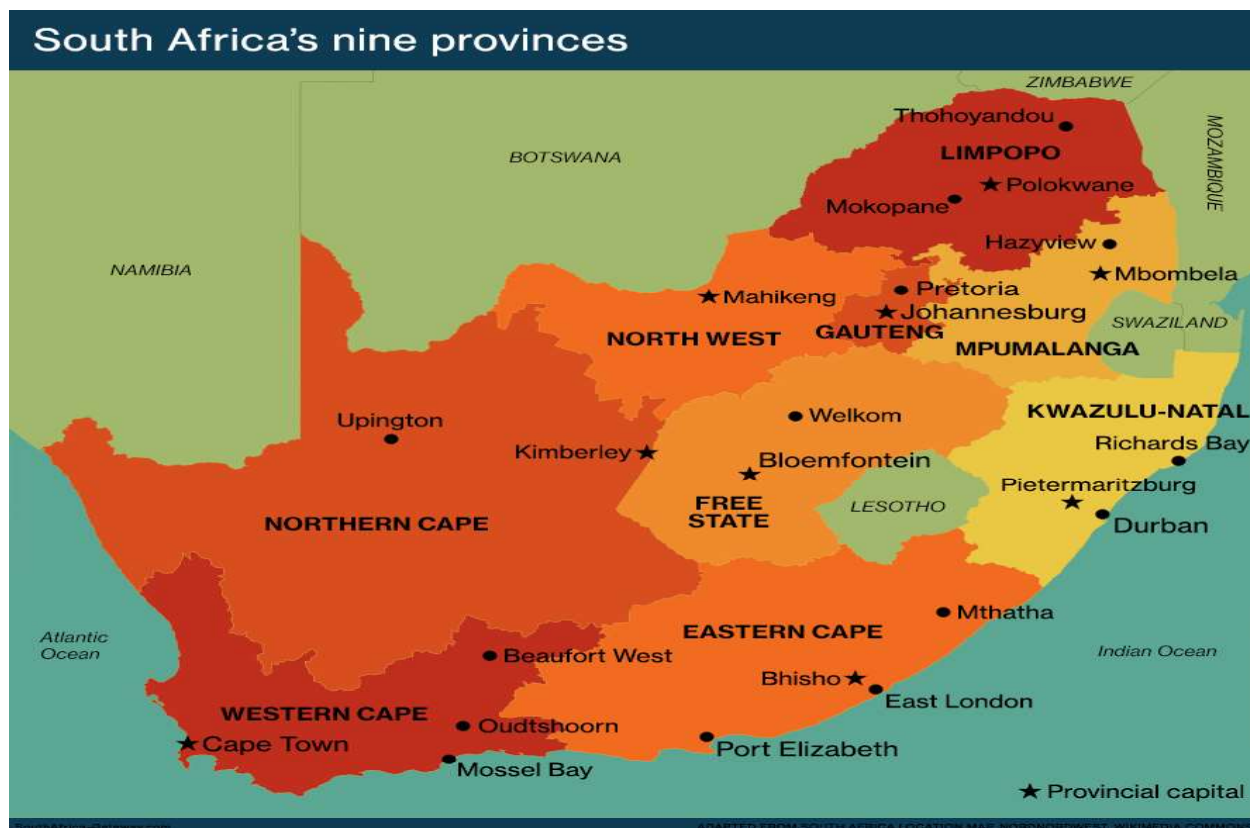


Figure 1.1: South African map
(Alexander 2019)

South Africa is a constitutional democracy and the country has a three-tier system of government, namely, national, provincial, and local government (South Africa Yearbook 2019/20:2). Simeon and Murray (2001), Thornhill (2011), and the South African Government (SAG) (2021) explained the three-tier as follows: the national government deals with several functions that affect the country as a whole and demand standardization. This includes monitoring and supporting the execution of policies and other matters ascending in provinces. The provincial sphere is mainly responsible for executing national policies to ensure efficient and effective service delivery and direct the administration of local government in the province. The local sphere is accountable for the delivery

of basic services like electricity, water and sanitation, fire-fighting services, and municipal planning, amongst others.

The provincial sphere in the KZN province in Pietermaritzburg has a total of 16 departments (South African Government 2021). Of the 16 departments, seven have what can be considered operative SLs. However, only six of these departments agreed for their libraries to form part of the study. They comprised: the Department of Agriculture and Rural Development (Department A); Department of Cooperative Governance and Traditional Affairs (Department B); Department of Transport (Department C); Department of Health (Department D); Department of Public Works (Department E); and Department of Economic Development, Tourism, and Environmental Affairs (Department F).

1.3 Outline of the research problem

As indicated above, South African provincial government departments (PGDs) promote effective and efficient service delivery. Hence, the provision of specialized information by SLs in these departments is important and cannot be underestimated if service delivery is to be improved (Chris-Israel, Madu, and Yemisi 2018). Likewise, every SL in PGDs desires to save time and effort for management whenever they require accurate information to perform their duties (Chris-Israel, Madu, and Yemisi 2018:6). Feldman and Sherman (2008:5) warn that the shortage and incorrect supply of information have consequences such as inadequate resolutions and the duplication of efforts (as more than one section in the organization may perform the same task without realizing it has already been done). Hence, SLs are required to “sustain the overall objectives of the department and assist in providing employees with the information they need to complete their roles” (O’Connor 2007:69) and to stipulate what has already been done before.

IPs are struggling to communicate or demonstrate the value of library services to management (Gillian and Faraker 2016; Financial Times Corporate and Special Libraries Association 2013). Thus, POs may lack recognition of the value of IPs and the services they provide if they are not well communicated (Gillian and Faraker 2016:15). Also as indicated above, most SLs were established several years ago and recurring evaluations of their value to their PO and their users in terms of meeting their needs, are imperative (Bolt 2008:13). However, most SLs are not in a good condition

and are in dire need of improvement in terms of either the services or resources provided (Asghar and Shafique 2012:10). Reports of library activities in terms of the value and influence they have on individuals' quality of life and the PO are thus in demand. In particular, the ability to demonstrate how SLs strategically support the PO is critical in this era of advanced technology (Ralph, Sibthorpe, and Abdi 2017:370). Previous studies have focused on investigating strategies to measure the value of information services in SLs in the private sector (Garratt and du Toit 2003), measuring the value of public libraries (Jaeger, Bertot, Kodama, Katz, and DeCoster 2011), and measuring the value of library resources in academic libraries (Jantti and Cox 2013).

Since the explosion of information underscores the value of critical assessment in sifting out unreliable information, this is where IPs come in with their expertise concerning the appraisal of information sources (Laybats and Tredinnick 2016:205). This is important, especially in a corporate context where there is an increase in personnel who bypass the library as they subscribe to the myth that libraries are irrelevant, and every bit of information required can be found on the internet (Henczel 2006:2; O'Connor 2007:69; Wu 2008:59). Laybats and Tredinnick (2016:204) remind us that in the era of post-truth, information flows freely through the internet and so do untruths. IPs' skills are required to alleviate the load of information on users, filter through, and present only useful information. That is, amongst the abundance of accessible information, there come new challenges to analyze, manage, and filter the information before it is good for use (Huwe 2020:3; Ali, Yu, and Amran 2018:453).

However, there are obstacles to SLs in their attempts to deliver quality service due to various developments (Muller 2008; Poll 2007:7; National Library of South Africa 2014). Factors such as user behavior in terms of meeting their information needs, economic decline, and an increase in the expectations of SL services from users and POs, have played an important role in terms of these libraries having to evaluate their success (or otherwise) in meeting users' needs (Mutisya 2017:83). Indeed, some SLs have been closed as they were seen as an additional cost factor and unnecessary to the PO (Poll 2007; Oak and Patil 2011; Abram 2018). Therefore, there is a need for librarians in SLs to demonstrate to management that the library is an essential part of the organization and that it is worthy to be developed according to the changing times and information needs of users. Management should also be enlightened about the value of the information resources of their SLs (National Library

of South Africa 2014:86) and be advised in terms of the benefits the organization stands to gain with an effective library.

Government department priorities and that of their SL should be aligned to strategically facilitate its resources and services to the department's goals and developments (Abram 2018:12). Similarly, special librarians need to prove their value to their POs, and the evidence they provide must be related to the organization's objectives, goals, and mission (Turner 2009:14-15). Several SL professionals do indeed measure and evaluate their library's performance and value. However, there is a growing use of ad hoc strategies that do not adequately illustrate how the library contributes to the PO (Nicholas 2007:9). For the SL to prove its value in its contribution to the development of the PO, it needs to produce evidence from a strategic measurement and evaluation perspective – a need that this current study addressed.

Therefore, the broader objective of this study was to establish the strengths and weaknesses of SLs in KZN PGDs (based in Pietermaritzburg) to improve the services provided especially in the current 4IR era in which library services are, at times, regarded as superfluous. Furthermore, the study aimed to place SLs in a better position by highlighting areas that need to be addressed by the South African provincial governments in terms of the importance of having a SL in a GD.

1.4 Aims and objectives of the study

This study aimed to measure and communicate the value of SLs in KZN government departments. The researcher also aimed to use the findings of this study to inform management about the value of SLs in these departments to advocate their need for redevelopment.

Therefore, the study addressed the following research objectives:

1. To determine the level of library awareness among users, assess the effectiveness of the services provided, and deliver tangible evidence of their impact to management.
2. To demonstrate the capacity of special libraries in terms of their connection to the success of their parent organizations.

3. To identify the methods used to measure the value of special libraries, examine how IPs communicate this value to management and use the findings to inform management of the value of these libraries.
4. To evaluate perceptions and desired expectations of library services currently offered and how they affect user satisfaction in the context of the Fourth Industrial Revolution.
5. To identify best practices that can be implemented to enhance the functions of special libraries in government departments.
6. To determine how library professionals' skill sets and services assist the parent organization in achieving its goals.

1.5 Research questions and proposed hypotheses

The study was guided by the following research questions (RQs):

1. What is the level of awareness of special libraries, and how effective are the services and resources they provide in helping to achieve organizational goals?
2. How are library services and resources strategically aligned with organizational goals?
3. What methods are used to measure the value of libraries, and how is this value communicated to the management of the parent organization?
4. How does the quality of services and resources provided affect library users' perceptions, desired expectations, and satisfaction?
5. What are the functions of special libraries, and what best practices can special libraries in government departments benchmark to improve their value?
6. What are the roles of information professionals in special libraries and what competencies are required to help achieve organizational goals?

To answer the posed research questions, the following hypotheses (H) were put forward:

- H1: There is a negative correlation between the level of awareness, utilization, and the effectiveness of SLs in departments.
- H2: There is a positive correlation in terms of strategic alignment between SL outcomes and organizational objectives.

- H3: There are different types of methods to measure library value and there is no process in place to communicate it to management.
- H4: There is a difference in the level of perceptions, desired expectations, and satisfaction with information and library services from library users across each department under study.
- H5: There is a difference in library services available in departmental SLs.
- H6: There is a positive correlation between library professionals' skill sets, and their services in terms of meeting the goals and objectives of an organization.

1.6 Significance and justification of the study

According to Evans, Gruba, and Zobel (2014:66-67), researchers can provide four primary lines of argument to establish the significance of their study. Firstly, the study may advance knowledge in the relevant discipline. Thus, this study is resourceful to South African government departments as it provides new insights regarding the value of SLs, the formulation, and reformulation of their policies, and their need for redevelopment. Secondly, a study may play a part in providing the solution to a practical problem encountered in a particular discipline. SLs are currently faced with two challenges: one relates to proving the value they provide to their PO and the other one is overcoming the traditional library norms amidst the developing and swiftly progressing usage of information technologies to access information (Jin 2011:9; Washburn 2015:4). These challenges instigated this study. Thirdly, a study may validate a novel use of a procedure or technique. This study, for example, contributes to the LIS sector as it helped to determine appropriate techniques for measuring and communicating the value of SLs. Lastly, when the results of a study are deliberated in relation to those of other studies, significant practical or theoretical applications may arise.

Through this study, SLs should be better placed to highlight areas that need to be addressed and to strategically align their objectives to those of their POs to achieve set goals. In addition, when a SL is properly developed to become a credible source of information, it will benefit employees in terms of their professional development and the organization at large. It also needs to be noted that measuring and communicating the value of SLs is an international trend that is developing rapidly in the field of LIS since there is a need for IPs to cement their careers and worth in the political environment. Therefore, determining the value of SLs in KZN PGDs can not only verify their worth

but also elevate awareness, anticipating that they will be fully utilized and recognized by the POs as an integral element of the department.

1.7 Originality of the study

The evaluation of PhD-level research is determined by the presence of originality in the study, which shows the contributions of the researcher to the prevailing body of knowledge (University of Melbourne Academic Skills Unit 2012:1). In a research study, originality is being “novel”, “creative”, “inventive”, and “imaginative” (Silverman 2017:89). Therefore, in practice, this means that the researcher may have several ways to demonstrate the originality of their study. Among other criteria listed by the University of Melbourne Academic Skills Unit (2012:2) and Phillips and Pugh (2010:69-70), the current study showed originality as follows:

- i. Demonstrating originality by testing someone else’s idea;
- ii. Taking a particular technique and applying it in a new area;
- iii. Using a different methodological approach to address a problem;
- iv. Examining areas that people in the discipline have not examined before; and
- v. Developing a new research tool or technique

The use of Henczel’s (2006) strategic measurement model added to the originality of the study, as it measured the integration of library resources and services into the organization’s administrative functions. It also showed how library services are prioritized in the organization and whether they are strategically aligned to the objectives of the PO. Originality was also demonstrated by joining benchmarking techniques with the service quality (SERVQUAL) and library quality (LibQUAL) models to evaluate the value of SLs. Moreover, this study employed a mixed-methods research (MMR) approach to address the current research problem by assessing the value of SLs from the users, library professionals, and management’s point of view. This was necessary since scholars such as Chris-Israel, Madu, and Yemisi (2018), Baada, Baayel, Bekoe, and Banbil (2019), and Kumar and Mahajan (2019) attest that traditionally, library evaluations were mostly done quantitatively without showing the impact of information and services provided by the library on the PO. Lastly, this study demonstrated originality as it examined an area that has not been explored before in the discipline,

that is, measuring the value of SLs and communicating how they add value to South African PGDs achieving their objectives.

In a nutshell, the originality of the study lies in the knowledge gap addressed in this under-researched area, specifically in the South African context. The study is also relevant in an age of increasing information awareness and accessibility through the internet which has diminished the role of many SLs. Therefore, measuring the value of SLs in an organizational setting provides useful indicators that can justify their strategic alignment and importance to their PO.

1.8 Scope, limitations, and delimitations of the study

The scope of a study refers to what is and what is not relevant to one's study (Enslin 2014:275). As indicated in Section 1.2 above, South Africa has three spheres of government and the focus of this study was on the provincial government sphere. More specifically, the study focused on SLs in GDs based in Pietermaritzburg in the province of KZN. The aim was to produce evidence that SLs in GDs are a valuable asset to their POs and to communicate that value to management. Probing the value of libraries in general and from other types of the library such as academic or public libraries would have been irrelevant to this study as these libraries have a variety of users and they serve different purposes.

Limitations of a study can be described as constraints or limits in the research that are out of the researcher's control such as time, financial resources, or access to information which may cause the scope of the study to be redefined (Enslin 2014:275). Erima (2022:17) opined that limiting conditions such as paucity of previous research or impediments to reaching participants/respondents can also have an impact on the results of a study, especially regarding validity, which is beyond the control of the researcher. Given that the current topic is barely explored, there was a limitation in terms of access to information. The researcher had to heavily depend on related published content from other institutions, including research measuring the value of public and academic libraries, and the value of SLs in private (as opposed to government) organizations.

A further limitation was the impediment brought upon by the Coronavirus disease (COVID-19) – the 2019 global pandemic. The first case of the disease was detected in Wuhan, China, in December 2019

(Hall, Gaved, and Sargent 2021:1), and by 30 January 2020, the World Health Organization (2020) announced that the virus had become a global public health emergency. The virus quickly progressed, becoming a pandemic, and by February 2021, there had been over two million deaths globally (World Health Organization 2021). To prevent the further spread of COVID-19, many countries resorted to implementing measures such as lockdowns, wearing of face masks, and social distancing, and these measures brought a change to how researchers collected data during the pandemic (Silverman 2020:76; Cesário and Nisi 2021:377).

Consequently, the University of KwaZulu-Natal's (UKZN) Humanities and Social Sciences Research Ethics Committee (HSSREC) provided guidelines that encouraged the use of online research for data collection purposes (University of KwaZulu-Natal Research Ethics Office 2021). These guidelines also urged researchers to obey the national regulations, protocols, and the rules of the various lockdown levels when collecting data. Thus, the researcher has to resort to collecting both sets of data using online platforms. However, the data collection process did not progress as anticipated, particularly with the quantitative data, and the measures taken to increase the response rate are discussed in Chapter 4.

The delimitations of the study are determined by the decisions the researcher makes during the research and they simply explain what the researcher does not intend to do (Enslin 2014:276; Leedy and Ormrod 2015:62). These include the selection of the research method and the research design to be adopted as well as the population to be investigated in the study. The population of this study was limited to employees in the head offices of the departments under study as they are regarded as regular users of the SL. Employees from the department's regional offices were not included in this study.

The decision to use the multi-case design in the study was necessary to gain multiple perspectives of individuals regarding the value of having SLs in GDs. Since there are no universal methods appointed to measure the value of SLs, this study employed a combination of older models, namely, SERVQUAL (1988), LibQUAL (1999), total quality management (TQM) (1980), and a newer model, namely, the strategic measurement model (2005) to formulate the most suitable assessments to measure the value of SL services.

1.9 Theories underpinning the study

In this study, a comprehensive understanding of models, different types of measurements, and evaluations that have been used by past researchers to measure the value of different libraries, assisted the researcher in deciding on which methods, models, and standards were suitable for the measurement of SL services. Naturally, SLs must reflect the POs' aims and objectives through the collection and services they provide to the users (Harande 2013:2). Therefore, it is important to not only acquire data on how users perceive the library or how useful the library collection is in meeting their needs but also to produce evidence of how library services are currently assisting the PO with achieving its mission now and into the future (Henczel 2006:1).

Different strategies have been used by various scholars to measure the value of SLs. These include, but are not limited to, Conceptual Framework for Measuring Value (Cram 1999); Information Services Audit (Garratt and du Toit 2003; Henczel 2018); Monetary Value or Return on Investment (ROI) (Portugal 2000); Economic and Social Value (Rooney-Browne 2011); and Value-in-use and Perceived-value (Turner 2009). The strategies proposed by Turner (2009) were adopted in this study. These strategies were selected since they are more relevant to various information services.

The Henczel (2006) model (referred to as the strategic measurement model in this study) for measuring and communicating the value of SLs in corporate organizations underpinned this study. This model was adopted as it reveals the procedures and resources of the SL that are mostly utilized, the effectiveness of the library in delivering its services, the relevancy of services to current users, and how they help accomplish the PO's objectives. The SERVQUAL model proposed by Zeithaml, Parasuraman, and Berry (1988) and the LibQUAL model established by the Association of Research Libraries in 1999 were also applied. These models were used in the study to gauge quality as a factor necessary for service delivery in the corporate setting thereby determining the values of services provided. The TQM model proposed by Deming in 1980 was applied under the benchmarking component. Table 1.1 provides a summary of the relationship between the conceptual models adopted and the RQs posed.

Table 1.1: Summary of the relationship between conceptual models and RQs

Research question(s)	Conceptual model(s)	Key variables addressed by the model(s)
RQ - 1	SERVQUAL LibQUAL Strategic measurement model	User satisfaction Service quality User perceptions and expectations
RQ - 2	Strategic measurement model TQM (External benchmarking)	Best practices Performance measurement
RQ - 3	Strategic measurement model TQM (External benchmarking)	Best practices Performance measurement
RQ - 4	SERVQUAL LibQUAL	User satisfaction Service quality User perceptions and expectations
RQ - 5	TQM (External benchmarking)	Best practices
RQ - 6	Strategic measurement model TQM (External benchmarking)	Best practices Performance measurement

1.10 Preliminary literature review

A literature review works as a point of reference for researchers to connect and contrast their findings which helps to determine the most important issues to focus on, and to guide their research in the right direction (Howard 2014:101). This study used various resources, both print and electronic, such as books, ebooks, journals, conference presentations or proceedings as well as other library resources to construct the literature review. As demonstrated in the second column of Table 1.2, the researcher used various search terms or keywords to identify relevant literature held in various databases. The “hits” reflected research on SLs not only done in South Africa but across the world.

Table 1.2: Evidence of literature search

Date of searches	Search terms/keywords used	Database searched	Hits for each search
August 2019 – September 2021	Special libraries	eBooks and printed books	66 results
		Journals	40 results
		Academic ResearchSpace	158 results
		Google Scholar	1 290 000 results
	Special libraries in South Africa	eBooks and printed books	53 Results
		Journals	2,400 results
		Academic ResearchSpace	157 results
		Google Scholar	56 300 results
	Special libraries value	eBooks and printed books	30 results
		Journals	10 300 results
		Academic ResearchSpace	156 results
		Google Scholar	925 000 results
	Measuring special libraries' value	eBooks and printed books	152 results
		Journals	8 700 results
		Academic ResearchSpace	49 results
		Google Scholar	96 900 results
	Special libraries in government departments	eBooks and printed books	21 results
		Journals	90 results
		Academic ResearchSpace	150 results
		Google Scholar	28 800 results
	Special libraries awareness	eBooks and printed books	29 results
		Journals	52 results
		Academic ResearchSpace	154 results
		Google scholar	173 000 results
	Perceptions on the value of special libraries	eBooks and printed books	28 results
		Journals	551 results
		Academic ResearchSpace	139 results
		Google Scholar	53 300 results
Libraries measuring strategies	eBooks and printed books	4 results	
	Journals	534 results	
	Academic ResearchSpace	160 results	
	Google Scholar	16 300 results	

The need to measure and prove the value of services provided by libraries has become a challenge to all types of libraries globally (Million, Hatchell, and Sarmiento 2012:6). However, when it comes to literature to demonstrate the value of SLs, there is, despite the numerous results reflected in Table 1.2 above, a paucity of research that explores this problem, especially in the South African context in which the current study was based. Million, Hatchell, and Sarmiento (2012:6) noted this and indicated that while several studies have measured the value of academic, school, or public libraries this is not the case with SLs and there are fewer publications available. A bibliography of publications on the “Impact and outcome of libraries” compiled by Poll (2018) on behalf of the International Federation of Library Associations and Institutions (IFLA) supports the assertion concerning the dearth of literature related to the current topic. The article listed a total of 40 research publications (18 conceptual papers, 18 empirical papers, and only four theoretical papers) on SLs with no reference to South Africa thus further underscoring the need for the current study.

Jin (2011:10) and Washburn (2015:19) pointed out that historically, the value of SLs has been investigated from numerous approaches such as measuring the value based on the input and output of services, perceptions of value by the PO, and the ROI. A detailed review of the relevant literature and the gaps addressed are provided in Chapter 3.

1.11 Research methodology

Research methodology is a logical path the researcher needs to follow when researching to solve a problem. This study adopted the pragmatic paradigm approach to research. The epistemological assumption of researchers following the pragmatic paradigm is that reality can be understood by examining peoples’ perceptions. This approach aims to get a deeper understanding by incorporating various sources of knowledge and using suitable methods to reach the study’s objectives (Maarouf 2019:9). This paradigm was deemed appropriate for this study as it permits the researcher to implement different methods, according to the research problem, for data collection and analysis. The justification here is that pragmatism opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis (Creswell and Creswell 2018:52). Pragmatism is frequently linked to and signifies the foundations for an MMR approach (Morgan 2014:1045; Parvaiz, Mufti, and Wahab 2016:76). Thus, the MMR approach was adopted for this study to test the study’s hypotheses and answer the research questions presented in

Section 1.5 above. An online questionnaire (refer to Appendix A) was used to collect quantitative data while online semi-structured interviews (refer to Appendices B and C) were used to collect qualitative data.

The researcher adopted a multiple-case design. The online questionnaire gathered quantitative data from a total of 160 employees (out of a sample of 369) from the departments under study, and the online interviews gathered qualitative data from four IPs and four HODs (out of a sample of 12).

The MMR convergent parallel design was preferred to allow the researcher to merge both types of data for a comprehensive analysis (Creswell and Creswell 2018:57). SPSS 27.0.1.0 software was utilized for quantitative data and descriptive and inferential statistical analysis were used to analyze the data and test the research hypotheses (Trochim, Donnelly, and Arora 2016:280; Neuman 2017:187). Qualitative data were analyzed using thematic content analysis (Anderson 2007:1) through the use of NVivo software.

To help ensure the validity and reliability of the research instruments, pre-tests were conducted with library users who did not form part of the actual sample for the study. External validity in the study was fulfilled through the use of a multiple-case design from which the findings could be generalized to other GD SLs in South Africa. For the trustworthiness of qualitative data, this study considered issues of credibility, transferability, dependability, and confirmability as advised by Trochim, Donnelly, and Arora (2016:72).

Chapter 4 presents a detailed discussion of the methodology used for the study.

1.12 Ethical issues

As a researcher, it is important to maintain certain principles, and these include “your professional code of conduct that sets a standard for your attitudes and behavior” during the study (Louw 2014:262). This study adhered to the research ethical standards as stipulated by the HSSREC (University of KwaZulu-Natal Research Ethics Office 2021). The researcher acquired ethical clearance for the study from the UKZN (refer to Appendix D) and written permission to conduct the study from the six departments under study was granted (refer to Appendices E, F, G, H, I, and J).

To protect the integrity of the study, the researcher made use of data collection instruments and cover letters (refer to Appendix K and L) to explain to the respondents what the study was about and what would happen with the results. Furthermore, assurance was given to respondents that their responses would be confidential and anonymous.

1.13 Definition of key terms

Williams (2014:9) noted that definitions are designed to explain or describe the meaning of a word or phrase to help understand concepts, their application, and their use. In this research project, the following terms and concepts are explained as follows:

Special library

A SL comprises a specialized collection of materials (in any format), is organized for an explicit customer base, and delivers information to customers rapidly and proactively (Vargha 2017:640). A further definition of a SL and one adopted for this study is that it is a library that enhances the objectives of its PO by aiming to satisfy the specific information needs of its users, providing access to specialized information resources physically and electronically (National Library of South Africa 2014:83; Vargha 2017:640). The SL in the context of this study is what is also referred to as a government (or more specifically, a provincial government) library. According to the International Federation of Library Associations and Institutions (2019), government libraries can be defined as a group of libraries that are part of and work for a body with a regulating responsibility and which have, in some manner, a constitutional liability or association. They are funded by the government and while their main audience is the government the actual audience could be wider than the government (Bihani 2008:5).

Parent body or organization

In this study, a parent body (or PO) refers to a department or an organization (Ahmed and Soroya 2015) that is responsible for the overall management of the SL. The term “organization” is used interchangeably with the term “department” throughout the study.

Library value

McCreadie (2013:328) affirmed that the notion of library value could be demarcated in numerous approaches. For example, value for customers is the level of support and services supplied, economic value for the ROI, or value for the PO in terms of the SL's contribution to organizational goals and objectives. In this study, the value of a SL is associated with the contribution of the library towards helping the PO fulfill its objectives.

Service

Kotler and Keller (2012:G8) described service as any action or performance that an organization can present to another that is unquantifiable and does not result in the ownership of something.

Library services

In this study, library services refer to the different activities provided by a particular library. (Podbrežnik 2014:51). Services offered in SLs are aligned with the objectives of the PO as they aid in the achievement of those objectives. Such services include but are not limited to, the provision of selective dissemination of information, knowledge management, or researching information for management to make informed decisions.

Service or library quality

According to Baada et al. (2019:2), service or library quality is the complete value of library facilities, resources, and services that fulfill customers' expectations. LibQUAL or SERVQUAL allows IPs to assess the overall quality of services or resources from the user's perspective (Podbrežnik 2014:51).

Information

The definition of information adopted by this study is the one given by Prytherch (2005:349), namely, "An assemblage of data in a comprehensible form capable of communication. This may range from

content in any format – written or printed on paper, stored in electronic databases, collected on the Internet etc. – to the personal knowledge of the staff of an organization.”

Customers

Customers also known as patrons, clients, or users are those who obtain or profit from the information services and resources provided by the SL. The terms are used interchangeably in this study.

1.14 Thesis structure

The structure of the thesis, by chapter, is as follows:

Chapter 1: Introduction

This chapter gave a bird’s eye view of the thesis. It provided the contextual background to the study, the research problem, and the aim, objectives, RQs, and hypotheses underpinning the study. This was followed by the significance and justification for the study, the argument for the study’s originality, and its scope, limitations, and delimitations. A brief overview of the study’s theoretical framework, preliminary literature review, and methodology adopted were provided. The chapter ended with an outline of the ethical concerns associated with the study and the definitions of key terms used.

Chapter 2: Conceptual Framework

This chapter discusses in detail the different conceptual frameworks that formed the foundation of the study. Specifically, the models applied in this study were discussed in detail and justified. The models were the strategic measuring model, library and service quality models, as well as the TQM model.

Chapter 3: Literature Review

This chapter provides a review of relevant literature regarding the value of SLs based on previous investigations in the field of research. The chapter also demonstrates how the research problem being

investigated was developed, what other scholars achieved using different theoretical frameworks and, where appropriate, the methodological, theoretical, and conceptual shortcomings of the studies.

Chapter 4: Research Methodology and Methods

This chapter describes the research methodology adopted. The research approach, methods, data collection instruments, population, sampling method, data collection approaches, and how data were presented and analyzed are presented and discussed.

Chapter 5: Analysis and Presentation of Findings

This chapter presents the findings of the study. Quantitative findings are presented in tables and graphs, while qualitative findings are presented in text format. The findings are presented in terms of the RQs underpinning the study.

Chapter 6: Interpretation and Discussion of Findings

This chapter interprets and discusses the findings of the study presented in the preceding chapter. The RQs guiding the study provide the structure for the chapter.

Chapter 7: Summary, Conclusions, Contributions of the Study and Recommendations

This, the final chapter, presents a summary of the research findings, the conclusions, and the recommendations based on the outcomes of the study. The originality and the contributions of the study to the body of knowledge are again emphasized. Suggestions for further research are also provided.

1.15 Summary

The matter under investigation in this study, namely, measuring and communicating the value of SLs to management in the KZN PGDs, was introduced in this chapter. The background and context of the study were provided. The research problem was outlined, which led to the development of the study's

research objectives, research questions, and hypotheses. The significance of the study in relation to knowledge, the subject matter, the LIS field, theoretical practice, and policy development was also discussed. The Henczel (2006) strategic measurement model was introduced as the model that underpinned the study and added to its originality in that this is the first study to pay attention to the value of SLs in GDs in the South African context, as noted by Million, Hatchell, and Sarmiento (2012) and Poll (2018). The pragmatic paradigm was applied in the study which allowed the researcher to adopt an MMR approach to answer the research questions. Definitions of the key terms used in the study were provided.

Chapter 2 follows, and it will discuss the theoretical framework and the relevancy of the models and theories adopted in the study.

CHAPTER 2: CONCEPTUAL FRAMEWORK

2.1 Introduction

The purpose of this study was to determine the value of special libraries (SLs) in provincial government departments (PGDs) and investigate how the value of these libraries was being communicated to management. The aim was to use the findings to inform management about the value of SLs in these departments to advocate their need for redevelopment. This was done by evaluating the level of perceptions, desired expectations, and satisfaction regarding the use of information resources and library services provided. It was important to not only acquire data about how users perceive the library or how useful the library collection is in meeting users' needs but also to produce evidence of how library services are currently assisting POs in achieving their mission now and in the future (Henczel 2006:1). A comprehensive understanding of theories, models, and other types of measurements and evaluations that have been used by past researchers to measure the value of different types of libraries assisted the researcher in determining which models or theories would be suitable to measure the value of SL services.

This chapter will start by briefly examining what a theory is and how it is related to a model and the differences between them. This will be followed by a discussion of theoretical and conceptual frameworks and their role in research. The various models that underpinned the study are then discussed. The methods for measuring value in libraries are then described and the chapter concludes by presenting the conceptual framework for the study and how it informed the entire research project.

2.2 Theories and models

In research, theory can be defined as a set of concepts and ideas, the proposed relationships among these concepts, and a structure that is intended to capture or model something about the world (Maxwell 2013:74). In other words, a theory guides the researcher in reviewing the relevant concepts in the literature, designing the study, and interpreting its outcomes. The process also contributes to the generation of new knowledge (Ukwoma and Ngulube 2021:1 and Ngulube 2020:8). On the other hand, a model naturally comprises a thoughtful interpretation of a phenomenon or a particular facet of a phenomenon, with a more precisely defined scope of justification compared to a theory (Nilsen

2015:2). Even though the difference between a theory and a model is not always clear, there is a relatively close relationship between them. This relationship can be said to exist as models are embedded in theories and they can be used to exemplify a theory for a particular case (Ngulube 2018:3-4).

2.3 Differentiating a conceptual framework from a theoretical framework and their role in research

A theoretical framework (TF) has been defined by Grant and Osanloo (2014:13) as the “blueprint” for the entire dissertation inquiry since it serves as the guide on which to build and support a study and also provides the structure to define how you will rationally, systematically, and critically approach the dissertation as a whole. A conceptual framework (CF) can be defined as a researcher’s plan, either in detail or in a descriptive form, which describes the central issues to be considered in the study, these may include the key variables, factors, or concepts and the alleged interrelation between them (Ngulube 2020:19; Miles, Huberman, and Saldaña 2014:37). A good CF or TF works as the “glue” that joins the element of social research together by giving researchers the focus and direction on which their empirical study should be centered (Ngulube 2018:1). Vinz (2022:1) concurs by indicating that a good framework provides researchers with a strong scientific research base and affords support for the rest of their study, as this is where they explain the theories or models that supported the research, showing that the study was grounded in established ideas.

Fain (2013:91) defined the term “framework” as the conceptual foundation of a research study. Meanwhile, concepts are defined as “symbolic statements describing a phenomenon or a class of phenomena” (Fain 2017:101). Green (2014:35) is of the view that a TF should be applied once a study is underpinned by a particular theory or model. On the other hand, a CF draws from concepts based on various theories, models, research findings, or the researcher’s own experience to guide a research project (Green 2014:35; Nieswiadomy and Bailey 2018:115). This suggests that a study’s CF is “something that could only be constructed not found, as it incorporates pieces that are borrowed from elsewhere” (Maxwell 2013:64). Thus, it is the researcher who builds the structure and the overall coherence of the framework. From this perspective, Grant and Osanloo (2014:16) differentiate a TF from a CF by explaining that the former is taken from an existing theory (or theories) in the literature that has already been tested and confirmed by others and is thus considered a generally

acceptable theory in the scholarly literature. A CF comprises a less-developed description of theories in a research study (Vithal and Jansen 2013:19). Consequently, the comprehensive role of the CF is to organize and guide the researcher in their empirical research (Ravitch and Riggan 2017:15). This study thus regarded a CF to be beneficial as it assisted the researcher to pinpoint and create her own worldview (the pragmatic paradigm approach) on the problem to be investigated (Grant and Osanloo 2014:17). Van der Waldt (2020:2) points out that in the social sciences field, a CF has two different perspectives or applications, and these are described below.

The first perspective talks about the graphical representation of the CF (Maree 2012:220). According to Ravitch and Riggan (2017:235), a CF is a graphical demonstration of the research's main concepts presented in the form of a schematic illustration showing the basic concepts and how they are related to one another (refer to Figure 2.1 below). The second perspective talks about a CF as a “mental map that connects the various dimensions of the research process such as the researcher's prior knowledge and interests, the literature survey, theory, methods, data analysis and findings” (Van der Waldt 2020:3). There is no straightforward description of the CF and how it should be presented, thus creating confusion for the researcher and a debate with other scholars on which is the correct perspective to apply for a particular study (Van der Waldt 2020:3; Munene 2019:9). Therefore, Van der Waldt (2020:4) points out that since there is no particular or best layout for creating an argument, there is also no single “right” method to create a CF for a study.

2.4 Models employed in the study

The strategic measurement model by Henczel (2006) underpinned the current study; however, since it is impractical to quantify the value of SLs under just one aspect, there was a need to source other components from other models that have been used by other scholars to determine the value of a library. Hence, the service quality (SERVQUAL) model by Parasuraman, Zeithaml, and Berry (1988); the library quality (LibQUAL) model by the Association of Research Libraries (ARL) (1999); the total quality management (TQM) model proposed by Deming in 1980 (Martínez-Lorente, Dewhurst, and Dale 1998) were also incorporated into the study. The models are presented and discussed below.

2.4.1 Strategic measurement model

The strategic measurement model of Henczel is embedded in the assertion that just as the nature of information changes due to the increase in digitization, the conduct of users and their outlooks towards the information being delivered by SLs in corporate settings also changes. This requires SLs to self-examine the contribution of their services in helping POs achieve their goals and objectives. On this note, Henczel's (2006) model assists SL services processes, developing and improving in terms of the POs' objectives. The three standard approaches to gathering data from users are:

a) Client satisfaction measures library performance by evaluating whether or not the library resources and services bring satisfaction to users' needs. Ryder (2011:199) posits that the continuous tracing of user satisfaction with library resources and services is vital to keep up with the needs of the users and quickly take necessary actions when their needs are not fulfilled. RQ1 of this study was composed to gather data regarding the satisfaction of the user.

b) Collection development and usage is regarded as the process of ensuring that the needs of the users are met on time in a cost-effective manner by utilizing library materials generated in the organization or externally (Samuel, Entsua-Mensah, and Edward 2016:4). This process comprises various activities such as the evaluation of information needs of existing users, the extent to which library users utilize the resources, and the management of a collection development policy. For the current study, the impact of resources and services was comprehended from the responses to the SERVQUAL and LibQUAL surveys, and for the information professionals (IPs), the data indicating the impact was sourced using a qualitative inquiry.

c) Information strategic alignment is concerned with gathering data to discover the extent to which the investment in library resources and services is efficient and effective, that is, the information provided is utilized for the success of the PO. This was fulfilled in the current study through the external and internal benchmarking processes conducted. Thus, RQ3 and RQ5 were structured to source such data.

When applying this model in SLs, Henczel (2006:15-16) advised that for the researcher to deliver a complete measurement and assessment framework that has the PO strategic objectives in mind, the measurement categories must correspond and support each other to produce desired outcomes. For instance, the user satisfaction assessment must direct the organization on how services can be developed further and incorporated into its strategic plans to promote organizational success. This will ensure that the services that are offered by the SL to the PO are significant and of strategic value to the organization.

2.4.2 Service and library quality models

The next section discusses two quality models commonly used in library and information research, namely, SERVQUAL and LibQUAL. However, before doing so the perceptions of quality are first discussed to provide a perspective on the category of quality referred to in this study.

2.4.2.1 Perceptions of quality

Unlike product-based organizations, libraries are service-based and, therefore, can only assess the quality of the service/s provided (Bhanu 2017:12). According to Bhanu (2019:30), as a service organization, a library's principal goal is to afford the mandatory information and quality service according to the level of satisfaction of the involved user. However, Varghese and Thirunavukkarasu (2020:2) posit that "quality" has a comparative meaning as it differs from organization to organization, circumstance to circumstance, from one person to another, and from background to background. The definition of the term quality can be said to be subjective to the person defining it, as each person can have their own opinion about what it means (Martin, Elga, and Gremyrb 2020:1; Charantimath 2011:2). A definition can be derived from different analyses and perceptions of a person's daily life and the organization from which quality is to be defined.

The term "quality" has been illustrated as having both technical and functional dimensions, with technical in terms of the process of the user interaction with the service, and functional in terms of how the user experienced the service or resources offered (Grönroos 1984:38-39). Since quality is subjective based on the occurrence of the users' expectations of utilizing certain resources or services, then their quality can be regarded by the value-in-use (Martin, Elga, and Gremyrb 2020:7-8). Turner

(2009:12) indicated that the notion of value-in-use is more relevant to various information services as it examines decisions made, time saved, or mistakes avoided in using those information resources or services. Therefore, for this study, the level of quality can be subjectively defined by the extent or degree to which a particular user's expectations are satisfied (precisely, thoroughly, and expeditiously) by the utilized service (Martin, Elga, and Gremyrb 2020:8; Reddy 2017:145).

Nyantakyi-Baah (2016) investigated the perceptions of users on the quality of services provided by and the value of the libraries of the Ghana Institute of Journalism and Ashesi University College. This was a comparative case study aimed at soliciting information from students, and library and faculty employees. The findings revealed that even though both libraries were considered to have satisfactory service provided by library staff, students frequented the libraries more than faculty staff. Findings also revealed that IPs from these libraries lacked sufficient skills and competencies to collect data, translate it into a language understandable to management, and how to communicate such information to demonstrate their value. This might be due to both libraries not having specific strategies for measuring their value.

Once again, the question of skills and competencies required by IPs surfaces and what strategy or strategies of measuring value are suitable for a certain type of library; the current study addressed these issues.

2.4.2.2 Service quality (SERVQUAL) model

The concept of SERVQUAL originated from the marketing discipline in the early 1980s when three American marketing gurus, Parasuraman, Zeithaml, and Berry developed a conceptual model of service quality (Shahin, Jamkhaneh and Cheryani 2014:39). This model is used to capture and evaluate the service quality experienced by users (Mulder 2018:1). In other words, it identifies the quality of service by asking users to assess their expectations of services rendered and their actual perceptions of those services to measure the gap or discrepancy between the two. According to Zhang and Chen (2020:100), the developers of the SERVQUAL model consider the perspective of the library user appropriate to assess the quality of service, and this is because the user's opinion focuses on the satisfaction of their special needs (Podbrežnik 2014:52). Furthermore, Podbrežnik (2014:52) posits that one of the factors that determine the satisfaction of a user is the perceived quality of service

rendered, as the assessment of this service concentrates on reflecting the opinion of the user on the issue of service. Sajna and Mohamed (2021:75) denote that the satisfaction of the ever-developing user's needs is a standard indicator of service quality.

Parasuraman, Zeithaml, and Berry (1985:44) questioned the components of service quality and established a gap model that offers an essential framework to outline and evaluate service quality. The development of the SERVQUAL model was based on the results from the exploratory study done by the same authors utilizing comprehensive focus group interviews (Yarimoglu 2014:82). Initially, the gap model comprised five gaps that occurred concerning the perceptions of service quality and the responsibilities associated with the service delivered to the customers. Thereafter, Wirtz and Lovelock (2016:797) adapted, expanded, and improved the framework and included a sixth type of gap known as the service quality gap. For this study, Gap 5 was the focus as it represented external gaps between the client (user) and the organization. Gap 5 is known as the perception gap, which is the discrepancy between clients' expectations and their perceptions of the services delivered.

The gap analysis was developed based on the differences between expectation and performance alongside the service quality dimensions. These dimensions differ by organization and by the country in which the analysis is taking place (Amjad, Mamoun, Bayan 2013:407; Kumar, Gupta, Rashid, and Shyam 2020:3). The dimensions identified by Reddy (2017:147-148) for users to assess the quality of service acknowledged in this study include reliability, assurance, tangibles, empathy, and responsiveness. This study included a sixth dimension, namely, the general library expectations as Matthews (2013:97) indicated that library users utilize the library for various. The dimensions are described below:

i Dimension 1 - Reliability

This refers to how the library is performing and implementing its promised services in the given set of requirements between the organization and the user.

ii Dimension 2 - Assurance

This has to do with IPs, whether they are skilled workers who can gain the trust and confidence of their users.

iii Dimension 3 - Tangibles

This refers to the appearance of the physical surroundings and facilities, equipment, and personnel.

iv Dimension 4 - Empathy

This refers to how the library cares and gives individualized attention to its users while utilizing the library.

v Dimension 5 - Responsiveness

This refers to the willingness of IPs to help their users by providing them with good quality and fast service.

vi Dimension 6 - General library expectations

This refers to the expectations of library users based on their various reasons for using the library.

The SERVQUAL instrument was created to evaluate the level of satisfaction of users regarding services provided both qualitatively and quantitatively. However, for this study, only the quantitative stance of the instrument was considered. Initially, the instrument comprised 44 statements or questions divided into two sections. The sections are grounded on the six dimensions listed above with statements related to respondents' expectations and perceptions of the services evaluated (Mauri, Minazzi, and Muccio 2013:136; Oak and Patil 2011:6). The first 21 statements are grouped to ask users about their expectations of services while the second group of statements deal with the perceptions of services as utilized by the users (Mauri, Minazzi, and Muccio 2013:136). It is in the statements where the users are requested to express their opinions by evaluating each item, ranging on a scale of 1 to 7 where 1 indicates that they strongly agree with a statement and 7 indicates that they strongly disagree with the said statement. Thereafter, the statements assessing expectations are compared with the statements assessing perceptions to determine the service quality (Oak and Patil 2011:3). Lee (2022:8) advised that the statements can be altered, supplemented, and employed as a suitable assessment model that reflects the characteristics of the type of sector it is applied to, as executed in the design of the questionnaire for the current study.

According to Mikitish (2015:275), the noticeable strength of SERVQUAL-based models for libraries is their ability to adjust their instruments to measure the satisfaction of library users to determine the value of that library. Since its creation in the 1980s, the SERVQUAL model has been adapted and applied in different types of libraries around the world (Zhang and Chen 2020:97), and it has become

a capable and effective instrument for evaluating the quality of services delivered by libraries, SLs included (Sajna and Mohamed 2021:76), hence its suitability for the current study.

However, like any other model, the SERVQUAL model has its limitations and criticisms. Firstly, according to Mauri, Minazzi, and Muccio (2013:139), it has been criticized for evaluating users' perceptions and expectations simultaneously, stating that doing so may affect a user's expectations that are always changing with every service utilized. However, Mauri, Minazzi, and Muccio (2013:138) indicated that in 2004, Parasuraman, Zeithaml, and Berry stood their ground in terms of the simultaneous evaluation of perceptions and expectations by indicating that it permits making a long-term evaluation of the service and increases the amount of information requested to measure service quality. Secondly, even though marketing experts have criticized the model, it has been applied internationally and in different types of libraries as alluded to above, and "the wide range of application of the SERVQUAL instrument spells confidence in its utilization as a technique for measuring service quality in various sectors" (Ramseook-Munhurrun, Lukea-Bhiwajee, and Naidoo 2010:40), including SLs. Lastly, the lack of the "I don't know" option on the measurement scale means that users who have never utilized the product or service evaluated might have to consider choosing a central value option, which may lead to the misrepresentation of data and clarification glitches (Mauri, Minazzi, and Muccio 2013:140). To overcome this weakness and for this study, the SERVQUAL measurement scale was adapted to a five-point scale that included a neutral option, "Not applicable" (N/A). This option was also applied in the LibQUAL tool for those people who have never used the library or did not know.

2.4.2.3 Library quality (LibQUAL) model

The LibQUAL model is an adapted version of the SERVQUAL model, established mutually by the ARL and the Texas A and M University (TAMU) in 1999 for the main purpose of online evaluation of the quality of resources and services in libraries (Bhanu 2017:13; Kumar and Mahajan 2019:4). The LibQUAL model is a developing standardized instrument of library service quality across libraries (Baada et al. 2019:4-5). According to Reddy (2017:148), it was based on the SERVQUAL model of measuring service quality and the tool (also known as LibQUAL+) was developed to measure library quality. Scholars such as Cook, Heath, Thompson, and Thompson (2001) and Thompson, Cook, and Thompson (2002) recognized the necessity of a similar tool to the

SERVQUAL instrument to determine service quality specifically in the context of library and information organizations (Vaidya, Malik and Ali 2021:11).

This tool was used in this study as part of a survey for library users to measure the level of perceptions, desired expectations, and satisfaction of the library quality in four dimensions, namely, Affect of service (AS), Information control (IC), and Library as place (LP) (Association of Research Libraries 2020; Fagan 2014), and Satisfaction with the library (SWL). In a LibQUAL survey, respondents' opinions are sought using a four-point scale: the minimum level of quality they are willing to accept, the actual level of quality they perceive to have been provided, the desired level of quality they would like to receive, and the N/A option for those users who indicated that they did not know or never used the library (Reddy 2017:148). The differences between user evaluations of library quality on these levels (minimum, perceived, and desired) indicate the areas of the library that require immediate attention from library management (Natesan and Aerts 2016:30).

Initially, the LibQUAL+ instrument comprised 41 items classified under five dimensions. It was steadily improved over the years and in the latest edition of the instrument and for the purpose of this study, only four dimensions comprising 17 items or questions were included. The revisions and amendments of the instrument were due to it being implemented in various libraries around the world (De Brito and Vergueiro 2013:35). It can also be stated that since the foundation of the tool in 2000, approximately two million users from approximately 1,200 libraries have partaken in LibQUAL+ assessments (Rehman, Kyriallidou, and Hameed 2014:83). Bhanu (2019:30-31) explains the dimensions mentioned above as follows:

- i. Affect of service (AS) exemplifies the library employees' related matters, for example, distinguishing the employees' capabilities of processing the information-related inquiries or any predicaments posed by the user;
- ii. Information control (IC) is associated with the library and information resources, and the access devices based on current technological advances to retrieve those resources;
- iii. Library as place (LP) has to do with the library space and other physical facilities offered by that library; and

- iv. Satisfaction with the library (SWL) is included as part of the dimensions to determine users' satisfaction and to determine essential measures the library should take if users' needs are not fulfilled (Ryder 2011:199).

To determine the strengths and weaknesses of Malaysian SLs, Harande's (2013) study evaluated two SL collections and users' opinions regarding their use of the libraries. Using a survey research method, the study highlighted that a SL supports its PO to accomplish its set objectives (Harande 2013:2). The study employed the LibQUAL tool to evaluate users' perceptions regarding the library collections and their usage. It was concluded that the two Malaysian SLs were current, relevant, and accessible although the quality of the materials was inadequate. The study recommended that library evaluations should be done continuously to indicate the level of usage of the collections by its users and to determine areas of improvement when compared to other libraries.

This recommendation also sparked the interest of the current study to evaluate the usage of SLs using the LibQUAL tool and their need for redevelopment while benchmarking best practices from similar libraries that are more advanced and effective. However, Harande's (2013) study could also have employed the SERVQUAL tool to evaluate the quality of service from the library staff's point of view and determine the strengths and weaknesses of library collections and services.

In this study, the LibQUAL+ tool was used to measure the state of the library and to inform management of the strengths and shortfalls of the library from the users' point of view (Heath 2014:2; Rehman, Kyriellidou, and Hameed 2014:83; Bhanu 2017:13). LibQUAL+ has been used in studies similar to the current one by different scholars (Bhim 2010; Harande 2013; Mutisya 2017; Baada et al., 2019; Kumar and Mahajan 2019) as will be presented in the literature review chapter. This measuring tool was deemed relevant to the study as the results enabled the researcher to identify areas of improvement in the libraries under study, help set up benchmarks for IPs on performance measures, and provide the library with a basis for systematic feedback (Reddy 2017:148-149).

A strength of this model lies in it being able to be administered online. The analysis of data can also be done online, thus avoiding the problems associated with the manual processing of a questionnaire. A further strength is that it provides an accessible and replicable procedure to get large amounts of normative data speedily (Blixrud 2012:1). These strengths were pertinent to the current study given,

for example, that the collection of data needed to be done strictly online (as elaborated in Chapter 4). However, a reason for incorporating the SERVQUAL-based model in this study was that the LibQUAL+ instrument could not measure the impact of the library on the PO on its own, as the satisfaction of users does not necessarily indicate that those services are valuable to them (Mikitish 2015:275). Despite this criticism, LibQUAL+ has, as alluded to earlier, been used in hundreds of libraries around the world to gauge levels of library service quality (LibQUAL+ 2019:2) and to help with strategic planning and benchmarking.

Regardless of the wide application of this instrument in various libraries, several scholars have presented some drawbacks concerning the LibQUAL+ measuring instrument. Walters (2003:98) mentioned two debatable notions about LibQUAL+ that were not clear to him. Firstly, he questioned the statement by Zeithaml, Parasuraman, and Berry (1990:16) which was also cited by Thompson, Cook, and Thompson (2002:4) regarding users being the only “judges of quality and that all other additional judgments are irrelevant”. Secondly, the effectiveness of users’ perceptions as a valid and objective gauge to measure quality. In terms of the first notion, it can be argued that all employees (at junior or management level) from the departments under study who do use their department’s SL, can be considered competent to judge the quality of services rendered to them by the library (when compared to including external stakeholders who only use selected services from the organization). For the second notion, it can be argued that the users’ perceptions are indeed a valid and objective gauge for measuring quality, as they will expose the strengths and weaknesses of the SLs under study. Evaluations using the LibQUAL+ model are necessary, particularly in SLs, to support them in ensuring that the PO understands the purposes and contributions of library services to the organization (Matthews 2015:211). This will assist in making certain that both the library management and the PO continually monitor the users’ expectations to reduce gaps that generally occur between expectations and perceptions (Bhim 2010:37; Quinn 1997:360).

The application of these two models (SERVQUAL and LibQUAL) was required and relevant to this study as they complemented each other by creating a balance between underlining user perceptions of service delivery and the crux of the service itself (Edgar 2006:4).

2.4.3 Total quality management model

According to Arikök (2016:9), TQM is a concept created in the 1980s by the American specialists of quality management, namely, Deming, Muran, and Crosby. TQM was originally introduced in Japan after World War II to assist the Japanese in rebuilding their economy. It focuses on continuous quality improvement in the areas of product or service, employer-employee relations, and consumer-business relations (Sajjad and Amjad 2012:34; Johnson 2014:1). Johnson (2014:16) suggests that even though the notion of the implementation of the TQM model was not initially considered for libraries, it could indeed be utilized to improve users' satisfaction with the services provided. As with any other service-oriented organization, libraries also need to be managed efficiently. Thus, there is a need to implement TQM as it represents particular standards and methods that are customary and already founded philosophies in libraries, including how open they are to the improvement of service for users (Johnson 2014:14).

TQM is a management philosophy that seeks to integrate all organizational functions to focus on meeting customers' needs and achieving organizational objectives. In the library sector, vital components of TQM are performance measurement, staff competencies, and benchmarking (Reddy 2017:146). Performance measurement has to do with the categorization of any difficulties in how service is delivered and discovering new methods for refining the products of service offered in association with the goals of the organization, and this is generally practiced by management in libraries (Reddy 2017:146). Staff competencies concern the quality of service rendered in libraries based on staff experience and the provision of training to ensure the delivery of quality service to users (Reddy 2017:146). Benchmarking is the procedure of comparing the processes, products, and services of a library with another library, doing quality processes, and offering quality products and services to the users, usually in their sector (Reddy 2017:146). It allows organizations to develop plans on how to make improvements or adopt best practices, usually to increase some aspects of performance (Dragolea and Cotîrlea 2009:814). Ogidi and Inikpi (2014:57) conceptually defined benchmarking as an organized management instrument that contains the evaluation of management procedures and acquiring from others for advanced organizational development. For this study, only the component of benchmarking was undertaken.

Arikkök (2016:7) indicates that the quality of library resources and services has to do with the satisfaction of users' needs and TQM is concerned with building a learning organization where endless developments are permitted; benchmarking then becomes an accurate method concerning the classification of areas of improvement, hence its application in this study. Benchmarking was also deemed relevant for this study as it permits IPs to evaluate and equate the budget effectiveness and general usefulness of their library alongside other similar libraries. The results can then be used to validate the value of the library to the PO or to recognize gaps for library improvement (Anyim 2021:2; Haswell 2012:13). Benchmarking is one of the generally effective methods that permits continuous conduct of a comparative study of library resources and services, abilities of library staff, and their skills to accomplish the objectives of the PO (Rzheuskyi and Kunanets 2018:1).

According to Ruby (2013:59), benchmarking also encourages organizational learning as it facilitates the process of discovering what employees know, realizing how others are doing things, and evaluating the relationship of the qualities in those processes to develop their skills. A learning organization requires library services that also adopt and adapt best practices, which may lead to excellent performance and goal achievement (Nicholas 2007:7). On the contrary, Elmuti and Kathawala (1997:237) stated that one of the limitations that comes with the process of benchmarking is that the data gathered may lack clarity on where it comes from, which makes it difficult to compare the results. The current study overcame such limitations by ensuring that the collected data were marked and stored under the names of each department under study.

Different types of benchmarking can be applied in the library and information sector, and these include competitive, functional, generic, internal, external, and international benchmarking (Anyim 2021; Buset, Declève, and Ovaska 2019; Ogidi and Inikpi 2014; Elmuti and Kathawala 1997). Internal and external benchmarking were applied in the current study and are discussed below:

Internal benchmarking is applied when an organization needs to compare related services to the library to determine functional benchmarks and best procedures for service delivery between two or more sections so that they can be transferred from one section to another. The main goal of undertaking this type of benchmarking is to establish internal working standards in an organization to facilitate knowledge and information sharing (Elmuti and Kathawala 1997:231-232). External benchmarking is applied when libraries seek other libraries that have been identified as paramount in

their work processes and service delivery. For this study, external benchmarking was conducted between the SLs under study in the provincial government departments (PGDs). However, the library that is benchmarking against the best needs to carefully choose the processes to be adopted since not all best practices apply to every library (Rzheuskyi and Kunanets 2018:13). The purpose is to ensure that library resources and services are enhanced to satisfy users' needs for the organization's success.

The application of benchmarking during strategic measurement and evaluation also allows SLs to validate their worth to the PO thereby proving their contribution. Wong and Wong (2008) and Elmuti and Kathawala (1997) point to the benchmarking process comprising five stages: determine what to benchmark, form the benchmarking team, collect and analyze benchmarking data, identify gaps, and act. However, this study adopted the stages provided by Matters and Evans (1997) as cited in Elmuti and Kathawala (1997:233): plan the exercise, form the benchmarking team, collect the data, analyze the data for gaps, and act. The planning, collection of data, and analysis of gaps in the data were the stages selected to achieve the objective of the study. Benchmarking questions were included in the library user's online questionnaire for internal benchmarking purposes. For external benchmarking purposes, the interview schedules for both the IPs and the HODs included benchmarking questions concerning how library resources and services are tailored in terms of the goals of the departments under study.

Benchmarking has been criticized for its origins in the corporate world, which values profit, the satisfaction of customers, and organizational processes (Ruby 2013:60). However, parts of this critique were favorable to the current study as it aimed to evaluate the satisfaction of users based on the resources and services offered by SLs in the government department (GD) environment, hence the relevancy of benchmarking to the current study.

2.5 Methods for measuring value in libraries

Ryder (2011:193) opined that demonstrating the value of library resources and the services offered by a SL is a continuous challenge that is crucial due to technological advances and for their success and existence in an organization. By demarcation, research on library value naturally strives to demonstrate that there are certain benefits in the utilization of library resources and services by users or the contribution of the library toward the main objectives of the PO (Schwieder and Hinchliffe

2018:425). Thus, the ability of a SL to frequently validate its worth is important for its survival and progression in providing for the present and future information needs of the PO (Ryder 2011:211).

As alluded to and for this study, the value of a SL concerns its involvement in facilitating the PO to reach its objectives (value-in-use of the resources and services provided by the SL). Jaeger et al. (2011:3) noted that the term “value” is always associated with or viewed in a monetary sense; they acknowledge that just like quality, value is subjective as it mirrors the distinctive worth of something, be it a physical item or a theoretical idea. Economists view the term value “as the amount paid for goods or services since the price is a gauge of the value one is willing to pay” (Griffiths and King 2009:173). However, when it comes to the library sector, “value can be said to be the amount of use or non-use of the products and services by users” (Jaeger et al. 2011:5). Therefore, what is important when it comes to library value is the users, their needs, and what is considered a valued service. Discussing and determining the value of a category of service rendered is difficult, subjective, and distinctive, and users define it in various ways (Hiller 2012:10; Broady-Preston and Lobo 2011:4).

It is due to financial challenges that most libraries are being asked by their POs to scrutinize their impact by assessing the value of the resources they provide and the services they offer (Heider, Janicki, Janosko, Knupp, and Rahkonen 2012:2). Likewise, Hinchliffe (2011:3) noted the arrival of novel supplies of information emanating from the technological revolution has adversely modified the representation of libraries. In a world that has been shaped by technology, the significance of how quickly users get access to library materials is no longer essential, what is now important is how libraries demonstrate their value to the PO by generally and practically indicating how their services support the mission of that organization (Tetteh and Nyantakyi-Baah 2019:45).

According to Woldring (2001:284), different scholars have attempted several methods to measure value. However, Schwieder and Hinchliffe (2018:425) and Hiller (2012:10) noted that there is no specific method that has been identified as the main method when it comes to determining the value of corporate or any other library for that matter. This was also emphasized by the findings of two studies conducted by Matarazzo, Prusak, and Gauthier (1991) and Matazzaro and Prusak (1995), which found that organizations housing SLs have no specific method to measure the value of their libraries; and their function in shaping the organization towards achieving its objectives is unknown. Nonetheless, the attempted methods of measuring library value include but are not limited to the

return on investment (ROI) by Portugal (2000), monetary value by Griffiths and King (2009), perceived value by Broadbent and Lofgren (1991), value-in-use by Turner (2009), and users' satisfaction (as discussed earlier) by Tetteh and Nyantakyi-Baah (2019). The method applicable to this study, value-in-use, is discussed below:

2.5.1 Value-in-use

Macdonald, Wilson, Martinez, and Toossi (2011:676) defined value-in-use “as a customer’s outcome, purpose or objective that is achieved through service ... value-in-use provides a missing link between service quality on the one hand and relationship outcomes on the other.” The concept of value-in-use was adopted for this study to measure the use of library resources (products) and services. It is considered important as it internally indicates the value of the library (Gann and Pratt 2013:227). According to Ryder (2011:196) and Turner (2009:14), SLs must be able to prove their value to POs in a manner that is well understood by management, meaning that there should be a link between the value provided by the library and the objectives of the PO. It is assumed that because libraries are used, they are of value to their users (Tenopir 2011:6). This study, therefore, based the assessment of value-in-use on three dimensions (experience, relationship, and personalization) identified in the extensive literature review conducted by Ranjan and Read (2014:293-294). Medberg and Grönroos (2020:7-8) explain these dimensions as follows:

- i. Experience is concerned with expressive and sympathetic characteristics between the user and the person rendering service in terms of whether the user finds it pleasant and outstanding;
- ii. Personalization is concerned with the distinctiveness and modification of the service according to the user’s needs and wishes; and
- iii. Relationship is concerned with the progressive communication, cooperation, and mutuality between the user and the person rendering the service.

Thus, the value-in-use of SL products and services can be negatively or positively affected by how the service was rendered to the user by the library staff, as the experience of the user can also determine the future use of that service. Macdonald et al. (2011:675) established that service quality is a pioneer of value-in-use since it is connected to how the library staff conducts the procedure of supporting the user, enabling the formation of value-in-use (Medberg and Grönroos 2020:10).

Consequently, Medberg and Grönroos (2020:25) resolved that measuring library service quality equates to measuring the value-in-use of product and services; hence, the adoption of the value-in-use concept in this study. Medberg and Grönroos (2020:27) further state that the equivalence of measuring service quality to value-in-use prevents time and cost wastage for researchers in that they avoid having to start another measurement method just for the concept of value-in-use.

A study that explored the concept of value-in-use was conducted in the United Kingdom (UK) by Turner (2009) aimed at determining how managers could establish the value of the National Health Service (NHS) library services in terms recognizable to management. The study sought to establish whether the library services make a significant contribution to the organization in reaching the set goals. The study adopted the notions of value-in-use, perceived value, and information-as-knowledge. The hypothesis (which was proven) was that information obtained through library services is used in ways that directly relate to organizational objectives (Turner 2009:15). The study used an MMR approach to extract data from library members. The findings of the study revealed evidence that the information provided by the library assisted users in making better-informed decisions, saving time, contributing to a higher quality of patient care, and offering new knowledge (Turner 2009:7). The suggested notions of value-in-use and perceived value provided a solid direction for the current study in terms of situating the type of value that resonates with SLs in GDs, the construction of questions in the questionnaire and the interview schedules.

2.6 Conceptual framework of the study

The information from Table 1.1 (Summary of the relationship between theoretical models and research questions) in Chapter 1 was used to develop a diagrammatic representation of the relationships among the key concepts under investigation. Thus, the researcher developed a CF as illustrated in Figure 2.1 below to indicate the relationship between the study's research questions and the models adopted to determine the value of SLs.

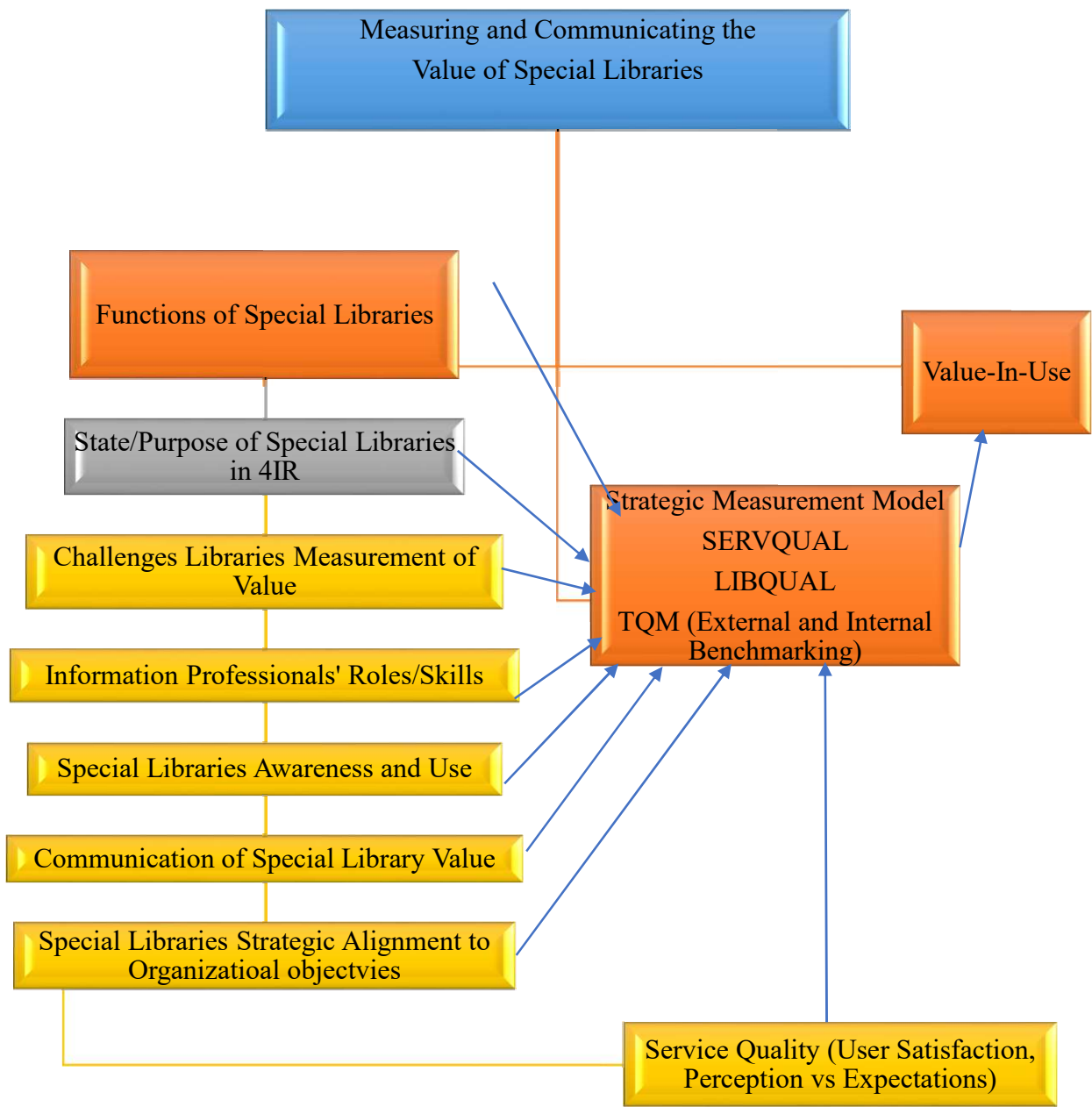


Figure 2.1: Conceptual framework
(Synthesized by the researcher)

A CF is a combination of organized components and variables that assist in resolving a real-life research problem. When researchers develop a CF, they start by making a logical assumption that a problem does exist, and the application of methods, processes, practical methodology, models, or theory may be used to resolve the problem (Zackoff, Real, Klein, Abramson, Li, and Gusic 2019:140). The development of a CF was conducted based on the identified problem with SLs being undervalued and their worth not being communicated to management, thus aiming to find the strengths and weaknesses of these libraries in helping to improve service delivery in the PGDs. The synthesized CF in this study helped define the research problem by means of identifying the research variables and clarifying the relationships among these variables. Furthermore, the CF acted as a mental map for the overall design of the research study to shape the researcher's interests and personality during the research, the questions to be answered, the methodology, the analysis of data, and the research results. The use of multiple models allowed the researcher to get a different perspective of the value of SLs from the users' point of view as well as that of the management. This helped formulate the interpretation of the results since the measurement of the value of libraries cannot be based only on the perspective of the user.

The CF also helped the researcher to inform the literature reviewed in Chapter 3 by identifying themes such as the state of libraries around the world; functions of SLs; challenges of library value measurement; roles of IPs in GDs; awareness and use of SLs in organizations; communication on the value of SLs; and alignment of SLs services to organizations' objectives. Moreover, the applied models helped to inform the literature to be reviewed; for instance, only the conceptual and empirical studies that employed similar models or theories to this study were reviewed. This was important to locate the study's main concepts in the broader context of the study's discipline (Paulus, Lester, and Demster 2014:49)

2.7 Summary

This chapter began by explaining what a theory is, how it relates to a model, and the differences between the two concepts. It then proceeded to explain the differences between a TF and a CF and provided the rationale for the chosen framework (hence the title of this chapter). It further highlighted the different models that have been used in the study to guide the process of interpreting the value of

SLs from the users' perceptions and that of the PO. Models are deemed an appropriate means to link otherwise contrasting data points into an understandable demonstration of the value of a library.

Firstly, the chapter explored the strategic measurement model that underpinned the study by indicating how the model was incorporated to fulfill the purpose of this study. Secondly, the chapter placed more focus on research studies relating to evaluating library value by assessing the quality of service delivered and its alignment with the objectives of the PO. Thirdly, the review exposed that even though there is a wide range of research conducted to assess the value of various libraries, there is no universal method that is used to measure value since the determination of value varies from organization to organization, and from user to user. Through this review, the researcher found that a "perfect" model to measure and communicate library value needs to be developed based on the particular organization being studied. Hence, the current study adopted various models to inform the investigation and develop the study's CF (Figure 2.1). The SERVQUAL and LibQUAL models have emerged to be the most applied models in the library and information field to measure the quality of service delivered; their instruments were adapted to suit the objectives of this study. Furthermore, the strengths and weaknesses of the models employed were also discussed to effectively reveal the suitability of their application to this study. Fourthly, benchmarking was also considered to reveal some of the best practices in GD SLs so that other libraries can learn and adapt them to improve service delivery (external benchmarking). Lastly, the concepts embodied in the CF developed in this study and outlined under Section 2.5 above, were used to form the basis for themes in the literature review.

Chapter 3, which follows, comprises the review of the literature.

CHAPTER 3: LITERATURE REVIEW

3.1 Introduction

Based on the research questions, this chapter portrays a review of the literature relevant to the theme of this study, and which was conducted to identify the gaps in the literature. According to Machi and McEvoy (2022:5), a literature review is a written document that presents a rationally debated case established on a deep understanding of the existing state of knowledge regarding the subject of the study. Thus, a literature review should be an organized scrutiny of academic works around the topic of study, critically analyzing, evaluating, and integrating the findings of the research, its theories, and methods, exposing gaps and suggesting what needs to be done to improve what is already identified about the topic (Efron and Ravid 2019:2). For a study to be effective, researchers are required to demonstrate that they are aware of what other scholars have done and what contributions they have made through the review of the literature. Thus, a literature review aims to provide a summary of the ideas and recommendations that have been previously portrayed by other researchers (Mudassir 2022:44). A further purpose is to uncover any significant material that could improve the current research whilst establishing what has not yet been written about the topic being investigated.

By critically assessing previous research, a researcher can stipulate insights on gaps that should be attended to and describe the significance of their study by linking previous investigations to their own (Tarmizi and Hussin 2021:20). Accordingly, the review of literature in the current study shares similar intentions as emphasized by the above scholars. Due to the paucity of research on measuring the value of libraries (special libraries (SLs) to be specific), the literature discussed in this chapter is mostly on measuring the value of academic or public libraries since they are the types of libraries dominant in the sources. The purpose of this literature review is not only to introduce readers to the current and preceding research conducted to determine the value of SLs in organizations but also to set the background of the study, to enlighten them about the research methodology and areas for developing the knowledge of the field. Flick (2018:87) points out that as one synthesizes the discussion, the concepts, and the theories, the ultimate goal is to inform readers which of these have informed one's own study.

This chapter is organized around the research questions (RQs) (refer to Section 1.5) and the themes and sub-themes that emanated from the conceptual framework that underpinned the study. To begin with, a map of the literature review is discussed and presented.

3.2 Mapping the literature review

As a researcher working with a new topic in the library and information service (LIS) field, it is important to organize one's literature to enable the reader to understand how the projected study adds to, expands, or reproduces studies that have been previously conducted. Creswell and Creswell (2018:82) suggest that a convenient way to tackle this step is by constructing a literature map to organize and summarize the review of the literature. A literature map is used to demonstrate how all of the literature is connected through the established themes and patterns found. Chaterera (2017:52) defines a literature review map as a graphical drawing that illustrates the main ideas of a study, and the connections between and among those ideas or concepts.

The main aim of having a literature map in this study was to delineate how the objectives of the current research as described in Chapter 1 are interrelated with the conceptual framework that underpinned the study. Figure 3.1 illustrates the mapping of the literature review: it begins with the main topic of the study, the models underpinning the study, and then the research questions derived from these models. The map further highlights the sub-themes that stem from the topic and also the various articles from which the gaps were identified to create RQs. The map ends with the overall objective of the study, which was to determine the value of SLs and how they assist parent organizations (POs) in achieving their objectives.

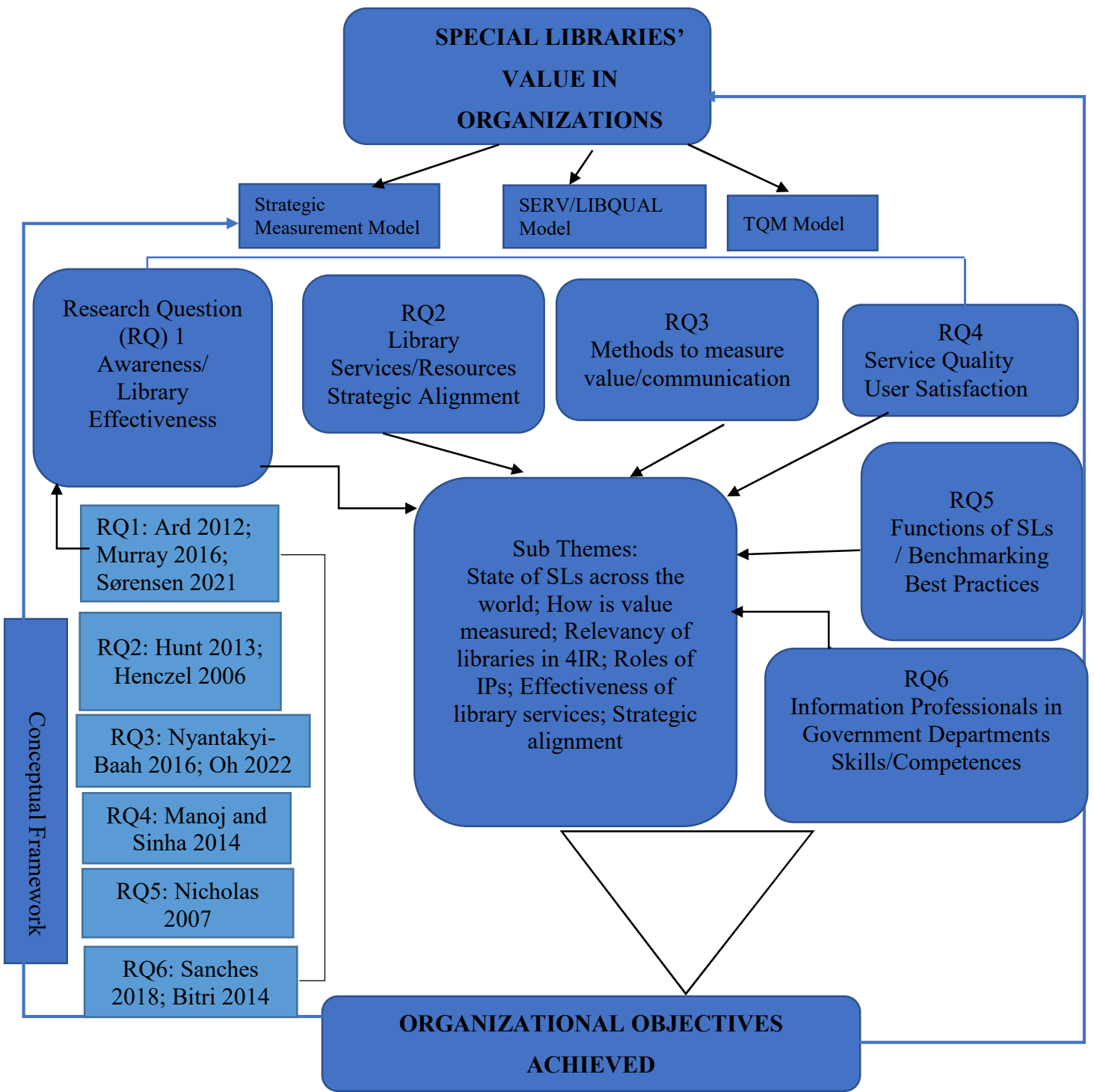


Figure 3.1: Literature review map
(Synthesized by the researcher)

The next section discusses the awareness of SLs and the effectiveness of library services in assisting the PO to achieve its goals.

3.3 Awareness of special libraries and the effectiveness of services and resources provided in helping to achieve organizational goals (RQ1)

A library must not only “hold its door open” but also ensure that it promotes the awareness and utilization of its resources and services (Manoj and Sinha 2014:136). According to Ali (2020:247), “The special library of today has moved from being a traditional print-based resource located in one place to becoming an information service that connects on demand to any research project, marketing value, or any other activity needing specific information.” Isebe (2021:12) asserts that the main purpose of SLs is to assist, direct, and influence their POs in their retrieval and utilization of significant information that is relevant to the targeted users for the efficient and effective accomplishment of their tasks. This means that it is the responsibility of SLs to ensure that users in the PO are aware of and have access to the library collection. Thus, for a library to achieve its objectives, the intended users must be aware of the library services and resources that exist so that they know they can access and utilize them when a need arises (Nwankwo, Chukwu, Igbokwe, and Agbanu 2019:189; Oriogu, Chukwuemeka, and Oriogu-Ogbuiyi 2018:34).

Nwankwo et al. (2019:189) insist that without awareness there are fewer chances of library resources and services being utilized as it prompts usage. Awareness can be referred to as the ability to know or have an insight into a condition, reality, realization, acknowledgment, understanding, and informed interest or recognition of something that exists (Anunobi and Nwankwo 2020:137; Abdullahi, Ahmad and Ahmed 2019:39). Akpojotor (2016:3) asserts that awareness is the knowledge or perception of a situation, fact, consciousness, recognition, realization, grasp, acknowledgment, concern about, and well-informed interest or familiarity in, a particular situation or development. Thus, awareness is the understanding of how informed users of the library are in the delivery of information services and resources. The importance of awareness is to ensure that library users are informed of resources available in the library, new materials procured, library operations, and the services provided (Oriogu, Chukwuemeka, and Oriogu-Ogbuiyi 2018:34). The same authors further maintain that awareness is vital for the utilization of information services and resources by users as it acts as a facilitator to users and positively stimulates their opinion of the library. A study by Ezeala (2022) recommended that appropriate awareness initiatives should be conducted occasionally, particularly to recently appointed officials in the organization so that they become aware of the significance of the library and always utilize it to support their performance and their development.

According to Namugera (2017:742), the effectiveness of awareness promotion of library resources and services is contingent on frequent communication with the users. This is because the value of a library and its collection does not only depend on the number of information resources available in the library but also depends on the effective ways and means of making the users aware of what resources (and services) are available and how they can make use of them (Olajide and Adio 2017:3). Eiriemiokhale and Ibeun (2017:4) state that in this way, library users can make maximum use of library resources and services to satisfy their needs thereby adding value to the library. However, being aware of the library resources and services available does not necessarily mean that users would make use of them. This was evident in a study by Eyiolorunshe, Eluwole, and Aregbesola (2017) who revealed that while there was awareness of the library resources and how they could access them, the frequency of use was deemed lower when equated to the awareness level.

For this study, the awareness of library resources and services meant that users have knowledge about the library and what is available for them to utilize for their benefit. Thus, awareness was viewed as the first step for users to utilize library resources and services. In the LIS field, awareness is knowing the different types of resources that are available in the field, which could be regarded as useful to the intended users, and those that are irrelevant to the purpose of the SL (Nwankwo et. al. 2019:191). In this study, the notion of awareness was the degree to which users have knowledge or understanding of current information resources and services offered by SLs in provincial government departments (PGDs).

Awareness goes together with utilization; thus, the term utilization generally refers to the use of something such as library resources and services. The utilization of a library involves the effective usage of the fundamental services provided by that library, and library services and resources could be regarded as worthless until they have been utilized (Lasig and Collantes 2022:12). Onanuga, Ilori, and Ogunwande (2017:84) emphasize that a library that is not being utilized is as good as dead as it cannot justify its existence. Thus, the utilization of library resources and services shows the extent of what they are used for, which is mostly to fulfill the needs of the users. This is normally captured by library statistics which act as a gauge to determine the extent to which the resources and services are being utilized (Bitagi and Garba 2014:122). Mwatela (2013:1) argues that the utilization of library services and resources has been affected since libraries moved from just being educational

monuments to being centers of knowledge and information. However, librarians in SLs are expected to inform as well as educate users in the several ways they can effectively access information resources and services provided by the library (Isebe 2021:12; Kumar 2017:11).

As alluded to above, increased awareness does not necessarily result in increased utilization of resources and services. Furthermore, no matter how “rich” a library is in terms of the quality of its resources and services, what regulates its value is the degree to which those resources are utilized (Odu and Edam-Agbor 2018:84). Anunobi and Nwankwo (2020:138) assert that the issue of library resources and services being underutilized is a universal challenge that cannot be overlooked, given that the achievement of library objectives is considered and measured when users are satisfied with the quality of the service rendered and the resources provided. Hence, the significance of the current study. Thus, users of a library must be made aware of the available resources and services and how to locate or utilize them effectively so that the library can be regarded as effective (Anunobi and Nwankwo 2020:137).

Lasig and Collantes (2022:13) declare that the library’s entire service standard must be fixed on how easily it sustains and accomplishes meeting the information needs of its users. As a result, satisfaction is an individual level of encounter that would indicate that a user is satisfied with the services or resources utilized, with the staff’s approach, and with the library as a place, in meeting their needs and expectations. To help mitigate the issues of underutilization of library services and resources, a study conducted by Lakra and Verma (2021:15) concluded that even though there are various types of information resources and services, there is limited awareness of these services on the part of users. The authors recommended that the library should consider regular sessions, workshops, and orientation programs for users for awareness purposes – for them to be knowledgeable about new services, resources, and technology to sustain their information needs.

The next section examines how library services and resources can be strategically aligned with the organizational goals.

3.4 Strategic alignment of library services and resources with organizational goals (RQ2)

The effectiveness of SLs is measured by the extent to which they meet the comprehensive and various needs of their users while at the same time helping to fulfill the objectives of the PO. Thus, there is a need, especially in this technological and social era, for these libraries to have strategies by which such goals and objectives are achieved and to provide both purpose and direction to the PO (Manoj and Sinha 2014:134). Accordingly, Ruan and Sykes (2014:155-156) state that there should be an effective alignment between library information resources and services with the vision, mission, and objectives of the PO. Alignment can be described as a process of constructing a match between elements of the internal and external context of an organization. This matching process aims to have objectives, systems, strategies, culture, leadership and the like “pulling in the same direction and thereby optimize chances of reaching desired outcomes” (Lundmark, Hasson, Richter, Khachatryan, Åkesson and Eriksson 2021:2). Ruan and Sykes (2014:157) posit that SLs in the corporate environment such as government departments (GDs) and law firms are, to remain viable, progressively being more attentive to the alignment of their strategies to their PO’s objectives. The term strategic alignment has been discussed (refer to Section 2.4.1) and thus the narrative that follows reviews literature concerning an information strategy.

For the SL’s information strategy to connect to the goals and objectives of the PO, there should be vital features such as communication and alignment (Hijji 2014:10). Communication should be between the library and the management of the PO as well as all the employees from the various sections. Likewise, there should be an alignment of the information resources and services that are offered by the library to facilitate the achievement of the main objectives of the organization. A SL can thus be perceived as a strategic player and valued in the PO once it has developed a system in which the contribution of information to organizational success is measured and library value evident (Henczel 2006:11; Browne 2011:28-29). Chiware (2014:1) and Ruan and Sykes (2014:155) posit that one of the best strategies for SLs to defend their significance and be accepted as key players in the organization is to proactively provide proof of their value. This is because the PO’s management needs to understand the link between organizational strategic goals and library services (Chiware 2014:1).

This would require a strategic plan from the information professionals (IPs), adding to the required competencies (as discussed below) needed to accomplish the organizational objectives. Chiware (2014:1) opined that SLs can be said to be achieving their goals only when they provide information services in response to the organizational objectives. Sanches (2018:313) described a strategic plan as a procedure and framework utilized to link an organization to its background, objectives, and procedures required to accomplish identified goals. Strategic planning is an organization's method of describing its strategy or focus and creating resolutions on assigning its resources to carry out the strategy, including its human and financial resources (Moniz and Bishop 2016:35). Thus, a strategic plan also "serves as a guide and roadmap for an organization in pursuit of its stated objectives" (Wairimu and Theuri 2014:27). A plan can be set up to achieve the objectives of the PO, nonetheless, how the plan is approached (strategy) and implemented will determine whether that plan will be successful (Adeyemi, Awojobi, and Orbih 2014:57).

Strategic planning is the evaluation of organizational strengths and weaknesses, the creation of priorities in the context of the organization's physical and economic abilities, the identification of potential areas for growth and threats, and generating alternative strategies to achieve set goals (Sanches 2018:171; Ruan and Sykes 2014:157). Strategic plans have also been recognized as tools for communication and verification of a library's role in dealing with the challenges currently being experienced due to technological development (Sanches 2018:312). A comprehensive literature search reveals the scarcity of scholarly literature on strategic planning particularly with regard to SLs as most of these studies (Harrison, Olike, Amoth 2022; Brui 2018; Adeyemi, Awojobi and Orbih 2014; Chiware 2014) were conducted in academic libraries.

Siambi's (2021:44) study reviewed strategic planning and application in universities where it was observed that effective implementation of a strategic planning procedure is based on having a working and integrated system in place as well as on involving all the main stakeholders in the procedure. The strategic planning and application process is important in pushing the organization to accomplish its objectives as it establishes the foundation for probing current conditions and estimating future concerns. The study found that there is a need for strategic planning and implementation to be inclusive of every affected member of the organization and be consistent to ensure success across the organization. According to Brenner, Kear, and Wider (2017:28), an inclusive strategic planning process invites more members across the organization, and restructures

planning as a form of organizational change (which can be met with doubt and resistance). The authors further emphasize the importance of all library employees understanding the drivers of change, assisting in influencing organizational resolutions, and taking ownership of what is put into operation (Brenner, Kear, and Wider 2017:28).

A recent study conducted by Harrison, Otiike, and Amoth (2022) aimed to examine the presence of strategic plans in public university libraries in Kenya. The study revealed that several libraries do not have any strategic plans as they depend on those of their PO. The concept of communicating the strategic plans with organizational staff and relevant stakeholders was emphasized as it plays a vital role in creating an empowering environment for them to partake in the plans, even before they are implemented. The study recommended the application of suitable processes to produce accurate and reachable goals. It was concluded that strategic plans are essential as they endeavor to maintain the primary obligation of their PO by offering quality library resources and services.

The next section discusses various methods used by researchers to measure the value of libraries, their challenges, and how this value is communicated to management.

3.5 Methods used to measure the value of libraries and how this value is communicated to the management of the parent organization (RQ3)

To begin with, the methods used for measuring library value and the challenges encountered by researchers while using those methods, are discussed.

3.5.1 Methods for measuring value and their challenges

The discussion on the methods for measuring value in libraries started in Chapter 2 (refer to Section 2.5). Matarazzo and Pearlstein (2014:1) regard the question of the value of library services to the organization as a difficult one to answer by IPs, especially in the case of SLs where even the organization's management often does not understand how the library contributes to the organization. This was evident in the survey conducted by the Financial Times Corporate and Special Libraries Association (2013) where it was revealed that only one-third of the responding executives felt that IPs add value to their organization. IPs continue to strive to strategically align library services with

those of their PO and to establish methods to show how they contribute to the success of that organization (Matarazzo and Pearlstein 2014:2). There is thus a need for IPs to evaluate services and to describe their impact in a manner that looks to the development of those services so that they remain a central component of the effective knowledge organization (Ard 2012:17).

Regardless of their type, libraries have recently faced a challenge concerning the need to demonstrate the value of the services they provide to concerned stakeholders or the PO (Murray 2013:276; Matthews 2018:263). Measuring and proving the value of libraries is a general and continuous challenge that needs to be tackled for constant success and, indeed, their survival in a PO (Ryder 2011:193). According to Felix and Dugdale (2011:45), SLs have a distinctive opportunity to provide everlasting value to their POs by transitioning from “quiet brooding rooms for storing and retrieving information” to “hubs” inside the organization where their value will be apparent in their unique arrangement of the library as a place, services offered, and information resources collected. During the 1990s and 2000s, there was a considerable amount of research conducted to quantify the value of SLs and the services they provide (Ryder 2011:193). This research is discussed below together with the challenges encountered in measuring library value.

Firstly, the main challenge is how value is defined (the working definition of library value for this study is provided in Section 1.13 and the type of value linked to the study is described in Section 2.5.1). A second challenge concerns the method or standard by which value should be measured. As alluded to in Section 1.10, the challenge of measuring library value in corporate SLs can be said to emanate from the dearth of literature specifically for this type of library which results in the lack of a universal method that can be utilized for the measurement. The challenge of the lack of a universal method to measure the impact and value of SLs was well documented in an article by Woldring (2001) which discussed the different strategies to measure the value of SLs as proposed by various researchers. The article revealed that different scholars used different strategies to measure value and it largely depends on how it is measured, for example, some researchers sought to measure the value of the library to the PO in monetary form.

According to Robinson, Calvert, Bawden, Urquart, Bray, and Amosford (2010:64), three different techniques can be used in value assessments, namely, assessment of monetary value, assessment of impact, and assessment of the nature of the benefit provided. The authors also noted the notion of

demonstrating value according to value-in-use for information provided by the library. Woldring (2001:292) contends that this measure is not practical as the value-in-use of information cannot be regulated precisely for the reason that there is a possibility of a gap between the actual value and the assessment of that value. However, Turner (2009:12) stated that the notion of value-in-use is more relevant as a strategy to measure the value and impact of various information services as it looks at decisions made, time saved or mistakes avoided in using that information.

Secondly, for the past two decades, the issue of measuring and presenting evidence to management regarding the value and impact of libraries has been a concern that researchers have been trying to address and is evident in the increase of available research (Library and Information Association of New Zealand Aotearoa 2014:6; Jamali 2020:1). Jamali (2020:1) opined that “The reason for great attention to value and impact has been partly the pressure on libraries to demonstrate their value and impact to justify their budget or investment by stakeholders.” This may be due to the attitude portrayed towards the importance of libraries and their impact on society, especially by the government in general. For example, in the United States of America (USA) in 2018, a new federal government recommended the reduction of budgets across social and arts-based programs such as the Institute of Museum and Library Services and the Corporation for Public Broadcasting (McGlone 2018:1; Stenstrom, Cole and Hanson 2019:354).

Murray and Ireland (2018) conducted a national survey of public and private universities in the USA to understand the perceptions of provosts and chief academic officers regarding library value and their preferences for communication with management in terms of the types of data that would support the prioritization of the library budget in the institution. The findings revealed specific evidence in the form of practices that can be said to support the priorities of the institution, including library services and resources such as space, staffing, instructional outreach, and user satisfaction data. In terms of how library impact should be communicated, library administrators should strategically present a formal annual report or conduct a dedicated budget meeting to declare explicit evidence of impact.

In a 2014 report, the Canadian Library Association presented a response to the question of how libraries measure the outcomes and community impact of their services. It was noted that there is an increase in requests for libraries to identify the contribution and value they offer to society, not only

to justify their need for financial support but also their actual existence both quantitatively and qualitatively. Given this, the employment of a mixed-methods research (MMR) approach in the current study was necessary to obtain data that justifies the existence of SLs in PGDs.

An article by Hiller (2012) questioned what corporate libraries are measuring and whether it matters. Once again, the issue of having to demonstrate library value to the PO to secure funding and support was emphasized and the need to incorporate the evidence of impact into their executive planning foundation to be considered for budget allocation was identified. In addition to the presentation of evidence on their impact and value, corporate libraries also need to demonstrate that they are efficient and effective in fulfilling organizational expectations and the users' needs.

Thirdly, there is the challenge of measuring and proving value in the Fourth Industrial Revolution (4IR) where the significance of a library may seem redundant. The developments of technology have caused many to question the function of physical libraries in the 21st century when there are so many opportunities to access the same service through the internet (Tait, Martzoukou, and Reid 2016:2). Ashiq, Rehman, and Mujtaba (2021:158) noted that the general concept of the library profession and the services provided by libraries in any environment has greatly transformed due to the rapid advancement in technology. Consequently, with the deteriorating circulation of print library materials, the decreasing gate counts together with the needs and anticipations of users that are always changing, libraries have suddenly come under scrutiny to prove their value to the PO (Knight 2017:295). Similarly, Knight (2017:294) posits that the value and importance of the library have been further diminished by the internet as it is capable of reliably providing sources of great quality that are current and easily accessible to users.

However, the trend of self-service on the internet was reported by the Financial Times Corporate and Special Libraries Association (2013:7-8) as a significant challenge for users when searching for information as it results in information overload. As a result, there is a lot of time spent by users organizing information found on the internet, yet they are not sure of its relevance to their needs (Lord 2014:259). Thus, IPS need to demonstrate their value to the PO, particularly given the possibility of them being undermined and bypassed as gatekeepers of information for the organization (Financial Times Corporate and Special Libraries Association 2013:9).

Lastly, and adding to the notion of technological advancement in libraries, the rise of the COVID-19 pandemic around the world has added additional challenges in an era in which libraries need to thrive and prove their value (Canada Architecture News 2020:6). Such challenges, as mentioned by Tunga (2021:70), include the paradigm shift of libraries from a physical to a virtual setting, the variation of attitudes between the library professionals and the users in terms of presenting and receiving information, and the rise in the utilization of online library resources and services. To some libraries that were already offering online services to their users, the challenge was simply to accelerate the digital change to everyday use but to others who were still operating in a traditional environment with outdated resources or lacked the right tools to undertake virtual services, COVID-19 suddenly caused a huge setback in proving value (Zhou 2022:228; Tammaro 2020:219). The lack of digital equipment and literacy skills among some users and library staff resulted in the complete closure of some libraries during the pandemic (Ameen 2021:303; Yu and Mani 2020:201). In general, the COVID-19 pandemic can be said to have revived the issue of the digital divide as it (the divide) created significant obstacles to library use in that those who did not have access to computers and the internet were also precluded from physically visiting the library, and many libraries were simply not in a position to convert their services to online provision (Tammaro 2020:219). However, Ameen (2021:304) posits that libraries recognize the imperative need to redesign the services they offer to remain relevant to the changing world and to meet users at their point of information need.

After reviewing research on the methods of measuring the value of libraries, Murray (2013:469) noted that there is a component that most researchers do not consider, which is what IPs could do with the information derived from the evaluations. This generally refers to the strategic communication of library value to the executive management and this is discussed in the next section.

3.5.2 Communicating library value to management

The review of various literature (Jin 2011; Ardis 2012; Million, Hatchell, and Sarmiento 2012; McCreadie 2013; Financial Times Corporate and Special Libraries Association 2013; National Library of South Africa 2014; Sullivan 2018) highlights the absence of communication on the issue of SL value, particularly between the IPs and the management in the PO. Lawton (2016:181) insists that it is important for IPs to communicate their value to management in a tangible and evident manner. Should IPs fail to communicate the value of library services using information of

significance to the organization, management may find it easy to regard the library as an unnecessary expense, thereby depriving it of funding (Ard 2012:17). McCreadie (2014:4) posits that the issue of IPs communicating the value of their role in the PO remains a key challenge. Indeed, several corporate libraries have been shut down, downsized, or outsourced due to the shortage of funding or management support since the IPs neglected to prove the value of the SLs (Library and Information Services Transformation Charter 2014:84). Million, Hatchell, and Sarmiento (2012:25) advised that communication is of importance in as much as it is necessary to prove the value of a library. On the other hand, Albert (2014:634) referred to communication as a “missing part of the puzzle” for IPs when proving library value. Owoeye and Dahunsi (2014:76) defined communication as the practice through which information, knowledge, thoughts, or messages are transferred or conveyed from one source to another.

An article by Albert (2014) emphasized that it is now more essential than ever that librarians increase the visibility of the library and its services, use data to make evidence-based decisions, and communicate the value of their services to their stakeholders’ success. Using and communicating assessment data demonstrates transparency in the institution and makes assessment systematic and more effective. Openly communicating assessment data in terms of library value contributes to the foundation of an assessment culture by demonstrating accountability, transparency, and willingness to collaborate. The more visible a library is and the more librarians communicate the value of the library to stakeholders, the greater investment those stakeholders will make. The author recommends the use of data derived from mixed-methods assessments as a strategy to communicate a complete picture of the library and the value it holds to the PO. The strategy as suggested by Albert (2014) was adopted in the current study as a starting point for communicating the value of library services, that is, to get the views from the users, IPs, and top management regarding their perceptions of the value of the library.

Communication is an integral part of proving the value of a library as it allows IPs to create a “story” on the services and resources offered, why they are utilized, how they influence users on decision-making, and what strategic impact the library has on the success of the PO’s mission (Albert 2019:2). The value of library and information services should be expressed and transmitted frequently in narratives that align with the reporting sequence of the organization (Ard 2012:17). Moreover, the assessment data collected increases awareness of the library services and resources, and encourages

trust among the PO and IPs as the communication on the achievements and failures increase transparency by showing if there is any impact made by these services (Albert 2019:2). According to the Association of College and Research Libraries (2017:1-2) impact report, IPs are to communicate the library's contributions to management who should, in turn, provide guidance in the development of library services and resources. Thus, if IPs match the library assessment to the PO's mission, enhance organizational learning, measure its impact, and ensure that the data collection activities collaborate with the major stakeholders, then good communication can materialize much more naturally and efficiently.

The next section discusses relevant literature on studies that examined the effect of the quality of services and resources provided by SLs on users' perceptions, expectations, and satisfaction.

3.6 Effect of quality of services and resources provided by special libraries on the perceptions, expectations, and satisfaction of users (RQ4)

The aspect of quality, service quality, and its measuring instruments has been exclusively discussed in Section 2.4.2. (Service quality models). Therefore, this section further discusses the aspect of service quality as a determinant of user satisfaction, and how it affects their perceptions and expectations. Service quality has been recognized as a significant factor that contributes to an organization's capacity to ensure that customers continue to utilize the services and consequently add value to the performance of the organization (Ajayi, Ayodele, and Adedokun 2021:86). The satisfaction of users with the services and resources provided by libraries have been examined by various scholars in different settings. Some have dealt with user satisfaction and service quality as separate concepts, while others have viewed user satisfaction as something that depends on the quality of services or resources provided. In terms of the latter, a study by Negi (2009) determined that the quality of services and resources provided does lead to the satisfaction of the user. However, Cronin and Taylor (1992) maintained that the satisfaction of users is what leads to the quality of services provided. Unidha (2017:2) contends that quality must start from the needs of the user and finish with the user's perception. Parasuraman, Zeithaml, and Berry (1988) suggested that the quality of services offered, and the satisfaction of users are influenced by the same aspects. The current study viewed user satisfaction as a result of service quality, and it is in that quality of service that users are satisfied (Kobero and Swallehe 2022:1373).

Nonetheless, with all the research that had been conducted regarding the relationship between the two concepts (service quality and user satisfaction), there is no agreement on the type of relationship they share (Musyoka 2013:1), especially in the context of SLs, and the current study addresses this gap. Ajayi, Ayodele, and Adedokun (2021:86) believe that service quality does affect the satisfaction of the user which is being continuously molded by their life experiences. Similarly, the effect of service quality on user satisfaction has been shown in studies conducted mostly in academic institutions and other industries (but not including SLs). For example, a study conducted by Harwina (2021:19) in the hospitality industry found that service quality influenced user satisfaction amongst 95.3% of customers whilst the satisfaction of the remaining 4.7% was affected by other factors. Comparable proportions of results were also found in a study conducted in an educational institution by Herman (2022:39), where the satisfaction of 84.9% of students was influenced by service quality while the outstanding 15.1% were affected by other variables not included in the study.

According to Musyoka (2013:v), organizations must increase the value of service quality and take care of the satisfaction of users as they are important concepts for remaining competitive in any business context. In other words, for an organization to have a competitive advantage, it should ensure that the service it offers to the user is of high quality to guarantee user satisfaction (Ajayi, Ayodele, and Adedokun 2021:87). As a service industry, the library is expected to deliver quality service to its users to inspire new users to come and utilize the services and resources (Ajayi, Ayodele, and Adedokun 2021:87). Paul, Mittal, and Srivastav (2016:606) assert that customer satisfaction is a state of mind which matches the effects of users' expectations before using the services or resources, with performance perceptions after usage. Thus, users are satisfied when the perceived service meets or surpasses their expectations and vice versa (Ajayi, Ayodele, and Adedokun 2021:89). Tjiptono (2019) as cited by Chiara, Agustina and Yudhistira (2022:71) states that the elements or the indicators that form user satisfaction comprise the correlation of the service to the users' expectations, the interest of the users to revisit the service, the enthusiasm of the users to recommend the service to others, and their overall satisfaction.

Musyoka (2013) examined all possible elements that had an excessive impact on library performance by employing a SERVQUAL-based questionnaire among library users at universities in Kenya. The objectives of the study were to determine the level of library user expectations and perceptions of

service quality in libraries and also to determine if there were any correlations between the quality of services offered and the satisfaction of users. The study revealed that the library as a place and its collections were viewed as important factors in determining the satisfaction of the user. However, service quality was found to have a statistically substantial positive effect on user satisfaction.

At the National University of Lesotho, Khaola and Mabilikoane (2015) evaluated students' perceived levels of library service quality, their satisfaction with the service, frequency of usage of library resources, and whether there were connections among these concepts. Using a survey as their research method, they employed the LibQUAL+™ instrument based on three factors: Library as place (LP), Information control (IC), and Affect of service (AS). Descriptive and inferential statistics were used to analyze the data derived from the questionnaires. The findings indicated that there was a strong and positive connection between all the factors of library service quality and the users' Satisfaction with the library (SWL). Interestingly, the study also found no correlation between the satisfaction of users and the rate at which they utilized the library. This calls for further studies in a different context to determine if the same results regarding the correlation between satisfaction and frequency of use can be replicated.

Afthanorhan, Awang, Rashid, Foziah, and Ghazali (2019) assessed the effects of service quality on user satisfaction at the University Sultan Zainal Abidin Library. The study employed the LibQUAL questionnaire to examine the gap between users' perceptions and expectations concerning the services provided by the library. Thus, the objectives of the study were to identify service quality dimensions that satisfy the users and to observe the effects of service quality on the satisfaction of users. The study revealed that the quality of services and resources provided by the library has a considerable impact on user satisfaction. While the study indicated that it would provide a benchmark to the IPs and offer suggestions on how to improve the quality of services and resources delivered to meet library users' requirements, these, unfortunately, were not provided.

A study by Mutisya (2017) assessed the quality of library services in international courts using the SERVPERF, SERVQUAL, and LibQUAL models to examine the gaps between different service quality variables. Based on the pragmatic paradigm, the study employed a mixed-methods approach where quantitative and qualitative data were collected from library users. Furthermore, focus group discussions (FGDs) were also conducted to corroborate or further investigate the problems that had

been identified from the questionnaire data. The study revealed that the expectations of users were not being met by the library services offered, and this was identified as a gap that existed between users' expectations and perceptions of service quality. This finding was also confirmed during the FGDs. Other issues found in the study that were of concern were poor library collections and equipment, and limited library space. However, users did not regard the physical aspect of the library as important; thus, the study recommended the need for electronic resources for users to access at any time. The study's recommendation for frequent inspection of user satisfaction created a starting point for the current study to evaluate whether the satisfaction of users equates with the value of library services.

The next section discusses the functions of SLs and the best practices that could be benchmarked by special libraries in government departments to improve their value.

3.7 Functions of special libraries and the best practices that could be benchmarked by special libraries in government departments to improve their value (RQ5)

This section explores the issues or concerns regarding SLs to recognize gaps that are relevant to the current study whilst identifying best practices that could be benchmarked for effective library services. Furthermore, the various functions of SLs in organizations are discussed.

3.7.1 State of libraries around the world

The International Federation of Library Associations and Institutions (IFLA) reviewed the state of libraries (including SLs) around the world in a publication edited by Abdullahi (2017). The book presented chapters that highlighted challenges in public, academic, school, and SLs. Based on this review, challenges that were identified in these libraries include the lack of school library policies, a lack of funding support from management, a lack of staff, a lack of library space, the need to demonstrate library value, and keeping pace with users' needs. It can be deduced that libraries across the world are battling with more or less the same challenges mostly due to the increase in the development of technology. Murray (2013:276) echoed the same sentiments that even though SLs differ, they share the same concerns with other types of libraries, the main one being merely to survive since they are not valued as they should be and there is a need to constantly prove their value.

It would have been informative for Asundi and Karisiddappa (2017); Horvat and Koren (2017); Martínez-Arellano (2017); Ocholla (2017); Ralph, Sibthorpe, and Abdi (2017); and Vargha (2017), in their respective chapters in the book to reflect on what the various types of libraries discussed were doing to overcome the challenges identified so that best practices could be adopted. However, benchmarking, collaboration, and impact or value assessment were highlighted as some of the activities that special libraries could consider advancing their functions and increasing their value.

Benchmarking was alluded to in this study, where internal and external benchmarking was conducted among library users, librarians, and top management to determine best practices for adoption to increase library value (refer to Section 2.4.3). In libraries, benchmarking is used for different purposes, including using it to achieve and deliver service quality (Yasin and Zimmerer 1995; Ogidi and Inikpi 2014), using it as a powerful management tool (Haswell 2012), or using it as a communication tool that assists in finding library value (Buset, Declève, and Ovaska 2019). For this study, the latter applied. Buset, Declève, and Ovaska (2019) reported on a five-year international benchmarking project conducted by three European health and medical libraries in 2013. These libraries were carefully chosen as they were dealing with the same subject, in a similar organizational context, attending to universities and university hospitals. The project aimed to compare services among the libraries to discover and implement best practices. Different phased data were collected through both quantitative and qualitative methods. One of the questions asked concerned determining the value of the libraries. Thus, methods for measuring value in each library were investigated. Data and statistics were assembled and matched from spring 2013 to spring 2014 and libraries were visited in autumn 2014. Some of the best practices reported in the findings include the importance of direct marketing, user experience-oriented activities in the libraries, paying attention to users' opinions when developing a library, and collaboration. Thus, benchmarking was used as a communication tool in that participating libraries learned new skills such as analyzing, discussing, negotiating, presentation, and cross-cultural communication, among others, as doing so would help them to address the challenges faced by their libraries. When it came to the value of libraries, the report only indicated that there were indicators for measuring the value that was created but did not specify what these were.

3.7.2 General functions of special libraries

The general function of any library is to support users in their pursuit of the information they require at any time when it is needed. Further, Shaibu (2015:226) maintains that libraries have operated as a channel of political and social revolution and as a custodian of intellectual liberty. It was in the 20th century when the notion of SLs began to materialize due to the evolution of office management and technical and scientific advances. As organizations needed to provide specialized information, the role and development of SLs became critical (Ashikuzzaman 2013:1; Black and Gabb 2016:192). Enwerem, Envuluanza, and Usuka (2020:236) emphasize the importance of SLs in organizations, departments, and research centers as they promote the objectives of the POs by offering modern information services and resources tailored to the needs of a user. Depending on the type of organization a SL serves, their functions may differ but they are not limited to selecting, acquiring, and organizing information materials; but also offer specialized services such as current awareness services, literature searching, indexing, and abstracting services, document delivery services, assist with personal information needs, digital library services, and access to online journals and databases (Eje and Dushu 2018:3; Enwerem, Envuluanza, and Usuka 2020:240).

Currently, however, due to the advancement of information and communication technology (ICT) and the impact of the COVID-19 pandemic, SLs are embracing internet services through the help of integrated library software and other online resources to fulfill their roles in the PO. ICT is a broad term describing the technologies that are employed for collecting, retrieving, presenting, or communicating knowledge or information. The ICT tools are used to deliver services to the users through suitable networks for information access thereby bridging the gap of space, time, and labor between organizational employees in terms of sharing what they know and receiving new information (Eje and Dushu 2018:14). The effect of ICT on library and information services cannot be stressed enough, as it is noticeable in every level of employees' development in an organization (Eje and Dushu 2018:3). The advancements in the services provided by SLs through the integration of ICTs suggests that the future prospects of SLs are "bright" (Enwerem, Envuluanza, and Usuka 2020:240).

The question one can ask is whether the adoption of online services means that the physical library and the functions or services it provides could simply be replaced by a digital library. The digital library (irrespective of the type) provides users with digital services and resources such as electronic

books (ebooks), online catalogs, and social media (Söderholm and Nolin 2015:249). A recent study by Ruthven, Robinson and McMenemy (2022) examined “The value of digital and physical library services in UK public libraries and why they are not interchangeable.” The study stems from the effect of the COVID-19 pandemic where UK libraries were forced to close and as a result, there was an increase in the use of digital services which affected the normal usage of the physical library. Through the use of a focus group of library users, participants were asked how they adapted to the library closures, and how they intend to use library services in the future (Ruthven, Robinson, and McMenemy 2022:1). During the sessions, participants discussed the advantages and disadvantages of the digital and physical libraries and described their value in different terms. When it came to the value of both types of libraries (digital or physical) it was revealed that how their functions are fulfilled may lean towards more or fewer digital initiatives depending on how the role is interpreted by the librarians’ skills and experiences. The authors, therefore, concluded that the element of value differs between these two kinds of libraries. Public library users in the UK showed that their value attributes are generally related to physical libraries, and thus digital library services or functions “were more about digital tools or products” (Ruthven, Robinson, and McMenemy 2022:10). The study concluded that the one mode of a library can never replace the other but can complement one another as users value them differently. Even though this type of investigation still needs to be conducted in a SL context, it is an indication that the functions of SLs and their services in the corporate environment cannot simply be replaced with online services.

According to Black and Gabb (2016:200), the functions of SLs go beyond the collection, structuring, and distribution of information. There is a need to understand the needs of designated users to ensure satisfaction with the information service provided, even though their satisfaction often comes with criticisms (Hendrikus 2019:4). The negative opinions by users may be caused by the ineffectiveness of a library in performing its functions. A study by Hendrikus (2019:4) identified some reasons for the poor functioning of the library and these include the difficulty experienced by IPs to fulfill the needs of the PO and diverse stakeholders. Furthermore, the negative opinions could be a result of planning failure by library management in terms of strategically aligning their mission to the projected plans of their PO. This is because a special library as a unit in an organization is meant to lessen the difficulty of the PO in fulfilling its mission by ensuring that information and knowledge are managed effectively for organizational benefit (Hendrikus 2019:9-10). Semertzaki (2011:133) agrees and posits that a library becomes a focal point in an organization if it connects departmental staff by collecting,

disseminating, and monitoring the flow of organizational intellectual property (knowledge). Likewise, one of the influential things that SLs can do to increase their value to the POs is to offer services that promote good business decisions (Ard 2012:17). Swanson (2014:24) avers that for SLs to thrive, they merely need to ensure that they maintain their main role of adding value through their services by assisting the organization in accomplishing its strategic objectives.

The next section discusses the roles of IPs in special libraries and the skills or competencies they require to assist in achieving organizational goals.

3.8 Roles of information professionals in special libraries and the competencies required to help achieve organizational goals (RQ6)

There is an increasing recognition that information and knowledge be viewed as important strategic assets in an organization that must be properly organized for compliance with policies and also be used as resources that influence the improvement of organizational performance (Fraser-Arnott 2017:65). Thus, as people who utilize information strategically, IPs are there to assist POs to improve their performance and to accomplish their fundamental goals and objectives (Special Library Association 2016:2; Hariyadi 2015:3). Bitri (2014:54) described IPs as people who possess knowledge and transmitters, they understand users' needs, and they appreciate the information and are cognizant of its function in the organization.

The role of IPs in an organization is not unilateral – they can wear many hats to facilitate the organization in reaching its objectives. For example, due to the evolution of digital technologies, Ptolomey (2009:61) used the term “hybrid information professionals” to collectively denote the diverse roles of IPs. As such, these hybrid roles that interconnect positions in records management, knowledge management, librarianship, archives, and museums are rapidly increasing due to a lack of organizational support and the decline of financial resources (Garaba 2015:220; Fraser-Arnott 2017:66). Furthermore, Ard and Livingston (2014:525) reported that the main responsibilities for some IPs in organizations are to support marketing, competitive intelligence, and current awareness. The convergence of roles requires IPs to adapt to the 21st-century norms and solicit skills from the different fields in the profession that can be used to fulfill the modern needs of the user (Garaba 2015:220). Mancini (2014:7) pointed out that in the current 4IR, organizations are looking for a “new

breed” of IPs, the ones with a broader skill set than what is found in the traditional fields of SLs and information centers. That is, an effective IP should be able to merge several skill sets, including market intelligence, the ability to project beneficial information regarding a subject of interest to the organization, outstanding communication with management, negotiating skills, and other professional abilities (Swanson 2014:12)

Thus, IPs need to ensure that any information constructed by their organization is important enough to be protected and organized in a manner that it would be easily retrievable since information is regarded as a valuable asset to any organization (Jalil, Hussin, Yunus, Samsudin, Sani, and Anwar 2020:1073). The type of information that can be generated in a GD may include the record of procedures used to formulate policies, laws, departmental managerial processes, departmental projects, and programs utilized for the improvement of the citizens it serves and the entire nation (Rosliy and Hussin 2018:613). Therefore, if such information or records in GDs are not managed accurately, it may lead to poor decision-making by management and unnecessary duplication of mistakes which delays the delivery of services (Rosliy and Hussin 2018:633; Howard 2017:2). Furthermore, unmanaged information or records could easily be manipulated, removed, destroyed or misplaced which may lead to the organizational risk of losing crucial information, especially in the event where there is a need to prove cases of corruption, which is a huge problem in government organizations (Wamukoya 2015:17). Thus, it is the role of an IP to communicate with the management of the PO the value and advantages of having well-managed information, both for the PO and, ultimately, the public (Owen, Cooke, and Matthews 2012:70).

The current technological environment has completely transformed the roles and responsibilities of LIS professionals in the government sector and how information is delivered, stored, and retrieved has significantly changed (Jalil et al. 2020:1071; Chakraborty 2013:5; Emezie and Nwaohiri 2013:30). The expectations of the users regarding how they can speedily access library’s resources and services have also changed as the new technologies have brought about the prospect of stimulating opportunities and complex problems related to these changes (Rubin and Rubin 2020:308). Consequently, the roles and value of IPs in a time where information can be accessed anytime and anywhere have been questioned, especially in GDs where their “title” is already diminishing (Sanches 2018:311; Bitri 2014:54). Some of the reasons why the title of IP is diminishing and may fade in the future is because there is a lack of organizational support for the development of

these professionals, especially in corporate organizations, and the status bestowed on them is minimal (Garaba 2015:217).

There are two schools of thought regarding the librarianship profession. Some researchers believe that it is a “dying profession” due to the paradigm shift of digital evolution (Jain 2013:138). On the other hand, some consider it a “dynamic profession”, like Rubin and Rubin (2020:417) who posit that IPs are more relevant than ever and their skills are required in this evolving 4IR era. Matarazzo and Pearlstein (2016:4) supported this notion by indicating that the transition to technology did not bring along some new model of services, but rather IPs are just faced with an onslaught of new devices with which to practice the traditional library standards. Emezie and Nwaohiri (2013:30-31) and Nonthacumjane (2021:263) are of the view that due to this paradigm shift, IPs are now playing a dynamic role; not just being the overseer of records or information but the gateway to countless sources of information through combining their traditional roles with technology and conforming to new methods of performing their work. Besides, technological experts have envisaged that beyond the year 2025, the overall capacity of online information will increase from 130 to 40,000 exabytes, meaning that there will be more information for these professionals to manage (Ayers 2018:1).

The total amount of information and fabrications in what is becoming an age of “post-truth” that is manufactured regularly makes the role of IPs more dynamic than ever before (Howard 2017:3). A study by Warriar, Shivarama, and Angadi (2015:522) concluded that with countless sources available online, there will always be a need for IPs to apply their skills to sift substantial numbers of sources to get credible information and to make it accessible for the intended users at the right time. The findings of the study by Mislán, Yatin, Taib, Ma’roof, Mohamad, Hanuzi, Abdul Rahman, Rahmad, and Abdul Kadir (2020:1123) indicate that technology has not changed the roles of IPs, rather, it provides ever-changing benefits, particularly in librarianship and thus, there is a need for this profession to handle technological changes proactively. The same authors further recommend that IPs get continuous training to develop their technological skills to decrease the gap in the digital divide, and to inhibit information confusion in the post-truth era. This implies that IPs need to commit to the continuous personal and professional improvement of the required range of competencies needed to steer the digital transformation and have the credence to shift from their comfort zone of traditional methods for the effective fulfillment of their objectives (Appleton 2018:1; Hallam and Faraker 2016:18; Chakraborty 2013:3).

A case study by Lawton (2016) in a book titled *The invisible librarian* reported on IPs working in the Auckland Council in New Zealand. IPs working in different library settings were interviewed face-to-face or online between 2014 and 2015. IPs were asked to rate themselves using a scale from zero to 10 regarding their visibility to management or stakeholders and library users. IPs indicated that they do go to some lengths to market themselves and spread awareness of their services, yet it was a struggle to get recognition from top management. Nonetheless, compared to the time when he or she was hired, the visibility was zero but with time and hard work, it had increased to seven. A combination of personal contacts with the users and issuing a monthly newsletter was reported to be the most successful method of increasing visibility. In terms of what value the librarian brought to the organization, an evidence-based approach to decision-making is what was identified as the value provided. When asked if they have any formal method of measuring and communicating impact or value, IPs mentioned the customer satisfaction survey conducted each year to measure impact but no method of communicating it was reported.

Additionally, a literature review conducted by Khan and Parveen (2020) revealed that several studies have explored the professional competencies that are critical for SLs. Such studies include that of Ayoku and Okafor (2015), who examined IP's information technology (IT) skills in terms of their suitability for the 4IR. The authors found that there is a lack of expertise in search engine functions and specialized catalogs. The study emphasized the importance of IPs being proactive and improving their IT skills. The study by Khan and Bhatti (2017) also emphasized that IPs should show interest in getting digital competencies to remain relevant. Fraser-Arnot (2017) examined IPs' general competencies, grouping them into five categories, namely, interpersonal, personal, organizational, management, and technical competencies. The study established that IPs were playing a different role in their PO and, therefore, these competencies could be channeled to improve IPs coming into the profession (Fraser-Arnot 2017:65). At the top of the list of their competencies identified for IPs were collaboration, client service, and communication. These competencies were also emphasized by Swanson (2014:24) and Garaba (2015:221). They further indicated that IPs should also include advocacy, collaboration, and critical thinking in addition to their broader skills, as well as fostering professional connections to enable the sharing of best practices in the field to help impart the value and impact of IPs. Meanwhile, Wamukoya (2015) gave prominence to competencies such as being strategic, forming partnerships, and collaborating with different stakeholders in the organization.

In the study commissioned by the Financial Times Corporate and Special Libraries Association (2013) titled: “The evolving value of inform management”, participants were drawn from a comprehensive variety of professions and public organizations. A survey and in-depth interviews were used as data collection tools. The majority of respondents were IPs (83%) and management (library users) (17%). Major themes that emerged from the collected data include the undermining of IPs by users; the challenge IPs have of demonstrating value to the organization; information overload on the part of users; IPs overestimating their worth (a majority of 55% said that they “add a lot of value”, yet only 34% of the management agreed that this was indeed the case); the importance of IPs becoming “embedded” was also highlighted to avoid libraries acting in silos; and all respondents regarded communication, understanding and decision-ready information as the most important qualities for advancing IPs. Besides the obvious challenge of demonstrating value by IPs, a question arising from this study was whether IPs still add value to the organization in the 4IR. This was one of the research questions posed in the current study and which needed to be resolved.

In short, IPs are constantly being challenged due to technological evolution. To what extent they continue to play a (significant) role in GDs depends on how they respond to these challenges, quickly adjusting to the existing and emerging market trends. However, Matarazzo and Pearlstein (2016:4) warn that since most IPs started their careers in traditional roles, they are bound to resist change while others cannot imagine how they will propel that change. Regardless of whether they are ready or not, the roles of IPs will need to develop and change to support the changing needs of the organizations (McClure 2013:260). Garaba (2015:217) posits that “change can be a challenging process to embrace, and it is something that cannot be done with the stroke of a pen.” Thus, IPs need to shift from normal systems, procedures, and organizational culture to enable the conversion of their mentality towards change. Lastly, Cromity and Miller (2009:29) and Hunt (2013:3) advised IPs to take the initiative in projects in their organization, take risks, and develop and reinforce their skill sets to have a positive impact on management, whilst empowering themselves. The fundamental strategy for any IP to remain relevant to their roles in the PO is to be realistic in who they are and be intentional in the manner in which they tell their story to the top management (Abrams 2013:26).

3.9 Review of related literature

The purpose of this section is not only to describe the literature that was analyzed for this study but also to critically review the sources by pointing out any weaknesses, strengths, or arguments that the researcher came across and indicate possible reasons behind them (Howard 2014:105). It is within the critical review of sources that researchers are also advised to draw the reader's attention to gaps or any missing information that their current research anticipates exploring and filling (Howard 2014:105). Thus, for the researcher to present a well-focused and insightful review, there was a need to subdivide the literature into several areas, namely: the theoretical literature review around the topic of the current study; the methodological literature review about how previous research was conducted and how or which methods were employed; and the empirical literature review regarding findings from previous research conducted in the LIS field or similar fields (Flick 2015:168).

3.9.1 Theoretical literature

According to Howard (2014:102), when reviewing the literature theoretically, the researcher deliberates on the theoretical developments concerning the research problem, by regularly connecting each theory to empirical evidence. Thus, the critical review of the theoretical literature should help the researcher to have answers to questions such as: What is already known about this particular topic, or the area of study in general? Which theories were used and discussed in this area? What concepts were employed or debated? (Flick 2015:169).

In South Africa, Sibanda's (2011) thesis aimed to develop and consequently authenticate a measuring tool to evaluate service quality in an archival organization. This study employed the standard psychometric procedure for developing measures of constructs. The two research questions that the study aimed to investigate were the dimensions for measuring service quality and how these dimensions can be measured effectively by archival organizations. The study found that there is currently no measuring tool to evaluate service quality in the archives discipline. Thus, a service quality measurement instrument called ARCHIVqual was formulated. The development of this theoretical framework was an extension of the already existing service performance (SERVPERF) measuring instrument commonly used within the archival context. SERVPERF model is a performance-based measurement of service quality associated with the satisfaction of the user and

their opinion after service delivery (Kim, Kwon, Yu and Choi 2013:394). The developed theoretical framework by Sibanda was specifically designed to measure service quality in archival organizations and not in libraries.

To determine the strengths and weaknesses of Malaysian libraries, Harande's (2013) study evaluated two SLs' collections and users' opinions regarding the libraries' usage. Using a survey research method, the study highlighted that a SL supports its PO to accomplish its set objectives (Harande 2013:2). The study employed the LIBQUAL tool to evaluate users' perceptions regarding library collection and usage. It was concluded in the study that the two Malaysian SLs are current, relevant, and accessible although the quality of the materials is inadequate. The study further recommended that library evaluations should be done continuously to indicate the level of usage of the collections by its users and to determine areas of improvement when compared to other libraries. This recommendation also sparked the interest of the current study to evaluate the usage of SLs using the LIBQUAL tool and their need for redevelopment whilst benchmarking best practices from similar libraries that are more advanced and effective. Nonetheless, the use of the SERVQUAL tool could have also been employed to evaluate the quality of service from the library staff's point of view and to determine the strengths and weaknesses of library collections and services.

A study by Harland, Stewart, and Bruce (2018) was conducted to address the issues faced by academic libraries in aligning their vision, strategy, and objectives with those of their PO. The study developed a theory, which suggested that the senior library management must be strategic when responding to continuous changes within their PO and the consequent changes in their organization's strategic plans. The findings from the data derived from purposively selected participants revealed that the one way for the library to sustain its significance to its PO is to ensure that the library is aligned with the vision, strategy, and objectives of the organization. One of the participants revealed the increase of uncertainty about the future of libraries as the main challenge that leads to other issues such as the decrease in budget allocation or job security. The question one can raise in this study is the issue of applicability since the study was conducted in an academic environment, will the application of the same theory yield the same results if applied in SLs? Nonetheless, the alignment of library services to the vision of PGDs has also been examined in the current study.

Baada et al. (2019) assessed user perception of the quality of public library services in the Greater Accra Region of Ghana using the LibQUAL model. The authors emphasized that public libraries must evaluate their effectiveness to remain competitive, retain public support and funding, and prove the value they add to the community (Baada et al. 2019:3). The study applied a quantitative approach to survey 180 patrons of the public libraries under study. The LibQUAL instrument was used to measure library users' minimum, perceived, and desired levels of service quality across three dimensions namely: AS, IC, and LP. Using interpretative techniques to analyze data, the results showed that users were not satisfied with the quality of available library materials as well as the library facilities. The lack of internet connections and digital collections for users were some of the major concerns. The inclusion of a qualitative approach in the study would have aided in obtaining more information from the users' point of view on what the library should do to increase its effectiveness in the community. Furthermore, interviewing the library staff would have been useful to determine whether their services are effective and how they prove the value they add to their users.

In an attempt to measure service quality, customer satisfaction, and loyalty of public library users, a recent study conducted by Oh (2022) developed and confirmed a simplified library customer satisfaction index (LCSI) lite model for public libraries. The study used a questionnaire to collect data from four public libraries in South Korea. The model was confirmed to have a good acceptable fit on the three dimensions of service quality (library personnel; library resources and user services; facilities and equipment) which inspired loyalty through user satisfaction. The LCSI model is said to provide information that assists in explaining the functioning and accomplishment of libraries to their users and the top management validate their services. The model was produced specifically for a public library, which makes it limited to be applied to other types of libraries. Furthermore, additional dimensions need to be included in the model such as the dimension of 'location and library environment' given the diverse locations of public library users to determine their satisfaction in those aspects.

3.9.2 Methodological literature

Flick (2015:170) avers that conducting a methodological literature review not only assists the researcher in creating a comprehensive and concise justification of why and how the chosen method

was employed in the study; it also prepares them for more technical steps of formation in using the method and assist in avoiding the drawbacks of the method stated in the literature.

A workbook by Portugal (2000) presented four diverse methods that were developed from the outcome of interviews with participants from 125 organizations and institutions to evaluate the intangible valuation of library services and information resources. The four methodologies are return-on-investment and cost-benefit analysis; knowledge value-added; intranet team forums and intellectual capital valuation. These methods are reported to be accommodating to any type of library and can be appropriate in various settings, SLs included. Each method is expounded in six parts in terms of its scope, assumptions, advantage, what the method does and not do, applicability, and steps of application. All the methods discussed in this workbook are concerned with evaluating the intangible value of the library services to the organization and not the user, hence they do not apply to this study which seeks to evaluate the value of libraries to the user and the PO. Moreover, these methodologies were produced based on imaginary numbers anticipated by IPs to demonstrate conclusive proof of the value of libraries.

A conference paper presented at the Nigerian Library Association (2018) Conference held at Olusegun Obasanjo Presidential Library discussed a study that scrutinized the roles that SLs play as agents of positive change in public institutions in Osun. The paper highlighted the obvious issue of funding for government departmental libraries in that it is inadequate for the development of these libraries as a result, there is poor service delivery by SLs attached to public institutions (Chris-Israel, Madu and Yemisi 2018:6). Purposive sampling was used to select six SLs from Public institutions in the State. The results from the survey study revealed that from the sampled libraries, the lack of acknowledgment of the value of these libraries by management has resulted in underfunding. The methodology of this study was distorted, it was mentioned that a structured questionnaire, interview, and observation were utilized as instruments to collect data, however, only the quantitative data was reported. Besides this shortfall, this study supports the justification of the current investigation to analyze the value of SLs in provincial GDs within the South African context.

3.9.3 Empirical literature

This type of review helps the researcher to contextualize their research approach at the beginning of their study and in their findings when finalizing the study. Consequently, through this type of review, the researcher would be able to answer such questions as: Are any contradictory results and findings that could be taken as a starting point for the current study? (Flick 2015:17).

Matarazzo, Prusak and Gauthier's (1990) study looked at the opinions conveyed by senior management from the 164 organizations surveyed about their libraries and IPs. The report emphasized the importance of circulating information from the library, and the need to improve and provide effective services, particularly those services that respond to the needs of the users while meeting the general objectives of the organization. The study also emphasized the need for further inquiry into how the corporate world regards the value of information and IPs. Only the top management was interviewed to acquire impartial confirmation that organizations do value libraries. The study concluded that there is inadequate management agreement on how the library adds value to the organization's performance and how this value should be measured. Remarkably, a considerable percentage of respondents declared that they had no methods or standards for measuring the value of the library. This finding prompted further investigations on the methods or standard of measuring the value of SLs (RQ3) since the lack of formal evaluation could make it difficult for this type of library to justify its continued existence within the PO.

Matarazzo and Prusak (1995) reported the outcomes of a survey conducted on senior management regarding the value of corporate libraries. The study aimed to figure out how United States (US) corporate libraries are valued by senior management of their PO. Thus, directors or vice presidents from various organizations whom the library managers reported to formed part of the survey study. The report indicated the lack of the best standard or method of measurement to gauge corporate library value. Thus, to assess library value 36% of the respondents indicated that they relied on annual surveys and informal feedback from users to rate library services and resources, and their suggestions on how the library can be improved. When it comes to library services' contribution to the strategic formulation of strategy, only three-quarters of the respondents indicated that there is some influence from information provided by the library valuable to the process, while 14% saw no connection between the library services and corporate strategy. This study provided a base for the current

research in terms of the methods or standards to be selected to measure SL value in that they must be linked to the strategic objectives of the PO (RQ2 and RQ3), hence all the methods used in this study not only evaluate value based on the users' opinion but also of the top management.

During the 73rd IFLA General Conference, Nicholas (2007) presented how SLs can prove their contribution to the PO by developing proactive strategies. It was further indicated that there is a need to investigate issues relating to the value of SLs, performance measurement, and evaluation in Jamaica. A group of Librarians embarked on pilot projects to save the SLs in Jamaica. The projects employed benchmarking as a tool to measure the Library services based on the TQM. Nicholas (2007) considered the evaluation of SL services by undertaking Henczel's 2006 evaluation strategy to measure SLs' value. The article emphasizes the issue of strategically aligning library services to organizational goals. The article concluded that libraries could help achieve goals through the benchmarking tool. From this study, a gap existed within the South African context especially when it comes to the alignment of SLs' services and resources (RQ2 and RQ5), and how these libraries could benchmark each other's services to improve value in their respective libraries.

A study conducted by Bhim (2010) used the LIBQUAL survey instrument to investigate the quality of service provided at the Bessie Head Public Library based on the user's perceptions to ascertain their level of satisfaction. The study aimed to pinpoint differences in the service provided and users' opinions on the quality of collections, library facilities, and staff services. Using three dimensions of service quality (access to information, staff services, and library facilities), the LIBQUAL instrument comprised open-ended and closed questions to solicit data from 200 adult users targeted for the study. The findings revealed a gap in the quality of service in terms of users' expectations and perceptions (RQ4). This study indicated that the level of satisfaction might vary according to the categories of users and the magnitude of the gap differs according to individual services. The inclusion of library staff in this study as part of the qualitative participants would have assisted in getting their perceptions on the quality of service they serve. The researcher would have also discovered the factors that lead to the satisfaction or the dissatisfaction of users since judging quality based on users' perceptions alone may not be enough because the perception of quality differs as discussed in Chapter 2 (refer to Section 2.6.1).

The Australian Library and Information Association (2012) investigated the value of health libraries and information services in Australia. Library users and IPs were surveyed through an online survey. The findings of the study showed that there is a considerable contribution made by library services to POs, their value was seen through the quality of service they deliver, the technology equipment available for users, the library as a place, the resources provided, and most importantly, the survey confirmed the value of retaining qualified IPs. However, there was no specific method mentioned to have been employed to evaluate this value. The study highlighted challenges such as the need for online library services, lack of funding, IPs insecure about their role or future in the organization, and ignorance about library value by management. The issues raised in this study by the users and IPs are similar to the challenges faced by libraries under study (RQ6), which prompted this investigation and will be addressed in this study.

In Ghana, Nyantakyi-Baah (2016) investigated the perception of users on the quality of service and value of the Ghana Institute of Journalism and Ashesi University College libraries. This was a comparative case study aimed at soliciting information from students, library, and faculty employees. The findings revealed that even though both libraries were considered to have satisfactory service from library staff, only students frequented the libraries more than faculty staff. The study also revealed that IPs from these libraries lacked sufficient skills and competencies to collect data, translate it into a language understandable to management, and also how to communicate such information to demonstrate their value (RQ3 and RQ6). This might be because both libraries have no particular strategies for measuring their value. Once again, the question of skills and competencies required for IPs surfaces and what strategies of measuring value are suitable for a certain type of library, the current study addressed these issues.

Anunobi and Nwankwo (2020) empirically determined the “Awareness and extent of use of library information resources by university undergraduates in Anambra State”. This research was conducted to establish the extent to which an academic library assists undergraduates with their academic goals. Their research adopted a survey design that sought information from undergraduate students in universities. Generally, the objectives of this research were to determine the level of awareness of university library information resources, the extent to which these resources are utilized, and the obstacles to undergraduates’ awareness and use of library information resources. Mean ratings were used to analyze data obtained from respondents. The findings from this research revealed that there

was moderate awareness of library and information resources by undergraduates. The level of utilization of these resources by students was also found to be low in these university libraries. Lastly, the respondents identified 12 out of the 16 items listed as impediments to their awareness and utilization of library and information resources in these libraries. The items listed included the lack of library orientation, lack of access to online library services, lack of current awareness services, and poor location of the library within the universities. It would have been beneficial for this study to include IPs working in these universities to seek their opinions on the strategies they use to increase users' awareness and utilization of library resources as well as the mitigation plans to overcome the impediments for effective utilization of these resources. Thus, the findings of this study prompted further investigations on the level of awareness of special libraries and how effective the services and resources provided are in helping to achieve organizational goals (RQ1).

Mamta and Kumar (2023) conducted a systematic review of library service quality studies based on a search of published articles from 2010 to 2021. The objective of the study was to determine the models of service quality, the dimensions, research populations and methods frequently used by IPs to measure service quality. The results of the study revealed that IPs commonly employ the SERVQUAL and LibQual models in such studies. IPs were reported to prefer only questionnaire-based survey methods to be distributed among a sample size of less than 100 respondents in academic libraries. The dimensions reported to be mostly used in these studies are the same dimensions adopted in this study to measure service quality (RQ4). The next section discusses the synthesis of the reviewed literature highlighting the major gaps identified.

3.10 Synthesis of the literature review

The literature review above indicates that there is indeed a quest to provide proof of the value of libraries, especially within the 4IR era, where information can be accessed anytime and anywhere without the need to visit a library building. The strengths of the reviewed literature stem from over two decades of research on the value of libraries. While the quantity of literature on measuring the value of libraries remains limited, it is gradually increasing. Furthermore, the advancement of technology during this period makes it mandatory for IPs to produce concrete evidence justifying their significance to their POs. Apart from providing evidence of their value to POs, IPs and libraries must increase their visibility (especially in corporate organizations), to thrive.

However, despite the increase of research worldwide, the literature's weaknesses were identified as follows: firstly, there is no single method or standard that can be identified as the "best" when it comes to measuring the value of SLs. Secondly, studies that have measured the value of SLs often disregard the need to indicate what IPs should do with the findings, and how these findings should be effectively communicated to management. Thirdly, the reviewed studies rarely used mixed methodologies which could produce results with broader generalizability. Most studies reviewed were conducted using either a quantitative or a qualitative approach, leading to an imbalance in the collected data and a need for further explanation of data obtained using either approach. Lastly, some of the models (LCSI, ARCHIVqual, SERVPERF) used to measure user satisfaction and determine library value, performance, or quality were designed for a specific type of library and did not apply to SLs or were not relevant to the purpose of the current study. Thus, the gaps identified were methodological, theoretical, and empirical, particularly in the lack of data that could be presented as evidence of the value of SLs to management.

Consequently, the reviewed literature for this study implies that no universal method exists that could be employed to measure the value of SLs. Therefore, the researcher had to develop measurement methods that best suited the objectives of this research. Furthermore, the researcher needed to identify the most suitable methodology that could be used to address the research questions. Therefore, this study sought to address these gaps by developing a conceptual framework based on the knowledge acquired from previous theoretical and empirical research discussed in the literature review, as well as drawing on the findings of this study.

3.11 Summary

This chapter started by describing the concept of a literature review in terms of its definition, the need for researchers at this level of study to have this chapter, and what the review of the related literature should entail. Various types of literature were discussed together with the responsibilities a researcher should accept when conducting a literature review. The purpose of the literature review in this study was to enlighten the reader about the background of the study and highlight developing matters in the field. The chapter was, therefore, organized thematically based on the study's research questions. A literature map was introduced to visually present a summary of the previous research conducted

related to the current study and, where appropriate, to illustrate how the study enhances, expands, or replicates other studies. The chapter discussed and reviewed various methods used by previous researchers to measure the value of libraries, the challenges they have encountered in using those methods, and how library value has been communicated to management.

The chapter also discussed and reviewed the strategic alignment of library services and resources offered in corporate libraries and the effect of quality on services and resources offered by SLs on the satisfaction of users. The review highlighted that amidst the questions of their relevancy in the digital era, SLs should maintain their main function of assisting POs to reach their goals by providing valuable information for decision-making. The chapter further discussed SLs' awareness and reviewed how effective library services are in helping the PO to attain its goals. The roles of IPs in organizations and the required competencies needed to assist an organization in reaching its objectives were also discussed.

This literature review reflects the dearth of literature on measuring the value of SLs, especially in GDs in South Africa. This study, therefore, bridged this gap. However, the insights from the literature available assisted the researcher with the overall methodology of the study, informed the current study in creating the conceptual framework, and significantly helped in the design of the data collection instruments. Furthermore, the review specified that demonstrating the value of SLs is a universal challenge faced by IPs due to technological advancements.

Chapter 4 follows and comprises a discussion of the research methodology and methods adopted.

CHAPTER 4: RESEARCH METHODOLOGY AND METHODS

4.1 Introduction

The term “research” literally indicates the repetition of a search for something and indirectly presumes that previous searches were not exhaustive, in the view that there is still a possibility for the expansion of new knowledge (Kabir 2016:2). Khatri (2020:1435) refers to research as a process through which researchers undertake to find answers to resolve identified research questions. Likewise, the research questions steer the selection of methodology and methods by the researcher (Berryman 2019:272). Pulla and Carter (2018:9) opine that researchers need to select a research method or methods that will be appropriate for their study and will generate the required results. Therefore, this chapter provides a detailed description of the journey undertaken to accomplish the research project to resolve the research problem identified by this study (Zulu 2018:340). It is in the chapter on research methodology and methods that researchers critically assess the general validity and reliability of their study to inform the reader how data were collected or produced and how the data were analyzed to reach a logical conclusion.

For research to be scientifically reliable, it should be justified by the methods applied in carrying out that investigation (Erima 2022:150). According to Kabir (2016:2), research is a scientific methodology for addressing a research question to resolve an identified research problem or generate new knowledge. This process involves the systematic and organized collection, configuration, and analysis of information, with the main objective of making the investigation beneficial for decision-making. On the other hand, research methods involve the techniques used by researchers to collect data, its analysis, and the interpretation proposed for the particular study (Creswell and Creswell 2018:383). Additionally, O’Leary (2014:4) mentions that methodologies offer both the strategies and foundation for the administration of the study.

Creswell and Plano Clark (2018:171) assert that a research methodology is an overall approach that influences how research is conducted. Neuman (2014:2) denotes that research methods refer to the collection of particular techniques used by researchers in a study to select cases, evaluate and observe social life, collect and improve data, examine data, and report on findings. Research methods and research methodology are connected as they represent the guiding approach laid down by researchers

at the beginning of the research process (Erima 2022:150). Accordingly, this chapter describes the methods used in carrying out the current study to resolve the research problem. The chapter also outlined how the study's population was acquired, discussed the methods employed for the collection of data, and how the data collected were analyzed.

The central purpose of this study was to measure the value of special libraries in provincial government departments and communicate this value to management to advocate their need for redevelopment. Therefore, the researcher cautiously contemplated available methodologies and methods and decided on the most appropriate ones that would help solve the research problem that was being investigated.

The researcher starts by enlightening readers about the research philosophy that informed the study.

4.2 Research paradigm

A philosophy, paradigm, or mental model introduces a certain way in which the researcher interprets and understands the world, through collecting ideas about the nature of truth that offers the foundation for a study (Plano Clark and Ivankova 2016:57; Sefotho 2021:5). Saunders, Lewis, and Thornhill (2019:130) referred to research philosophy as an organism of ideologies and traditions regarding the development of information during the process of research. Creamer (2018:41) opines that researchers must describe their philosophical position to be clear about which viewpoint they are taking during the process of their research.

Babbie (2017:34) mentions that paradigms in social science symbolize a diversity of views, each presenting potencies deficient in others. Therefore, no paradigm is accurate; researchers need to identify paradigms that might be useful to their study as each can unlock different perceptions and propose different varieties of philosophies. The paradigmatic positions are also referred to as the major components of the research paradigm, namely, the nature of reality (ontology), the correlation between the knower and known (epistemology), ethical issues during the research process (axiology), and the beliefs about methodologies (Nieuwenhuis 2016:52; Berryman 2019:272; Khatri 2020:1436).

The next section briefly discusses some of the main paradigms in research and the paradigm that was adopted for the current study.

4.2.1 Interpretivism

The interpretivism (or constructivism) paradigm believes that there are multiple realities since people can construct their reality. It is the traditional foundation for qualitative research that depicts multiple truths through an instinctive method to understand the significance of and contexts for people's experiences (Plano Clark and Ivankova 2016:198). Ryan's (2018:9) concept of interpretivism believes that "truth and knowledge are subjective" since there are differences in our values and life experiences. According to Du Plooy-Cilliers (2014:27) and Berryman (2019:273), the interpretivism paradigm was established due to the critiques, weaknesses, and restrictions of positivism (discussed below) when applied to social sciences research. This paradigm is of the view that since individuals are different from objects, they cannot be studied in the same manner as "they always change according to the time and environment they find themselves in and are constantly influenced by them" (Du Plooy-Cilliers 2014:27). In most cases interpretivism is a research paradigm that is connected with qualitative research (Pulla and Carter 2018:9). The next section discusses the positivism paradigm.

4.2.2 Positivism

Positivism is generally described as the approach of the natural sciences; it is a paradigm position that promotes the use of natural sciences techniques to investigate social truth (Du Plooy-Cilliers 2014:24; Byrman 2016:24). Rehman and Alharthi (2016:53) assert that positivism is a paradigm that endeavors to comprehend the social world in the same way the natural world is understood and that according to the paradigm, reality exists independently of human perception. Usually connected with experiments and quantitative research, positivism is considered a form of empiricism and was initially categorized by Auguste Comte (1798-1857) in the 19th century (Ryan 2018:4). Positivists believe that the truth exists independently of the participant and acknowledge the possibility that the researcher's philosophies and principles may influence what is being studied (Rehman and Alharthi 2016:53). Ontologically, positivists believe that truth consists of facts that can be verified (or challenged). They hold that reality is not separate from individuals and that observations and

measures convey to us what reality is (Ryan 2018:5). The post-positivism paradigm is discussed below.

4.2.3 Post-positivism

Panhwar, Ansari, and Shah (2017:253) assert that the aggravations with the firmly empirical nature of the positivist paradigm and its shortcomings steered the development of post-positivism in the mid to late 20th century. Çüm and Demir (2020:122) concur that post-positivist theories were presented as criticism of positivism after the positivist paradigm had been proposed. Thus, post-positivism claims that researchers can make rational implications about a phenomenon by merging empirical interpretations with sensible reasoning (Bhattacharjee 2012:18). According to Kumatongo and Muzata (2021:18), “The term post-positivism represents the thinking after positivism, challenging the traditional notion of the absolute truth of knowledge, the understanding that absolute positive knowledge may not apply when studying human behavior and actions.” This philosophy considers that there is a distinct reality and that knowledge about this reality is achieved by being a distant and autonomous observer. Thus, the influence of a researcher’s values should be mainly controlled and detached from the study (Plano Clark, and Ivankova 2016:198). The next section discusses the pragmatism paradigm, which was the paradigm adopted in this study.

4.2.4 Pragmatism

This study was underpinned by the pragmatic paradigm. According to Farjoun, Ansell, and Boin (2015:1788), the phrase pragmatism originates from the Greek word *pragma*, which implies action, from which phrases such as “practice” and “practical” originate. Pragmatism positions itself on resolving realistic problems in the real world (Kaushik and Walsh 2019:4). As opposed to other paradigms, this paradigm was considered suitable for this study as it permits the researcher to implement different methods for data collection and analysis according to the research problem. Creswell and Creswell (2018:380), contend that pragmatism is “a worldview or philosophy that arises out of actions, situations, and consequences rather than antecedent conditions (as in post-positivism).”

The justification for leaning on this paradigm in this study was that pragmatism permits researchers to explore various procedures, diverse worldviews, several hypotheses, and assorted methods for gathering and analyzing data (Creswell and Creswell 2018:52). Maarouf (2019:5) declares that various scholars have underlined that pragmatism bestows logical validation for the mixed-methods research (MMR) approach. For instance, Mitchell (2018:115) revealed that the pragmatism paradigm is deemed “the logical partner” of MMR as its primary beliefs offer the core for combining research approaches. Pragmatism is thus frequently linked to and provides the basis for the MMR method (Parvaiz, Mufti, and Wahab 2016:76; Morgan 2014:1045). It embraces different methods to form part of the overall research strategy (Kaushik and Walsh 2019:11). The researcher opted for this paradigm as it allowed for attentiveness to the participants’ opinions, as well as their understanding and experience of library services. Methodologically, pragmatism allowed the researcher to be flexible during the gathering of data and its analysis since the weakness of one method was compensated for by the corresponding strengths of the other methods.

The next section discusses the research methodology and approaches adopted in the study.

4.3 Research methodology and approaches adopted

According to Kabir (2016:21) and Ngulube (2020:2), research approaches refer to all those techniques that are employed by researchers during the progression of their study to address their research problem and contribute to knowledge. Conversely, research methodology reflects the rationale behind the methods utilized in the context of the study and justifies the utilization of a specific method or technique instead of others, so that the findings of the study are capable of being assessed either by researchers alone or by other scholars (Kabir 2016:22). In other words, research methodology is responsible for connecting theory and evidence, taking into account the use of approved values to maintain objectivity (Tan 2018:4). Ngulube (2020:2) asserts that the researcher’s level of experience in the field of study might be partially measured by how they utilize methodologies to achieve effective and reliable research.

It is thus important for researchers to describe approaches and techniques used in a particular study so that other scholars can test the applied procedures (Ngulube 2015:125) to determine if the study could be replicated in another contextual setting (Erima 2022:158). Various scholars (Creswell and

Creswell 2018:60-61; Kothari and Garg 2019:4; Ngulube and Ukwoma 2019:2) have highlighted the three major research approaches, which are quantitative, qualitative and MMR approaches; these approaches are associated with positivism, constructivism, and pragmatic paradigms respectively.

The quantitative research approach is discussed in the next section.

4.3.1 Quantitative research approach

According to Ngulube and Ukwoma (2019:2), this approach “is concerned with quantification and generalization of the knowledge about a social phenomenon, using numbers and formulae. The objective is to confirm or disconfirm theories and hypotheses, using statistical tests.” In a similar vein, Plano Clark and Ivankova (2016:4) declare that a quantitative research approach investigates the connections among variables by gathering and examining numeric data articulated in figures or counts. Thus, information derived from a quantitative study is usually expressed as statistics or in other quantitative terms (Grønmo 2020:21). Leavy (2017:87) proclaims that the quantitative research approach appreciates breadth, numerical reports, and generalizability as it strives to attain objectivity, control, and exact dimensions. Methodologically, the quantitative research approach depends on deductive strategies aimed at contesting or constructing supporting data in favor of particular hypotheses and theoretical statements (Lampeck and Kívés 2015:22).

Lampeck and Kívés (2015:23) state that since the findings of quantitative studies are mostly presented in statistical data, they frequently record only the data arising on the surface and do not permit a deeper consideration of the problem being investigated, other developments, and human behavior towards research; this is where qualitative methods are adopted to overcome such flaws. Bryman and Bell (2019:16) highlight some of the characteristics of a quantitative research approach stating that quantitative studies:

- i. Commonly represents an understanding of society as an outer, impartial reality;
- ii. Typically involve a deductive method to the correlation between research and philosophy in which theory testing is the main objective; and
- iii. Combine the traditions and standards of the natural science paradigm, particularly those of positivism.

The next section discusses the qualitative research approach.

4.3.2 Qualitative research approach

Leavy (2017:124) and Kothari and Garg (2019:4) aver that qualitative research approaches appreciate the depth of meaning and participants' personal experiences and their meaning-making procedures. Doing so enables qualitative researchers to construct a dynamic understanding of the research problem by unpacking the values participants assign to their behaviors, situations, and surroundings. Methodologically, qualitative research approaches depend on inductive designs required for producing significantly rich, descriptive data which lead the researcher to a deeper understanding of a research problem (Ngulube and Ukwoma 2019:2). Unlike the quantitative research approach which focuses on numerical data, Lampek and Kívés (2015:23) point out that a qualitative research approach is centered on a qualitative understanding of a phenomenon, gathering and analyzing participants' views, attitudes and values. Although they could be applied to any type of research, qualitative research approaches are normally employed in exploratory or descriptive research (Leavy 2017:124). As Lune and Berg (2017:20) assert, "particular features of representation, significance, or perception typically need the attention of the person's insights and personal apprehensions" and this can only be achieved through qualitative research approaches.

Bryman and Bell (2019:16) summarized the characteristics of a qualitative research approach:

- i. It takes a primarily inductive approach to the correlation between theory and research, in which the creation of theories and understandings is the main objective;
- ii. It rejects the use of the natural science and positivist models in social research and substitutes them with methods that strive to determine how people understand their social world; and
- iii. It represents an understanding of social reality as a frequently changing and developing property of people's creations.

Bryman and Bell (2019:16) state that the major difference between quantitative and qualitative research approaches is that quantitative scholars depend more on prescribed and numerical measurement and analysis methods than qualitative scholars do. However, every research approach

has its limitations as well as advantages. The advantages and disadvantages of the two research approaches are listed in Figure 4.1.

Qualitative Research	
Advantages	Disadvantages
<ul style="list-style-type: none"> Provides detailed perspectives of a few people Captures the voices of participants Allows participants' experiences to be understood in context Is based on the views of participants, not of the researcher Appeals to people's enjoyment of stories 	<ul style="list-style-type: none"> Has limited generalizability Provides only soft data (not hard data, such as numbers) Studies few people Is highly subjective Minimizes use of researcher's expertise due to reliance on participants
Quantitative Research	
Advantages	Disadvantages
<ul style="list-style-type: none"> Draws conclusions for large numbers of people Analyzes data efficiently Investigates relationships within data Examines probable causes and effects Controls bias Appeals to people's preference for numbers 	<ul style="list-style-type: none"> Is impersonal, dry Does not record the words of participants Provides limited understanding of the context of participants Is largely researcher driven

Figure 4.1: Advantages and disadvantages of qualitative and quantitative approaches
(Creswell 2015:22)

The next section discusses the MMR approach, which was adopted in the current study.

4.3.3 Mixed-methods research approach

According to Creswell and Creswell (2018:44), MMR is a research approach that involves the collection of both quantitative and qualitative data, incorporating the two types of data, and employing different strategies that could contain various philosophical beliefs and theoretical

backgrounds. Thus, the main belief with this type of approach is that the incorporation of qualitative and quantitative data produces an understanding deeper than the data that could be offered by either approach on their own. Fouché and Strydom (2021:420) proclaim that since the emergence of the MMR approach, there have been numerous descriptions of the term throughout the years with various elements underlined in different sources, and the utilization of mixed techniques is occasionally confused with multi-method research. Therefore, Ngulube (2022:22) advised the researcher about the importance of distinguishing MMR from multi-method research. According to Leavy (2017:164), multi-method research includes the utilization of two or more approaches in one research tradition in a particular project, for example, merging two quantitative techniques or two qualitative techniques. On the other hand, MMR involves the mixing of qualitative and quantitative procedures in a study (Ngulube 2020:7). Thus, the mutual characteristic of MMR and multi-method research is that they equally steer researchers to combine different approaches in a single study.

The introduction and development of MMR can be traced back to the late 1980s when researchers were coming across some research problems that required clarifications beyond merely the statistics from a quantitative understanding or words from a qualitative one (Creswell and Plano Clark 2018:70). Thus, to get the most comprehensive evaluation of multifaceted research problems, the mixture of both types of approaches was considered to overcome such challenges. It was during the early 1990s that researchers from different fields such as education, health sciences, management, and sociology started employing MMR in their methodology (Creswell and Creswell 2018:338). Onwuegbuzie, Mallette, and Mallette (2022:10) assert that the development of the MMR approach has experienced several methodological phases since the early 20th century such as the official occurrence of the social and behavioral sciences from 1900 to 1929; the formative period that started in the 1950s and lasted up to the 1980s; the paradigm wars that began around 1980 and went on to 1989; and the occurrence of MMR integration around 2015 to the present day, to mention a few.

Given this background, it can be deduced that MMR is an approach that aims to resolve research questions by integrating two different approaches (qualitative and quantitative) (Creswell and Creswell 2018:249). Thus, this approach positions itself in the research problem in such a way that methods and philosophies are utilized instrumentally, depending on their appropriateness to the study (Leavy 2017:164). Creswell (2015:3) and Rubin and Babbie (2017:70-71) caution that MMR is not merely the combination of both quantitative and qualitative data; it also assimilates them in a manner

that strengthens the inquiry. Creswell and Plano Clark (2018:44) noted that, in general, research problems that are appropriate for MMR are those in which one data source may be deficient, the findings are usually required to be clarified, exploratory results need to be generalized, the main experimental design needs to be improved, or multiple cases need to be compared or differentiated.

The justification for using MMR in a study may differ depending on the research questions to be answered. According to Rubin and Babbie (2017:76), there are three broad reasons why researchers choose to use MMR in their studies, and these are:

- i. To use one set of techniques to clarify cases or offer statistics for the findings of the other set;
- ii. To use one set to introduce concepts or methods that subsequently can be followed by the other set; and
- iii. To see if the two sets of results substantiate each other.

The latter justification applies to this study since the researcher wanted to corroborate the findings from library users, IPs, and management in the form of heads of departments (HODs) regarding the value of SL services in PGDs). Thus, the main reason for employing the MMR approach in this study was that the integration of statistical trends (quantitative data) with stories and individual experiences (qualitative data) provided a combined strength for an enhanced understanding of the current problem being investigated than either type of data on their own (Fouché and Strydom 2021:420). Consequently, the quantitative techniques were dominant and supported by qualitative methods. Figure 4.2 illustrates how the MMR approach was classified in terms of priority and sequence in this study.

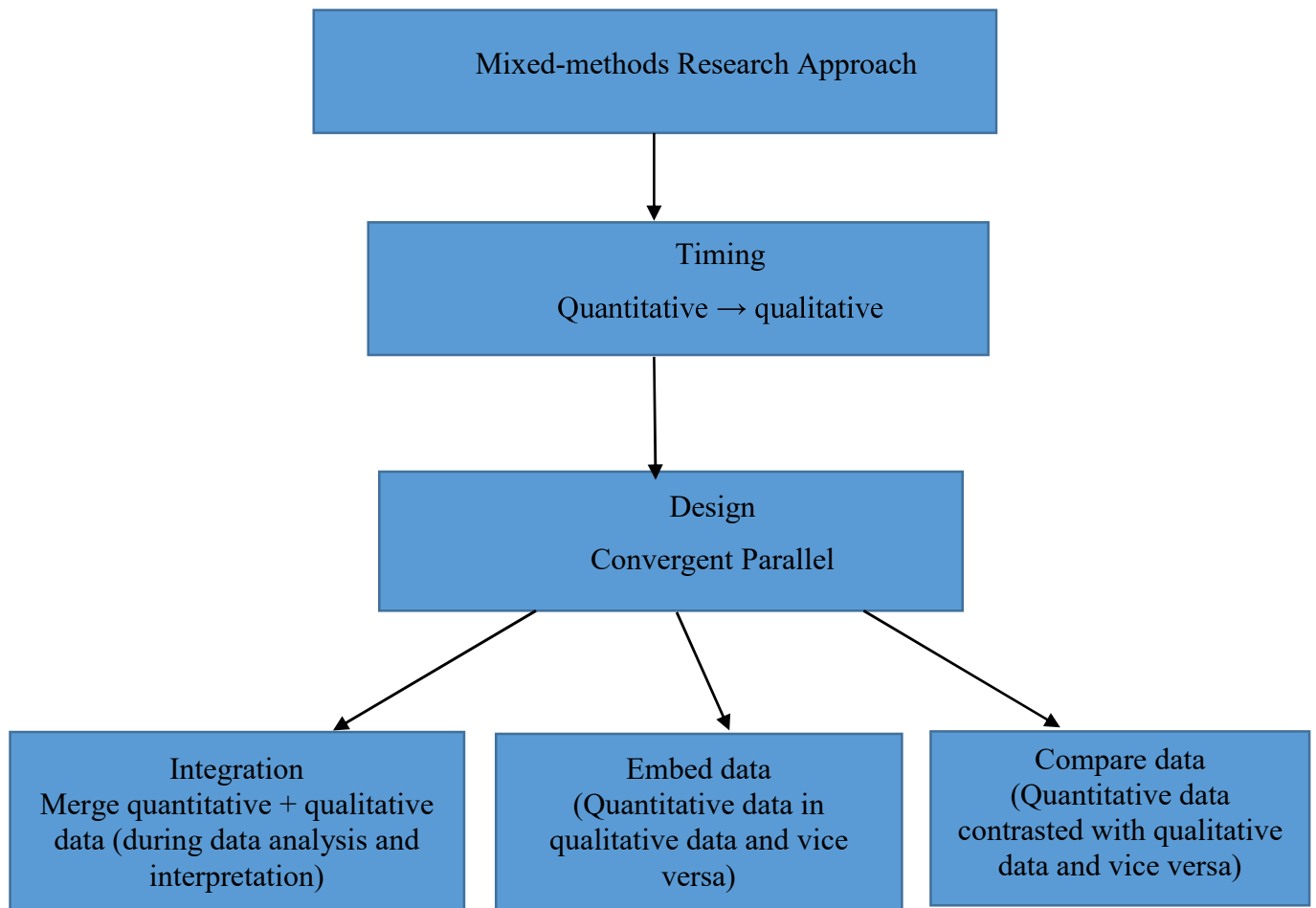


Figure 4.2: Classification of MMR approach
(Synthesized by the researcher)

Bryman and Bell (2019:341) and Creswell and Plano Clark (2018:55) cautioned researchers of the shortcomings of applying MMR in a study as follows:

- i. MMR must be proficiently considered and conducted, or else the results will be questionable, regardless of the various methods applied;
- ii. The use of MMR in research can be expected to take significantly extra time and financial resources than investigating with just one research approach, and disseminating resources too thinly could weaken the effectiveness of a study;

- iii. Not all researchers have the abilities and training essential to conduct both quantitative and qualitative research, which may inhibit them from integrating the various forms of research; For example, a conference paper (Chris-Israel, Madu, and Yemisi 2018) presented at the Nigerian Library Association Conference scrutinized the roles that SLs play as agents of positive change in public institutions in Osun State. Their methodology was distorted as it was mentioned that a structured questionnaire, interview, and observation were utilized as instruments to collect data: however, only the quantitative data were reported.
and
- iv. Researchers should be aware that despite producing great strides in terms of acceptance and appropriateness in practice and academic developments, MMR is still undergoing a paradigmatic dilemma (Pasipamire and Masuku 2022:98)

The researcher took note of these shortcomings regarding the application of the MMR approach in the current study; however, she was confident in doing so having worked with this type of approach in her Master's research. Furthermore, the researcher also attended various training workshops to equip herself with skills in conducting, gathering, and analyzing data when the MMR approach is applied. Some brief insight on the three basic mixed-methods designs informing MMR with a focus on the convergent parallel design will now be discussed as it was this design that was applicable in this study.

Creswell (2015:23) proposes three main designs of the MMR approach, namely, the convergent parallel design, the exploratory sequential design, and the explanatory sequential design. In the exploratory sequential design, the researcher starts by gathering qualitative data to provide a foundation for formulating the quantitative phase (Rubin and Babbie 2017:75). In other words, this design commences with and usually prioritizes the gathering and exploration of qualitative data in the initial stage. Thereafter, researchers perform an advanced stage by creating a quantitative feature constructed on the qualitative findings. In the explanatory sequential design, the researcher gathers quantitative data first, followed by the gathering of qualitative data to acquire an enhanced understanding of the data sourced through the quantitative method (Rubin and Babbie 2017:76). Thus, qualitative data is gathered and analyzed to clarify or expand on the findings from the quantitative method. As noted, the convergent parallel design was applied in this study and it is discussed below.

4.3.3.1 Convergent parallel design

Creswell and Creswell (2018:15) state that the convergent parallel design is a type of MMR design where researchers combine or converge quantitative and qualitative data to present a thorough analysis of the problem being investigated. The researcher usually collects both types of data approximately at the same time and integrates the evidence during the interpretation of the results, and contradicted or congruent outcomes are described or probed further in this design. According to Creswell and Plano Clark (2018:129), the strength of the convergent parallel design is that researchers are competent in giving a voice to participants as well as conveying statistical trends. Thus, the convergent parallel design was used in this study to allow the researcher to merge quantitative and qualitative data for thorough analysis.

In the study the gathering of quantitative and qualitative data happened independently but parallel to each other; they were then converged and integrated in the interpretation phase and doing so provided complementary data to answer the research questions (Cohen, Manion, and Morrison 2018:39; Hall 2020:85). The main objective here was to evaluate while comparing the two data sets to attain a better and more comprehensive interpretation of the problem, to corroborate one set of findings with the other, and to establish if participants' responses were comparable (Creswell and Plano Clark 2018:122).

The research design adopted is discussed next.

4.4 Research design

Research design “refers to the overall strategy that you choose to integrate the different components of the study coherently and logically” (Kabir 2016:112). In other words, it is the overall organization (structure) of exactly how a researcher conducted his or her study. Kumar (2019:154) asserts that a research design is a strategy that researchers elect to follow throughout their project to obtain answers to their research problem as accurately, economically, objectively, and validly as possible. Thus, a research design is a general approach that will ensure that the research problem is resolved effectively as it comprises the blueprint for the gathering, measuring, and analysis of data (Kabir 2016:117). The

choices made at this point of the research process do much to regulate the quality of the conclusions drawn from the findings of the study (Bordens and Abbott 2018:103).

Kumar (2019:155) indicates that research design has two main functions: firstly, it relates to the recognition or improvement of techniques and logistical preparations essential to undertake research; secondly, it underlines the significance of quality in these techniques to warrant their accuracy, objectivity, and validity. On this note, Kabir (2016:113) states that a good research design reduces bias and increases the reliability of the accumulated and evaluated data. According to De Vaus (2006:49), the most common basic types of research designs are cross-sectional design, experimental design, longitudinal design, and case study design.

The latter design was applied in the current study and is discussed next.

4.4.1 Case study design

According to Bryman (2016:60) and Tan (2018:33), the term “case” is commonly used in association with a place, an organization, a person, or a situation. Therefore, a case study is usually an interpretive study that seeks an in-depth or intensive investigation of a particular case to resolve the identified research problem (Tan 2018:33). It is an exhaustive study of a certain research problem instead of a generalized statistical investigation or comprehensive comparative inquiry and is generally employed to reduce a very broad area of research into several simple researchable cases (De Vaus 2006:49). Accordingly, researchers can use multiple cases in situations where they want to compare and contrast different cases (Tan 2018:33). For this reason, this study employed a multiple-case study to compare the perceptions of the value of SLs based on different cases. A multiple-case study involves investigating various case studies purposively chosen according to their similar characteristics to enable the analysis of data in each situation so that the researcher can understand the similarities and differences between the cases (Gustafsson 2017:11).

The current study employed a multiple embedded case study design as the researcher needed to get a rich understanding of how SL users, IPs, and management of the departments perceive information and services provided by the library to ascertain their value. With a multiple-case study, the researcher can compare, construct a theory, or offer generalizations in the study (Leedy and Ormrod

2010:137). This was deemed important for the current study as the comparison of different cases' perceptions of the value of library services was required to measure their value. One of the benefits of employing a multiple-case study that proved useful was that it provided the various perceptions of the individuals in the selected cases (Brink 2018:224). Therefore, this design was suitable for the study as the researcher intended to obtain a general perspective on the value of SLs from the targeted population.

According to Bhattacharjee (2012:98), multiple-case studies allow the researcher to use the cases involved to confirm or disconfirm inferences from one another thereby improving generalizability by linking collected data. Thus, the current study involved cases as follows: **Case one** involved the users in each library under study to determine their level of perceptions, desired expectations, and satisfaction with library resources and services offered. **Case two** was concerned with finding out from the IPs and HODs of each department how the library contributes to the departmental goals and objectives. **Case three** involved the benchmarking of SLs' best practices to improve library services in these departments. Vohra (2014:55) avers that when cases corroborate with each other, the findings are strengthened, and external validation is presented.

The survey design, which was also employed in the current study, is discussed next.

4.4.2 Survey design

The survey design was also employed in this study; it is one of the most prominent methods of collecting data in the social sciences field (Panke 2018:222). The main reason for adopting the survey design was to obtain data from a large sample of targeted respondents relatively quickly given the time constraints associated with the study (Ali, Azman, Mallick, Sultana, and Hatta 2022:167). According to Kabir (2016:118), a descriptive or survey research design attempts to observe, define, and describe current situations by using numerous subjects and questionnaires to completely describe a phenomenon. Survey designs can be employed in a wide range of circumstances including predicting behavior and determining and evaluating existing perspectives on different research problems (Frippiat and Marquis 2010:304; Bordens and Abbott 2018:296). According to Ponto (2015:168), survey-designed research can employ quantitative research approaches, qualitative research strategies (by asking respondents open-ended questions), or both approaches (MMR).

Lately, survey design has advanced into a rigorous method of research, with technically established approaches specifying a representative sample and how the survey should be distributed (Ponto 2015:169).

Originally, the distribution of surveys mainly depended on paper-based techniques such as personally handing out questionnaires, conducting house visits, having individual discussions, interviews, and so on (Nayak and Narayan 2019:31). However, with technology advancement surveys are now commonly distributed through online methods. Thus, online techniques of data collection were adopted in this study and will be discussed further in Section 4.7.1. An example of the application of online methods was seen in a study conducted by the Australian Library and Information Association (2012) which investigated the value of health libraries and information services in Australia. Library users and IPs were surveyed through an online survey. The findings of the study showed that there is a considerable contribution made by library services to their POs; their value was seen through the quality of service they deliver, the technology equipment available for users, the library as a place, the resources provided, and, most importantly, the survey confirmed the value of retaining qualified IPs. The study highlighted challenges such as the need for online library services, the lack of funding, IPs' insecurity about their future in the organization, and ignorance about library value on the part of management.

The following two sections discuss the population of the study in terms of who they were and secondly, how they were selected, that is, the sampling procedure, and the sample arrived at.

4.5 Study population

According to Burns and Veeck (2020:44-45), a population comprises all individuals from which the investigator desires to attain inferences based on information provided by the sample data. The population of a study should be characterized by the objectives of the research (Burns and Veeck (2020:45). O'Leary (2014:354) defines a population as the overall association of a distinct group of people, entities, or events. Bryman (2016:694) refers to a population as the universe of elements or units from which a sample is chosen. Finally, Rubin and Babbie (2017:609) refer to a population as "the group or collection that a researcher is interested in generalizing about. More formally, it is the theoretically specified aggregation of study elements."

Based on the objectives of this study, the targeted population consisted of three groups, namely, the general employees in the selected departments under study (that is, the users or potential users of the SLs), the IPs in the SLs, and the HODs. The common characteristic of the population under study was that they were all employed by KwaZulu-Natal (KZN) PGDs in Pietermaritzburg, and thus considered as users of the SL. The PGDs purposively selected for the study were included on the basis that their SLs were operational. On this basis, of the 16 existing PGDs, seven departments were identified as having functioning libraries, and of these, six agreed to participate in the study (refer to Section 1.2). Details of the population were obtained from the human resource offices of each department between the 3rd and 25th November 2020 and the total population at the time of the study was 7,866. Table 4.1 displays the relative population from the three groups in each department under study and this is followed by a discussion of the sampling procedures adopted.

Table 4.1: Distribution of the targeted population from the six participating departments

	Name of department	Number of employees (including librarians and HODs)	Number of librarians	Number of HoDs
A.	Agriculture and Rural Development	700	1	1
B.	Cooperative Governance and Traditional Affairs	277	1	1
C.	Transport	5,000	1	1
D.	Health	500	1	1
E.	Public Works	400	1	1
F.	Economic Development, Tourism, and Environmental Affairs	939	1	1
	Total	7,866		

4.6 Sampling procedure and sample

A sample is a portion of the population the researcher studies to collect the required data to resolve the research problem (Stockemer 2019:58). A sample is required since researchers may not have enough time and resources when conducting a study to include the entire population or there is no need to look at every single case in a large population (Neuman 2017:70). Consequently, the process whereby several individual cases are selected from a larger population to participate in the research

study is known as sampling (Leavy 2017:268). Probability and non-probability sampling are the two main sampling procedures for research. With probability sampling, the researcher knows in advance which units of the population have the likelihood of being included in the sample, while with non-probability sampling, there is no guarantee for the units of the population being selected for the sample (Cohen, Manion and Morrison 2018:214).

Since the current study adopted the MMR approach, its sampling techniques differed from other approaches and researchers should highlight those adopted techniques applied during the sampling process for methodological transparency. According to Ngulube and Ukwoma (2021:1), methodological transparency refers to summarizing the problems that the researcher came across when employing the research approach selected and the choices made to effectively complete the research using that approach (this is further discussed in Section 4.11). For setting the sampling frame, this study adopted one technique from probability sampling and another from non-probability sampling, namely, simple random sampling and purposive sampling, respectively.

Simple random sampling is a quantitative technique for choosing members (also referred to as units) that will represent the population (Creswell and Creswell 2018:382). According to Cohen, Manion, and Morrison (2018:215), simple random sampling allows each unit of the population under study to have an equal probability of being chosen and the likelihood of that unit being selected is unchanged by other units being selected. A sample can be biased if some members of the targeted population are systematically over- or under-represented; however, with random sampling bias is eliminated based on the probability that every member of the population will be selected (Vogt, Gardner, and Haeffele 2012:122). This type of sampling technique was appropriate for this study as it applies to larger homogeneous groups such as government organizations, from which a sampling frame was collected using email addresses (Fricker 2017:168). Ngulube (2009:77) cautions that using a simple random sampling technique on a larger population requires a lot of time unless a computerized system is used to automatically draw the required sample. Thus, the email addresses of employees in the six selected departments were harvested from various internal sources such as the IT and human resources sections.

The sampling approaches for MMR include parallel, identical, nested, or multilevel, which also denotes the correlation amongst the selected samples (Corrigan and Onwuegbuzie 2020:794).

Ngulube and Ukwoma (2021:4) state that researchers must underline what was sampled and the sampling relationships specified to attain methodological transparency. For this study, the multilevel relationship, which comprises the utilization of two or more groups of samples acquired from various levels of the research, was adopted. For example, one stage of the study (quantitative stage) involved the sampling of employees in the departments under study, whereas the sampling for the qualitative stage involved the IPs and the HODs. The cautious selection of the number of sampling units allowed the researcher to accomplish the “gold standard of power” at the quantitative level and “saturation” at the qualitative level (Corrigan and Onwuegbuzie 2020:795). The six departments included in the study were purposively selected on the basis that they all had operating SLs. Conversely, IPs were purposively chosen on the basis that as the heads of their libraries, they had insight and understanding of the value of their libraries to the parent organization (PO) and were able to share best practices to improve service delivery. The HODs were selected to form part of qualitative sample representation as they could provide relevant information regarding the existence of the SL in their department and how it is strategically aligned to the success of the department.

For the quantitative inquiry, the sample size was established using the formula introduced by Krejcie and Morgan (1970). The population of this study as indicated in Table 4.1 was 7,866 and according to Krejcie and Morgan (1970:607), if the population size is between 7,000 and 8,000, the sample should be 367. However, the sample size for this study was 369. When determining the sample size for quantitative inquiry, the researcher must consider the level of confidence needed to test the results, the degree of accuracy required to estimate the population parameters, and the estimated level of variation concerning the main variable in the study population (Kumar 2011:191-192). This is known as the analysis plan (Fowler 2014:39). The confidence level for the results of this study was set at 95%, the margin of error at 5%, and the estimated level of variation set at a 50% difference (at least) to the study population (Raosoft Incorporated 2004). Sampling errors largely depend on sample size, not on the extent of the population in a sample (Fowler 2014:39). Nonetheless, “a sample can be biased whether it is large or small” (Fricker 2017:176). The formula and calculations leading to the final population sample for the quantitative stage of the study were as follows:

Population from each department (N) x total sample size (S)

= Sample population (SP)

Total population (TP)

Department A $700 \times 368 = 32.7$ (33)

7 866

Department B $277 \times 368 = 12.9$ (13)

7 866

Department C $5\ 000 \times 368 = 233.9$ (234)

7 866

Department D $550 \times 368 = 25.7$ (26)

7866

Department E $400 \times 368 = 18.7$ (19)

7866

Department F $939 \times 368 = 43.9$ (44)

7866

Total sample size (33+13+234+26+19+44) = 369

An overview of the study sample is provided in Table 4.2.

Table 4.2: Study sample

Targeted Participants	Department of Agriculture and Rural Development (A)	Department of Cooperative Governance and Traditional Affairs (B)	Department of Transport (C)	Department of Health (D)	Department of Public Works (E)	Department of Economic Development, Tourism, and Environmental Affairs (F)
Sample Frame (Departmental employees)	700	277	5000	550	400	939
Librarians/Library managers	1	1	1	1	1	1
Heads of departments	1	1	1	1	1	1
Total sample size	33	13	234	26	19	44
Total sample for the quantitative population = 369						
Total sample for the qualitative population = 12						

When it comes to qualitative inquiry, there are no rules for the sample size frame as it depends on what the researcher wants to know (Patton 2015:470). In other words, there are no real vigorous and firm guidelines for sample sizes in qualitative research (Strydon 2021:380). Some considerations for choosing a sample size include the ease of accessing the participants and the researcher's judgment that the selected population has rich information about the issue under study (Kumar 2011:176). Thus, for the objective of the current research, the total sample for the qualitative inquiry was 12 (6 IPs and 6 HoDs).

The next section discusses the data collection methods used in the study.

4.7 Data collection methods

According to Okite-Amugoro (2017:111), data collection methods are the techniques and approaches employed by researchers in a study to gather factual data from the identified respondents and participants. Such methods of collecting data include but are not limited to observations, interviews, questionnaires, and document reviews (Tan 2018:81). Data collection is referred to as a process whereby a researcher gathers and measures information on variables of interest, in an established organized manner that supports the answering of the listed research questions, tests hypotheses, and assesses outcomes (Kabir 2016:202). The main objective of gathering data is to accumulate evidence that the researcher can use to present conclusions or answers to the particular research problem/s being investigated. Furthermore, data collected in research are also used to confirm or disconfirm the hypotheses proposed in that research (Mudassir 2022:103). This is where the primary and secondary data come together by assisting researchers to build a conclusive argument when answering their research questions. Primary data are those that are newly assembled, initially, and are unique in nature (Dawit 2020:2), whereas, secondary data already exist and can be found in documents and databases, and on the internet (O'Leary 2014:243).

Literature reveals that in the library and information services (LIS) field, the most frequently used data collection methods have been survey questionnaires and interviews (Togia and Malliari 2017:49), with a preference for paper-based methods compared to electronic-based methods (Tella 2015:588). The advent of computer and network technology initiated a diversity of survey methods such as the telephonic survey in the 1960s, computerized face-to-face surveys in the 1980s, online

surveys in the 1990s, and associated cellular phone surveys in the 2010s (Vehovar and Manfreda 2017:143). Electronic-based methods of data collection prevailed during the recent COVID-19 pandemic when researchers were forced to abide by the rules and regulations of the pandemic, for instance, social distancing.

The data collection instruments used in the study are discussed in the next section.

4.7.1 Data collection instruments

The researcher resorted to collecting data through internet-based research procedures (Hewson 2017), commonly known as internet-mediated research (IMR) (Hewson, Yule, Laurent, and Vogel 2003:2). IMR includes the collection of primary data to present novel evidence to answer specific research questions (Hewson et al. 2003:1). Wright (2005:2) indicated that the benefits of using IMR include having access to participants who are widely dispersed and enabling communication among people who may be hesitant to meet face-to-face (as was the case during the global pandemic); hence online questionnaires were considered to be suitable for this study. As pointed out by Hewson (2017:59), IMR allows researchers to have easier access to purposively selected populations who are perceived to be knowledgeable to answer the research questions.

On the other hand, the disadvantages include uncertainty over the reliability and validity of the data through poorly constructed instruments, sampling, and the issues around the design, application, and assessment of an online questionnaire (Wright 2005:2). Other problems include the issue of representation of the entire population as some members may not have access to the technology, and the issue of non-responses if the sampled members prefer paper-based as opposed to online procedures (Couper 2000:466). In this study, the majority of departmental employees had computers with access to the internet as well as the above-mentioned email addresses which were used to select the sample. Thus, the main data collection method for the study was the Web-based survey questionnaire, which was complemented by online interviews. Online surveys encompass an HTML form (questionnaire) on the Web, which can be constructed by researchers (and answered by research participants) without needing extraordinary technical skills to do so (Hewson 2017:60). Online surveys provide participants with the flexibility and liberty to respond to the research questions in their own time (Bhaskaran and LeClaire 2010:11).

The next section discusses the online survey questionnaire utilized in the study for quantitative data collection.

4.7.1.1 Online survey questionnaire

A questionnaire is a survey research instrument with a set of standardized questions that follow a fixed pattern for data collection from identified participants about a specific research problem (Tan 2018:86). It is assigned to participants in the hope that they will read the set of questions provided and respond accordingly in the spaces specified. In Web-based surveys participants respond to a questionnaire through a Web browser and, in most instances (as in the case of this study), the researcher sends the participants a link to the questionnaire in an email message (Hewson 2017:60; Vehovar and Manfred 2017:146). Bhaskaran and LeClaire (2010:14) assert that some of the benefits of using online surveys in a research study include assistance with the analysis of the results through the creation of charts and graphs. Moreover, online surveys offer a self-administration advantage, where the participants can complete the questionnaire by themselves (Vehovar and Manfred 2017:144).

In terms of designing the questionnaire for this study, Google Forms (2020) was utilized to create a multiple-choice survey questionnaire consisting of 43 closed, open-ended, and Likert scale questions clustered into five sections (refer to Appendix A). A survey questionnaire can ask questions in several ways and include closed questions where respondents have to select among fixed answer choices, open-ended questions, where respondents are given a space to provide their answers in their own words, and Likert scale questions, where the researcher measures the respondents' perceptions or attitudes using a five-point scale (Kabir 2016:245).

Gatekeeper's letters were sought from the departments under study (refer to Appendices E to J) for permission to conduct the study. Once permission had been granted, emails were sent to the selected participants (the sample) containing a cover letter, requesting them to follow the link (<https://forms.gle/T8LdufeJ7zk19Vrx5>), and respond to the questions (refer to Section 4.7.2 for the questionnaire time frames). Thus, emails were sent to the 369 employees from the six participating departments requesting them to respond to the survey questionnaire. Eventually (see below), 160

responses were obtained, which represents a 43% response rate. Saleh and Bista (2017:71) argued that the survey response rate (whether high or low) depends on a combination of issues during the time data were collected. These issues may include rewards, trust, and budget, which influence the probability of individuals responding to the survey or not. The low survey response rate in this study was attributed to the fact that during the COVID-19 pandemic, employees in the PGDs were working remotely and some did not have access to the internet or computers while working from home; as a result, and even after several reminders the response rate remained low. To increase the response rate, a reward for participation was introduced. One of the emails reminding respondents to participate in the survey promised a reward of a R500 Takealot voucher to one lucky respondent from each of the six participating departments (these vouchers were awarded at the closure of the questionnaire). Offering this incentive did improve the response rate slightly but not to the required percentage (over 50%).

However, Vehovar and Manfreda (2017:152) and Daikeler, Bošnjak, and Manfreda (2020:513) note that online surveys have a lower response rate percentage when compared to other survey methods. According to Callegaro, Manfreda, and Vehovar (2015:220) and Flick (2015:139), the response rate from online survey questionnaires is usually anticipated to be in the range of 30% to 50%, and what matters the most is that the returned questionnaires have been correctly completed. Based on this rationale, the response rate of 43% was regarded as acceptable since all returned questionnaires were correctly completed with all questions being responded to.

The next section discusses the online interviews for collecting qualitative data.

4.7.1.2 Online interviews

An interview is a research instrument frequently utilized in genres across disciplines in which a discussion is treated as a data creation resource through in-depth, semi-structured, and focus group formats (Leavy 2017:262). There are several types of interviews, and these include face-to-face, focus group, telephone, email, and online interviews. This study conducted online interviews, “which is another form of remote interviewing that taps into the capability of the computer as an operational instrument for research” (Bolderston 2012:68). There are different methods of conducting online interviews in the virtual world, either with synchronous or asynchronous communication

technologies (Hewson 2017:63). Asynchronous technologies do not require the researcher and the participant to be online at the same time as an interview can typically be conducted by multiple e-mail exchanges between the researcher and the participant over an extended period (Bolderston 2012:73). Other methods include text-based such as chat rooms, social networking sites, and instant messaging.

Synchronous communications require both researcher and participant to be online at the same time using audio and visual interviews such as Skype, net meetings, and conferences (Jowett, Peel, and Shaw 2011:255; Cohen, Manion, and Morrison 2018:538). According to Bolderston (2012:73), the advantages of online interviews include the proficiency to access distant participants, the possible decrease in response bias, and its effectiveness when there is limited time and financial resources. The need for participants in online interviews to have access to the internet, to stay connected for the entire interview, and the lack of audiovisual qualities such as facial expressions and tone of voice (which are easily identified in face-to-face interviews where the researcher and participant are physically present) are some of the downfalls of this method (Jowett, Peel and Shaw 2011:256).

In this study, online interviews were conducted using synchronous communication technology such as Microsoft Teams (refer to Section 4.7.2 for interview time frames). Microsoft Teams allows different people from various organizations to conduct a video meeting without having a Teams account (Microsoft 2020). A semi-structured interview schedule with questions adapted from Nyantakyi-Baah (2016) and themes for various questions emerging from the literature review were used. The adoption of a semi-structured interview schedule in this study was based on the reflexivity of the researcher during data collection since the aim was to observe rather than just be a neutral collector of data (Ruslin, Mashuri, Rasak, Alhabsyi and Syam 2022:25). The interview questions comprised both closed and open-ended. The HoDs' interview schedule (refer to Appendix B) consisted of 10 questions covering different themes, while the schedule for the IPs (refer to Appendix C) consisted of 16 questions.

In terms of arranging the interviews, emails were sent to the IPs and the personal assistants (PAs) of the HODs together with a cover letter (refer to Appendix K) inviting them to participate in the interview. Possible dates for the interviews were also provided. Participants who agreed to take part in the interviews were required to complete and sign a consent form attached to the cover letter, which

stated that they understood the purpose and content of the study and they gave permission for the researcher to record the interview session. Overall, the qualitative approach recorded a response rate of 67%, that is, four out of the six targeted IPs were interviewed while the same number of targeted HODs participated.

How the research instruments were administered to the respondents and participants is discussed next.

4.7.2 Administration of the instruments

Based on the ethical guidelines of the University of KwaZulu-Natal (UKZN) and as depicted in the ethics approval letter (refer to Appendix D), the researcher worked closely with the ICT section in each of the departments under study to administer the online questionnaire through employees' email addresses. Thus, the online questionnaire to collect quantitative data was active from 05th July 2021 to 08th July 2022. For control and marking the list of those who replied, respondents were asked to provide their email addresses to proceed with answering the questions; this ensured that unnecessary reminders were not sent to those who had already responded since several reminders were sent whilst the questionnaire was active.

For qualitative data collection as alluded to above, the researcher worked closely with the Pas of each of the four HODs to set up suitable dates for the interviews while IPs were contacted directly by the researcher. Depending on their availability, individual interviews for the IPs and the HODs were conducted from 10th August 2021 to 15th December 2021. An interview schedule was sent to participants before the day of the interview so that they could familiarize themselves with the researcher's profile as well as the questions to be asked. In each session, the interview lasted approximately 40 minutes.

The next section discusses how both sets of data were analyzed; a detailed presentation of the analyzed data is provided in Chapter 5.

4.8 Data analysis

Data can be defined as characters, numbers, images, or recorded material in a manner that can be evaluated to construct a conclusion regarding a particular case (Dawit 2020:2). In the data analysis phase of the research process, researchers are concerned with creating order by organizing and giving meaning to the large amounts of data gathered using various approaches to address the study's research questions (Mutsvunguma 2019:105). Technically, data analysis is the process of summarizing and organizing collected data to respond to the research questions of the study (Bhattacharjee 2012:23; Trent and Cho 2014:652). The major intention of analyzing data is to translate cluttered data collected from respondents into a format that is simple to understand, readable, significant, and useful and that assists the process of formulating answers to the research questions either qualitatively or quantitatively (Bhatia 2017:166; Dawit 2020:2).

Following the MMR approach applied in the study, the analysis of data was done using both quantitative (SPSS Version 28.0) and qualitative (NVivo Version 11) techniques. The next two sections discuss the software that was used to analyze the quantitative and qualitative data.

4.8.1 Statistical Package for the Social Sciences (SPSS)

The online survey questionnaire consisted of library quality (LibQUAL) and service quality (SERVQUAL) inquiries whereby respondents were requested to rate services in numeric values to capture their levels of satisfaction. The use of the questionnaire enabled the researcher to extract the automatically created spreadsheet and import it into the SPSS Version 28.0) to generate descriptive and inferential statistics. SPSS is a statistical package developed by the IBM Corporation and employed by scholars globally; it is extremely easy to use, and different numerical investigations can be conducted with the software (Ong and Puteh 2017:18; Gogoi 2020:2424). According to Gogoi (2020:2425), SPSS software organizes the data through a computer program, which reduces the load of analyzing significant amounts of data and technical oversight. Through the software, researchers can carry out both comparison and correlational statistical analysis in the context of identified variables. The SPSS software was deemed suitable for this study as it presented a comprehensive output when compared to other statistical software such as SmartPLS or AMOS. Ong and Puteh

(2017:22) aver that selecting the right statistical analysis assists researchers in extracting correct and robust outcomes to successfully meet the objectives of the study.

Descriptive statistics use several methods to describe raw data, and these include frequencies, percentages, measures of central tendency (mean, mode, and median), and measures of variability (range, standard deviation, and variance) (Neuman 2017:187). For this study, frequencies, percentages, and measures of central tendency (mean) were used to analyze data from the closed questions in the online survey. The open-ended questions in the survey were analyzed using content analysis (through the NVivo software discussed below) to classify themes emerging from the respondents' answers. According to Popping (2017:329), "Content analysis is a systematic reduction of a flow of text to a standard set of statistically manipulable symbols representing the presence, the intensity, or the frequency of some characteristics, which allows making replicable and valid inferences from text to their context."

Quantitative data from the LibQUAL and SERVQUAL tools were analyzed using various gap score analyses to determine the level of service and library quality. If scores are in the zone of tolerance (ZoT), the service adequacy gap (SAG) is said to be positive because users' perceptions are higher than their minimum expectations (Association of Research Libraries 2020:1). To obtain the level of service or library quality in SLs, the researcher followed the steps from the formulas presented by Mutisya (2017:134-136) as described below.

Step 1: Mean (mean = sum of all observations/total number of observations) to calculate users' levels of service quality for each statement on the tools.

Step 2: SAG (SAG = perceived mean - minimum mean) to calculate the extent to which SLs in PGDs are meeting the minimum expectations of their users.

Step 3: Service superiority gap (SSG) (SSG = perceived mean - the desired mean) is calculated to indicate the extent to which the SL is surpassing the expectations of its users.

Step 4: ZoT (ZoT = desired mean – minimum mean) calculates the range from the minimum library quality rating to the desired service rating. The perceived levels of service should fall in this zone.

Step 5: D-M score formula (D-M score = (SAG) / ZOT x 100) is applied to LibQUAL raw data for the three main dimensions of the survey, namely, Affect of service, Library as place, and Information

control to put the users' perceptions of library quality in the context of their expectations (Dennis and Bower 2007:10).

In all these calculations, a negative score indicates that the users perceived level of service quality is beneath their minimum level of desired service quality. Conversely, a positive score indicates that the users' perceived level of service quality is beyond their desired level of service quality (Mutisya 2017). The NVivo software used in the qualitative data analysis is discussed in the next section.

4.8.2 NVivo software

Nvivo is a computer-assisted qualitative data analysis (CAQDAS) software package that facilitates the management and analysis of qualitative data (Bryman 2016:693). Qualitative data in this study were analyzed using thematic content analysis through the support of computer software such as Nvivo. According to Anderson (2007:1), thematic content analysis is a descriptive presentation of qualitative data. In the last two decades, the use of computer software to assist with qualitative data analysis has become an essential tool for many researchers (Gibbs 2014:277). Recently, the use of software like Nvivo has gained popularity. Nvivo is intended to support the analysis of qualitative data; it is suitable for consolidating and classifying data as it searches for and locates key phrases and presents counts of terms and phrases (Burns and Veeck 2020:146).

In this study, the data sets extracted from the open-ended questions of the questionnaire, and online interviews held with the IPs and the HODs were thus analyzed using Nvivo software. Using the coding tool, the researcher was able to quickly retrieve and accumulate text and other data associated with some thematic concept (such as library value) so that they could be assessed collectively and, therefore, compare different cases (Gibbs 2014:283). Thus, from the data presented by the respondents and participants, a range of patterns and interconnections grows. This is known as "mapping", where researchers "map" and build themes deductively from data related to identified themes (O'Leary 2014:309). Through the concept of mapping, the current researcher submerged herself in the data collected and visualized the sources, nodes, cases, relationships, sets, query results, and attribute values to make a connection between the theoretical ideas and the components visualized in a concept map (Woolf and Silver 2018:101). The utilization of NVivo software for the qualitative data analysis facilitated data management by enabling the researcher to create structures

in the data, and present findings in graphs and other forms of display that assisted in writing about the research findings (Flick 2014:807-808).

4.8.3 Side-by-side comparison style

According to Teddlie and Tashakkori (2009:229), analyzing data collected using the MMR approach includes a procedure whereby quantitative and qualitative data analysis techniques are joined and incorporated into a particular study. The main assumption here is that both qualitative and quantitative data provide different kinds of information, detailing the opinions of participants qualitatively and the results of the research instruments quantitatively, and collectively they should generate similar results (Creswell 2009:269). As alluded to above, this study employed a convergent parallel MMR design; however, Creswell and Creswell (2018:344) point to the challenge of using such a design, which is how to merge the two sets of data since bringing together a numeric quantitative database with a text qualitative database is not natural. However, Creswell (2014:222) stipulated several ways the two data sets can be merged, and these include side-by-side comparison, data transformation, and a joint display of data.

In this study, data were analyzed using the side-by-side comparison style where comparisons are seen in the discussion section of the thesis. Firstly, the researcher reported the quantitative statistical results and then discussed the qualitative findings (Creswell and Creswell 2018:344). It is up to researchers to choose which findings from which method they will start. By presenting one set of findings first and then the other, researchers make comparisons during their discussion, hence the name side-by-side method. Researchers should note that whatever the data obtained from each method, how they have been analyzed influences the results of the study (Dawit 2020:2). Hence, when it comes to the analysis of data, its quality or validity is critical since an analysis is deemed valid if it measures what it intended to measure (Bhatia 2017:166). According to Bhatia (2017:167), “Data analysis unlocks significant values by making certain facts and information transparent and recognizable [through, for example, charts and graphical displays]. It allows the identification of important and often mission-critical trends.”

The testing of the hypotheses put forward in the study is discussed next.

4.8.4 Testing of hypotheses

A hypothesis is an assumption about the possible outcome of a study and provides a guideline for the research. It is a provisional description of the research topic, a possible result of the research, or an informed speculation about that result (Sarantakos 2013:125). According to Kabir (2016:55), a hypothesis helps the researcher draw “meaningful conclusions” supported by “relevant” empirical data. The different types of research hypotheses include simple, complex, directional, nondirectional, associative, causal, inductive and deductive, null, and alternative research (Kabir 2016:61). The null type of research hypothesis was considered appropriate for the current study. This type of hypothesis is the conventional approach to making a prediction as it involves a statement that states that there is no relationship between two groups that the researcher contrasts on a particular variable (Kabir 2016:61).

Hypothesis testing is an essential tool in scientific research, used to validate or reject hypotheses about population parameters based on sample data. It provides an organized framework for assessing the statistical significance of a hypothesis and drawing conclusions about the true nature of a population (Salomão 2023:1). In the current study, the researcher stated the hypotheses to be tested, analyzed the research findings, and accepted or rejected the null hypothesis based on results of the analysis (Kabir 2016:66). The purpose of formulating hypotheses in this study was to predict the outcomes, ensure continuity in investigating the research problem, and provide a starting point for further inquiry (Binoy 2019:31).

The next section discusses how the reliability and validity of the research instruments used in the study were achieved.

4.9 Reliability and validity of the instruments

Generally, reliability and validity are the practical phrases referring to the objectivity and credibility of research. In research practice, increasing objectivity is a very distinct activity that involves declaring the accurateness and inclusiveness of research data (reliability), and testing the credibility of the analytical statements that are being made about the data (validity) (Silverman 2017:589). Leedy and Ormrod (2015:117) state that validity and reliability mirror the degree to which researchers may

be affected by an error in their measurements. However, Mudassir (2022:112) asserts that “In general, a measuring instrument can be accurate without being valid; nevertheless, if a measuring instrument is valid, it is more likely to be accurate.” Validity has to do with the degree to which a test tests what it is supposed to test and measures what it intends to measure (Cohen, Manion, and Morrison 2018:572). Reliability has to do with the extent to which a measuring instrument produces the same results when the entity being measured remains the same (Leedy and Ormrod 2015:116).

In terms of the reliability and validity of the survey questionnaire, a pretest of the questionnaire was conducted (refer to Section 4.9.1), and the questionnaire was checked for internal consistency through the Cronbach alpha in SPSS. Moreover, the implemented guideline models of LibQUAL, SERVQUAL, and the benchmarking from the total quality management (TQM) model have been thoroughly tested over the years. The Association of Research Libraries (2020) has indicated that the LibQUAL/SERVQUAL model instrument has, since the year 2000, been verified in over 1,000 libraries across different countries. Such countries include Canada, the United Kingdom, and the United States of America, and its relative ease of distribution and analysis has been proven (Mamta and Kumar 2023; Mikitish 2015). Within the African context, the instrument has been applied and tested in several countries, including South Africa (Bhim 2010; Sibanda 2011), Nigeria (Mutisya (2017), and Ghana (Baada, Baayel, Bekoe, and Banbil 2019), to mention a few. Nevertheless, external validity was fulfilled since the current study adopted a multiple-case methodology comprising six SLs in PGDs from which the generated results could be generalized to other SLs in PGDs in South Africa.

In this study, the following criteria were considered in judging the soundness of the qualitative data for trustworthiness (as advised by Trochim, Donnelly, and Arora 2016:72):

- i. **Credibility** – includes ensuring that a study is conducted according to the principles of good practice and that data are believable from the perspectives of the participant/s (Bryman 2016:384). In this study, after the qualitative data had been analyzed from the interview recordings, transcribed data were sent back to participants for data validation before they could be presented as the findings of the study.
- ii. **Transferability** – signifies the degree to which the qualitative data results can be generalized or transferred to other contexts or settings. As this was the responsibility of the researcher, a

thorough description of the research context was provided in terms of the scope, limitations, and delimitations of the study, which future researchers can then use to determine how sensible the transfer is.

- iii. Dependability – dependability is concerned with whether you would obtain the same results if you could observe the same thing twice. This requires the researcher to account for the ever-changing context in which the research occurred.
- iv. Confirmability – refers to the degree to which the results could be confirmed or corroborated by others. In this regard, the researcher provided an evaluation of the methodology applied in terms of what worked and what did not work as well as the challenges experienced during the research process (refer to Section 4.11).

The pretesting of the research instruments is discussed next.

4.9.1 Pretesting of research instruments

According to Neuman (2014:358), it is imperative to pretest survey interviews and questionnaires before employing them for data collection. Significantly, Bryman (2016:260) mentioned that it is appropriate to perform a pretest before distributing a self-administered questionnaire or interview schedule to certify that the research instrument/s functions well as a whole. Moreover, during a pretest researchers need to look out for possible errors, difficulty in understanding the questions, or confusion on what is required on the part of respondents or participants. Neuman (2014:320) emphasized that pretesting should be conducted with a small group of respondents or participants who are similar to those in the actual study. Therefore, to ensure the validity and reliability of the research instruments (online questionnaire and interview schedules), a pretest was conducted with junior and senior management employees at the KZN Department of Public Works.

The researcher ensured that the employees who formed part of the pretest study were not part of the actual sample of the study. To fulfill this, emails were sent to 20 junior employees who did not form part of the sample for the main study requesting them to respond to the online questionnaire. The email clearly indicated that the questionnaire was a trial of the main questionnaire to be administered for the study and employees were requested to point out anything that they did not understand while completing the questionnaire. To ensure a reasonable response rate, the researcher ensured that the

selected junior employees for the pretest had access to a computer and the internet. The interview schedule for IPs was pretested on two middle management employees and the schedule for the HODs was pretested on two directors. In light of the pretest for the interview schedules, some of the questions were omitted as they were perceived as being repetitive. The data from the pretest of the questionnaire were subjected to the SPSS software analysis, to establish the instruments' reliability using Cronbach alpha. Two parts of the questionnaire were tested: the reliability output for part 1 was .966 and for part 2 it was .982 (refer to Appendix M), which indicated that the tested questionnaire was reliable. However, there were a few revisions done to the questionnaire since some respondents asked for more clarity on what was required.

The next section addresses the ethical considerations of the study.

4.10 Ethical considerations

According to Cohen, Manion, and Morrison (2018:144), "The rise of Internet-based research, online research and virtual worlds have created a new site in which interactions take place between individuals and communities from ethically plural cultures and backgrounds." Maree and Van der Westhuizen (2007:41) contend researchers must underline the ethical concerns arising from their studies. Ethics refers to moral principles that direct the changing aspects of research in determining what is or is not morally appropriate. With online research, the mutual ethical concerns include the issue of unwelcome email invites, obtaining informed consent for online surveys, privacy, and security matters, merging data from various sources, and surveying children and minors, among others.

The study adhered to the research ethical standards as stipulated in the UKZN research ethics guide (UKZN Research Ethics Policy 2014) and the latest guidelines as specified by the Humanities and Social Science Research Ethics Committee (HSSREC) due to the global COVID-19 pandemic (University of KwaZulu-Natal Research Ethics Office 2021). The researcher attached a letter (refer to Appendix L) to introduce herself to the respondents in the email inviting participation in the survey. To maintain integrity in the research, the letter explained to the respondents what the study was about, and what would subsequently happen with the results. Integrity in research means that the researcher will be honest and truthful to the respondents during the course of the study in terms of a reasonable

set of standards (Chambliss and Schutt 2019:295). The letter also ensured the respondents of their anonymity, their responses to be treated with confidentiality, and that they could withdraw at any time during the process should they need to. Thus, the terms “respondents” and “participants” were used when reporting the quantitative and qualitative data respectively to maintain anonymity. In terms of data storage, since all data were collected online, both types of data were (and are) stored in a folder that is password protected and can only be accessed by the researcher and her supervisor, to be disposed of after five years.

The evaluation of the research methodology applied in the study is discussed in the next section.

4.11 Evaluation of the research methodology

According to Kumar (2011:335), evaluation generally refers to the practice of reviewing something or a procedure to assess its value. In other words, evaluation is concerned with how well something works or whether it has achieved the intended outcomes (Cohen, Manion, and Morrison 2018:80-81). Ngoepe (2012:115) and Erima (2022:185) observe that each research method has its fair share of limitations that need to be acknowledged by the researcher to prevent doubts from being cast upon the findings of their study. Thus, it is necessary to evaluate the research methods employed in terms of the research design, its shortcomings, limitations during the data collection process as well as ethical matters that would have occurred in the progression of the study (Masenya 2018:167). Researchers should demonstrate their depth of understanding of methodological issues by critically evaluating their methodology, pointing out if there were any flaws with the applied methods, and illustrating how these were resolved (Zulu 2018:340).

Ngulube and Ukwoma (2021:4) and Ngulube and Ngulube (2022:5) assert that researchers who employ the MMR approach in their studies need to evaluate their research methodology to achieve methodological transparency. This is achieved by informing the readers whether there was deflection or integration in the utilization of that approach and presenting evidence of where and how these were manifested. It was imperative to address methodological transparency especially in research concerning LIS as it helps improve the reliability and trustworthiness of such research (Ngulube and Ukwoma 2021:2). For this study, methodological transparency was achieved through the strategies suggested by Ngulube and Ngulube (2022:5) as follows:

- i. By stating the philosophical foundations of the study, that is, the pragmatist paradigm (refer to Section 4.2.4);
- ii. Deliberately classify the study as MMR from the onset (this was specified in Section 1.11 and further elaborated in Section 4.3.3);
- iii. Communicate the significance of employing MMR (refer to Section 4.3.3);
- iv. Stipulate the weighting, classification, and the phase of mixing in the applied MMR approach – quantitative data were dominant followed by qualitative data, and convergent parallel design was applied where the mixing of data occurred during the interpretation stage (refer to Section 4.3.3 and Figure 4.2); and
- v. Describe the value added by utilizing the MMR approach in the study (refer to the final paragraph in this section).

The use of the MMR approach was valuable as the mixing of data during the interpretation stage facilitated the creation of new knowledge from this research (refer to Chapter 6). However, there were several challenges experienced by the researcher during the process of data collection. Firstly, the collection of quantitative data began in July 2021 when COVID-19 restrictions were still active and employees in the PGDs under study were working remotely usually from home. This significantly impacted the response rate and Section 4.7.1.1 explained how the low response rate was mitigated. The response rate of 42% finally achieved was regarded as acceptable, and qualitative data collected were used to complement quantitative data. Secondly, and as alluded to in Section 1.8, there were challenges when arranging interview dates and times with the HODs due to their busy schedules. The majority of IPs preferred telephonic interviews as opposed to virtual meetings due to poor internet connectivity in their offices. Moreover, the researcher observed the lack of audiovisual quality during an interview with one of the HODs as the interview was conducted while he was traveling from one meeting to another, and at various points the network connection was unstable. On these occasions, clarity was needed, and the researcher had to ask the HOD to repeat some of his responses. However, apart from this instance, no other problems were experienced. Despite these challenges with the qualitative data collection, a 67% response rate was recorded.

Lastly, based on this experience and given another global pandemic, the researcher would still use online methods for collecting data but with a census technique rather than a targeted sample as it has

its limits, including not knowing who has access to a computer or the internet. It can be concluded that regardless of the challenges encountered in the study, the application of the MMR approach proved a success since the collected data were used collaboratively to produce rich findings that permitted the researcher to resolve the research problem.

4.12 Summary

This chapter presented the narrative on research methodology and methods that were applied as a guide to the entire research process. Specifically, the chapter explained the concept of research paradigm, research approaches, and research design. The population of the study and the sampling procedure, the data collection methods and their techniques, and the pretest conducted were described and discussed. The research methodology employed was also evaluated. The rationale for choosing the pragmatic research paradigm for the study was explained in the chapter. It was deduced that the pragmatic paradigm allows the researcher to employ multiple methods, which expand the understanding of resolving the research problem under study. This consequently informed the choice of adopting the MMR approach. The chapter presented further justification for the application of MMR based on the study's research questions, which included the ability to corroborate quantitative with qualitative data to determine and communicate the value of SL services in PGDs.

The research design of the study was also discussed, and it was recognized that the applied research design provided a logical approach throughout the course of the study and assisted in triangulating various processes to achieve desired outcomes. Thus, multiple-case studies and survey design were deemed suitable for the study since the researcher needed to obtain different perspectives from the three groups targeted (the users, the IPs, and the HODs) to determine the value of SLs. Subsequently, the chapter further described the targeted population to fulfill the objectives of the study, wherein the rationale for simple random and non-random (purposive) sampling was postulated. A total sample of 369 respondents and 12 participants for quantitative and qualitative inquiry respectively was extracted from six PGDs in KZN. The techniques used for data collection were described – an online survey questionnaire was administered to employees in these departments, and online interviews were conducted with IPs and HODs using semi-structured interview schedules.

The chapter proceeded to elaborate on how the collected data were analyzed guided by the convergent parallel design where quantitative and qualitative data would be integrated in the interpretation phase. Thus, the chapter further discussed how the SPSS (for quantitative data) and NVivo (for qualitative data) software assisted the researcher during the analysis process. How the researcher adhered to ethical standards during the research process as stipulated in the UKZN's research ethics guide was described. The chapter also discussed how reliability and validity in this study were considered, and how pretesting was used to validate the research instruments. Finally, the methodology employed in the study was assessed for methodological transparency.

The next chapter presents data extracted from the online survey questionnaires and online interviews to determine the value of SL services.

CHAPTER 5: DATA ANALYSIS AND PRESENTATION OF FINDINGS

5.1 Introduction

This chapter presents and analyzes the raw data drawn from the online questionnaires and interviews conducted with special library (SL) users, the information professionals (IPs), and the heads of departments (HODs) from the provincial government departments (PGDs) of KwaZulu-Natal (KZN) regarding the value of these libraries and how such value is communicated. The study was conducted in six PGDs in KZN, South Africa. The main purpose of this research was to measure the value of SLs in government departments (GDs) and communicate that value to the management of these departments.

The analysis and interpretation of mixed-methods data can be complicated as it involves combining the analytic techniques for qualitative and quantitative data to achieve cohesive results (Leavy 2017:181; Ngulube 2022:36). Thus, when the analysis has been completed, the data interpretation should include examining the quantitative and the qualitative results while assessing how the information addresses the research questions (Creswell and Plano-Clark 2018:327). Teddlie and Tashakkori (2009:231) described this interpretation drawing as inferences and meta-inferences. Inferences in mixed-methods research (MMR) are conclusions or perceptions derived from the separate quantitative and qualitative elements of the research and across the quantitative and qualitative elements (meta-inferences) (Teddlie and Tashakkori 2009:232). According to Creamer (2018:174) and Ngulube (2022:36), there is no particular type of procedure approved for MMR analysis, but the strategy chosen to analyze such data must facilitate the assimilation of the two different types of data.

In this study, the quantitative and qualitative results are presented separately while reflecting, when appropriate, on how each question asked of the respondents or participants responded to particular research questions and authenticated the proposed hypotheses. The research questions probed, and the hypotheses proposed are indicated in Section 1.5. The quantitative data drawn from the SL users are presented first, followed by the qualitative data drawn from the IPs and the HODs. The findings

are combined in the discussion stage in Chapter 6. The separate presentation of data (convergent parallel design) was done to achieve a thorough analysis of the problem being investigated and “give a voice to participants” regarding the value of library services in PGDs (Creswell and Plano Clark 2018:129).

Generally, the practice of data analysis permits researchers to determine the findings of their study (Leavy 2017:111). In this study, the analysis of quantitative findings was indicated with descriptive and inferential statistical interpretations (frequency counts, mean or standard deviations, multiple regression analysis, and percentages), and such data were presented in charts, graphs, or tables. For qualitative data, thematic content analysis was conducted and presented with the help of a computer-assisted qualitative data analysis (CAQDAS) such as the NVivo software package.

The next section discusses the response rate for the study.

5.2 Response rate for the study

Johnson and Wislar (2012:1805) defined a response rate as the proportion of people chosen into a sample who are suitable and eventually partake in the survey or an interview. In research, the actual percentage of the sample that participated in a study is referred to as the response rate (Bryman and Bell 2019:155). That is, a response rate guides the reader in terms of the representativeness of the sample (Ngoepe 2012:118). A response rate is attained by dividing the initial number of respondents or participants selected by the total number of questionnaires satisfactorily completed and returned, or interviews successfully conducted, then multiplied by one hundred. Saleh and Bista (2017:64) opine that when a survey is used to collect data, a favorable response rate is essential to achieve satisfactory findings for the study. The current study used an online survey (Google Forms) and an online platform (Microsoft Teams) to collect quantitative and qualitative data respectively. Wu, Zhao, and Fils-Aime (2022:1) report that the use of online approaches to collect data might generate a lower response rate of approximately 11% compared to mail surveys. Fincham (2008:1) and Johnson and Wislar (2012:1805) assert that researchers should aim for a response rate of approximately 60% for quantitative data. Conversely, Singleton and Straits (2005:145) suggest that the response rate for qualitative data should be approximately 85% to be considered adequate, whereas under 70%, there would be a greater probability of bias. Table 5.1 shows the overall response rate for the study.

Table 5.1: Response rate for the study (n=381)

Target group	Targeted sample	Number of actual respondents/participants	Response rate %
Quantitative data	369	160	43%
Qualitative data	12	8	67%
Total	381	168	44%

Mailu, Adem, Mbugua, Gathuka, and Mwogoi (2021:82) note that getting a good response rate from online approaches to data collection has proved to be challenging, and Flick (2015:345) considers 50% to be quite a good ratio provided the returned online questionnaires are correctly completed. The returned questionnaires for this study were indeed correctly completed, yielding a response rate of 43% for the quantitative component of the study. For the qualitative component, a response rate of 67% was achieved. Both response rates were deemed satisfactory.

The next section presents the quantitative data derived from the SL users.

5.3 Quantitative data presentation

This section presents quantitative data that was collected using an online questionnaire (refer to Appendix A) from SL users in purposively selected PGDs in KZN. As alluded to above and in Section 4.8, the side-by-side comparison of data will be referred to during the discussion stage, thus, in this section, the researcher reports the quantitative statistical results (Creswell and Creswell 2018:344). The respondents' response rates as per the six-targeted PGDs are presented first.

5.3.1 Response rate for quantitative data

Table 5.2 shows the number of responses required from each department and the number of responses obtained from the online questionnaires that were circulated among the users. The percentages in this table and all other tables in this study were rounded off to the closest whole number. The researcher sent a few more than the required number of questionnaires hoping to increase the response rate since data were collected during the COVID-19 global pandemic (the challenges of obtaining responses from online questionnaires were discussed in Section 4.7.1.1).

Table 5.2: Distribution of online questionnaires (n=160)

Name of Department	Number of Emails circulated	Number of responses required	Number of responses obtained	Percentage %
Department of Agriculture and Rural Development (A)	38	33	13	39%
Department of Cooperative Governance and Traditional Affairs (B)	18	13	13	100%
Department of Transport (C)	239	234	45	19%
Department of Health (D)	31	26	26	100%
Department of Public Works (E)	24	19	19	100%
Department of Economic Development, Tourism and Environmental Affairs (F)	49	44	44	100%
Total	399	369	160	43%

Overall, from the total number of required responses, that is, 369, 160 questionnaires were completed. The 100% response rate was obtained from Departments B, D, E, and F. Department C had the lowest (19%) response rate. The overall response rate of 43% was considered valid to determine the value of SLs in PGDs from the users' point of view.

The next section presents the demographics of the respondents.

5.3.2 Descriptive analysis of respondents' demographics

In this section, the researcher sought the demographical characteristics of the respondents in terms of gender, the term of their work position (that is, contract or permanent), the department they were working in, level of position and work experience, studying status, and level of education. Such information was requested to get a proper understanding of the nature of the respondents and help to interpret trends in their responses.

5.3.2.1 Respondents' gender

The respondents' gender was requested to demonstrate gender representation in the study, and as illustrated in Figure 5.1 the female library users 103 (64%) were the dominant respondents compared to male library users 57 (36%).

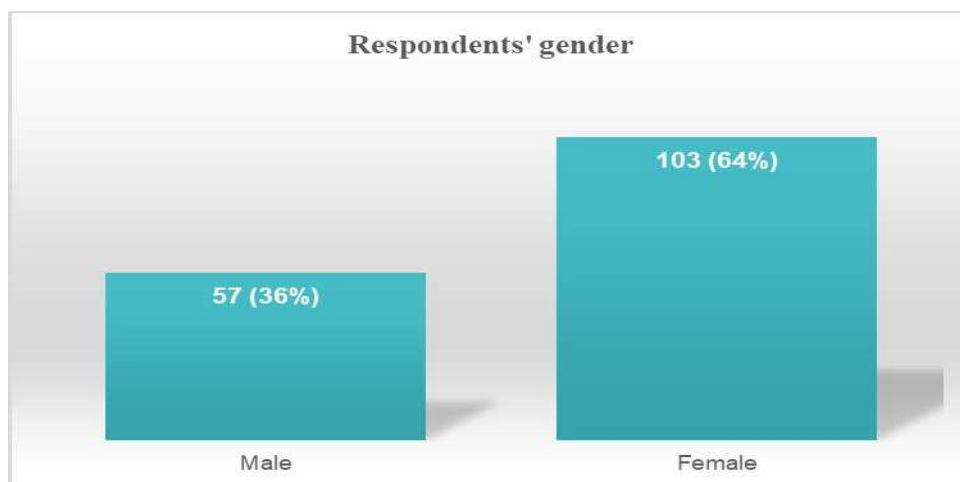


Figure 5.1: Distribution of respondents' gender (n=160)

5.3.2.2 Respondents' current term of work position

Respondents were asked about their terms of employment to differentiate the permanent employees from those working under contract and the findings were as follows: Of the 160 respondents, 128 (80%) indicated that they were permanent employees while 32 (20%) indicated that they were contract employees.

5.3.2.3 Respondents' department

The researcher requested respondents to indicate the department they were working under to determine the response rate from each department under study. The results show that Department F had the highest number of responses, that is, 48 (109%). Other departments that obtained the required number of responses (or more) were Department B 13 (100%), Department D 27 (104%), and Department E 23 (121%). The departments that fell short of the response rate required, that is, less than 100% were Departments A and C with response rates of 27% and 17% respectively.

5.3.2.4 Respondents' position and work experience

The level of positions in GDs can be categorized between senior management (from deputy director upwards) and junior staff level (from assistant director downwards). The majority 114 (71%) of respondents who participated in the online survey were junior staff, while 46 (29%) were from the senior management level. The working experience of the respondents is illustrated in Figure 5.2. The highest number 77 (48%) of respondents have been working in the department for more than 10 years, which indicates that they are familiar with the processes of the department and how services are rendered, 35 (22%) respondents have been working for 5 - 10 years, 23 (14%) for 1 - 2 years, 11 (7%) for 3 - 4 years, and 14 (9%) have been working for less than a year.

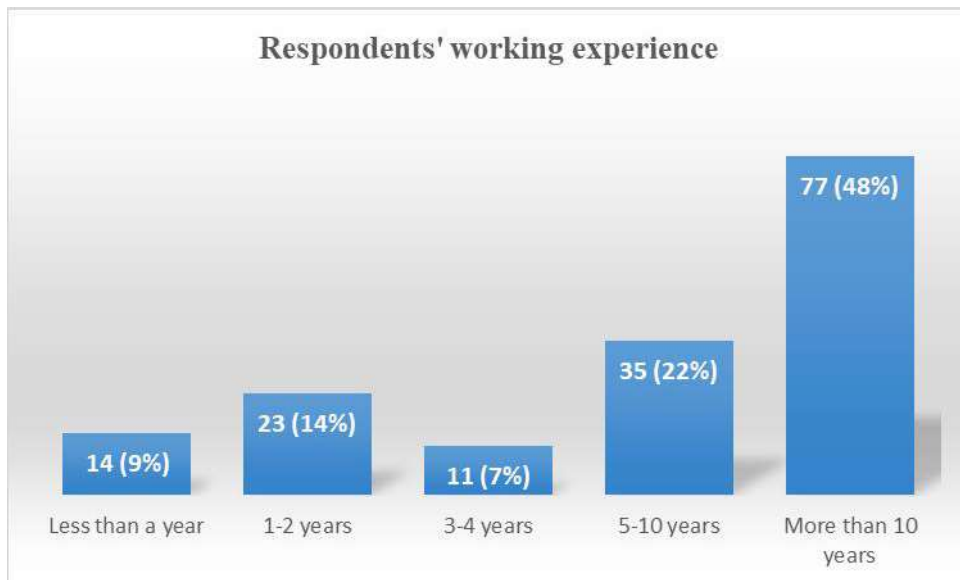


Figure 5.2: Respondents' working experience (n=160)

5.3.2.5 Respondents' studying status and level of education

Respondents were asked to indicate whether they were currently studying, planning to study or there were no plans to study. Sixty-nine (43%) respondents indicated that they were not studying, 63 (39%) indicated that were planning to study further soon, and 28 (18%) were currently studying.

In terms of the respondents' level of education, Figure 5.3 indicates that 59 (37%) respondents had attained a Bachelor's degree, followed by those respondents who hold a Diploma 35 (22%), and 25 (15%) who have a Master's degree. Twenty-two (14%) respondents indicated "Other" while 14 (9%) respondents revealed that they have a secondary school qualification, and five (3%) of the respondents had a PhD.

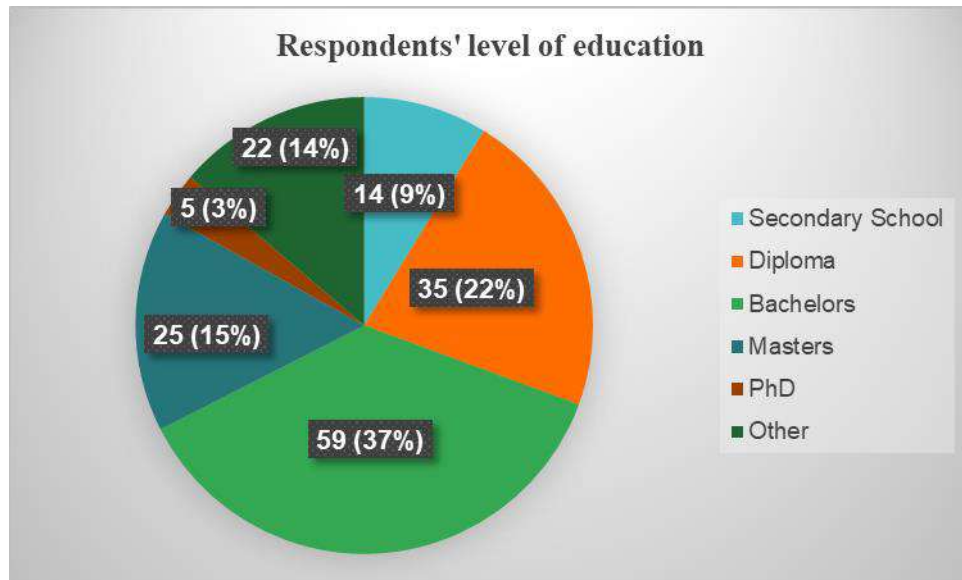


Figure 5.3: Respondents' level of education (n=160)

Various aspects related to library and information use by the respondents are presented below.

5.3.3 Awareness, use of services, and purpose of use

In this section, the researcher determined the users' awareness of the SL and its services in their department, and for those who were aware, how often they visited and utilized the library service and what the benefits of visiting the library are. The respondents' answers assist in determining the effectiveness of library marketing by IPs in their respective departments. This section partially responds to RQ1 and seeks to test H1.

5.3.3.1 Awareness of the special library in the department

Respondents were asked to indicate whether they were aware that there was a SL for their department. Figure 5.4 shows that the majority 133 (83%) of respondents were aware of the library in their departments while 27 (17%) of the respondents revealed that they were not aware and that it was the first time they had heard about the library.

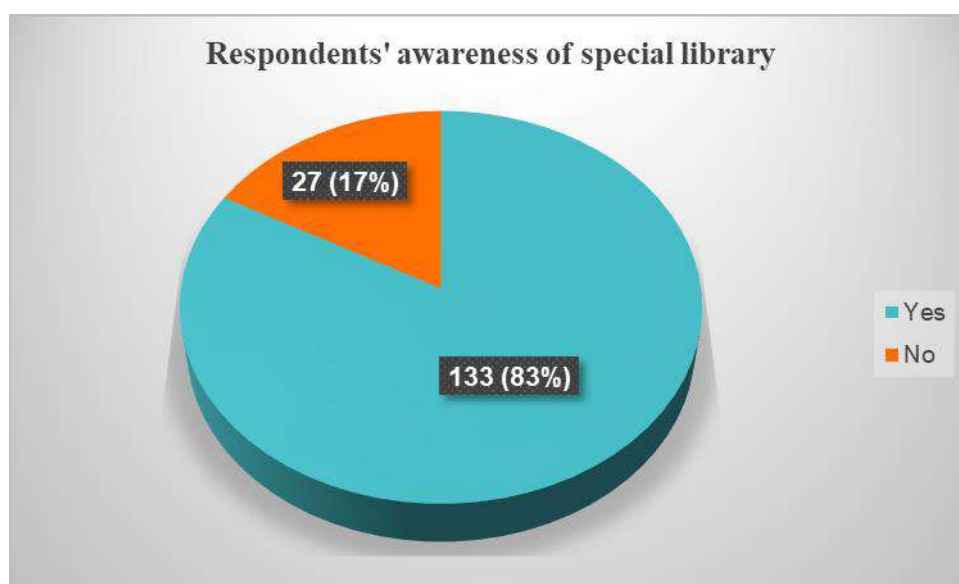


Figure 5.4: Respondents' awareness of the special library (n=160)

Respondents who indicated that they were not aware of the SL in their department were requested to proceed to the question where they were asked about their preferred method of finding information (given that they did not utilize the library services). The 133 (83%) respondents who were aware of the SL were requested to answer follow-up questions, that is, the frequency of library utilization, which services or resources they utilized during their visits, and the benefits obtained from visiting the library. The classification of respondents who were aware and those who were not aware of the library was done to avoid the generalization of the awareness of SLs in PGDs.

5.3.3.2 Frequency of library use

Respondents were asked to indicate their frequency of use of the SL in their department. Figure 5.5 shows that 58 (36%) respondents use the library monthly, 51 (32%) have never used the services or

the resources provided (despite being aware of the library), 12 (8%) respondents indicated that they utilized the library weekly, while 11 (7%) respondents used the library daily.

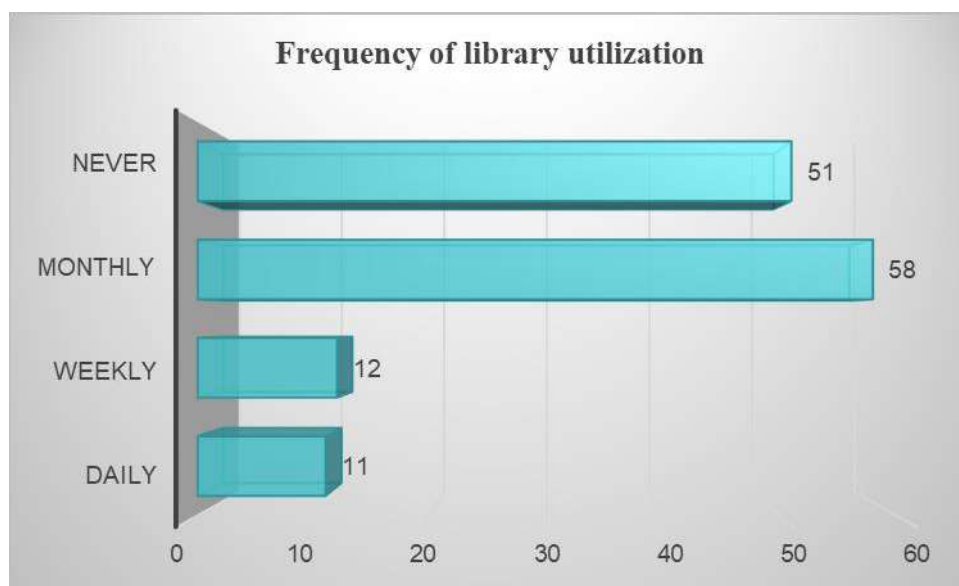


Figure 5.5: Frequency of library utilization (n=133)

5.3.3.3 Library services aware of and used

Table 5.3 shows that a surprisingly high number 56 (42%) of respondents indicated that they were not aware of nor utilized the services or resources provided by the SL, while 25 (19%) respondents indicated that they were aware of and used the archiving services. Sixteen (12%) respondents indicated the use of the library for leisure (reading/studying) while newspaper services were utilized by 10 (8%) respondents. The remaining services listed were used by 5% of respondents in each instance.

Table 5.3: Special library services or resources awareness and use (n=133)

Library Services/Resources	Frequency	Percentage %
Archiving	25	19%
Reference services (e.g Literature searches)	7	5%
Electronic resources (Journals)	6	5%
Provide credible sources of information	6	5%
Lending service (Borrow books and building plans)	7	5%
Newspapers	10	8%
Leisure (e.g. reading/studying)	16	12%
None of the above	56	42%

5.3.3.4 Respondents' benefits after visiting the library

The researcher asked respondents to indicate how they benefited from the library services. Table 5.4 indicates that 25 (19%) respondents pointed to making better-informed decisions, while the same number benefitted by being offered new knowledge. Other benefits that received an equal response, that is 20 (15%), were the library contributing to a higher quality of service delivery and the library saving time in information retrieval and delivery. Twenty-two (17%) respondents 22 (17%) pointed to the library assisting in avoiding duplicating work tasks in the department, while 21 (16%) pointed to achieving a higher success rate in research.

Table 5.4: Benefits of visiting the special library (n=133)

Benefits of visiting the special library	Frequency	Percentage %
By contributing to a higher quality of service delivery	20	15%
To make better-informed decisions	25	19%
To save time in information retrieval and delivery	20	15%
By offering new knowledge	25	19%
With a higher success rate in research	21	16%
To avoid duplication of tasks in the Department	22	17%

5.3.3.5 Respondents preferred sources of information while working to make informed decisions

The researcher asked all 160 respondents to indicate their preferred source of information when making a work-related decision. Table 5.5 demonstrates that the majority 98 (61%) of respondents indicated that they use the internet to find the information they require, 23 (14%) indicated that they consulted the librarian to provide reliable information, 10 (6%) indicated the use of past documents with similar work cases, while 29 (18%) indicated that they use all of the above three sources.

Table 5.5: Preferred source of information (n=160)

Preference of information sources	Frequency	Percentage %
I just Google information from the internet	98	61%
I consult the Librarian to provide information from reliable sources	23	14%
I consult past documents with similar cases	10	6%
All of the above	29	18%

The next section presents the results of the respondents' expectations and perceptions concerning the service quality statements.

5.3.4 Service quality statements: expectations and perceptions

In the third section of the questionnaire, the researcher sought to measure the expectations and perceptions of SL users regarding the quality of service they receive using a 5-point Likert scale with higher numbers indicating higher mean levels of expectations and perceptions. The findings of service quality expectations are presented first, followed by the findings for service quality perceptions. The results from sections 5.3.4, 5.3.5, and 5.3.6 partially respond to RQ4. Furthermore, the findings were used to test H4.

5.3.4.1 Service quality statements – expectations

Expectations refer to what the user expects from the services or resources provided in the library. The overall mean for the expected level of service in SERVQUAL is 1.9. Table 5.6 shows the level of service expectations by SL users through the SERVQUAL tool.

The overall mean for Assurance was 1.7. Components of Assurance that obtained the greatest mean scores were: ASR3 (1.8) and ASR4 (1.8). The lowest mean was noted in ASR2 (1.6) and ASR1 (1.7).

The overall mean for Empathy was 1.9. The components of Empathy that obtained the greatest mean scores were: EM3 (2.0). Other components of Empathy received an equal mean of 1.9 and these were: EM1, EM2, EM4, and EM5.

The overall mean for Reliability was 1.9. Components of Reliability that received the greatest mean score were: RL3 (2.0); while RL1 and RL2 received a lower mean score of 1.9 each.

The overall mean for Responsiveness was 1.3. Components of Responsiveness that obtained the highest mean were RS1 (2.0) and RS2 (2.0). The component that received the lowest mean was RS3 (1.9).

The overall mean for Tangibles was 2.0. The component of Tangibles that received the greatest mean was TA1 (2.2). The components that received the lowest mean were: TA2 (1.9) and TA3 (1.9).

The overall mean for General library expectations was 1.8. The components with the highest mean were: GL1 (2.1) and GL3 (1.9). The lowest mean was obtained in GL2 (1.4).

From Table 5.6, service quality (expectations) dimensions with the highest overall mean were Tangibles, Empathy, and Reliability. Conversely, the lowest mean scores were recognized in statements from ASR1 and GL2.

Table 5.6: Service quality statements – Expectations (n=160)

Service Quality statements (EXPECTATIONS)	SA (1)	A (2)	M
Assurance – assesses the knowledge and courtesy of the library staff and their ability to transmit confidence			
Behavior of library staff instills confidence in users, which makes them want to revisit (ASR1)	95	42	
Library users feel safe when transacting with the library (ASR2)	81	59	
Library staff are always considerate (ASR3)	74	51	
Library staff are knowledgeable enough to answer users' queries (ASR4)	77	53	
Empathy – assesses the behavior, attitude, and approach of the library staff toward users			
The Library gives users individual attention (EM1)	66	51	
Convenient opening hours for the Library (opening and closing times) (EM2)	62	62	
Library staff give personal attention to the users (EM3)	57	60	
The Library has the users' best interests at heart (EM4)	68	50	
Library staff understand the specific needs of the users (EM5)	62	56	
Reliability – measures the delivery of the service as it relates to dependability and accuracy			
The Library shows sincere interest in solving users' problems (RL1)	63	57	
Library staff provide services as promised (RL2)	61	63	
The library provides services at the promised time (RL3)	54	63	
Responsiveness – refers to the readiness of library staff in providing the service to the user			
Library staff are never too busy to respond to user's questions (RS1)	54	64	
Library staff keep users informed about when services will be performed (RS2)	55	64	
Library staff are willing to help the user (RS3)	58	61	
Tangibles – evaluate the appearance of physical facilities and equipment			
Equipment is modern and in good condition (TA1)	43	53	
Facilities are visually appealing (TA2)	62	63	
Library resources are visually appealing and up-to-date (TA3)	61	64	
General library expectations			
The library that helps me stay abreast of developments in my field(s) of interest (GL1)	43	69	
The library that helps me to advance in my academic field (GL2)	76	65	
The library that helps me with my research needs (GL3)	59	60	

5.3.4.2 Service quality statements – perceptions

Perceptions refer to the user's actual experiences of the services and resources the SL currently provides. The overall mean for the perception of service in SERVQUAL is 2.3. Table 5.7 shows the level of service perceptions by SL users through the SERVQUAL tool.

The overall mean for Assurance was 2. Components of Assurance that obtained the greatest mean scores were: ASR3 (2.1), ASR1 (2.0), and ASR4 (2.0). The lowest mean score was acquired in ASR2 (1.9).

The overall mean for Empathy was 2.1. The component of Empathy that received the highest mean score of 2.2 was EM5. This was followed by the components EM1 and EM4 each receiving a mean score of 2.1. The element that received the lowest mean score was EM2 (2.0).

The overall mean for Reliability was 2.2. Components of Reliability that received the greatest mean scores were RL1 (2.2) and RL3 (2.2). The component that received the lowest mean score was RL2 (2.1)

The overall mean for Responsiveness was 2.0. The element of Responsiveness that received the greatest mean score was RS1 (2.1). Lower mean scores were received in components RS2 (2.0) and RS3 (2.0).

The overall mean for Tangibles was 2.5. Two components of Tangibles each receiving the highest mean score of 2.6, were TA1 and TA2. The component with the lowest mean score was TA3 (2.5).

The overall mean for General library expectations was 2.4. The components of General library expectations with the highest mean score was GL1 (2.5). This was followed by GL2 (2.4) while the lowest mean score was obtained by GL3 (2.3).

Table 5.7 shows that service quality (perceptions) dimensions with the greatest overall mean were TA and GL. Conversely, the overall lowest mean score was recognized in statements such as ASR2.

Table 5.7: Service quality statements – Perceptions (n=160)

Service Quality statements (PERCEPTIONS)	SA (1)	A (2)	N (3)	D (4)	SD (5)	Mean Score
Assurance						
ASR1	61	52	40	6	1	2.0
ASR2	66	54	37	2	1	1.9
ASR3	56	44	49	9	2	2.1
ASR4	56	52	37	13	2	2.0
Empathy						
EM1	52	48	49	7	4	2.1
EM2	52	58	40	8	2	2.0
EM3	49	46	54	8	3	2.2
EM4	52	46	50	11	1	2.1
EM5	44	50	54	11	1	2.2
Reliability						
RL1	47	52	52	7	2	2.2
RL2	50	54	45	9	2	2.1
RL3	50	43	52	12	3	2.2
Responsiveness						
RS1	46	54	49	8	3	2.1
RS2	57	57	35	8	3	2.0
RS3	48	67	38	6	1	2.0
Tangibles						
TA1	26	40	66	23	5	2.6
TA2	29	41	63	19	8	2.6
TA3	27	51	56	20	6	2.5
General library expectations						
GL1	26	60	51	18	5	2.5
GL2	32	61	51	11	5	2.4
GL3	34	58	53	10	5	2.3

5.3.4.3 Measuring the gap in the quality of service rendered

To evaluate the gap in service quality, a formula to measure the gap was created where Quality equals Perceptions minus Expectations ($Q=P-E$). The formula to calculate the SSG for LibQUAL is provided in Section 5.3.5.4.2. All service quality dimensions were included to identify the SSG. Some of the service quality statements that were most relevant to answering the study's research questions were also selected for inclusion in this calculation.

Table 5.8 indicates positive scores were achieved, which indicates that the users' perceived level of quality is above their desired level of service quality. The positive score shows the users' expectations were met or surpassed, which signifies higher service quality. Nonetheless, even though the findings presented positive scores, the level of these positive scores is fairly

low, and there is a need for improvement in the services and resources provided to improve the low positive scores.

Table 5.8: Service quality/superiority gaps

Service quality statement	Perceptions (performance) mean (P)	Expectations mean (E)	Q or SSG (P-E)
Assurance	2	1.7	0.3
ASR1	1.9	1.6	0.3
ASR2	2.0	1.7	0.3
Empathy	2.1	1.9	0.2
EM3	2.1	2.0	0.1
EM5	2.2	1.9	0.3
Reliability	2.2	1.9	0.3
RL1	2.2	1.9	0.3
RL3	2.1	1.9	0.2
Responsiveness	2.0	1.3	0.7
RS2	2.0	2.0	0
RS3	2.0	1.9	0.1
Tangibles	2.5	2.0	0.5
TA3	2.5	1.9	0.6
TA2	2.6	2.2	0.4
General library expectations	2.4	1.8	0.6
GL3	2.3	1.9	0.4
GL1	2.5	2.1	0.4

The next section presents the findings of library quality (LibQUAL) based on the minimum level of quality users are willing to accept, their desired level of quality, and the perceived level of quality they are currently receiving from their SL.

5.3.5 Library quality statements

The study sought to establish the level of SL quality by investigating the gaps between the minimum (1) level of what respondents would find acceptable, and the perceived (2) level which indicates how the user felt after using the services or resources. Furthermore, the desired (3) level of service, represents what the user would personally want from the library. For those users who found that they did not relate to any of the statements listed, an N/A (4) option was provided and the results for this fourth scale are presented in Table 5.11. Table 5.9 presents the results of the LibQUAL tool with 17 statements of library quality in percentages while Table 5.10 presents the same results in mean scores to help identify the gaps between the three

dimensions and determine the quality of the library. The desired-minimum (D-M) score interpretation standard was used to interpret scores attained from the LibQUAL tool data. According to Dennis and Bower (2007:3), this score incorporates all three scores (minimum, perceived, and desired) by assigning users' perceptions of library quality in the context of both minimum and desired expectations. Section 5.3.5.4 concerning the gaps between library quality measures, explains how the D-M score was obtained in the study, and the required actions based on these acquired scores will be discussed in Chapter 6.

The next section presents the minimum, perceived, and desired mean scores from columns two to four in Table 5.10 as well as the gaps between the measures.

5.3.5.1 Users' minimum level of library quality

The overall mean for a minimum level of library quality was 1.0. The mean for the Affect of service (AS) was 0.18. The components of AS that obtained the highest minimum probability mean scores were AS-1 (0.19), which was indicated by 31 respondents, and AS-6 (0.17), indicated by 27 respondents. Components that received equal mean scores were AS-4 (0.15) and AS-5 (0.15) as indicated by 24 and 25 respondents respectively. The components that received the lowest mean scores were AS-2 (0.13) and AS-3 (0.13) as indicated by 22 respondents each.

The mean score for Information control (IC) was 0.19. The elements of IC that obtained the greatest mean scores were IC-2 (0.21), and IC-1 (0.20), as indicated by 34 and 33 respondents respectively. These were followed by IC-4 (0.18) and IC-5 (0.18) as indicated by 29 respondents respectively. The lowest mean score was recorded in IC-3 (0.16), as indicated by 26 respondents.

The mean score for Library as place (LP) was 0.24. The components that received the greatest mean scores were LP-4 (0.27) as indicated by 43 respondents, followed by LP-1 (0.24) and LP-3 (0.24), as indicated by 39 respondents each. The lowest mean score was recorded in LP-2 (0.21), as indicated by 33 respondents.

The mean score for Satisfaction with the library (SWL) was 0.19. The element that obtained the highest mean was SL-2 (0.23), as indicated by 38 respondents, and the lowest mean was obtained in SL-1 (0.14) as indicated by 23 respondents.

5.3.5.2 Users perceived level of library quality

The overall mean score for the perceived level of library quality by users was 0.55. The AS measure on the perceived level received a mean score of 0.61. The component of AS that received the highest mean was AS-3 (0.72), as indicated by 58 respondents. The following elements obtained mean scores of 0.68 to 0.6: AS-4 (0.68) as indicated by 54 respondents, AS-2 (0.63) and AS-6 (0.63) both being indicated by 50 respondents, and AS-5 (0.6) as indicated by 48 respondents. The lowest mean score was obtained in AS-1 (0.45) as indicated by 36 respondents. The IC measure on the perceived level received a mean score of 0.53. The element that received the greatest mean was IC-3 (0.66) as indicated by 53 respondents. This was followed by IC-4 (0.61) as indicated by 49 respondents, and the lowest mean score was received by IC-2 (0.39) as indicated by 31 respondents.

The LP measure on the perceived level obtained a mean score of 0.46. The elements that received the highest mean score were LP-1 (0.51) as indicated by 41 respondents. This was followed by LP-2 (0.47) as indicated by 38 respondents. The lowest mean scores were recorded in LP-3 (0.46) as indicated by 37 respondents and LP-4 (0.41) as indicated by 33 respondents. The SL measure on the perceived level obtained a mean score of 0.56. The component that received the highest score in this measure was SL-1 (0.61) as indicated by 49 respondents, and the lowest score was obtained in SL-2 (0.54) as indicated by 43 respondents.

5.3.5.3 Users desired level of library quality

Overall, the desired level measure obtained the highest mean score (1.15) as compared to other measuring levels. When it comes to the AS measures on the desired level of LibQUAL, the mean score was 1.29. The elements of AS in the desired level with the highest mean were AS-1 (1.42) as indicated by 76 respondents and AS-2 (1.35) as indicated by 72 respondents. The lowest mean (1.23) was recorded in three statements AS-3, AS4, and AS6 as indicated by 66 respondents respectively.

When it comes to IC in the desired measure, the mean score was 1.02. The components that obtained the highest mean scores were IC-4 (1.11) as indicated by 59 respondents. Followed by IC-2 (1.05) as indicated by 56 respondents, and IC-1 (1.03) as indicated by 55 respondents.

The overall mean score for LP was 1.06. The elements that received the equal highest mean of 1.14 were LP-2 and LP-3 as indicated by 61 respondents each. This was followed by LP-1 (1.10) as indicated by 59 respondents. The lowest score was recorded in LP4 (0.86) as indicated by 46 respondents.

The SL measure in the desired level of library quality mean was 1.21. The element that obtained the highest mean was SL-1 (1.27) as indicated by 68 respondents. The lowest mean was recorded in SL-2 (1.14) as indicated by 61 respondents.

Table 5.9: Library quality statements (n=160)

Library quality statements	Minimum	Perceived	Desired
Affect of service (AS)			
The library gives users individual attention (AS-1)	31 (19%)	36 (23%)	76 (48%)
The library has employees who are consistently polite (AS-2)	22 (14%)	50 (31%)	72 (45%)
The library staff are always ready to respond to users' questions (AS-3)	22 (14%)	58 (36%)	66 (41%)
The library staff are knowledgeable when answering users' questions (AS-4)	24 (15%)	54 (34%)	66 (41%)
Library users can depend on library staff to respond to service problems (AS-5)	25 (16%)	48 (30%)	68 (43%)
The library staff care and understand users' needs (AS-6)	27 (17%)	50 (31%)	66 (41%)
Information control (IC)			
The library makes electronic resources accessible from my office (IC-1)	33 (21%)	40 (25%)	55 (34%)
A library website/page enables me to locate information on my own (IC-2)	34 (21%)	31 (19%)	56 (35%)
The library provides printed information resources that I need to complete my work (IC-3)	26 (16%)	53 (33%)	50 (31%)
The library makes information easily accessible for independent use (IC-4)	29 (18%)	49 (31%)	59 (35%)
The library has print and electronic journal collections I require for my work (IC-5)	29 (18%)	38 (24%)	54 (34%)
Library as place (LP)			
The library has space that inspires studying and learning (LP-1)	39 (24%)	41 (26%)	59 (37%)
The library has quiet space for individual activities (LP-2)	33 (21%)	38 (24%)	61 (38%)
The library is a comfortable and inviting location (LP-3)	39 (24%)	37 (23%)	61 (38%)
The library has a community space for group learning, meetings, or study (LP-4)	43 (27%)	33 (21%)	46 (29%)
Satisfaction with the library (SWL)			
The library services rendered by staff (SL-1)	23 (14%)	49 (31%)	68 (43%)
The library resources (books, journals, newspapers, etc.) (SL-2)	38 (24%)	43 (27%)	61 (38%)

Table 5.10: Library quality measures mean scores

Measures	Minimum Mean (M)	Perceived Mean (P)	Desired Mean (D)	ZOT (D-M)	SAG (P-M)	SSG (P-D)	D-M Score (SAG/ZOT x 100)
AS							
AS-1	0.19	0.45	1.42	1.23	0.26	-1.97	21.14
AS-2	0.13	0.63	1.35	1.22	0.49	-0.73	40.16
AS-3	0.13	0.72	1.23	1.1	0.59	-0.51	53.64
AS-4	0.15	0.68	1.23	1.08	0.53	-0.55	49.07
AS-5	0.15	0.6	1.28	0.95	0.27	-0.68	28.42
AS-6	0.17	0.63	1.23	1.06	0.46	-0.6	43.39
Mean	0.15	0.61	1.29	1.14	0.47	-0.68	41.22
IC							
IC-1	0.20	0.5	1.03	0.83	0.3	-0.53	36.14
IC-2	0.21	0.39	1.05	0.84	0.18	-0.66	21.43
IC-3	0.16	0.66	0.94	0.78	0.5	-0.28	64.10
IC-4	0.18	0.61	1.11	0.92	0.43	-0.5	46.74
IC-5	0.18	0.47	1.01	0.83	0.29	-0.54	34.94
Mean	0.19	0.53	1.02	0.83	0.34	-0.49	40.96
LP							
LP-1	0.24	0.51	1.10	0.86	0.27	-0.59	31.40
LP-2	0.21	0.47	1.14	0.93	0.26	-0.67	28.00
LP-3	0.24	0.46	1.14	0.9	0.22	-0.68	24.44
LP-4	0.27	0.41	0.86	0.59	0.14	-0.45	23.73
Mean	0.24	0.46	1.06	0.82	0.22	-0.6	26.83
SL							
SL-1	0.14	0.61	1.27	1.13	0.47	-0.66	41.59
SL-2	0.23	0.54	1.14	0.91	0.31	-0.6	34.06
Mean	0.19	0.56	1.21	1.02	0.37	-0.65	36.27
Overall Mean	0.19	0.55	1.15	0.96	0.36	-0.6	37.5

5.3.5.4 Gaps between library quality measures

The gap in LibQUAL levels was determined using the scores obtained in the minimum, perceived, and desired levels from the 17 library quality measures listed in Table 5.10. The calculations aimed to reveal the following measures and gaps:

- i. The zone of tolerance (ZoT) – the level of library quality users find acceptable;
- ii. Service superiority gap (SSG) – the level to which perceived library quality exceeds what was expected by users;
- iii. Service adequacy gap (SAG) – the level to which library quality meets the minimum expectations of users; and
- iv. D-M score – to indicate strong and weak points of library quality (Dennis and Bower 2007:10; Mutisya 2017:134-136).

5.3.5.4.1 Level of library quality users find acceptable

According to Nadiri and Hussain (2016:245) and Zeithaml, Berry, and Parasuraman (1993:5), the ZoT represents “a range of expectations (desired and adequate) and an area of acceptable outcomes in service interactions”. Library users will be satisfied with the services or resources delivered that fall in this zone. However, if the service falls below the ZoT, users will be dissatisfied (Nadiri and Hussain 2016:251-252). The findings in this study revealed that the overall mean score of the ZoT for LibQUAL was 0.96, the AS measure obtained a ZoT score of 1.14; the IC measure obtained a score of 0.83; while the LP measure obtained a score of 0.82, and the SL measure obtained a score of 1.02.

5.3.5.4.2 Level to which library quality exceeds users’ expectations

To determine the SSG in LibQUAL measures, the perceived mean score is subtracted from the desired mean (DM) score, that is $SSG = (P-D)$. As alluded to in Section 5.3.4.3 above a negative SSG shows that the library is not delivering superior library quality to the users. Table 5.10 indicates that the overall SSG for this study was -0.6, and all other LibQUAL dimensions were negative. The highest overall negative SSG was recorded in the AS dimension (-0.68).

5.3.5.4.3 Level to which library quality meets the minimum expectations of users

In LibQUAL measures, the SAG can be described as the difference between the perceived mean (PM) score and the minimum mean (MM) score. Thus, the SAG was calculated by deducting the minimum score from the perceived score level of library quality as determined by users (Mkhonta 2016:474). Furthermore, a negative SAG implies that the library is not meeting the minimum expectations of users and there is a need for the library to improve those dimensions with the negative scores. Table 5.10 indicates that the overall mean for the SAG in LibQUAL was a positive 0.36; this implies that the perceived level of library quality is beyond their minimum expectations. It should be noted that none of the LibQUAL dimensions obtained a negative score – AS was 0.47, IC was 0.34, LP was 0.22, and SL was 0.37.

5.3.5.4.4 Identification of strong and weak points of library quality (LibQUAL D-M scores)

The D-M score was calculated by dividing the SAG by the ZoT and then multiplying that proportion by 100 (Mkhonta 2016:475). The score from this formula indicates the position of the perceived level of LibQUAL concerning the minimum level accepted by users and the level of quality desired by users. The D-M score usually ranges between 0 and 100 (refer to Table 6.1). The LibQUAL measure obtained an overall mean score of 37.5. The D-M mean score for AS was 41.22, IC was 40.96, LP was 26.83, and SL was 36.27. These scores indicate that when it comes to LibQUAL, the library performed below the expected measures and the ZoT of users.

5.3.5.4.5 Library quality measures – not applicable option

Table 5.11 showcases respondents who opted for the N/A option on the LibQUAL tool. The Table shows that out of the 160 respondents on the LibQUAL tool, 2.39% of those respondents opted for the library quality not applying to them; therefore, the findings presented in Tables 5.9 and 5.10 above can be said to be a true representation of respondents' views on the quality of SLs.

Table 5.11: LibQUAL statements - Not applicable (n=160)

LibQUAL statements	N/A	Mean
AS		
AS-1	17 (11%)	0.42
AS-2	16 (10%)	0.4
AS-3	14 (9%)	0.35
AS-4	16 (10%)	0.4
AS-5	19 (12%)	0.47
AS-6	17 (11%)	0.42
Overall mean		0.41
IC		
IC-1	32 (20%)	0.8
IC-2	39 (34%)	0.97
IC-3	31 (19%)	0.77
IC-4	26 (16%)	0.65
IC-5	39 (24%)	0.97
Overall mean		0.83
LP		
LP-1	21 (13%)	0.52
LP-2	28 (18%)	0.7
LP-3	23 (14%)	0.57
LP-4	38 (24%)	0.95
Overall mean		0.68
SL		
SL-1	20 (12%)	0.5
SL-2	18 (11%)	0.45
Overall mean		0.47

The next section covers benchmarking and related issues.

5.3.6 Internal benchmarking and general questions

In this section, the researcher sought to understand the value of SLs in PGDs from the users' perspective regarding the attention paid by management towards library services, their satisfaction with the library services and resources, those resources and services considered the best, what the library should be providing in terms of departmental support, and which department section they think the library should be working with.

5.3.6.1 Attention paid by management to the development of the special library

The respondents were asked to indicate their views regarding the attention given to the library by the management of the department and to further elaborate on the answer provided. Figure

5.6 shows that there is not enough attention given by management to the development of SLs in PGDs as indicated by 109 (68%) respondents as compared to 42 (26%) respondents who felt that management was doing enough for the library.

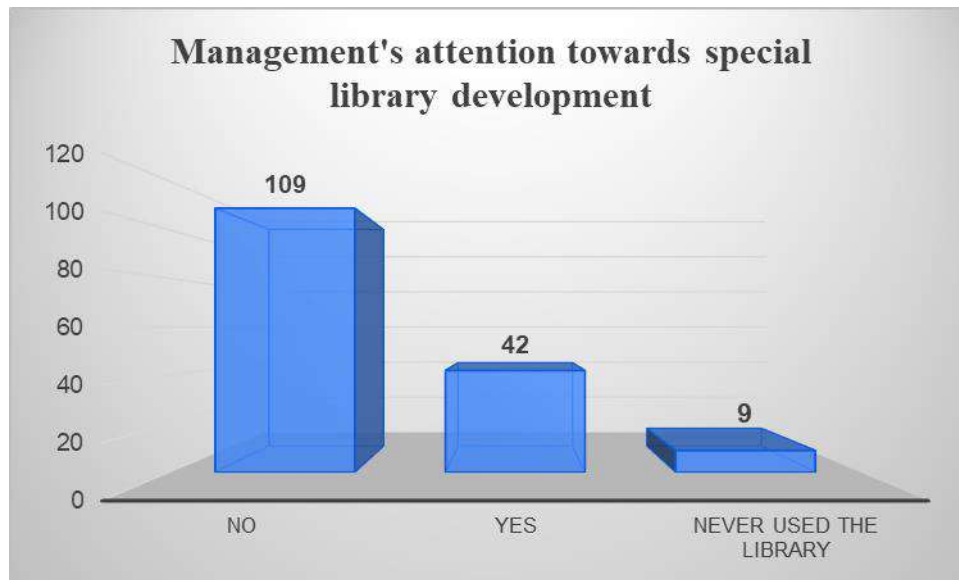


Figure 5.6: Managements' attention toward special library development (n=160)

In briefly explaining their answers, library users expressed their views regarding the attention paid by management to the SL. Those who felt that there was no attention being paid explained, for example, as follows: *allocate more budget for the library; outdated library resources; lack of library marketing and information about library benefits; lack of qualified IPs; and lack of recognition of the library potential in the department.*

Explanations from respondents who indicated that management does give the library attention included: *there are some visible improvements in the library; the library has updated resources; and IPs assess users' needs before procuring library materials.*

Explanations from respondents who indicated that they had never used the library were encapsulated by one respondent who mentioned the *lack of knowledge about the existence of the library even after being in the department for a long time.*

5.3.6.2 Library resources and services in the department meeting users' general needs for information

When asked to indicate whether their general information needs were being met by the SL in their department, a majority 104 (65%) of respondents indicated that the library does meet their general needs for information, while 56 (35%) indicated that their information needs were not being met (refer to Figure 5.7).



Figure 5.7: Library resources and services meet our general needs for information (n=160)

5.3.6.3 Best library services or resources received

Those respondents who answered in the affirmative to the previous question were then asked to identify at least one "best" library service or resource they have received. The findings are shown in Table 5.12. Thirty-one (19%) respondents identified Electronic resources/services as the best services they have received. Other best services or resources indicated by respondents include Printed books 25 (17%), Newspaper services 21 (13%), Research services 13 (8%) (provided by the library staff), Work-related resources 8 (8%), and the Selective dissemination of information (by library staff) as indicated by 6 (4%) respondents. However, some respondents, rather than listing the best services/resources received, opted to mention what they would like to receive in the library. In this regard, 14 (9%) respondents, indicated that there

was a need for library resources to be updated and that the library should have a quiet space for users to study.

Table 5.12: Best services/resources from the library (n=104)

Best library services/resources received by users	Frequency	Percentage
Newspaper services	21	13%
Printed books	25	17%
Electronic library resources/services	31	19%
Government gazette notices (online and at the library)	7	4%
Work-related resources	8	5%
Selective dissemination of information	6	4%
Leisure books	4	2%
Research services	13	8%
Need for updated resources and quiet space to study	14	9%
Library staff are competent	1	1%

*Multiple responses were possible

5.3.6.4 What library should be providing for it to be seen as the support structure of the department

The study sought respondents' perspectives on what they thought should be provided by the library in terms of supporting the department. The highest number 34 (21%) of respondents indicated the need for their SLs to move towards the introduction of online services and resources, pointing out that library users require more electronic databases and online books to support their research, training, and general reading. Twenty-two (14%) respondents raised the issue of the need for library awareness through various marketing strategies such as regular updates on what the library has to offer, library induction of new employees, library poster distribution in the offices, and library banners at the entrance of the building. Sixteen (10%) respondents suggested the need for the SL to provide services and resources that are relevant to their information needs since the materials currently in their library are outdated. The need for the SL to offer resources and services that could assist users with their job functions was raised by 15 (9%) respondents. Six (4%) respondents suggested the need for the library to provide specialized services such as braille services, adult basic education and training (ABET) for upskilling staff, motivational sessions, a group discussion room, and an employee book club. Two (1%) respondents pointed to the lack of financial support for the SL, suggesting that the library should be provided with a sufficient budget for its development. Some provincial departments are subdivided into regions and most of the SLs are housed in the head office of that department, consequently, there were respondents, 3 (2%), who felt that regional offices

should also have their libraries, especially those regions that are separated by a significant geographical distance from their head offices.

5.3.6.5 Section/s in the department library should be working with

In the final question, the respondents were asked which departmental section/s they thought the SL should be working together with. The Communications section, mentioned by 23 (13%) respondents, and the IT Unit mentioned by 20 (12%) respondents were two of the sections specifically suggested that the library should be working together with. Other sections identified were Human Resources Development (HRD) and Learning/Study Support with 12 (7%) respondents each; Records Management 7 (4%) respondents; Knowledge Management and Research; and Policy Development and Legal Services with 5 (3%) respondents each.

The next section presents the qualitative data.

5.4 Qualitative data presentation

This section presents the qualitative data derived from interviews conducted online with the IPs and the HODs of the targeted departments.

5.4.1 Response rate for qualitative data

From the six departments that were targeted for the study, only four IPs agreed to participate in the interview sessions; they are referred to as participants IP-A, IP-B, IP-C, and IP-D. An equal number of HODs were interviewed and are referred to as HOD-A, HOD-B, HOD-C, and HOD-D (see section 5.4.3). Table 5.13 depicts the response rate of 67% for both the IPs and the HODs.

Table 5.13: Qualitative data response rate (n=12)

Participants	Number of participants required	Number of participants acquired	Percentage %
Information professionals (Library managers/librarians)	6	4	67%
Head of departments	6	4	67%
Total	12	8	67%

5.4.2 Information professionals' interviews

The researcher sought the IPs' perspectives on the value of SLs in PGDs as they are the ones who provide the services to the users and are in a better position to narrate the value the library has in these departments and identify the methods used to communicate such value. Guided by the interview schedule for IPs (refer to Appendix B), participants' views are presented below.

5.4.2.1 Awareness, use of services, and purpose of use

This section aimed to partly cover RQ4 and RQ5. The results presented in this section were used to test H1.

5.4.2.1.1 Library users' awareness of the library and its services

In this question, the researcher sought to understand the IPs' point of view on whether the staff in the PGDs under study were aware of the availability of the SL services, whether they utilized the services, and what the purpose of use was. All four participants indicated that the staff members are aware that there is a SL in the department. However, as pointed out by one of the participants, awareness does not automatically indicate utilization: *They are not [all] using the library services that are there (IP-A)*

A second participant pointed out that there is still a need to raise more awareness of the library and its services to other employees.

5.4.2.1.2 Strategies to keep users informed about the library to make them keep using the services provided

In this question, the researcher sought to uncover the different types of marketing methods or strategies that IPs use to raise awareness of the SL to the users so that they remain informed about the library and continue to use its services. Three of the four participants interviewed indicated the use of internal emails to promote or inform specific users about a new book or journal available in the library. The marketing of the library and its services is also done "during departmental staff meetings where IPs alert users of what is new in the library". Another method of promoting awareness was "placing posters around the building regarding library

services and creating a library display of new resources at the entrance of the building”. However, IP-B expressed the difficulty of having to “raise awareness for library materials that are outdated and offering services that would be of no use to the users due to a lack of budget to acquire resources and offer services that are current and beneficial to users”. Thus, IP-B noted that:

There is no longer a budget for the library, so the promotion of library services is pointless as we won't be able to meet users' needs.

5.4.2.1.3 Main reason for users to use/visit the library

With this question, the researcher sought to determine what the IPs identified as the main reason why staff used the library and to determine if the reason/s put forward concurred with those of the users. Despite the wording of the question, the participants provided several reasons for staff library use. The reason all participants agreed upon was that departmental staff used the library to do research or get assistance with their studies (assignments). Participants also pointed to users coming to the library to access newspapers, photocopy machines, computers, and the latest journals. Participants IP-A and IP-C noted that they also depended on services provided by the provincial library services (part of the Department of Sport, Arts, and Culture) for those books requested by the users but were not housed in the SL. Thus, from the IPs' point of view, SLs in PGDs were mainly used to fulfill the personal needs of the users.

5.4.2.1.4 Influence that library use has on employees' personal information needs and jobs

With this question, the researcher aimed to determine if the services provided by the SL had any impact on staff members' personal needs and their jobs. All the participants concurred that their SL had a positive influence on the staff members especially those who are studying. When asked how this is evidenced, they pointed out that these same staff returned to use the library indicating that they do find the library and its services useful in meeting their personal needs. IP-A stated that they do get feedback from users on how particular information assisted them in their studies or certain tasks in their jobs. IP-C pointed to the SL space being utilized:

The library is also used as office space by those who do not have offices allocated to them and to access the Internet; however, the library currently does not have any internet connection, and this discourages users to revisit the library.

5.4.2.2 Special library policy/framework/guidelines

In this section, the researcher sought to determine whether the SLs operate under certain policies, frameworks, or guidelines in terms of their development, what it entailed, and if it was reviewed. This section partially responds to RQ2.

The participants responded as follows:

IP-A indicated that their library has an old policy, which they currently use. However, when it comes to library development, they hold meetings with branch librarians to discuss what is required in the branches and that is how resources are procured.

IP-B stated that their library does have a policy; however, it has yet to be approved by management.

IP-C reported that the library does not have any policy.

IP-D stated that their library does have a library policy for library development. It was created almost two years ago and has not been reviewed.

5.4.2.3 External benchmarking

The purpose of this section was to determine the various activities being conducted in the SLs to identify best practices that other libraries could benchmark to improve their own services.

5.4.2.3.1 Best ways to demonstrate or communicate library quality to senior management

In this question, the researcher sought to determine the best ways by which the IPs demonstrate the quality of their libraries to management. The question partially responds to RQ3, and the findings were used to test H3. When it comes to SLs in PGDs, the management not showing much-needed interest in the quality of services provided by these libraries appears to be a challenge. This was confirmed by IP-A and IP-C as follows:

It is a challenge to demonstrate the quality or value of the library because the management has very limited interest in the library and also to get them just to come and view the library.

In this department the library is not prioritized by the management, I would say the management does not have an interest in the library because if they did have an interest, they would not have cut off the entire budget concerning the library.

On the other hand, IP-D reported that:

My library conducts statistics every quarter where we check the frequency of use of library materials and services. This will then be combined into a report which is sent to the senior management for them to be aware of what is happening in the library and what the library has achieved in each quarter.

The remaining participant (IP-B) commented that the issue of demonstrating library quality and how it is communicated to management is handled by an assistant director of the library.

5.4.2.3.2 Ensuring library collection is aligned to departmental objectives

This section partially responds to RQ2 and the findings were used to test H2. Participants were asked how they ensure that the library collection is aligned with the objectives of their department. All participants agreed that the development of the library collection has to be done according to the mandate of the department and its strategic objectives. However, IP-C pointed out that when the library was fully operational, they had a library committee that included members of each unit in the organization. The committee met annually to discuss what various information resources needed to be procured for the library that would be aligned to each unit in the organization. IP-A indicated that since they have different types of libraries

Procurement of the materials is based on the syllabus of that particular library we are buying for and nothing beyond their scope of field is considered.

5.4.2.3.3 Key trends being followed by the library

In this section, the researcher sought to determine if the SLs under study were following any key trends that made them stand out in their departments and bring value to their libraries. The advancements in IT and the recent COVID-19 pandemic have shifted how libraries operate. During the pandemic (and particularly during the associated lockdowns), there was a need for libraries to introduce services that ensured that users still received the resources or services they required. Thus, new services and resources were introduced during this period. In light of RQ5, the researcher thought that the answers to this question could help other SLs by benchmarking the best practices and thus improving their services. Apart from IP-C who indicated that there were no current trends as their library was just operating with what they had, all the other participants indicated the notion of moving from a traditional library to the adoption of online library resources and services that could be accessed anywhere and at any time by the users. This shift included the digitization of library resources, paid online subscriptions to journals or newspapers, and open access. From the participants' point of view, users were now showing a preference for online information to meet their needs, and their libraries were moving to accommodate this preference.

5.4.2.3.4 Section or unit the library is placed

The researcher sought to determine under which section in the department the library is placed to establish if its current location or placement helped facilitate or hinder its development. This comes down to communication or reporting channels (RQ3) the IPs follow regarding all issues concerning the library. From the participants' responses, it appears that SLs in PGD departments were placed under different sections, and in the case of the four libraries under study, these sections were the Corporate Communication section, the KM section, the Policy and Research Unit, and the Research Department.

5.4.2.3.5 Library best practices

For external benchmarking between SLs in GDs, the researcher asked participants to list the best practices in their libraries. This question responds to RQ5 and the findings were used to test H5. The participants listed their best practices as follows:

IP-A: *Access to electronic resources and assisting users with their studies/research assistance.*

IP-B: *Lending books and newspaper services.*

IP-C: *Supplier of current local newspapers; access to the computer and internet for users; and offering updated information resources and services.*

IP-D: *Ensuring that the available information is valid, current, and peer-reviewed.*

5.4.2.3.6 Section in the department that the library can work in conjunction with

In this question, the researcher sought the IP's perspective concerning their library's placement in the department and whether they thought the library could be better placed for improved performance and better value to the PO. Irrespective of their location, SLs should be working in conjunction with all sections in the department, as pointed out by participants IP-A and IP-D. However, IP-B was of the view that the library should be working with the Policy and Research section, while IP-C opined that:

The Communication Unit could work better with the library since they are already dealing with information and have relevant infrastructures to bring awareness of the library to the users.

5.4.2.4 Satisfaction with service

This section partially responds to RQ3; it comprised one question which concerned how the IPs measured the satisfaction of users with the library services and resources offered.

5.4.2.4.1 How the satisfaction of library users is measured

IP-A indicated that their library did not have any measures in place to measure the satisfaction of their users. IP-B said that measuring the satisfaction of users was not done as regularly as it should be. When it was done, electronic surveys and manual questionnaire forms situated at the library were used to enable users to rate the services that they have received. IP-C stated that when the library was still active, they used to conduct regular questionnaire-based surveys to measure the satisfaction of the users, and the findings would be presented at the library committee meeting. The participant further revealed that they used to have a suggestion box at the library for users to write down their complaints/compliments/suggestions regarding the

library; these would be evaluated monthly to determine if there were any issues that the library needed to attend to or improve upon. IP- D revealed that:

We used to have a questionnaire attached to each library resource that a user would fill out after usage regarding their satisfaction, which did not work. Now the satisfaction of users is measured through our statistics. We also get verbal feedback, which is not measurable.

5.4.2.5 Perceptions of special library value

In this section, the researcher sought to determine the IPs' understanding of the value of their library to users and management, and what changes they would wish to see that could improve the value of their libraries. This theme partially responds to RQ6 in terms of how IPs are valued in PGDs.

5.4.2.5.1 Library services most valued by users

When asked “Which of the services provided by the library do you think is most valued by your users?”, IP-A indicated that the most valued service was the sourcing of academic books from the provincial library services for users to complete their studies. It was evident from the responses given, that library resources and services such as books, journals, internet access, and newspapers were some of the most valued in the departments under study. However, IP-D stated that users now value information that can be accessible online and, more especially, at any given time, as this saves the time involved in having to visit the library in person. The responses from the participants in effect show that the SL services and resources in PGDs were being utilized to some extent.

5.4.2.5.2 Skill set needed by information professionals in the current post-truth era to assist departmental decision-making

The researcher sought to understand the skills that IPs perceive would be of value in the department now that information is quickly and easily accessible through the internet and how those skills could assist their PO in using credible sources and making informed decisions. This partially responds to RQ6 and the findings used to test H6. IP-A revealed that “IPs should be

critical and logical about the resources that are used in the department; they should be able to evaluate the sources (authenticity check) and their reliability before taking information and passing it on to users”. Using peer-reviewed sources, information searching, or researching skills were other skills that were suggested by participants. Participants also suggested that it is important for IPs to keep themselves up-to-date with the various trends in the library and information field by attending workshops, conferences, and training initiatives on new technological developments. The responses provided imply that IPs in PGDs understand the need to embrace the demands that come with the evolution of technology by upgrading their skills, thereby remaining relevant to new trends that help them contribute to their POs.

5.4.2.5.3 Extent to which the library is valued by the department

Participants were asked to gauge, on a scale of one to 10, the level of library value to the PO and to explain their valuation. The struggle of IPs to locate, demonstrate, or prove their value to management was the crux of this study. Therefore, it was imperative to weigh the perspectives of IPs on the value of library services as portrayed by their departments. The highest level of library value, that is, eight, was given by IP-D who commented that the reason for the rating was that some employees were still not aware of or did not make use of library services. However, apart from that, their library was valued in the department. IP-A rated their library’s value to be generally at level five due to the underutilization of library services and lack of financial support from management. IP-B rated the value of library services in their department at level four. The reasons for the low rating were an insufficient budget to meet users’ needs, extensive supply chain management (SCM) processes when procuring library materials, and the lack of cooperation between the library and the management of the department. Lastly, IP-C provided a rating of one, revealing that the library services in their department had been dissolved and a KM center was being introduced.

5.4.2.5.4 What can management do to improve the library and its services

In the final question, the researcher sought to get the perspectives of the participating IPs on what could be done by management to help improve the value of library services. All participants raised the issue of ensuring that the library budget was prioritized and accessible whenever there was a need for library improvement. Three additional responses were as follows:

IP-A: *More buy-in from the management regarding the library development.*

IP-B: *Improve supply chain management processes when acquiring books, or allow the library to purchase materials directly from the supplier.*

IP-D: *Hire qualified information professionals.*

5.4.3 Heads of department interviews

HODs were included to get their perspectives on the significance of having a SL in their departments. Furthermore, their views on how they saw the library being part of the department's strategic plans in achieving its objectives were equally important. The findings from the interviews with the HODs on the value of SLs in their departments are presented below (refer to Appendix C for the interview schedule).

5.4.3.1 Current key objectives for the organization

In the first question, the researcher sought to understand the different objectives of each department under study to get a better perspective on what role their SL would be expected to play in assisting the department in reaching its goals. Table 5.14 reflects the key objectives of each department as indicated by the four HODs.

Table 5.14: Departments' key objectives

HOD	Key Objectives
A	<ul style="list-style-type: none"> • <i>To become the implanting agent of choice, to have the right capacity in the department to be able to deliver infrastructure</i> • <i>To build good relations with client departments</i> • <i>To provide infrastructure and immovable asset management on behalf of the client department</i> • <i>To improve the lives of the people of KwaZulu-Natal through sustainable infrastructure development and property management</i>
B	<ul style="list-style-type: none"> • <i>To ensure quality health services in the province through outreach health services, health promotion, reduction of communicable and non-communicable diseases</i>
C	<ul style="list-style-type: none"> • <i>To provide comprehensive farmer support that focuses on different areas or pillars such as to ensure that we have food security in the province</i> • <i>To provide extension and advisory services to our farmers</i> • <i>To provide analytical research and laboratory services</i>
D	<ul style="list-style-type: none"> • <i>Facilitating integrated economic planning and growth</i> • <i>Being a catalyst for economic transformation job creation and sustainable development</i> • <i>Implementing strategies that drive economic growth</i> • <i>Creating a conducive environment for trade, investment and tourism</i> • <i>Developing, monitoring, and enforcing a sound business, environmental, and consumer protection framework</i>

It was evident that the PGDs did not have the same objectives; thus, the functions of their SLs differed and so were the services and resources offered.

5.4.3.2 How the library service could contribute to the objectives

The researcher sought to ascertain how the HODs viewed the library in terms of its contribution to meeting the departments' objectives which, in turn, would indicate how they valued the library services. This question partially adds to RQ5 and the findings used to test H5. The participants appeared to understand the purpose of having a library and how the services provided would contribute towards achieving the objectives of their department. This was confirmed by HOD-A, who noted the necessity of information management for any successful GD and improving service delivery. HOD-A thus regarded the library as:

... a key to any organization as it is where people get information and so any organization must have an effective library service.

Likewise, HOD-C also identified the library as the key repository of the knowledge that is created in the department specifying that:

The library contributes through a knowledge creation function and it resonates around the issue of acquiring skills and creating new knowledge while storing the acquired knowledge since there is a lot of research conducted in the department.

The remaining two HODs concurred on the contribution of library services to the objectives of the department as they facilitated continuous learning of employees (users), ensured the availability of information online and on-site, and provided relevant and credible information to employees, which assisted in performance improvement and decision-making by management.

5.4.3.3 Indicators or measures to demonstrate the contribution of library services to the department (internal benchmarking).

The purpose of question 3 was to conduct internal benchmarking for each department, that is, to find internal working standards in the department that assist in knowledge and information sharing. The question partially responds to RQ5.

HOD-A noted the following when it comes to indicators that demonstrate the contributions of library services:

...being able to access the library and the information or services available, having the right people with the relevant qualifications and experience to manage the library.

HOD-B also noted the issue of having access to information and having a user-friendly space in the library. The ability to consistently trace documentation through proper filing and archiving was another indicator mentioned.

HOD-C reported that the contribution of library services to the department was indicated by:

The amount of knowledge generated through the use or consultations of library services and resources, the statistics in terms of users utilizing the library, frequency of use of library materials, and the number of research papers produced by the department on an annual basis.

The use of statistics as indicators or measures of the library's contribution to the department was also noted by HOD-D:

The number of information sources acquired; number of patrons visiting the library, online queries and telephone queries, and number of information sources utilized by patrons.

5.4.3.4 Necessity of having a departmental library

Participants were asked whether they thought it necessary for their department to have a library. This question cut to the core of whether the HODs saw value in having a library. This question partially responded to RQ5. HOD-A stated the following:

It is critical to have an effective library because that is where we should be keeping all information. It also saves time for our professionals to have access to the required information in-house rather than a person going out to other institutions to look for that information, which improves service delivery.

HOD-C explained that:

The library is an important part of our existence as a department because our services are more scientific and more social, which is why we need to acquire more knowledge to support those areas.

HOD-D understood that the library is an integral part of the organization stating that:

It provides relevant and up-to-date information in different formats to assist the department in achieving its strategic goals.

Notably, all the HODs agreed that their departments needed library services. They also expressed the necessity of having an effective library as it saves time in getting authentic information to achieve the strategic objectives of the department.

5.4.3.5 Budget allocation for the library and its utilization

The researcher sought to determine whether a set budget was allocated for the library (in contrast to it being catered for on an ad-hoc basis in the departmental budget) and whether it was utilized. All participants concurred that there is a budget allocated for the library, which is being utilized to develop the library as and when required.

5.4.3.6 Information professionals in the post-truth era have sufficient skills to assist the department achieve its objectives

The researcher sought the opinions of the HODs regarding IPs' skills in terms of whether they are sufficiently skilled to assist the department achieve its objectives in the light of the free flow of information through the internet. This question partially responds to RQ6 while the findings were used to test H6.

HOD-A expressed that:

We can only be able to assess someone's skills when they are doing their jobs, but the fact that there are IPs hired in the department means that they are seen as fit and relevant to the department.

HOD-B indicated that:

Currently, all IPs are fully equipped to search, access, and use data as part of their functions. They assist the department in extracting data, analyzing that data, and presenting it in the form of a report when required. This is in line with meeting the objectives of the department.

However, HOD-C admitted that there was less focus on investing in libraries and the same would apply to the development of IPs' skills. This HOD further indicated that in this era where information is everywhere, IPs that can adapt to the ever-changing technology, acquire skills that are necessary in their line of duty, and deliver what is expected from them, are needed.

HOD-C stressed that:

We need IPs that will reconsider how the library should look in terms of information packaging for the department and obtain relevant skills to achieve that.

HOD-D agreed that their IPs were well equipped with enough skills to assist in this free-flowing era of information; furthermore, the HOD pointed out that IPs undertook regular training, and attended workshops and conferences to keep themselves updated with relevant skills.

5.4.3.7 HODs' visits to the departmental library

The question about whether the HODs had ever visited the library in their departments partially responded to RQ1.

All four HODs interviewed confirmed that they had visited the library, which indicates awareness; however, three of them confessed that the visit was in passing and did not take time to look around and ask about the administration of the library. HOD-B stated that during the visit to the library they observed that:

The library team tries their best to provide the best service to the staff. There is a need for improvement in terms of the library environment, the technology infrastructure needs to be modernized and an update on the latest variety of library resources is required.

5.4.3.8 Alignment of library services with the strategic goals and objectives of the department

The researcher sought to determine how closely aligned the library services were with the strategic goals and objectives of the departments. The question asked partially responds to RQ2 while the findings were used to test H2. In response, HOD-A emphasized the necessity of information management in their department by using the library to store records from completed projects and having those records at the press of a button. According to the HOD, the matter of record keeping through library systems helps prevent the issue of repeating old mistakes or wasting time doing projects that have been done before, instead of using available records to improve new projects. Moreover, HOD-A noted that:

An effective library should link its functions strategically to the objectives of the department but currently, our library is not there yet.

HOD-B revealed that their library services were directly aligned with the objectives of their department as information supporting key departmental priorities could be sourced at their library.

HOD-C voluntarily provided a scale to measure the alignment of their library to the strategic objective of their department as follows:

On a scale of one to 10, I would say four. Generally, the library is not aligned with the organizational objectives as such except for individuals accumulating knowledge for themselves (assistance with their studies). I am hoping that the knowledge will enhance their skills in achieving their duties, which will add to improving service delivery.

Lastly, HOD-D revealed that their library services were closely aligned to the strategic objectives of their department since the library specifically acquired information resources aligned and related to the departmental mandate.

5.4.3.9 Integration of the library services into the department's workflow

The researcher sought to understand the HODs' perspectives on how library services are integrated with departmental processes to ultimately assist in decision-making and achieving the objectives of the organization. In response to this question, HOD-A and HOD-C revealed that their libraries do operate as a standalone unit since there is no integration of their services into departmental processes, thus making it difficult to measure the value they bring to the organization. Meanwhile, HOD-B and HOD-D's responses resonated with each other in that the services provided by their SLs are integrated into the processes of their departments. They pointed out that their libraries are accurately allocated to departmental sections that manage the library and oversee its development.

5.4.3.10 Departmental section that can work in conjunction with the library

The section or unit under which a SL is placed is important in terms of the library getting the attention it deserves when it comes to its development and the communication channel to management. Therefore, a question was asked to determine the HODs' opinions concerning which departmental section is best placed to work in conjunction with the library and supports its development (RQ3). HOD-A revealed that their library was correctly placed but did point out that:

The library should also be placed under the Corporate Services section for staff development and for those who want to further their education.

HOD-B noted that their library was currently placed under the Communications section and worked very well; however, the participant also noted that the library could still work in

conjunction with the Health Research and KM section, and the Information Communication Technology (ICT) section.

HOD-C revealed that their library was currently well placed under the Research and Laboratory Services section and could also work well with the Training and Skills Development section.

HOD-D revealed that their library was currently placed under KM, which was taking over the library section; this new section would work together with the Human Resource Development, Research and Development, Strategic Planning, and Communications sections.

5.5 Summary

This chapter analyzed and presented the findings of measuring and communicating the value of SLs in PGDs in KZN, South Africa. Six provincial departments with functioning SLs were selected for the study. The data were collected using online questionnaires and interviews that were conducted using online platforms. The analysis and presentation of data were guided by the various themes that were in line with the objectives of the study. Parallel mixed data analysis was the strategy selected to present the data. Based on this strategy, quantitative and qualitative data were presented separately, and the merging of the data will take place in Chapter 6. The chapter began by presenting the response rate of the study for both sets of data to provide the reader with a proper understanding of their nature and assist the researcher in interpreting developing trends in the responses.

The main findings revealed that there was a great awareness of the existence of the SL in the PGDs selected; however, there was a low frequency of library use as most of the respondents indicated that they utilized the library monthly or less. When it came to library quality, the findings revealed that the quality of the library was below the expected measures by users and below the ZoT as per the D-M standard. The findings from the qualitative data set showed that most of the SLs in PGDs were operating with an old or outdated library policy or framework (or did not have a policy framework at all). In terms of communicating library value, the findings revealed that there was a lack of methods used to demonstrate library value to management. While some measure of library users' satisfaction existed, such an exercise was irregular and there were no standard methods for evaluation. The interviews with management revealed that since the departments had different objectives, the indicators of library value

differed. When it came to the significance of having a library in their department, all HODs interviewed agreed on the necessity of having an effective library as it saved staff members' time. Lastly, the interviews with the HODs revealed that IPs in PGDs were viewed as having the necessary skills to assist the organization in improving service delivery; however, regular development and the acquisition of new skills were necessary.

The next chapter discusses the research findings.

CHAPTER 6: INTERPRETATION AND DISCUSSION OF FINDINGS

6.1 Introduction

This chapter focuses on the interpretation and discussion of the research findings presented in Chapter 5. In the discussion, the researcher interprets the results and relates them to the findings from previous studies and/or theories to draw conclusions (Kothari 2004:344; Bordens and Abbott 2018:519). Creswell and Clark (2018:190) maintain that the most critical issue in discussing the results is “how the outcomes compare and contrast with other related studies and theories”. Pandey and Pandey (2015:75) emphasize that the main purpose of data interpretation is to refer to important generalizations, show the values of greatest worth that have resulted from the research, and make the reader understand the implications of the data. Furthermore, the interpretation and discussion extend beyond the data of the study to include the results of other research and their theories to test proposed hypotheses (Kothari 2004:344).

In this study, six hypotheses (H) were proposed (refer to Section 1.5). The hypotheses were tested using a process that comprises various phases such as the construction of the hypotheses in the first chapter of this thesis; gathering appropriate evidence through the mixed-methods research (MMR) approach (refer to Chapter 4); and analyzing evidence to conclude as to their validity as conducted in Chapter 5 (Kumar 2011:88). The last phase of the test is conducted in this chapter where the researcher either accepts or rejects the hypotheses based on the interpreted results (Kabir 2016:66).

The convergent parallel mixed-methods design was considered appropriate for the study as it allowed the researcher to present a thorough analysis of the problem being investigated. Through this design, the researcher collected both types of data (quantitative and qualitative) roughly at the same time and the findings are integrated with this, the current chapter (Creswell and Creswell 2018:15). The pragmatic paradigm underpinned the study, while a multiple-case study design allowed the researcher to use the cases (cases one, two, and three) involved to confirm or disconfirm inferences from one another, thereby improving generalizability through the connection of the results presented in Chapter 5 (Bhattacharjee 2012:98). Consequently, this chapter discusses and interprets data derived from the online questionnaires and interviews to measure the value of special libraries (SLs) in provincial government departments (PGDs)

and to determine how that value is communicated to management. Therefore, the results are combined to ensure that both quantitative and qualitative data elements mutually inform the research problem. As alluded to in Section 1.10, there is a dearth of literature that aims to demonstrate the value of SLs, especially in government departments (GDs). The most relevant research has been conducted in sectors such as academic libraries, school libraries, and public libraries. Thus, the significance of the current study lies in bridging the knowledge gap on measuring and communicating the value of a SL and its impact on the parent organization (PO).

The research questions (RQs) presented in Chapter 1 (refer to Section 1.5) are used to structure this chapter in such a way that interpretation and discussion of the findings are integrated into the conceptual framework synthesized by the researcher in Section 2.11. As alluded to in Section 1.3, the research problem being investigated was based on the challenges faced by information professionals (IPs) to measure and demonstrate the value of SLs to the management of PGDs in South Africa. This problem was explored through the application of various conceptual frameworks such as the strategic measurement model, service quality (SERVQUAL) and library quality (LibQUAL) models, and the total quality management (TQM) model presented in Chapter 2. It was considered important to understand how SLs in the selected PGDs are strategically aligned to the objectives of their departments to establish library value, and how that value could be measured and communicated in a language explicable to management. Therefore, it was crucial to first establish the intended users' awareness of library services and, thereafter, the effectiveness of such services in helping the organization achieve its objectives. The study uncovered a significant awareness of the SL in the departments on the part of the users; however, most of the library's services are not aligned with the objectives of their departments, which questions the effectiveness of such services. This was covered by RQs 1 and 2 respectively.

The study also determined whether there are any methods used to measure the value of these libraries and how that value is communicated to management. A lack of methods used to measure and communicate the value of SLs was identified. This was covered by RQ3. The perceptions of library users were also sought regarding the quality of the library and services provided and the study found that there is a positive gap between users' expectations and perceptions of quality. This was covered by RQ4. For benchmarking, the study established the functions of SLs in organizations and discovered that such libraries have different functions based on the key objectives of their departments. This was covered by RQ5. Lastly, the study

drew attention to IPs' role in special libraries and it was revealed that their profession is still relevant in this, the Fourth Industrial Revolution (4IR) era. This was covered by RQ6.

Accordingly, in this chapter, the researcher seeks to link the conceptual framework presented in Chapter 2 and the literature appraised in Chapter 3 with the findings presented in Chapter 5 to determine how those results corroborate, contest, or add new knowledge to previous literature on measuring and communicating the value of SLs to their POs.

The next section discusses the findings in terms of the research questions posed.

6.3 RQ1: What is the level of awareness of special libraries, and how effective are the services and resources they provide in helping to achieve organizational goals?

The first RQ for the study focused on the awareness of SLs in the PGDs and the effectiveness of the services and resources provided in helping to achieve organizational goals. This RQ was informed by the strategic measurement model and the TQM model. Ayob (2011:12) emphasized the significance of assessing the effectiveness of the SL, especially given the changing environment and the application of new technology, to determine its impact in assisting the PO to achieve its objectives. Nwankwo, Chukwu, Igbokwe and Agbanu (2019:189) assert that for SLs to accomplish their purpose, the library users need to be aware of their existence, the resources offered, and the services rendered.

The vast majority 133 (83%) of respondents in the study indicated that they were aware of the SL and its services and resources in their PGDs. However, 27 (17%) respondents indicated that they were not aware that there was a library in their department, and it was their first time hearing about the library. These findings are largely consistent with the views of the IPs interviewed, who believed that staff members (library users) are aware of the existence of the SL in their department. Additionally, all the HODs interviewed also indicated their awareness of the SLs in their departments and further indicated that they had visited the library. This suggests that each HOD was aware of the condition of the library in their respective departments, whether good or bad.

This high level of awareness did not equal actual utilization of available services or resources as indicated by one of the IPs who revealed that employees were not using the library services

offered. Furthermore, Figure 5.5 shows that 58 (36%) respondents utilized the library monthly while 51 (32%) respondents never used the services or the resources provided by the library regardless of their awareness of the library. The strategic measurement model that underpinned this study denoted that, the level (whether high or low) of utilization of library services does not necessarily show the value of the services utilized since the numbers do not disclose how satisfied the users are with the services (Henczel 2006:10). Hence, IPs need to have certain methods in place to evaluate the satisfaction of users; in this way, the value of those services could be determined with tangible evidence indicating the effectiveness of the library to its PO.

One of the challenges identified from the findings that hinder effective awareness and use of library services is the lack of an adequate budget to develop the library as indicated by some IPs. They pointed out that their library holds outdated resources and offers services that are irrelevant to the users' needs. A recent case study conducted in the South African Broadcasting Corporation libraries by Rajagopaul (2022), revealed how the outdated collections in such libraries were viewed both as a weakness (as they were irrelevant in the current information age) and as a strength (rare historical collection) of the services. Additionally, a survey conducted in Nigeria by Onwubiko (2021), considered the future and challenges of SLs as transformation agents in public institutions; the study observed that users in such organizations were not utilizing the services provided and this was attributed to ignorance of services rendered and their effectiveness in meeting users' needs.

The results of this study correspond with those of the study by Eyiolorunshe, Eluwole, and Aregbesola (2017), who found that there was an awareness of the library resources among faculty members of Landmark University. Nevertheless, the frequency of use was deemed lower when equated with the awareness level. Oriogu, Chukwuemeka, and Oriogu-Ogbuiyi (2018) obtained similar findings in their study on faculty awareness, perceptions, and use of information resources and services in a private university. They found that the majority of respondents were fully aware of information resources offered by the library, yet there was poor utilization of those resources due to ineffective marketing strategies. In India, Sajna and Mohamed (2021) concluded that libraries need to organize appropriate user awareness and library orientation programs to ensure that users are appraised of different library resources and services offered. In Indonesia, Harisanty's (2019) study emphasized the need to improve awareness of the value of SLs owned by the government so that their presence in government organizations is a requirement. Harisanty (2019), pointed out that the libraries can assist in

meeting the information needs of employees, thereby enhancing their job performance, and leading to the attainment of organizational objectives.

For users to be aware of library services there should be proper marketing conducted before the probability of utilization. Marketing the services and resources of SLs by IPs should be ranked high on their job descriptions since users of such libraries may not have time to visit and browse through the library to know what is being offered. As the study findings indicate, just under a third (32%) of respondents do not make use of the SLs in their department and 17% of respondents are not aware of the existence of a SL in their department at all. Both sets of respondents need to be reached. Any IP must sell the library to the users and potential users, and constantly communicate the benefits and other services the library offers. This comes down to the IPs' skills, which are critical for any SL to be successful. Ralph, Sibthorpe, and Abdi (2017) postulate that personal skills are key for SLs to be effective, especially in the current age where there is a need to convince users as to what a physical library can provide and what the internet cannot offer.

A library in a workplace can be easily forgettable especially if it is not in the vicinity of employees; therefore, there should be a constant connection between the information provider and the users. A SL should be physically located in a place where all users will have access to it and perhaps at the forefront of the department where it would be visible. The IP should get a deeper understanding of users' information preferences and library services that they are interested in, to foster utilization (Acharya and Vagdal 2023:2). On the other hand, the availability and accessibility of an adequate library budget play a major role in marketing library services effectively to increase awareness for better utilization. The marketing of a library will not be successful if the services or resources presented are outdated and irrelevant to the needs of its users. These findings confirm the postulation made by Baada et al. (2019) in their study. They posit that libraries require a consistent budget allocation to maintain the quality of service provided and that IPs should market library services vigorously for effective utilization by users which, in turn, will warrant continuous and adequate funding.

The IPs shed some light on the reasons why users maintained their visits to the library. It was disclosed that most users revisit the library because of services such as assistance by IPs with research, studies, or assignments. Other reasons included the provision of newspapers,

photocopy machines, access to computers, lending resources from other departmental libraries (inter-library loans), and the latest journals.

These findings are partially consistent with those of the respondents. When asked to indicate the services they have utilized during their visit to the library, a substantial proportion of respondents 56 (42%) indicated that they did not utilize any of the services or resources identified. However, of those that did, 25 (19%) respondents identified archiving as the service most used, followed by 16 (12%) respondents who utilized the library for leisure purposes such as reading or studying, and 10 (8%) respondents who used the library to access newspapers.

These findings indicate that SLs in PGDs are frequently used to fulfill the personal needs of users, which raises a question regarding the purpose and impact of such services if the fulfillment of employees' personal needs is ranked as one of the top reasons for users' revisits. However, there were users (no more than 20%) who indicated that their reasons for using the library included receiving services or resources that assisted them in making better-informed decisions and such information presented new knowledge applicable to their jobs. Other reasons included the contributions of library services to a higher quality of service delivery, saving time for the users when retrieving information, and retrieving information that helped them avoid the duplication of tasks. Such findings demonstrate the effectiveness of SLs to the users and the PO, even though a fairly substantial proportion of library contributions were particularly related to users' personal needs. These findings concur with those of Turner (2009), whose study found that information provided by the library assisted users in making better-informed decisions, saved time, contributed to a higher quality of patient care, and offered new knowledge. In Nigeria, Ajayi, Aboyade, and Madu's (2017) study also pointed to how effective the services provided by IPs are. They mentioned the provision of current, appropriate, and applicable information to the PO, which results in increased productivity and management making informed resolutions that impact the attainment of set objectives.

However, there was a contradiction between the IPs and the library users concerning the utilization, impact, and effectiveness of services or resources in helping them perform their jobs and how that impact was evidenced. This was in relation to the client satisfaction standard approach (strategic measurement model); the effective utilization of these services from the library depends on the ability of a user to find, retrieve, and apply provided resources to fulfill their needs (Henczel 2018:272). Furthermore, there was some disparity in the methods used to

evaluate the benefits obtained by users when using library services or resources. This was also confirmed by the findings regarding how IPs evidenced the impact provided by the library services on the users' personal needs and how effective those services were in helping users perform their jobs (internal benchmarking). Nonetheless, the results showed that there was an impact, particularly on those who were studying, as they obtained assistance from the IPs. There was also an indicator (albeit weak) that evidenced the impact on job performance in that one respondent noted the impact of information received from the library in achieving a certain work task. This was in line with what was noted by Matthews (2013:97), namely, that there are three possible reasons why users utilize the library and its resources in corporate organizations: a) to perform a job or assignment, b) for personal reasons, and c) to get information resources or perform an activity. This implied that there is inconsistency in ensuring that library resources and services are applicable in assisting users to better perform their work; it is also a result of the lack of proper methods to evaluate the impact of library services in terms of their intended purposes. The later findings confirmed one of the issues that come with measuring client/user satisfaction, that is, ensuring that the instrument developed provides significant responses to what is being measured or investigated (Henczel 2006:3).

In conjunction with this question, H1 proposed that there is a negative correlation between the level of awareness, utilization, and the effectiveness of SLs in departments. Based on the findings to this question, the researcher accepted this hypothesis as the significant level of library awareness did not equate with the level of its utilization resulting in a lack of effectiveness towards its intended purpose, that is, to support the PO in achieving its objectives.

6.4 RQ2: How are library services and resources strategically aligned with organizational goals?

The second RQ aimed at determining how the services and resources of the SLs in PGDs are strategically aligned with the goals or objectives of their organizations. This question was informed by the strategic measurement model in relation to the information strategic alignment standard approach. The collection and usage standard conveyed that the objectives of the PO must be observed when the services and resources offered by the SL are selected (Rath and Rath 2014:3). The information strategic alignment standard conveyed that the library services should be aligned with the objectives of the organization in such a way that the information sourced is utilized effectively for the success of that organization. For the library to be deemed

effective and valuable, IPs are required to select or introduce library services and resources that are strategically aligned with the goals of their organization (Rath and Rath 2014:3).

The findings showed that of the four HODs interviewed, two of them indicated that their library was aligned with the objectives of their department, while the other two indicated that their library was not so aligned. The information strategic alignment standard adopted in this study emphasized the importance of measuring strategic processes and systems to echo the impact they have on the organization, whilst ensuring that the information resources and services offered within the library are supportive and conducive to the success of organizational objectives (Henczel 2007:2). Thus, this study revealed that all HODs coincided on having the functions of the library and its services linked to the objectives of the department, which is how the library can be said to be strategically aligned to its PO.

An organization with a library that is strategically aligned to its mission obtains various benefits such as avoiding reinventing the wheel in work processes, saving time for employees in searching for information to make informed decisions, and avoiding the repetition of previous mistakes. Such benefits are the indicators that could be observed in the departments whose SLs are said to be in alignment with the objectives of the departments as suggested by some of the HODs. Overall, when these benefits are accumulated, service delivery is improved, which is the mandate of any PGD. Chiware (2014:1) supported this finding as his study indicated that management should understand the link between organizational strategic objectives and how the services provided by their library help them achieve such objectives.

It emerged that management is not putting into effect their knowledge of the significance of having a strategically aligned library in their departments and this was evidenced by their lack of input regarding the library. This was reflected in the majority 109 (68%) of respondents indicating that management did not pay much attention (input) to the development of the SL in their respective departments. Only 42 (26%) respondents felt that management did give the library some attention. In support of their opinion regarding insufficient attention being paid by management, the majority of respondents also mentioned issues such as *having outdated resources due to lack of budget, the nonexistence of library policy, lack of support from management, and the library not being viewed as a critical part of the organization.*

The strategic measurement model highlights information strategic alignment as a key factor in aiding SLs to be recognized by their organizations. This alignment enables SLs to “get a seat at the table”, and for their services to be considered during decision-making, and for fostering opportunities to collaborate with other sections within the department (internal benchmarking) (Hendrikus 2019:20; Albert 2014:634). The latter perspective is corroborated by users who emphasize the need for “libraries to be viewed as a critical part of the organization” by management.

Those respondents who indicated that there was some attention from management towards library development were from those libraries that were said to be strategically aligned to the objectives of their departments. These respondents’ opinions were derived from the fact that their library had the latest resources and library users are involved in the development of the library to ensure that their needs are met. Library users listed some of the services that they thought their SLs should be providing for it to be considered as the support structure of their department. These services were as follows:

- i. Online information resources and services
- ii. Special library awareness through various marketing strategies
- iii. Relevant and updated library collection and services
- iv. Academic resources and regular sessions that encourage employees to study further
- v. Library collection and services that are relevant to the mandate of the department.

For the HODs who indicated that their libraries are not strategically aligned with the objectives of their departments, it signifies that their libraries are operating on their own, which brings into question the significance of these libraries to their departments. This finding refutes what Ruan and Sykes (2014) reported, namely, that SLs in GDs are gradually paying more attention to aligning their approaches to suit the goals of their POs and to remain relevant. Moreover, the finding from one of the HODs regarding the library not being aligned with the organizational objectives apart from individuals accumulating knowledge for themselves, implies that the library in this department caters more to the personal development of employees and neglects its main function of offering information that helps to fulfill the mandate of the organization. According to the information strategic alignment standard, library management needs to regularly monitor the PO’s vision and its objectives to ensure they are

still serving the same goal and their alignment is being maintained (Harland, Stewart and Bruce 2018:266).

Similar findings were observed in a study conducted in public university libraries in Kenya by Harrison, Otike, and Amoth (2022). Their study revealed that most libraries did not have a strategic plan as they depend on their PO for guidance and there was a lack of effective channels to communicate those plans. On this note, Hijji (2014:10) suggested that management should communicate and align the strategic objectives of the department with the library to create a connection between what the SL provides and what the department is trying to achieve.

As revealed in the literature review, both Kamau and Elegwa (2021:209) and Rath and Rath (2014:4), pointed out that some libraries operate without a policy, framework, or guidelines, which hinders effective collection development. Thus, it was necessary to enquire about the policy or guidelines used by library staff for the development of the library since such documents should be developed in conjunction with management (their approval is needed) and according to the organization's goals. Furthermore, the collection development policy should be the product of IPs working together with the library committee and being conscious of users' needs, and the mission and vision of the PO (Ali 2020:167). The findings show that IPs were aware of the fact that for their library to be deemed effective, the development of its services and resources should be aligned with the mandate of the PO to fulfill its strategic objectives. This implies that IPs have an understanding that SLs play a significant role in ensuring that the organization achieves its objectives, and doing so is based on the strengths of the library collection and its alignment with the objectives. However, the findings further reveal that some SLs in PGDs were operating without a policy, with an outdated policy, or a policy that was not approved by management. This is evidence that the majority of the SLs in the PGDs have services or resources that are not strategically aligned to the goals of their PO. This implies that there is no connection between the strategy of the library and that of the PO at large, as required by the strategic measurement model (Irwin and Silk 2019:327).

These findings corroborated the results from studies conducted by Kamau and Elegwa (2021) and Rath and Rath (2014), who found that the majority of SLs operate without a policy, framework, or guidelines. Doing so inhibits the effectiveness of their collection development thereby losing the SLs' significant value to their POs. A SL that does not have an effective developmental policy or framework is destined to fail, since in the absence of such a policy,

the services or resources being developed would be incapable of supporting the PO in achieving its objectives. In addition, Adeyemi, Awojobi, and Orbih (2014) and Nicholas (2007) posit that the SL should be developed based on the content of services the PO aims to deliver and the goals of the library should reflect those of the organization.

Lastly, for the library to have a role in assisting the department to achieve its strategic goals (that is, be effective in terms of service delivery), it would need to work closely with certain section/s in the department. An effective SL should be able to align the parent organization's (PO's) strategic information to all the subsections of the department, and this can only be achieved through the collaboration of the library and all departmental sections (Richards-Gustafson 2022). Sixty-seven (42%) respondents concurred with this notion, indicating that the SL should be working with all sections in the department.

H2 proposed that there is a positive correlation in terms of strategic alignment between SL outcomes and organizational objectives. This hypothesis was rejected. The lack of approved/updated policy or framework to guide the development of SL services and their collections indicated the disconnection of information supplied and its relevance towards sustaining the objectives of their POs. The lack of developmental policy in these libraries minimizes their value in corporate organizations since, with no tangible evidence to prove their contribution to the organization, management would be quick to dismiss any request for development. Hence, SLs in corporate organizations should work together for external benchmarking purposes.

6.5 RQ3: What methods are used to measure the value of libraries, and how is this value communicated to the management of the parent organization?

RQ3 had two purposes, that is, to establish various methods used to measure the value of SLs and to identify the strategies used by the IPs to communicate such value to management. The conceptual framework that informed this RQ was the concept of value-in-use and the TQM model on the aspect of external benchmarking. For IPs to be able to measure value, they need to be cognizant of the services or resources most valued by users, be able to measure their satisfaction with those services, and then determine how their services were valued in their PO. The channel of library communication was also investigated to determine how the placement of the library in the department affects how IPs communicate with management.

In terms of library services and resources most valued by users, IPs identified books, journals, internet access, newspapers, sourcing academic books from the provincial library, and online information sources and resources. This implies that IPs in PGDs are working hard to improve the quality of the services they provide and ensure their significance to their organizations. The findings from library users concurred with those of the IPs in terms of some of the most valued services and resources. According to library users (Table 5.12), the largest number 31 (19%) mentioned the provision of online services as the best service they have received and valued. This was followed by printed books 25 (17%), daily newspaper services 21 (13%), and research services 13 (8%). These findings indicate that while library users are leaning more toward online services offered by their libraries, there is still a preference for printed resources for utilization inside the library. Therefore, the need for having a physical library is still present as is the value-in-use of these services or resources. These findings affirm the assumption brought forward by the concept of value-in-use, which states that if library resources or services are still being utilized, it indicates that there is value in them (Tunner 2009 and Tenopir 2011).

The above findings concur with the results of the study conducted by Becker, Hartle, and Mhlauli (2017) on the assessment of the use and quality of library services, accessibility, and facilities by students at the Cape Peninsula University of Technology. They revealed that even though library users preferred using online resources and services, they still had the desire to interact directly with IPs in the library. Studies conducted by Ruthven, Robinson, and McMenemy (2022) and Vishwakarma and Yadav (2015), also confirmed that online libraries would not replace the tangible materials in the physical library but would only sustain the current needs of the users due to technological developments and such libraries (either physical or online) are viewed differently by users. Furthermore, the study conducted in the Niger State by Bitagi and Garba (2014) found that the provision of information resources in print format is prioritized in academic institutions. However, it needs to be borne in mind that academic library users arguably have enough time to browse through the library collection while SL users, also arguably, require easy access to information and have little or no time for browsing.

Some of the library users 14 (9%) felt that the library should redevelop the services and resources offered and there should be space allocated in the library dedicated to research. Other suggestions made by users that could add more value to the SLs under study and for them to be seen as the support structure of their departments include but are not limited to the IPs raising

more awareness 22 (14%) of library services, library collections being developed based on users' needs 16 (10%), and the provision of services and resources that assist users to perform their work 15 (9%). These findings imply that library users value the services provided by these libraries and would like to see them redeveloped to cater more specifically to their work-related needs. The latter proposition should have been the main reason SL users visit the library regularly. This is further evidence of the SL not being strategically aligned with organizational goals. IPs need to be observant of these desires of users and communicate them to management to develop a strategically aligned library. However, for SLs, the development of the library should be considerate of the mission of the PO and the needs of its employees who will be using the library's services to help the organization achieve its main goals. This is in line with the personalization dimension identified in the concept of value-in-use. Therefore, there is a need to balance the needs of the users and also concentrate on organizational processes to supply the required information and services.

Figure 5.7 shows that library users were satisfied with the library services and resources (an output indicator) offered by the SLs in PGDs as most users 104 (65%) indicated that the library does meet their general information needs as opposed to the 56 (35%) respondents who felt that their library did not do so. The satisfaction with the services rendered by the library can be measured by the continuous utilization of its resources which could, in turn, indicate value. Measuring the satisfaction of the users plays a vital role in the development of the library as it may indicate what is being done right and what needs to be added or corrected to suit the needs of the users, thus leading to their satisfaction. However, it should be noted that satisfying the needs of the users is a very complex task, and, although difficult to measure, it is important for each library to have certain measures that they use to gauge the value of their services to their users and their department.

Similar findings were observed in a study conducted by Lasig and Collantes (2022), who found that their users were also satisfied with the overall services such as library staff reference services, library resources, and facilities provided by the library. On the other hand, the current study's findings differ from those of Bitagi and Garba (2014) who found that the majority 154 (55%) of their respondents were not satisfied with the use of information resources and services provided by academic libraries and that inadequate funding of the library was the main cause influencing users' dissatisfaction. When a library provides quality information and the best

services to its users, this reflects positively on the extent of users' satisfaction thereby regulating the level of library value to the user and its PO.

In a similar vein, when it comes to measuring users' satisfaction and determining library value for the SLs under study, the results show that IPs in these libraries had no methods in place to measure the satisfaction of the users to determine library value. This finding coincides with the notion by Hiller (2012) and Schwieder and Hinchliffe (2018), who indicated that there are no methods in place to measure either the satisfaction of users or the value of libraries. This was confirmed by participants' responses, which revealed that some of the methods previously employed to measure satisfaction included irregular electronic and manual surveys, complaints or compliments placed in suggestion boxes, and verbal feedback. This implies that although some measures in place were being used in each library to measure users' satisfaction and determine library value, these measures were not fully capturing the satisfaction of users or value to the PO. Moreover, these measures were not being conducted regularly and there were no set methods used to evaluate users' satisfaction and determine the value of the library and its resources and services.

The lack of methods to evaluate the satisfaction of library users or determine library value added to the struggle of IPs to locate, demonstrate, or prove their value to management. This contention is supported by the results of the study conducted by Creaser and Spezi (2012) who noted that libraries are battling to find suitable, and efficient, methods to capture and demonstrate substantial evidence that proves their value to the PO. The study emphasized the necessity of building evidence based on the benefits of using the library.

Therefore, in the absence of tangible evidence to prove their value to management, the researcher sought to find other ways in which IPs demonstrated or communicated the contributions of their libraries to management. The findings derived from IPs show that there was also a lack of methods used to demonstrate or communicate library contributions to management in PGDs. At the same time, the lack of interest in library development on the part of management did not necessarily create an environment for any contributions to be communicated. Even though there was a lack of measures to demonstrate or communicate library value to management, a benchmark could be drawn from one participant who indicated that their library regularly recorded statistics regarding the frequency of library utilization. Furthermore, these were reported in written format such as annual reports to management

indicating the achievements of the library and its value to the organization. The TQM model employed in the current study advocates for IPs to benchmark services that are effective or useful in other libraries, and adopt those services or processes in their libraries to help improve their value to their PO.

The latter view of the participant corroborated with strategies suggested by various studies on how IPs could demonstrate or communicate SL value to management. Owoeye and Dahunsi (2014) proposed written communication in the form of reports and library circulars to convey library value assessments. Murray and Ireland (2018) suggested that IPs should be strategic when communicating the impact of library services to management. This would mean the inclusion of explicit evidence of impact in a formal annual report or presenting the findings of the value assessment/s during the organization's budget meeting. Jaeger et al. (2011) advised that the communication of the library's impact and value should be conveyed in measures and languages understandable to management for them to realize the usefulness of the services provided by the library to the organization.

When IPs were asked to rate how valued they thought their library was by their respective departments, the majority of participants rated their library's value below five on a scale of one to 10. However, a high score of eight was given to one of the libraries under study. According to the participants, the generally low ratings were due to the lack of collaboration between the library and the management of the PO. The purpose of internal benchmarking (TQM model) was to establish standardized internal working practices of SLs in PGDs and other sections within these departments. This finding confirms that there were isolated working standards between libraries and other sections. SLs in PGDs should not be seen as standalone units. Instead, there must be a collaboration between the library and other sections or units in the department. Library services and resources should be systematically integrated into departmental processes and some decision-making practices. This integration can then be used to facilitate the measurement of library value, making it easier to communicate this value to management.

Albert (2014) opined that the low ratings have to do with the visibility of IPs and library services in the departments and there is a need for IPs to improve the visibility of their libraries and the services they offer and to provide empirical data to management to make informed decisions. Another study by Heye (2014) also highlighted the issue of the visibility of IPs in

corporate libraries. One of the study participants stated: “We’re supposed to be the information experts, yet we’re not recognized as that by many of our employers” (Heye 2014:24).

The highest score of eight in the current study coincides with reports from several case studies found in a book by Lawton (2016). In one of the case studies, IPs were asked to rate themselves using a scale of zero to 10 regarding their visibility to management and library users. It was found that their visibility was given ratings of between seven and eight due to the impact they made in their organizations. Such impact included an evidence-based approach to decision-making, employees’ induction on using the library and saving users time by providing quality information. IPs in the current study could benchmark such strategies and exercise information strategic alignment techniques that would enhance their current visibility.

The researcher further sought the perspectives of IPs on the changes they would like to see from management that would show support towards the development of SLs to enhance their value. The findings reveal that IPs believed that support from management towards the development of the library and its services would make a great impact on the significance of having a library in the department. This support may include but is not limited to consciously raising awareness of the services offered by the library among employees in their respective sections and ensuring that the budget allocated to the library is not used to cover expenses other than those of the library. On the issue of the library budget, while the HODs indicated that there is a particular budget allocated for the SLs in PGDs, the IPs pointed to the lack of financial support. The issue of inadequate budget allocation for SLs in GDs is not a new one having been reported by various studies. Nawaz (2021), for example, reported that 36% of SLs in GDs do not have appropriate or regular budget allocations as most of the time their budget is used on other things. Ogundana, Olowosejeje, and Barkindo (2003) revealed that most SLs in GDs are not catered for in the annual budget and when they are provided for, such funds are not released and, if they are released, the library is often overlooked in determining what its priority needs would be.

The challenges faced by IPs in the current study confirmed the challenge faced by one of the IPs in the study conducted by the Financial Times Corporate and Special Libraries Association (2013). Their report revealed that “It is a major challenge to get our management to understand the value of what we are capable of and how we contribute to the success of the corporation,

while budgets and staffing are decreasing – trying to do more with less on both counts is not working!” (Financial Times Corporate and Special Libraries Association 2013:7).

The flow of communication between the SL and the management of the PO could be a challenge especially when the library is misplaced in the organizational structure. The management’s perspective was sought on how well SLs in their PGDs are placed to enable them to effectively report their challenges and for them (management) to provide support when required. As demonstrated in Table 5.14, PGDs have different key objectives; thus, the placement of SLs in their organogram differs. All the HODs interviewed were of the view that their SLs were currently well placed in different sections such as Infrastructure Maintenance and Technical Support; Communication; Research and Laboratory Services; and Knowledge Management (KM). Such views by the HODs were later challenged when they were asked how library services are integrated with departmental processes, or form part of decision-making to help achieve the objectives of the organization. Based on internal benchmarking (TQM model) which seeks to establish internal working standards, the findings affirm the lack of collaboration between SLs and the various departments and sections. It was found that two of the libraries under study operate as standalone units since there was no integration of their services into departmental processes, making it difficult for IPs in these departments to prove their value. On the other hand, according to the HODs, the remaining two libraries were integrated into the processes of their department, and they were accurately allocated in the departmental sections.

The IPs dealing with the day-to-day running of their SLs are of the view that they are misplaced, and this is subsequently leading to the library losing its significance to the PO. All participants felt that their libraries were misplaced, as they did not see any form of integration between the library services or processes and other departmental sections (internal benchmarking). Some participants pinpointed Policy and Research as a section that should be working better with the library as well as the Communications section. Sixty-seven (42%) library users concurred with IPs indicating that all sections or units in the organization should be working together with the library as indicated in Section 5.3.6.5. Such findings correspond with the results by the Australian Library and Information Association (2012), which reported that government libraries are moving away from just being a repository of information to being active participants across all facets of an organization’s work processes. Government libraries should

also act as a bridge to bring different parts of their departments together through shared research and policy interests.

Subsequently, when it comes to approaches of communicating or demonstrating library value to management, the current study found that there are no clear channels of sharing such value with the management; hence IPs were of the view that their services are not valued in the departments under study. The Financial Times Corporate and Special Libraries Association (2013:18) provided IPs with some of the best practical methods they could adopt to communicate their value to the PO. These include:

- i. Networking of IPs in the organization to promote library services;
- ii. Identifying sections that could work together with the library inside the organization;
- iii. Providing evidence of how IP's skills add value; and
- iv. Taking the initiative with ideas that could improve business processes in the organization.

The findings drawn from research by Kamposiori and Crossley (2019) and Cullingford, Peach, and Mertens (2014) show that the significance of measuring the value of SLs is already noticeable, and what is now required is a common framework that could be used to measure this value for or impact on the PO. On this note, the current study proposed a strategic framework for measuring and communicating the value of SLs in PGDs, and the framework is illustrated in Figure 7.1 (refer to Chapter 7). The core principle of this framework is that SLs in GDs should not function in isolation but be interlinked with various sections in the departments to achieve their main objectives. The proposed framework will ensure that SLs in PGDs are strategically linked to organizational objectives, the library's collection is developed as per the PO's mission, and there will be regular assessments of user satisfaction, determination of library value, and efficient communication between the library and top management.

H3 proposed that there are different types of methods to measure library value and there is no process in place to communicate it to management. This hypothesis was accepted based on the findings of this study, as there were different types of methods to measure library value and no process in place to communicate that value to the management in the majority of SLs under study.

6.6 RQ4: How does the quality of services and resources provided affect library users' perceptions, desired expectations, and satisfaction?

The fourth RQ aimed at assessing the perceptions of library users concerning the quality of the services and resources offered by the SLs in the PGDs under study. The findings were used to prove the relationship between library quality and service quality, their effect on the satisfaction of the users, and their continual utilization of the library. Case one involving the users in each library under study to determine their level of perceptions, desired expectations, and satisfaction with library resources and services offered was resolved in this research question. As alluded to in Section 4.8.1, to calculate users' levels of service quality for each statement on the tools (SERVQUAL and LibQUAL), the mean was calculated using the following formula:

Mean = Sum of all observations/Total number of observations. To determine the quality of services rendered in SLs, a gap between service quality expectations and perceptions was calculated using the formula: Quality equals Perceptions minus Expectations ($Q=P-E$).

This gap indicates the extent to which the special library is surpassing the expectations of its users. A negative score on SERVQUAL or LibQUAL indicates that the users' perceived level of service or library quality falls below their expected minimum level. In contrast, a positive score indicates that the users' perceived level of service or library quality exceeds their expected level (Mutisya 2017:170, 227).

The next section discusses the findings from the SERVQUAL tool.

6.6.1 Service quality

To determine the quality of services rendered, the researcher considered the gap between service quality expectations and perceptions. As alluded to in Section 2.4.2.2, Gap 5 was the type of gap considered in the study. The quality (Q) of service based on the six dimensions of SERVQUAL was measured by subtracting the perceptions (P) scores from expectations (E) scores for each entry. The level to which the performance of the library surpasses the desired expectations of the library users is known as the service superiority gap (SSG) (Mutisya

2017:167). The SSG is defined as the difference between the average service or library quality experience and the average service or library quality level expectations (Van Coller 1999:111). A negative SSG indicates that the library is not delivering superior service quality or library quality to the users. SSG can be determined in both the SERVQUAL and LibQUAL measures. The formula to evaluate this gap was Quality equals Perception minus Expectation ($Q=P-E$). According to Kumasey (2014:176), should the perception score be greater than the expectation score, then the quality of service can be said to be very satisfactory; should the perception score be equivalent to expectation, then quality is acceptable; and should expectation scores be greater than perception scores, then the quality of that service is inferior.

Table 5.8 indicates that the overall mean for users' expectations of service quality was 1.9. The mean scores for the different dimensions were as follows: Assurance (1.7), Empathy (1.9), Reliability (1.9), Responsiveness (1.3), Tangibles (2.0), and General library expectations (1.8). From these six dimensions measured in this study, the greatest mean was obtained in the Tangibles dimension (2.0), two dimensions (Empathy and Reliability) obtained the same mean score of 1.9, while the lowest mean scores were recognized in Assurance (1.7) and Responsiveness (1.3). The mean score records imply that SL users have their highest expectations on dimensions such as Tangibles, Empathy, and Reliability, whereas they had their lowest expectations on Assurance and Responsiveness. These findings differ from the results of the study by Musyoka (2013) on service quality and library user satisfaction in Kenyan universities. The users in this study had higher expectations on the Responsiveness dimension which obtained the highest mean of 4.53, indicating a great expectation of IPs in terms of how they render their services to users.

The SERVQUAL tool for this study had 21 service quality statements as illustrated in Table 5.6 and Table 5.7, and although all the statements obtained positive mean scores, all the scores were below the 5.00 mean. Therefore, the library users' expectations of service quality in the SLs under study are deemed average as they did not surpass the mean of 5.00. When it comes to individual statements for SERVQUAL expectations, the greatest mean scores were obtained in TA-1, GL-1, RS-1, RS-2, RL-3, and EM-3, indicating that the expectations of library users dwelt mostly with dimensions such as Tangibles, General library expectations, and Responsiveness. Such findings imply that these are the dimensions that the SLs should consider first when planning for the improvement of the quality of services rendered. In their study, Popescu and Madge (2023:10) opined that IPs could enhance the quality of services by

involving library users in the development of those services and constantly assessing the level of satisfaction and information behavior.

The individual statements that obtained the lowest mean scores of expectations were GL-2 and ASR-1 to ASR-4. This indicated that library users did not have high expectations of service quality on the General library expectations and Assurance dimensions. The possible cause of these low expectations could be due to users not being apprehensive about getting assurance from library staff as they assume that their department hires qualified IPs who are capable of delivering the required services. Moreover, on the General library dimension, the possible cause of the low expectation may be that the listed statements were not considered a necessity to have in the SLs under study since the main function of such libraries would be to ensure continuous addition of value in the services provided to help the organization achieve its strategic objectives.

The findings of service quality expectations reveal that library users' highest expectations concerned the library equipment being modern and in good condition (Tangibles), and the library helping them stay abreast of developments in their field(s) of interest (General library expectations). On the other hand, their least expectations were recorded on the latter dimension in terms of the library helping them to advance their academic field. The results of a study on the service quality of SLs in Kerala conducted by Sajna and Mohamed (2021) also reveal that the quality of services from these libraries did not meet the expectations of their users, particularly (and similar to the current study), their highest expectation was on the physical facility dimension. Kobero and Swallehe's (2022) study conducted in Tanzania regarding the effects of service quality on customer satisfaction in higher learning institutions also found similar results. The users in higher learning institutions' libraries had their highest expectations on the Tangibles dimension followed by the Reliability dimension indicating the need for modern tools or equipment and the trustworthiness or loyalty of IPs. Hoque (2023:815) opined that libraries need to be cognizant of their users' needs and expectations as they have changed dramatically as a result of the 4IR and, consequently, the disruptive changes that come with it.

Table 5.8 shows that the overall mean for users' perceptions of service quality was 2.3. The respective mean scores for perception on various dimensions were as follows: Assurance (2), Empathy (2.1), Reliability (2.2), Responsiveness (2.0), Tangibles (2.4), and General library

expectations (2.4). The findings show that the dimensions that achieved the greatest mean were Tangibles and General library expectations. Notably, the Tangibles dimension obtained the highest mean score in both expectations and perceptions, and this indicates the necessity of the dimension to library users in that, even though they were satisfied with what they were currently getting, they still expected a better quality of service. On the other hand, the mean score figures from other dimensions suggest that the SL users had their highest perceptions of the General library expectations, Reliability, and Empathy dimensions. Generally, the aspects of these dimensions are concerned with the role of the library to the user, the performance of the library staff, and the attitude of the library staff when providing services to the user. Musyoka's (2013) study obtained similar findings, where the perceptions overall mean score of 3.27 was found to be a little above average and the Tangibles dimension had the highest score of 3.32, indicating the satisfaction of users with physical aspects of the library and the entire library environment.

The lowest perceptions mean was obtained in Responsiveness and the same dimension in expectations received the lowest mean. This indicated that library users were not impressed by how library staff reacted towards their needs, and, at the same time, they did not place much expectation on this aspect. The Assurance dimension received the second lowest mean for perception, which indicated that users are dissatisfied with the behavior of library staff in instilling confidence in them to revisit or reuse library services. Such perceptions about the library by users can diminish the value of SLs if not taken care of since without the users, the library is as good as dead. These findings differ from those in the study by Mutisya (2017), who found that the perceptions of users at the African Union Court on Human and Peoples' Rights Library were high on dimensions such as assurance, responsiveness, and empathy.

The overall perceptions score for service quality in the study was 2.5, indicating that the users' perceptions of the level of quality were greater than their expectations, which was 1.9 overall. This was an indication of satisfaction with the service quality from the SLs under study as the users' perceptions surpassed their expectations. This finding corroborates the sentiments of Barfi, Parbie, Filson, Teye, Kodua-Ntim, and Ayensu (2023), who posit that in an ideal situation, the perceptions of users should exceed the projected expectations as it encourages them to continue using library services. Conversely, the findings of the current study differed from the study conducted by Oak and Patil (2011), who observed that the users' average

perception level of library service quality was lower than the level of users' expectations, indicating their dissatisfaction with the quality of services.

6.6.1.1 The service superiority gap in the quality of service rendered

The SSG was calculated on all the dimensions of service quality. However, only the most relevant items to answering the current research question were selected for calculations. The SSG mean scores for SERVQUAL were as follows: Assurance (0.3), Empathy (0.2), Reliability (0.3), Responsiveness (0.7), GL (0.6) and Tangibles (0.5). Table 5.8 shows that all the dimensions of service quality had a positive SSG, which implies that the SLs in the PGDs under study are delivering superior service to the users as their perceptions exceed their expectations. Notably, the overall SSG scores were fairly low, and in some dimensions such as Empathy, a minor gap of 0.2 was seen, while the greatest gap of 0.7 was found in Responsiveness. However, one of the aspects of the Responsiveness dimension that was selected as relevant to the research questions obtained a zero gap in terms of library staff keeping users informed about when services will be performed. This indicates that there is no difference between what users expected and what they were receiving from these libraries; however, there is a dire need for improvement in their performance for the gap to be greater than what is expected by the user. The second highest SSG gap was attained in the dimension of General library expectations, which implies that the library users were generally satisfied with the SLs under study. This finding concurs with the results displayed in Figure 5.7, demonstrating how library resources and services meet the general needs of users.

The lowest overall SSG score was recognized in the Empathy dimension where there was a slight gap between the aspects of library staff giving personal attention to the users and understanding the specific needs of the users. A possible reason for this slight gap could be that there are some SLs that are operated by personnel that are not qualified IPs as revealed in the findings of this study, thus lacking appropriate competencies to handle users' particular needs. IPs and the management of the POs should take note of this lowest SSG as this dimension focuses on a range of services that fulfill different needs of users, personalized or tailored services, and so on (Ramya, Kowsalya, and Dharanipriya 2019:40). Therefore, IPs need to be aware of users' individual desires or requirements and preferences when it comes to library services.

Contradictory SSG gaps have been obtained in various studies. In Kobero and Swallehe's (2022) study, the perceptions of users on service quality were lower than their expectations since nearly all gap scores of their dimensions were negative apart from the Reliability dimension, which scored a mean gap of 0.01. Furthermore, the Empathy dimension also obtained the largest gap score of -0.52, indicating that users felt that IPs were not giving them individual attention when visiting the library. Similarly, Musyoka's (2013) overall gap score was -1.10, a negative value denoting that the quality of service in those university libraries was less than satisfactory and that library users expected more from what the libraries were offering. Asogwa, Asadu, Ezema, Ugwu, and Ugwuanyi (2014) assessed the service quality of academic libraries in developing countries and found that there was a negative gap between the perceptions of users and their expectations of quality.

There are higher expectations of physical facilities in the majority of academic libraries in developing countries, and users are not satisfied with what they are currently receiving; this subsequently has an impact on the responsibility and reliability of IPs in these libraries. In Lahore, Pakistan, Chaudhry, Bhatti, Shahzad, Sulehri, Hussain, and Ullah (2021) assessed users' perceptions and expectations of quality services in libraries of the Punjab Group of Colleges and the findings revealed that users' expectations regarding service quality exceeded their perceptions with a gap from 0 to -1, indicating that the perceived quality and satisfaction with the services are positive due to the IPs' polite and compassionate attitude and their proficiency to deliver services as promised. A study by Bhim (2010) investigated the quality of service provided by the Bessie Head public library in South Africa. The results showed gaps among library users' expectations and perceptions of service quality, although the level of the gaps varied based on the different services utilized by users.

The findings of the current study and those from previous studies indicate that the satisfaction of users with the quality of service rendered is influenced by various factors as library users have various perceptions of quality. Moreover, the satisfaction of library users is significantly influenced by the service quality in multiple dimensions as proven in the study conducted by Malik, Danish, and Usman (2011) when they were exploring the impact of service quality on students' satisfaction in higher education institutes of Punjab, India.

However, Zygiaris, Hameed, Alsubaie, and Rehman's (2022) study on service quality and customer satisfaction in the post-pandemic world shows that delivering service to users at the

appointed time greatly aids in a better perception of the quality of services rendered. The study by Ajayi, Aboyade, and Madu (2017) noted that the delivery of services in quality and quantity is inefficient to the users of libraries in Nigeria due to factors such as poor funding and a lack of qualified library personnel. As alluded to in Section 2.4.2.1 regarding the perceptions of quality in this study, the satisfaction of users with the quality of services rendered in libraries depends on various factors and circumstances. However, the pillars for ensuring efficient delivery of service quality are the provision of sufficient financial resources and qualified IPs as gatekeepers for quality service (Selga-Cristobal 2018; Isebe 2021).

The next section discusses the findings from the LibQUAL tool.

6.6.2 Library quality

The researcher sought to determine the level of library quality by measuring the gaps that exist between the minimum level of what users would find acceptable, the perceived level which specifies how users felt after utilizing the service or resources offered, and the desired level of service, which represents how users personally wanted to receive library services.

6.6.2.1 Minimum level of what special library users find acceptable

According to Tajer (2014:174), this measure describes the level at which the library users are not discontented with the quality of the library, at the same time, they are not fully satisfied either. This means that the library quality statements with the lowest minimum level of what users find acceptable are considered the aspects that are least valued by users while those that obtained the greatest mean scores are the ones most valued by users. The dimensions for library quality that were measured were Affect of service (AS), Information control (IC), Library as place (LP), and Satisfaction with the library (SWL).

The findings of the study reveal that the dimensions on the minimum level of library quality users find acceptable obtained the following mean scores: AS (0.18), IC (0.19), LP (0.24), and SL (0.19). The results clearly indicate that the LP dimension obtained the highest mean score, showing that users highly value the physical attributes of the library while the AS dimension obtained the lowest mean score. Individual statements with the highest minimum expectations were in LP-4, LP-1, LP-3, LP-2, SL-2, IC-2, and IC-1, these statements indicate the items that

are most valued by SL users. It is clear that most statements were from the LP dimension, however, the aspect of the dimension that users placed their minimum expectation on was LP-2 as it received the lowest mean score of 0.21.

The findings further reveal that users also found the components of IC and SL acceptable as they obtained an equal mean score of 0.19. In the IC component, most users' minimum acceptable level was on the elements of IC-2 (0.21), and IC-1 (0.20). This indicated the desire of users to migrate to online library services since the element of IC-4 obtained the lowest mean score of 0.16. Moreover, users in the SLs under study also placed their minimum level of acceptance on the element of SL-2 as it obtained a mean score of 0.23. This indicates that the general satisfaction of users with the library resources provided by these SLs was at a minimum level of quality users expected.

A possible explanation for these findings is that employees in PGDs have their own offices and there is a preference for using their own office space for personal activities as opposed to staying in the library after obtaining the required information, thus the least expectations on the statements. Secondly, SLs are allocated a limited space in the organizations and some of the features such as library space for studying and learning may be limited; thus, even though the users of the current spaces in the libraries under study are acceptable, users still have high expectations on this dimension. Like any other service providers, library users expect IPs delivering library services in PGDs to be qualified people who are competent to deliver the required services efficiently and accurately, thus the lowest minimum expectations on the AS and IC dimensions from SL users.

These results correspond with the findings from a study conducted by Kumar and Mahajan (2019) who revealed that users of the central library of Maharshi Dayanand University in Rohtak, India have their greatest expectations of the physical attributes of the library since the LP dimension obtained the highest mean scores while the AS and IC dimensions had the lowest expectations. The study conducted by Selga-Cristobal (2018) on the expectations for library services, library quality dimension, and library customer satisfaction differed slightly as almost all the dimensions (AS, LP, and IC), obtained the highest minimum expectations except for the dimension concerned with access to information (AI). The AI dimension having the lowest minimum expectations was because library users still considered the traditional aspects of the library and this included how they accessed information (Selga-Cristobal 2018).

The findings of the current study differed from those of Mutisya (2017) who assessed the quality of the African Union Court on Human and Peoples' Rights Library. In his study, the AS and IC dimensions obtained the highest score on minimum expectations, while the LP dimension was least valued by users. This meant that the AS dimension, which deals with the way IPs deliver services, was the most important aspect to users in that study. The difference in obtaining the highest minimum expectations on different dimensions could be explained by the fact that Mutisya's (2017) study was conducted in a court library; thus, even though it is crucial for IPs (AS dimension) to demonstrate their capabilities of delivering services in a quick and timely manner in any type of library, lawyers (users) would take into consideration that they do not have much time to search for information due to their busy schedules. Thus, AS obtained the greatest minimum expectation. Conversely, the majority of users in the current study had their highest minimum expectations on the LP dimension due to their need for enhanced awareness of the library and its services; therefore, improving the physical aspects of the library could attract more users and overcome this weakness.

6.6.2.2 Perceived level of library quality by special library users

In this measure, the researcher sought to determine the level of library quality based on what users were currently receiving from the SLs under study. The results showed that the overall mean score for the perceived level of library quality was 0.55. The mean score for each dimension was 0.61 for AS, 0.53 for IC, 0.46 for LP, and 0.56 for SL.

These figures indicate that library users placed their highest perceptions of library quality on the AS dimension, which indicates their satisfaction with the elements related to library staff and how they deliver their services. Generally, most of the statements in the AS dimension obtained higher mean scores, with the lowest score identified on the statement relating to how the library treats individual users and the lack of attention to individual users in the library. The SL dimension came second in terms of the highest score. This indicates a correlation between the quality of library service delivered to the users and evidence of their satisfaction.

Mutisya's (2017) study also obtained similar findings since the AS dimension, together with its statements, scored the highest when it came to the perceptions of library users. However, a recent study by Barfi, Parbie, Filson, Teye, Kodua-Ntim, and Ayensu (2023) which assessed

the quality of services at an academic library, revealed that the AS dimension, which also has to do with how IPs interact with the users, was below the desired levels as they (the users) were not satisfied with what they were currently receiving. The study emphasizes the need to provide IPs with relevant service delivery training, ensuring that they uphold the requirement to be strategically attentive and friendly to users at all times.

As noted, the second highest score was obtained in the SL dimension, which was concerned with the general satisfaction of library users in terms of services rendered and resources offered. This finding agrees with the results reported in Section 5.3.6.2 where a majority of users concurred that the resources and services in the SLs under study met their general needs for information.

The findings further indicate that the LP dimension received the lowest mean score of 0.46. Thus, it can be deduced that, although users find the condition of LP acceptable (as per the results in 6.6.2.1) they are dissatisfied with the current quality of the physical aspects of these libraries. The library quality statement that obtained the lowest mean score came from the IC dimension, namely, IC-2 (0.39). This shows that even though this aspect of library quality is least valued as per the results on the minimum level, users are least satisfied by the lack of or non-functioning of the library website. A possible explanation for this statement to obtain the least perceived level of library quality would be that the library users who participated in the study indicated their preference for online library services, and having a functional library website would enhance the quality of such services thereby improving the value of the SLs.

A study by Kiriri (2018) revealed that even though there was a positive response in terms of satisfaction with available resources and how they access them, respondents were not pleased with the lack of access to those resources online or at the time they required information; rather, they had the desire to be able to access library services from their offices or homes. This was in line with the views from the study conducted by Odu and Omini (2017), who averred that the delivery of library services in the present 4IR does not necessarily require users to physically visit the library since the services can be performed online and the former “old-fashioned” library practices commonly done inside the library building are becoming irrelevant. In a similar vein, a recent study by Veeramallu, Kona, and Rudraksha (2021) conducted in engineering college libraries found that online information resources are a

necessity, especially in academic and SLs alike, to sustain the changing needs of users according to the developments brought by technological advancement.

6.6.2.3 Desired level of library quality by special library users

SLs and their POs can determine the most vital aspects for users by identifying library quality statements that obtained high mean scores from library users on desired expectations measurements (Mutisya 2017:202). Thus, the findings of this study revealed that the overall desired level of library quality is 1.15. The dimensions of the desired level of library quality obtained the following mean scores: AS (1.29), IC (1.02), LP (1.06), and SL (1.21). This implies that the desires of special library users are highly placed on the AS dimension, followed by SL and the least desire is placed on the IC dimension.

Remarkably, the same dimension (AS) that was rated high on the perceived measure and third on the minimum level, also scored higher on the desired level of library quality by users. This indicates that although users were satisfied with the quality of AS currently rendered, they consider this dimension the most important attribute that aids the quality of the library and also affects their overall level of satisfaction with library quality. This finding is similar to the results from a study conducted by Ghaedi, Valizadeh-Haghi, Ahmadi, Zeraatkar, and Baghestani (2020), who found that even though the college libraries of Shahid Beheshti University of Medical Sciences in Tehran, Iran met the users' minimum expectations on the AS dimension, the level of satisfaction was still considerably lower from the desired level by users. Mohindra and Shokeen (2015) at the National Law School of India University in Delhi found that the perceived level was rated higher on items from dimensions such AS and IC and that this differed from the desired level.

The findings from the current study on the desired level of library quality validate the findings on the minimum level of acceptance measure. This means that even though users were satisfied with the quality under the AS dimension, they still placed their highest desire on this dimension to regard the quality of libraries as satisfactory.

The lowest scores for the desired level of library quality were obtained in the statements LP-4, IC-3, IC-5, and IC-1. These statements were concerned with various aspects of the library such as community space, access to online records from users' offices, printed resources, and online

journals for users to complete their work. The least desired statement was LP-4, a possible explanation for this is that PGDs have spacious boardrooms that are used for holding meetings, conducting training, and learning, hence it was less desired by users. Interestingly, apart from the two statements that were below the mean score of 1.0, all other statements were above this level, which points towards the variety in the types of users served in SLs and the diversity in their desires concerning library quality.

The findings on the desired level of library quality corresponded with those of the study by Mutisya (2017). His findings showed that users of the African Union Court on Human and Peoples' Rights Library also had their highest desired expectations on the AS dimension; however, the least desires by users were placed on the LP dimension. On individual statements, the findings of the current study concurred and also varied with those of a study by Baada, Baayel, Bekoe, and Banbil (2019) who assessed user perceptions of the quality of public library services in the Greater Accra Region of Ghana using the LibQUAL model. Their findings showed that the majority of users desired to have a library that was comfortable with a welcoming environment (LP dimension). On the other hand, their finding on the AS dimension differed from that of the current study as users confirmed that they get individual attention from IPs in their library, as they are courteous, and possess enough professional skills to deliver service effectively.

The gaps between the library quality measures are discussed below.

6.6.3 Gaps between library quality measures

The LibQUAL overall mean scores from each level of library quality (minimum, perceived, and desired) were used to determine the gaps between library quality measures. Thus, the study sought to corroborate the findings of the library quality above by analyzing the gaps between various items on the LibQUAL tool, and the following measures were assessed:

- i. The level of library quality users find acceptable (ZoT);
- ii. The level to which perceived library quality exceeds what was expected by users (SSG);
- iii. The level to which library quality meets the minimum expectations of users (SAG); and
- iv. The strong and weak points of library quality (D-M score)

6.6.3.1 Level of library quality users find acceptable

Perceived levels of library quality fall in the ZoT, that is, the quality of the library can be said to be in the tolerated zone if the perceived scores surpass or are equal to the minimum scores. The quality of a library that is found to be below the ZoT could result in users' discontentment with the library services and resources offered to the point where users do not see any value in library utilization as it bears no relevance to their needs. Poor quality service will cause dissatisfaction among library users, while good quality service leads to user satisfaction (Nadiri and Hussain 2016:252).

Thus, column 5 in Table 5.10 shows an overall ZoT of 0.96 on library quality. The overall mean for the desired level of quality was higher (1.15) than the overall mean for the minimum level (0.19) users were willing to accept, while the perceived level was higher (0.55) than the minimum level. This indicated that the quality of SLs under study fell in the range of what users expected from these libraries as evidenced by the perceived level that was higher, by a narrow gap, than the minimum level. Therefore, it was apparent that the library quality fell in the ZoT of users. However, there was a very small margin of error in library quality provided by these libraries and a higher margin of expectations from users based on the desired overall mean score. When assessing service quality at the American Embassy Swaziland Information Resource Centre (IRC), Mkhonta (2016) also observed a lower ZoT of 0.8 when compared to the current study. Likewise, his study pointed out the very lesser margin for error in service delivery and extremely great desired expectations from users.

According to Mutisya (2017:216), the score for the perceived level of quality should not fall below the score for the minimum level as this would result in dissatisfaction among the users and the library value diminished. In this study, Table 5.10 (columns 2 and 3) indicates that all the scores for perceived level were greater than the scores from the minimum level; this further points to the overall satisfaction of library quality in SLs in PGDs. These findings are consistent with the results from the studies by Nadiri and Hussain (2016) and Nadiri and Mayboudi (2010) which were conducted in healthcare services and research libraries respectively. The results of the first study established that the ZoT of users regarding the library quality was narrow while the latter study confirmed that the respondents' perceived level of library quality was in the ZoT of users.

6.6.3.2 Level to which perceived library quality exceeds what was expected by users

The level to which the performance of the library surpasses the desired expectations of the library users is known as the service superiority gap (SSG) (Mutisya 2017:167). The SSG is defined as the difference between the average service or library quality experience and the average service or library quality level expectations (Van Coller 1999:111). A negative SSG indicates that the library is not delivering superior service quality or library quality to the users. SSG can be determined in both the SERVQUAL and LibQUAL measures.

For this study, the SSG for LibQUAL was measured by subtracting the perceived score from the desired score, and should the score from this calculation be negative, it would mean that the SLs under study are not delivering exceptional quality to their users. Consequently, column 7 in Table 5.10 indicates a negative overall SSG of -0.6 with not a single item in this measure scoring a positive mean, nor have any of the dimensions equaled out. This is an indicator that the overall quality of these libraries is poor when compared to what the users desired. Therefore, the results of this measure reveal a gap in the level to which perceived library quality exceeds what was expected by users of SLs in the PGDs. The dimensions with the highest negative mean scores were AS, SL, and LP. These dimensions were concerned with the library employee-related matters, the satisfaction of library users, and the physical aspects of the library. The lowest negative mean score was obtained in IC-3 (-0.28), which looked at the library in terms of providing printed materials that users require to complete their work.

Such findings provided evidence that IPs' attitudes when delivering service to users and the library as a place where services are rendered, play a major role when users determine library quality and their overall satisfaction from that quality. The findings are consistent with those of a study by Mkhonta (2016), who recognized a negative SSG (-0.14), indicating how the quality of service supplied by the Swaziland IRC could not equate with nor surpass users' desired expectations. Mardani and Zare's (2014) study also found an overall negative SSG (-2.14) in all the dimensions at the Tehran University of Medical Science libraries in Iran, demonstrating that the libraries were far from meeting the expectations of users on the highest level, which indicates that the libraries were practically inadequate in terms of providing users with the desired level of quality. The findings in the current study also correspond with the sentiments made by Ajayi, Ayodele, and Adedokun (2021) who maintain that meeting the

objectives of providing quality library services and ensuring that users desire to utilize the library effectively, is possible if IPs maintain the correct attitude when serving users.

6.6.3.3 Level to which library quality meets the minimum expectations of users

The extent to which library quality meets the minimum expectations of library users is determined by calculating the difference between the perceived mean (PM) score and the minimum mean (MM) score. This is done by subtracting the MM scores from the PM scores for the library quality statements. In this measure, a negative score is an indicator that the library does not meet the minimum expectations of library users.

The findings displayed in column 6 of Table 5.10 reveal positive SAG scores in all the library quality statements, which indicate that SLs in PGDs are meeting the minimum expectations of users. Even though the SAG scores were positive and above zero, none of them were above the mean score of 1.0, which indicates that library quality was barely meeting the minimum expectations of library users. Mkhonta (2016) also observed similar results as his study revealed a positive gap that was above zero, indicating that the resource center exceeded users' minimum expectations but that there was a need to supply relevant printed resources and ensure adequate operating hours. In terms of the current study, there is a need for the SLs in the PGDs under study to improve the quality of library services and resources provided to avoid the overall score falling below the users' minimum level of expectations. This could, for example, be achieved by library staff changing their attitudes during service delivery, improving the physical aspects of the library, and ensuring that library users are satisfied at all times when they visit the library.

Table 5.10 reflects that the SAG score for AS was 0.47; for IC, 0.34; for LP, 0.22; and finally, for SL, 0.37. This indicates that while the minimum expectations of users in the aspects of AS are met, users' overall expectations are barely fulfilled since the SL dimension obtained the lowest SAG score. A possible explanation for this is that SLs in PGDs are offering outdated materials to users, mostly due to the majority of them operating under a tight or non-existent budget. Furthermore, these libraries lack policies or guidelines to ensure consistency in the quality of library services and resources provided, as revealed in the study findings. This corresponds with the conclusions drawn from Kiriri's (2018) study, where it was determined that even though there were sufficient library collections, some of the resources were outdated

and the inability to access them anytime or anywhere contributed to the expectations of users hardly being fulfilled.

6.6.3.4 Strong and weak points of library quality

Dennis and Bower (2007:10) stressed that the measures of ZoT, SSG, and SAG as displayed above do not completely replicate the true meaning of users' assessment of library quality, hence they introduced the D-M score, which was used in this study to clearly explain the findings from the LibQUAL tool. According to Mutisya (2017:226), "the D-M score is a vital tool in the analysis and presentation of LibQUAL findings as it allows for meaningful and well-organized comparisons". For this study, the D-M score was calculated by dividing the SAG score by the ZoT score, and then multiplying that proportion by 100 (Mkhonta 2016:475). Table 6.1 indicates the standards used in the study to interpret the D-M scores obtained from the LibQUAL tool presented in Table 5.10.

Table 6.1: D-M score interpretation standards

D-M Score	Evaluation	Action required
> 100	Exceeds expectations	Maintenance
71-100	Meets expectations	Maintenance
60-70	Not so problematic	Monitoring
51-59	Potentially problematic	Close monitoring
=50	Mid-point in ZoT	Requires improvement
40-49	Mildly problematic	Requires improvement
15-39	Problematic	Requires special improvement
0-14	Considerably problematic	Requires immediate improvement
< 0	Below minimum expectations	Dire need for immediate improvement

Adapted from Dennis and Bower (2007:11-12)

The overall D-M score in LibQUAL for this study was 37.5 while the D-M scores for each dimension were as follows: AS score was 41.22, IC score was 40.96, SL score was 36.27, and the lowest score was obtained in LP (26.83). Generally, these scores showed that none of the dimensions were found to exceed the minimum expectations of library users as all of them were below the score of 50, which is the mid-point of the ZoT according to the standards interpretation. Specifically, the AS and IC dimensions' scores fell between 40-49, meaning the library quality was mildly problematic and requires improvement. On the other hand, SL and

LP dimensions' scores fell between 15-39, indicating that there was a problem with the quality of the library in these dimensions, and requiring special improvement. The overall D-M score in the study was significantly lower than the score of 83.46 obtained in the study by Mkhonta (2016), indicating the great strengths of the Swaziland IRC even though there were dimensions that left opportunities for progress as suggested in the study.

Remarkably, the same library quality statement that received the lowest negative SSG (IC-3) achieved the highest D-M score of 64.10 (refer to Table 5.10). This shows that this item is not that problematic but requires monitoring from library staff. Thus, this could be a weak point if the library is not taken care of or a strength if carefully developed to suit the desires of users. This was an indication to the IPs and management to reevaluate the significance of having a SL in their organizations, and further determine whether it is there for the personal use of the employees or it is there to assist them in improving their work performances.

The lowest D-M score of 21.14 was attained in AS-1, falling between 15-39 thus indicating that this was a problematic area that requires special improvement. However, the same dimension that contains the statement with the lowest D-M score also obtained the highest overall score compared to other dimensions, which indicated an imbalance in the effect of service quality on the users. A possible explanation of this could be that employees in PGDs are diverse, and their needs are different as per the earlier definitions of scholars such as Varghese and Thirunavukkarasu (2020:2) and Johnson (2014:2) who postulated that quality differs from one person to another and is based on user's perceptions after service utilization. Furthermore, these findings concur with the results of the study by Kiriri (2018) on the perceptions of users of library services in a private university in Africa regarding service delivery. His study revealed that there is a high demand for library services when the users are dynamic and of a diverse nature, and the PO is required to keep up with the changing dynamics to ensure that the needs of the users are effectively fulfilled.

H4 proposed that there is a difference in the level of perceptions, desired expectations, and satisfaction with information and library services from library users across each department under study. This hypothesis was accepted as the study findings revealed a difference in the level of perceptions, desired expectations, and satisfaction regarding information and library services currently offered by SLs across each department under study.

The next section discusses the functions of SLs and what best practices can special libraries in government departments benchmark to improve their value.

6.7 RQ5: What are the functions of special libraries, and what best practices can special libraries in government departments benchmark to improve their value?

RQ5 aimed to determine the various functions of SLs and identify best practices. The TQM model informed the RQ in terms of external benchmarking. Benchmarking of best practices was necessary for the SLs under study so that the IPs and management could accurately examine the strengths and weaknesses of their libraries and determine areas for improvement (Rzheuskyi and Kunanets 2018:2). Hence, the views of both the IPs and the HODs under study were required to answer this research question. External benchmarking of best practices from other SLs enables the development of library services and resources that make the functions of the library stand out in the organization, with the possibility of producing positive outcomes (Hiller 2012:11).

Table 5.14 reveals that the PGDs under study have different key objectives, meaning the functions of each library would be different. In terms of how the SL contributes to the objectives of the department and the necessity of having such services in the departments, the HODs viewed the library as an integral part of the organization whose services add value to the general objective of PGDs, namely, the improvement of service delivery. Some HODs regarded the library as *key to the organization* and a *key repository* due to the information stored and delivered, which enables users to create new knowledge and acquire new skills. The management observed the indicators or measures of such contributions of SLs to PGDs differently. HODs observed the following indicators: the ability to access information provided by the library, being assisted by competent IPs at the library, the appropriate library environment, the ability to trace documents, the level of knowledge creation through library utilization, and library usage statistics. It was based on such indicators that the HODs interviewed concurred with the need and significance of having a library, further emphasizing that when those services are utilized effectively, there is time saved in obtaining authentic information to achieve the strategic objectives of the department (value-in-use).

Moreover, the management concurred that having an effective library in their departments was critical, as it assisted employees with their performance and decision-making by management

using credible information. This implies that even though some of the departments did not have effective libraries, the management understood the value an effective library could bring to the organization and its staff. Such a finding disputes the notion contained in a study conducted by Matarazzo and Pearlstein (2014) that corporate managers simply did not understand how the library contributed to the organization. In an earlier study, Matarazzo, Prusak and Gauthier (1990) obtained the opinions of senior management on the value of corporate libraries. They found that management's understanding of the functions of such libraries in an organization, their significance, and how they can be evaluated is inadequate, as only a few of the respondents could describe the notable functions of the library in the organization.

The IPs pointed to the adoption of online services and resources as the main trend in their libraries, which helps them receive some recognition from the department and contribute to achieving the objectives of their PO. However, one of the IP participants revealed that their library did not have any key trends as they are currently operating with what they have, having had no budget allocation in the aftermath of the COVID-19 pandemic. This concurs with recent reports by Zhou (2022) and Tammaro (2020) where it was reported that COVID-19 caused a huge setback for libraries in terms of proving their value to their POs. Nevertheless, other trends that could be adopted by SLs include the digitization of library resources, access to online journals or newspapers, and open access to academic information. Such trends could be adopted or adapted, especially by libraries that do not have any key trend/s, provided that the IPs are granted access to adequate funding. The adoption of key trends informed RQ5, which involved the benchmarking of SLs' best practices to improve library services in the respective departments.

These findings imply that IPs in the SLs under study are constantly improving their functions and gradually acknowledging the need to move from their traditional methods of operation toward embracing the digital era. The gradual move toward and adoption of online services thus questions the significance of having a physical library in these organizations. The evidence presented so far supports the idea that SLs are shifting away from holding traditional materials that can only be accessed in the library to becoming a central digital point connecting the needs and requirements of information services for any research project, marketing assessment, or any interest that requires particular information (Ali 2020:247). This is especially so since recent studies conducted by Ajayi, Ayodele, and Adedokun (2021) and Zygiaris, Hameed, Alsubaie, and Rehman (2022) reveal that instead of waiting for users to visit the library, IPs

are also making use of technological facilities to influence library users and deliver library services through social media platforms and mobile applications. The latter can play a significant role in addressing the issues related to how IPs respond to users' needs and ensuring the quality of services rendered. Additionally, Khumalo and Nwone's (2021:1) study notes that libraries are shifting away from the belief that positions them as just a structure that preserves printed books for borrowing purposes to knowledge and information catering hubs where people turn to in their quest for information to satisfy their various requirements.

The IPs' efforts in ensuring that the functions of SLs in GDs are recognized were also visible from the findings regarding the best practices performed in their libraries. The findings revealed that IPs are doing their best to ensure that information supplied to users is valid, peer-reviewed, and current; users have access to online resources and newspapers; they are provided with various facilities to assist them with their research; and finally, that library resources are circulated. This implies that the IPs in these departments are working hard to improve the quality of the services they provide and ensure their significance to their organizations, regardless of the challenges they encounter, such as the lack of a budget or management support. Jamali (2020) reports that most libraries are operating on a low budget, and, in some instances, budgets do not exist. Jamali (2020) emphasizes that libraries need to demonstrate their value to management for that budget to be allocated annually. The lack of a library budget affects the quality of library services and resources offered to the users, which in turn affects their satisfaction regarding library services. In terms of the latter challenges, similar findings were revealed by IPs working in government-sponsored libraries in Hong Kong and Taiwan as they reported that they lacked funding, support from management, and qualified IPs (Asundi and Karisiddappa 2017).

In Nigeria, Chris-Israel, Madu, and Yemisi's (2018) study highlighted the functions expected from SLs to enhance the delivery of service in public organizations; however, the listed functions were only averagely performed, and thus the effectiveness of those libraries was lacking. The top five expected functions of SLs in public organizations such as the PGDs in the current study were listed as follows:

- i. Provision of effective information services;
- ii. Effective content management of resources;
- iii. Current awareness services (CAS);

- iv. Keeping abreast of the organization's needs and interests for both print and e-resources; and
- v. Proactive information dissemination service (Chris-Israel, Madu, and Yemisi 2018:10-11).

In addition to the above-listed functions, Hendrikus (2019) regards the promotion and implementation of a KM strategy as the most prevailing function that should be taken over by SLs in their respective POs. This is in line with Nenungwi and Garaba (2022) who, in their study, postulated a need for those PGDs that have not adopted a KM strategy to formally implement one that is strategically aligned to the mission and vision of their organization. This is because SLs not only disseminate knowledge, but they play a critical role in documenting and managing different knowledge and information sources produced in their PO. Thus, the SLs in the current study could benchmark the above strategies to improve their value to the PO. Should these information services be consistently delivered in PGDs, SLs in these departments would certainly grow to become a central driving force in GDs, especially in the current 4IR era (Chris-Israel, Madu, and Yemisi 2018:11).

H5 proposed that there is a difference in library services available in departmental SLs. This hypothesis was accepted, as it was evident from the objectives of the PGDs presented in Table 5.14 and various key trends performed by IPs in their respective SLs, that these libraries offer different services with the main purpose of ensuring that there is easy access to any kind of information required.

The next section discusses the roles of IPs in special libraries and the competencies required to help achieve organizational goals.

6.8 RQ6: What are the roles of information professionals in special libraries and what competencies are required to help achieve organizational goals?

The final RQ for the study sought to understand the roles of IPs in special libraries and the competencies required by such professionals in assisting the PO to achieve its goals. The strategic measurement model and the TQM model informed this RQ. In response to the question concerning the roles and competencies IPs viewed as vital when working in GDs to assist in making informed decisions using credible sources of information, the results showed

that the IPs are well aware of the digital revolution. Likewise, they are embracing this change as they are mindful of the need to redevelop their roles and skills to keep up with the fast-changing era in which information flows freely. The IPs emphasized the need to keep themselves updated with various trends or developments happening in their field and the necessity of attending workshops and conferences and undergoing training on new technological developments. This is especially important since a learning organization calls for SLs to pay attention to developing trends and adopt what other libraries are doing better to improve their own services (external benchmarking). These findings resonate with those of Appleton (2018), Hallam and Faraker (2016), and Chakraborty (2013), who postulated that IPs should be devoted to improving their roles and skills to keep up with the digital revolution and have the confidence to migrate from traditional to online methods of delivering services.

The Financial Times Corporate and Special Libraries Association (2013:24) noted similar sentiments in their report. One of the knowledge providers in their survey indicated the significance of IPs staying updated with the changes brought by technology. It was noted that the profession changes constantly and the upkeep of modern competencies is difficult even though it results in obtaining valuable skills beneficial to the PO. In a similar vein, Rajashekara and Biradar (2022) are of the view that IPs in corporate libraries should possess good practical awareness and the capability to determine the particular areas in which technology could be applied to assist the organization in accomplishing its objectives.

Additionally, the IPs in the current study identified various roles and skill sets that are valuable in the 4IR. These include but were not limited to, being a critical thinker when developing library services, authentically reviewing information sources before passing them as sources for reliable information, using peer-reviewed sources, and applying information searching, and researching skills. The identification of these roles and skills is in line with the internal benchmarking (TQM model), which is intended to justify the existence of the library and to demonstrate the library's contribution towards the department's success. The identified roles and skills in the current study align with the views of Ali (2020), who stated that IPs recognize the expanding nature of the challenges they face in the information age as well as the range of competencies that are required to meet them. Rajashekara and Biradar (2022) emphasize that IPs should get specific cross-training programs for efficient handling of challenges that come with technological advancement. A study by Garg (2013) highlighted the need for IPs to obtain a technological system viewpoint and be dedicated to the continuous development of their

competencies and approaches to boost their understanding of the networked environment. Onwubiko's (2021) and Popescu and Madge's (2023) studies underline the need for organizations to employ qualified IPs to work in SLs, to organize regular training to develop IPs' skills, and to provide funding for IPs to attend seminars, conferences, and workshops.

The management of the POs where the SLs are placed verified that IPs employed in their departments are well equipped with sufficient skills and competencies to assist their departments in maneuvering through this era of free-flowing information. The HODs indicated that their IPs can assist the respective departments achieve their objectives as they are competent in researching for any data required, assessing the data, and presenting it in terms understandable to management. This finding validates the roles of IPs in corporate organizations, showing that their strategic application of information in organizational processes assists in the improvement of service delivery. Moreover, the findings provide appropriate evidence of how the SL contributes to departmental goals and objectives (strategic measurement model).

However, for those departments that do not have qualified IPs, such benefits would not be visible and in the end, the management would not see the significance of having SL services in their organizations. Hence, HoD-C advised such departments to do better by *hiring qualified IPs who have sufficient skills in running and marketing the library and its services to the users...* This finding implies that unqualified personnel operate some of the SLs in PGDs and the management is not aware of this – another sign of neglect on their part. Similar results were obtained in a study conducted by Nawaz (2021), the study exposed a deficiency in SLs concerning IPs in that 38% of staff working in such libraries lacked a professional qualification in the field. Furthermore, the study warned that SLs are facing a significant shortage of professional and experienced LIS staff, as there are a limited number of such libraries under the supervision of professional librarians.

Remarkably, one HOD acknowledged the neglect of the development of the SL and that of improving IPs' skills (indicating a lack of input by management). Similar findings of negligence from top management have been reported in various studies. Chris-Israel, Madu, and Yemisi (2018) rationalized that the reason SLs in Osun State, Nigeria were experiencing challenges such as inadequate funding, insufficient manpower and ICT facilities, and outdated library collections, was due to negligence from the top management who seldom acknowledged

the significance of library services towards achieving the mission of the PO. The Australian Library and Information Association (2012) investigated the value of health libraries and information services in the country, Issues of concern reported by IPs included an inadequate budget for library development, insecurity of IPs about their future in the organization, and ignorance about the value of library services from top management. Such commonalities have and continue to bedevil librarianship since time immemorial in both developed and developing countries.

The findings from the study conducted by Onwubiko (2021) revealed inadequate budgetary provision for the SL by management, incompetent IPs, and outdated library resources and services. All these findings, including those of the current study, are confirmed by (Garaba 2015) who reiterated the need for IPs to rebrand and future-proof themselves lest they become irrelevant or like dodos, extinct.

With reports of negligence on the part of management, one could question the likelihood of the development of SLs and the survival of IPs in GDs. The neglect reported in this section is also indicated in Section 6.4 by IPs who opined that the management's buy-in and support could change how SLs are valued. Nonetheless, the findings from management on this question imply that, even though there is a lack of strategies to develop IPs' skills in some departments, they are well equipped with various competencies that assist with classifying authenticated information to be used in organizational processes. The latter finding is an indicator that IPs in these departments can produce expected outputs, which is to assist their POs in attaining their mission.

Based on the findings of this study and as noted by various scholars (Rubin and Rubin 2020; Jain 2013), one can deduce the following regarding the future of IPs in corporate organizations: First, this could be the death knell of IPs if the management continues with this disdain towards the value of IPs (and SLs) in such organizations. Second, and paradoxically (to avoid the first scenario above), the continued professional development of IPs is a must in their quest for relevance so that they can increase their value status in corporate organizations; however, for this to occur, buy-in from management needs to be cultivated and nourished. In short, the roles of the IP and the SL in a corporate organization should be based on identifying methods that support the organization and its employees by enhancing how information is accessed. The IP occupation is regarded as a "dynamic" one by Rubin and Rubin (2020:417), especially in this

technological era in which their skills are required to help the organization manage its information.

H6 proposed that there is a positive correlation between library professionals' skill sets, and their services in terms of meeting the goals and objectives of an organization. This hypothesis was accepted since IPs are attentive to their roles in corporate organizations, have appropriate skill sets to carry out those roles, and are aware of the need to redevelop the skills needed to continually sustain their positions in such organizations.

6.9 Summary

This chapter presented an in-depth discussion and interpretation of the data presented and analyzed in Chapter 5. The various models that underpinned the study, namely, the strategic measurement model, the SERVQUAL model, the LibQUAL model, and the TQM model, all guided the discussion and shaped the interpretation of the results. The chapter was organized according to the study's research questions. The study established that the level of awareness of SLs' services and resources in the PGDs was higher and did not equate to the level of utilization by the users. The possible causes for the utilization and underutilization of SLs in these departments were interpreted and discussed. Some respondents acknowledged that it was their first time hearing about the existence of a SL in their department. Respondents who utilized the library indicated that they did so for the archiving services, leisure purposes such as reading or studying, and for the provision of newspapers. In terms of how the library services and resources are strategically aligned with the goals of the organization, the findings revealed that even though the management of the POs understood the significance of having a SL that is strategically aligned to their goals, they are not putting much effort into its development. Regarding the methods used to measure the value of libraries and how that value is communicated to the management of the PO, the findings indicate that the IPs do not have methods in place to measure the satisfaction of the users to determine the value of the library. Furthermore, IPs in these SLs lacked methods to communicate library contributions, and their value, to management. Regarding the quality of services and resources provided affecting the level of perceptions, desired expectations, and satisfaction of library users, the findings reveal that users' perceptions of service quality are based on various factors. In terms of library quality, there is a gap in the level to which perceived library quality exceeds what is expected by users and library quality is barely meeting the minimum expectations of users.

When it comes to the functions of SLs in corporate organizations and which best practices other libraries can benchmark to improve their value to the PO, the results show that the PGDs under study have different key objectives, suggesting that the functions of each library would differ. However, the adoption of online services, digitization of library resources, access to online journals or newspapers, and open access to academic information are the main trends that could be benchmarked by other libraries that are ineffective. In terms of the roles of IPs in corporate organizations and the competencies required to help achieve organizational goals, the findings reveal that IPs assist their respective departments in achieving their objectives through their ability to research any data required, assess data, and present it in terms understandable to management.

Based on the interpretations and discussion of the findings in this chapter, all the proposed hypotheses were accepted except for the second hypothesis which was rejected.

The final chapter of the thesis follows and it presents the summary, conclusions, contributions, and recommendations of the study.

CHAPTER 7: SUMMARY, CONCLUSIONS, CONTRIBUTIONS AND RECOMMENDATIONS

7.1 Introduction

The purpose of this chapter is to summarize the findings of the study based on the discussion undertaken in Chapter 6. Thus, the researcher gets an opportunity to express her understanding of the research problem. The purpose of this study was to determine the value of special libraries (SLs) in provincial government departments (PGDs) and investigate how the value of these libraries was being communicated to management. The aim was to use the findings to inform management about the value of SLs in these departments to advocate their need for redevelopment. The study addressed the following research questions (RQs):

1. What is the level of awareness of special libraries, and how effective are the services and resources they provide in helping to achieve organizational goals?
2. How are library services and resources strategically aligned with organizational goals?
3. What methods are used to measure the value of libraries, and how is this value communicated to the management of the parent organization?
4. How does the quality of services and resources provided affect library users' perceptions, desired expectations, and satisfaction?
5. What are the functions of special libraries, and what best practices can special libraries in government departments benchmark to improve their value?
6. What are the roles of information professionals in special libraries, and what competencies are required to help achieve organizational goals?

The study was underpinned by various conceptual frameworks, namely, the strategic measurement model, service and library quality (SERVQUAL and LibQUAL) models, and the total quality management (TQM) model. The chapter is organized according to the themes from the RQs and the broader issues concerning the research problem presented in the first chapter of the thesis. The chapter presents a summary of the findings, the conclusions, and the recommendations of the study; the overall conclusion is made in alignment with the broader research problem. The originality and contributions of the study which include a proposed framework for measuring and communicating library value are also presented. The

implications of the study in terms of theory, policy, and practice are given, together with suggestions for further research.

The summary of the findings of the study is provided in the next section.

7.2 Summary of findings

This section summarizes the empirical findings of the study on measuring and communicating the value of SLs in KZN PGDs, Pietermaritzburg. The demographic characteristics of the respondents and participants are presented first. Thereafter, the summaries of the findings based on the key themes derived from the RQs are presented.

7.2.1 Awareness of special libraries and the effectiveness of services and resources provided in helping to achieve organizational goals

RQ1 sought to determine the level of awareness of SLs and the effectiveness of the services or resources provided in helping to achieve organizational goals. The results revealed that there was a great level of awareness of SL services or resources in the PGDs as indicated by the majority 133 (83%) of respondents. This finding was consistent with the views of all IPs. Furthermore, all HODs were also aware of the SLs in their departments. The findings further revealed that 58 (36%) respondents used the library monthly, followed by 51 (32%) who have never utilized the library. Archiving was identified as the service mostly used by 25 (19%) respondents while 16 (12%) utilized the library for leisure purposes such as reading or studying. These findings were partially consistent with what was said by the IPs who revealed that users utilized research services, newspapers, photocopy machines, computers, and the latest journals, and lent resources from the provincial library services (inter-library loans). The study also found that users benefited from visiting the library by making better-informed decisions while the information received also offered them new knowledge (25 or 19%), avoiding duplicating work tasks in the department (22 or 17%), and getting higher success rates in their research (21 or 16%).

The findings exposed that the lack of a budget to develop the library is one of the challenges hindering effective awareness and use of the library as indicated by some IPs. It was apparent from the findings that there is a contradiction between the IPs and the library users concerning

the utilization, impact, and effectiveness of the library in helping them perform their jobs and how this was evidenced. The hypothesis proposed in conjunction with this RQ was accepted.

7.2.2 Strategic alignment of library services and resources with organizational goals

RQ2 sought to determine the extent to which library services and resources were strategically aligned to the goals of the organization. The results revealed that the library services and resources from two of the SLs under study were strategically aligned to the goals of their parent organization (PO) while the other two were not aligned, as indicated by the HODs interviewed. However, all HODs concurred that having the functions of the library and its services linked to the objectives of the department is how the library can be said to be strategically aligned to its PO. Library users listed some of the services that they thought their SLs should be providing for it to be considered as the support structure of the department. The main services or functions were as follows:

- i. Online information resources and services;
- ii. Active awareness of the library through various marketing strategies;
- iii. Relevant library collection and services;
- iv. Academic resources and regular sessions that encourage employees to study further;
and
- v. Library collections and services that are relevant to the mandate of the department

Moreover, the findings, as indicated by the IPs, disclosed that some SLs in PGDs are operating without either a policy or an updated policy. The misalignment of library service to the organizational goals was also attested to by a majority 109 (68%) of respondents who revealed that not sufficient attention is given by management to the development of SLs in PGDs. Some library users opined that the lack of support from management in terms of the SLs' development was evident in the provision of outdated resources and the nonexistence of a library policy. The hypothesis proposed in conjunction with this RQ was rejected.

7.2.3 Methods used to measure the value of libraries and how this value is communicated to the management of the parent organization

RQ3 sought to establish various methods used to measure the value of SLs and identify the strategies used by the IPs to communicate such value to management. The findings revealed that the IPs recognized books, journals, internet access, newspapers, academic books from the provincial library, and online information sources as the services most valued by users. Library users concurred with IPs when it came to some of these services and, even though there was a high preference for online services by just under a fifth of users 31 (19%), there was still a preference for printed resources accessible through the library. The results of the study further revealed that library users are generally satisfied with the services and resources currently provided by the four SLs. However, the findings pointed to there being no methods in place to measure the satisfaction of the users to determine the value of the library. Furthermore, the results showed that there is a lack of methods to communicate the contribution of the SL to management. The hypothesis proposed in conjunction with this RQ was accepted.

7.2.4 Effect of quality of services and resources provided by special libraries on the perceptions, expectations, and satisfaction of users

RQ4 sought to investigate how the quality of services and resources provided by the SL affects the level of perceptions, desired expectations, and satisfaction of library users. The findings from the SERVQUAL tool revealed that when it comes to service quality, users placed their highest expectations on dimensions such as Tangible aspects of the library (mean score of 2.0), IPs' Empathy when delivering services (1.9 mean score), their Reliability in providing accurate information requested (1.9 mean score), and any other General library expectations by users (1.8 mean score). Conversely, the dimensions of service quality that obtained the highest perception scores were Tangibles (2.4 mean score), General library expectations (2.4 mean score), and Reliability (2.2 mean score). Consequently, there were positive service superiority gaps (SSGs) between users' expectations and perceptions of service quality in all dimensions.

The findings from the LibQUAL tool revealed that users had their minimum (0.18 mean score) and perceived (0.53 mean score) level of quality on the Affect of service (AS) dimension while the highest desired level was on the Satisfaction with the Library (SWL) dimension (1.21 mean score). Furthermore, the results showed that library quality fell in the zone of tolerance (ZoT)

(0.96) of users which indicates that the quality of the SLs under study is in the range of what users expected. There was a negative overall SSG of -0.6, positive service adequacy gap (SAG) scores in all the library quality statements, and an overall desired-minimum (D-M) score of 37.5. The hypothesis proposed in conjunction with this RQ was accepted.

7.2.5 Functions of special libraries and the best practices that could be benchmarked by special libraries in government departments to improve their value

RQ5 sought to explore the functions of SLs and the best practices that special libraries in government departments could benchmark to improve their value to their POs. The findings revealed that the PGDs under study have different key objectives which indicate that the functions of each library would differ. However, the overall function of all the SLs under study is to assist the PO in achieving its mission and to improve the delivery of services. Furthermore, the findings identified the adoption of online services, digitization of library resources, access to online journals or newspapers, and open access to academic information as some of the top trends that could be benchmarked by libraries to improve their value to the PO. This indicated that there is a gradual move to and adoption of online services, which questions the significance of having a physical library in these departments. The hypothesis proposed in conjunction with this RQ was accepted.

7.2.6 Roles of information professionals in special libraries and the competencies required to help achieve organizational goals

RQ6, the final one, sought to determine the roles of IPs in special libraries and determine the competencies required to help achieve organizational goals. The results of the study revealed that IPs assist their respective departments in achieving their objectives through their ability to research any data required, assess data, and present it in terms understandable to management. However, such benefits were not visible in some of the departments under study since it was revealed that some SLs are operated by unqualified IPs. The study identified the skills required by IPs to help achieve organizational goals and these included being critical thinkers when developing library services, authentically reviewing information sources before passing them on as reliable information, and using peer-reviewed sources to help select information for effective decision-making. However, the development of these and other relevant skills of the

IPs from the SLs under study could be marginalized due to the management's negligence of the profession. The hypothesis proposed in conjunction with this RQ was accepted.

The next section presents the conclusions and recommendations of the study.

7.3 Conclusions of the study

According to Nieswiadomy and Bailey (2018:278), the conclusions section is where the researcher attempts to generalize the findings and showcase the knowledge gained during the study. Thus, the conclusions of this study are presented according to the study's RQs.

7.3.1 RQ1: What is the level of awareness of special libraries and how effective are the services and resources they provide in helping to achieve organizational goals?

The study concludes that the frequency of library utilization does not match the significant level of awareness of SL services and resources in the PGDs as a majority of users only used the library on a monthly basis. The study also concludes that the archiving services and the utilization of the library for personal use are regarded as the main purposes for visiting the library. The SLs under study were found to be effective in helping some users to make better-informed decisions, while the information obtained from the library enabled them to create new knowledge, helped them to avoid the duplication of work tasks, and achieved a high success rate in their research. The study further concludes that the effectiveness of the libraries and their utilization to achieve the objectives of the POs are hindered by the lack of budgets for their development. This is reflected in some of the libraries offering outdated services and resources that are irrelevant to the users. Consequently, there is a discrepancy in the level of awareness of the existence of SLs in PGDs, the effectiveness of library services to users in helping them achieve organizational goals, and the level of utilization of these libraries. Hence there is a negative correlation between the level of awareness, utilization, and the effectiveness of SLs in departments as per the proposed hypothesis in this RQ.

7.3.2 RQ2: How are the library services and resources strategically aligned with organizational goals?

The study concludes that linking the functions and the services of the library to the objectives of the department constitutes the SL being strategically aligned to organizational goals. However, this study also concludes that half of the SLs under study are strategically aligned with the objectives of their POs while the other half are not so aligned; this causes a barrier for the latter libraries to prove their value. Furthermore, the lack of appropriate policy to develop the library is another impediment for the departments under study to create a library that is strategically aligned to the goals of the PO. Such confirmations were applied to reject the hypothesis proposed in line with this RQ, which stated that there is a positive correlation in terms of the strategic alignment between SL outcomes and organizational objectives. For the SLs under study to be considered as the support structure of the department, they need to reflect and implement the services suggested by library users to develop the library (refer to Section 7.2.3). The study further concludes that the creation of an effective SL policy needs to be done by IPs in consultation with management to ensure that the objectives of the organization are incorporated into all services and resources supplied by the library.

7.3.3 RQ3: What methods are used to measure the value of libraries and how is this value communicated to the management of the parent organization?

The study established that the users of SLs in PGDs are satisfied with the services and resources currently provided by these libraries. The study found that IPs and library users recognized books, journals, internet access, newspapers, academic books loaned from the provincial library, and online information sources as the services or resources most valued. However, users had a high preference for access to more online library services and resources that assist them with work-related issues. With such indications of satisfaction from users regarding library services, it is concluded that there were no methods in place to measure the satisfaction averred by the users.

The communication of library value by IPs to the management was found to be a challenge due to the placement of libraries in the organization. Thus, it is evident from the findings that the placement of SLs in PGDs differed due to the different key objectives of each department. The “misplacement” of the SLs under study was found to be affecting the effective reporting of

library challenges and also impeded the provision of support from management. Consequently, there were no clear channels for communicating library challenges and subsequently, its value, to the department. Based on these conclusions, the hypothesis which stated that there are different types of methods to measure library value and that there is no process in place to communicate it to the management, was accepted.

7.3.4 RQ4: How does the quality of services and resources provided affect library users' perceptions, desired expectations, and satisfaction?

The study found that the level of perceptions on service quality by users was high compared to the expectations level. Therefore, there was no discrepancy between users' expectations and their perceptions of the services offered due to the high level of users' perceptions. Additionally, there were positive SSGs between users' expectations and perceptions of service quality in all dimensions. In terms of library quality, it can be concluded that users find the AS dimension acceptable; similarly, the findings indicate that the dimension exceeded what users expected from the library. However, users' highest desires were placed on the SWL dimension which has to do with how IPs render their services and the significance of the library collection to their needs. Furthermore, the study also established that the library quality in these SLs was in the ZoT, which suggests that users are receiving the level of quality they expect.

The study further concludes that the SLs in the PGDs are meeting the minimum expectations of their users since the findings indicated a positive gap in the SAG level. Conversely, these libraries do not surpass the desires of their users since the result showed a negative gap on the SSG level. According to the D-M score interpretation standard, the study concludes that the SLs under study were generally problematic and required special improvement. Furthermore, the strongest points of library quality came from the AS dimension as it obtained the highest score; however, the D-M score standard considered this dimension mildly problematic and requiring improvement. Conversely, the Library as place (LP) dimension was considered problematic and required special improvement as it obtained the lowest D-M score, thus representing the weak point of the SLs under study. These conclusions are the evidence that was used to accept the proposed hypothesis for this RQ, which stated that there is a difference in the level of perceptions, desired expectations, and satisfaction with information and library services from library users across each department under study.

7.3.5 RQ5: What are the functions of special libraries, and what best practices can special libraries in government departments benchmark to improve their value?

The study established that the SLs in the PGDs have different functions since each department has different key objectives; however, the overall function of these libraries is to assist their PO in achieving its mission. SLs were viewed as an integral part of the organization whose services add to the improvement of service delivery. Furthermore, the study concludes that the adoption of online services, digitization of library resources, access to online journals or newspapers, and open access to academic information are the top trends that could be benchmarked by other SLs to improve their value to the PO. Even though the study revealed the gradual move and adoption of online services, having access to a physical library remains important as there were also preferences for printed resources on the part of library users. Thus, SLs should shy away from just performing the expected functions but also pursue other strategies that could enhance their functions. The hypothesis proposed for this RQ which stated that there is a difference in library services available in the departmental SLs was accepted.

7.3.6 RQ6: What are the roles of information professionals in special libraries and what competencies are required to help achieve organizational goals?

The study concludes that the roles of the IPs in the PGDs are to research any data required in the organization, assess that data, and present it in terms that are understandable to management. This helps the department to make informed decisions. However, the study further concludes that such benefits would not be visible in those departments that do not have qualified IPs. Additionally, qualified IPs in these departments possess the required competencies to help achieve organizational goals. These competencies include being critical thinkers when developing library services, authentically reviewing information sources before passing them as reliable information, and using peer-reviewed sources in selecting information for effective decision-making. To maintain such skills and to keep abreast of the Fourth Industrial Revolution (4IR), requires that IPs undergo regular training and development. However, when it comes to the development of the IPs in the PGDs, there is negligence on the part of the management which hinders their (the IPs) professional progress. The outcomes of this RQ provided sufficient evidence to accept the proposed hypothesis, which stated that there is a positive correlation between library professionals' skill set and their services in terms of meeting the goals and objectives of an organization.

7.4 Recommendations of the study

Based on the conclusions provided above, the following recommendations are made:

Recommendation 1: Assessing the satisfaction of SL users with the current services provided should be conducted regularly. Such results should be discussed in the annual library committee meeting to reflect on how the needs of the users have evolved and their satisfaction with the services being provided. The resolutions on how to improve library services from these meetings should be presented to management who should review the suggestions and offer the required financial support to ensure that the library provides relevant services as per users' preferences and needs. The impact of the implementation of new services should be monitored by IPs and presented by the library committee representative during management meetings.

Recommendation 2: IPs and the library committee should regularly consider and discuss creative strategies to market SLs in PGDs to keep the users (and management) informed about the library. Regular marketing could be conducted during general meetings and quarterly reviews for new employees as this would enhance the utilization of the services and resources provided by the SL. The use of online newsletters, library displays during departmental functions, and the introduction of various library programs (such as an employees' book club) are some of the strategies that could be considered in terms of marketing the library. IPs would need to provide feedback to the library committee on how the different marketing strategies are improving library utilization.

Recommendation 3: To improve the value of the SL, IPs and the library committee should develop a library policy or framework in consultation with management to ensure that the library is strategically aligned with the objectives of the department and provides quality library services or resources. The policy should be reviewed and updated regularly since the needs of the users change constantly as does the broader context in which the SL operates. More specifically, a library collection development policy needs to be considered as the collection could become inconsistent and ineffective leading to the library losing its value to the PO (Buraimo, Madukoma, Oduwole, and Olusanya 2023:39).

Recommendation 4: There is a need for management, IPs, and the library committee of each department under study to review (at least every five years) the placement of its SL to ensure that it is placed in the correct section and is still providing resources and services that are relevant.

Recommendation 5: In the absence of a formal method or strategy to measure and communicate the value of SLs, it is recommended that the proposed framework (see 7.6.1.1 below) be applied by the SLs under study to remain strategically aligned with their departments. The researcher proffers to present the findings, recommendations, and how the proposed strategic framework could be adopted by the critical stakeholders, especially those with implementing responsibilities in the PGDs under study. Such dissemination would include seminar presentations, policy briefs for government, and publication in peer-reviewed journals in the field.

Recommendation 6: With the development of the 4IR, the IT section, working with the IPs and the library committee, should design a library website to accommodate the growing preferences for online library services by users. IPs should be responsible for the general functioning of the website and IT personnel should offer technical assistance when required.

The next section discusses the overall conclusion of the research problem.

7.5 Overall conclusion of the research problem

The broader objective of this study was to establish the strengths and weaknesses of SLs in KZN PGDs in Pietermaritzburg to improve the services provided, especially in the context of the 4IR where library services may be regarded as superfluous. Furthermore, this study aimed to place SLs in a better position to highlight areas that need to be addressed by the departments under study in terms of the significance of having libraries in these organizations. It was evident from the outcomes of the study that the strengths of SLs in PGDs lie in having qualified IPs who have the required skills to render information resources and services efficiently and effectively. Conversely, the lack of support for the development of the SL on the part of the management of the PGDs was identified as the weakness of the libraries under study. Moreover, the lack of adequate methods to measure the values of SLs and communicate their contributions to management was also a weakness that resulted in a lack of support. It was

evident that without this support, IPs were limited in the modes of services they do and could deliver, and the value of the library was compromised.

The next section discusses the originality and contributions of the study.

7.6 Originality and contributions of the study

In an age where increasing information awareness and its accessibility through the internet has diminished the role or value of many SLs, this study was unique due to the paucity of such studies especially in the context of corporate and government department libraries. While other studies have emphasized measuring the value of academic and public libraries (Jaeger et al. 2011; Murray and Ireland 2018), this study attempted to measure and communicate the value of SLs in PGDs in Pietermaritzburg, KZN, South Africa. Leaning on the pragmatic paradigm, the study employed a mixed-methods research (MMR) approach using a multiple-embedded case study design underpinned by various conceptual frameworks as alluded to in Section 7.1. Thus, this study is unique with its application of the MMR approach and the combination of different conceptual frameworks to measure and communicate library value. Other studies largely used one research approach alone (Bhim 2010; Sibanda 2011; Chris-Israel, Madu and Yemisi 2018; Baada, Baayel, Bekoe, and Banbil 2019). The MMR approach allowed the researcher to acquire an in-depth understanding of the RQs, and corroborate the findings from library users, IPs, and HODs regarding the value of SLs in PGDs.

The study offers empirical evidence of the value SLs have in corporate organizations and the critical roles played by IPs, especially in the current 4IR where information is abundant. The study also offers empirically based data on the effect of not having a library policy to develop SLs in PGDs, thereby bridging the gap on the lack of studies related to SLs and their development. The study further adds to the body of literature as it provides a practical framework that IPs can implement to measure the value of their libraries, especially those in corporate organizations. The framework provides important criteria that should form part of the measuring methods for such libraries to be strategically aligned with the objectives of their organizations. Finally, this is the only study in the South African library and information services (LIS) context to produce empirical evidence using convergent parallel design to compare two data sets to attain a comprehensive interpretation of the value of SLs in PGDs and how this value is communicated to management.

7.6.1 Contribution to the conceptual framework

In this study, the researcher created her worldview to investigate the research problem. The schematic illustration of the conceptual framework presented in the study (refer to Figure 2.1) served as an “organizing instrument” to collect, evaluate, describe, and interpret data (Ravitch and Riggan 2017:41). Therefore, the adoption of various models, namely, the strategic measurement model, the SERVQUAL model, the LibQUAL model, and the TQM model is a new technique that could improve how IPs measure and communicate the value of their SLs to validate their significance in an organization. Thus, the integration of all these models in the study prompted the need to have a general strategic framework that could guide IPs in their quest to prove the value of the SL, especially in the current era of the 4IR.

7.6.1.1 Proposed strategic framework

In line with the fifth recommendation in Section 7.4, a strategic framework was developed. The core principle of this framework is that SLs in government departments (GDs) should not function in isolation but be interlinked with various sections to achieve the main objectives of the PO. The proposed strategic framework presented in Figure 7.1 is based on the principles of the conceptual models discussed in Chapter 2, that is, the LibQUAL, SERVQUAL, TQM, and strategic measurement models.

The framework begins with the involvement of the HODs in raising awareness of the value of library services in the department ranging from senior management to junior-level employees. For the users and potential users to see value in the services provided by the library, they need to be aware of them and also utilize them. Isebe (2021:12) asserts that the main purpose of the SL is to assist, direct, and influence its PO in their retrieval and utilization of significant information, which is relevant to the targeted users for the efficient and effective accomplishment of their tasks. Nwankwo et al. (2019:189) insist that awareness prompts usage and without it, there are fewer chances of library resources and services being utilized. Effective service delivery should be at the core of each organization’s mandate and the HODs must start by recognizing the SL as an integral part of the organization and acknowledging its value in the accomplishment of this mandate. Therefore, SLs must be included in the

departmental strategic plan, which must indicate how libraries should assist in achieving the goals of the department.

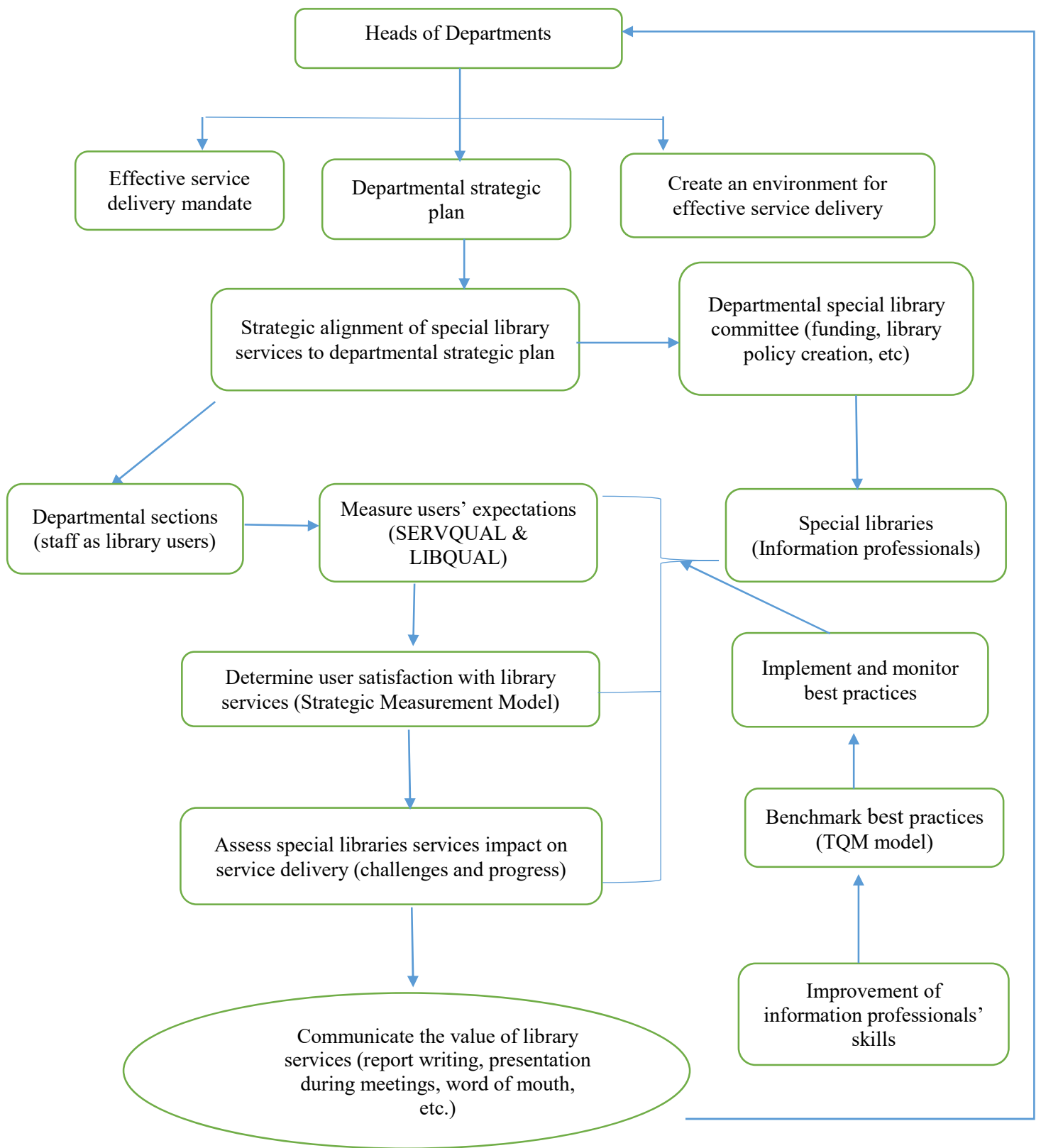


Figure 7.1: Proposed strategic framework

7.6.1.1.1 Explanation of the framework

a) Strategic alignment of special library services to a departmental strategic plan: PGDs have their vision, mission, and objectives they wish to achieve through the delivery of services to the citizens; a strategic plan communicates how this could be achieved. This plan involves the process of allocating resources to different units of the organization to ensure that the set goals are reached. The significance of SLs and their services needs to be communicated from the HOD to the management and employees at large so that they can take note and utilize the services provided to improve service delivery. Thus, IPs in charge of the SL need to take cognizance of this and, with help from the departmental library committee, ensure that services rendered are strategically aligned with the objectives of the department.

b) Departmental special library committee: The committee's responsibilities include guiding and reviewing library frameworks or policies for direction; sourcing and deliberating on the budget allocations for library services and resources; evaluating library assessments and presenting, when needed, possible resolutions; reviewing library annual reports; promoting communication between the library, the department, and the management; and serving as the library advocate in all departmental meetings. In organizations where SLs are operated by one or two IPs, the committee would serve as the voice of the library to management, and ensure coverage of all disciplines and representations from all units or sections of the organization when building an effective library collection (Buraimo, Madukoma, Oduwole, and Olusanya 2023:39).

c) Departmental sections: The success of this strategic framework also depends on the involvement of departmental staff. This is to prevent the library in a corporate organization from working in isolation. Therefore, one staff member from each section should be selected to form part of the library committee to ensure representation when building the collection of the library. Thus, users should be given platforms (for example, users' needs assessments, surveys, and interviews) where they can voice their needs and expectations of the library. This should give them a sense of involvement and control over the services they receive, which will motivate them to use the library.

d) Measure users' expectations: A SL can only be considered valuable to its users when the services rendered, and resources provided are selected with users' needs in mind. To be able to

provide users with services that they would utilize and regard as valuable, the IPs in charge of the SLs need to examine the expectations of the users concerning the library. This can be achieved using different methods and with the guidance of tools such as SERVQUAL or LIBQUAL instruments, user questionnaires, needs assessments, surveys, and interviews.

e) Determine user satisfaction with library services: The determination of user satisfaction is central to measuring the value of library services and resources. Users need to be satisfied with what the SL has to offer to render the services or resources perceived as valuable because the mere fact that the services and resources are utilized may not necessarily mean that satisfaction is achieved. The data obtained from such an analysis could be used to make fact-based decisions on whether the library services and resources are strategically aligned to the processes defined in the departmental strategic plan to fulfill the objectives of the organization.

f) Assess special libraries' impact on service delivery: It is vital to assess whether the services and resources offered by the library are positively impacting service delivery. If not, the challenges inhibiting such impact need to be identified and resolved. The assessment should be done annually with each section in the organization and with the HOD.

g) Communicate the value of library services: With the introduction of a SL committee in the departments, effective communication through written reports and regular meetings with top management will highlight the impact of library services and communicate their value. This will result in management ensuring continual budget allocation to improve library services and overall departmental service delivery.

h) Improvement of information professionals' skills: With the advances in information technology, IPs' skills need to be constantly improved. It is strongly recommended that the human resources section and the management in the PGDs ensure that SL staff get regular training and attend workshops to upgrade their technical skills and knowledge to enable them to provide their departments with authentic information.

i) Benchmark best practices: For SLs to create more value and to sustain their relevancy for their POs, benchmarking what other libraries are doing helps to improve the services offered and to identify possible gaps in services that can be filled. This leads to greater performance of the library towards achieving the desired objectives of the PO. Such services to enhance

library value include but are not limited to KM strategies, the provision of effective information services, and the effective content management of resources and services.

j) Implement and monitor best practices: It is recommended that after the identification of best practices from other SLs, IPs could present the findings to the library committee. These practices could be discussed, and the relevant ones selected for adoption to help improve library performance. This exercise should be conducted annually, and the IPs should be attentive and willing to collaborate with other libraries for continual learning.

k) Continue regular assessments of special library value: Since the needs of library users are constantly changing, so is the value of library services and resources; therefore, assessments to measure SL value must be conducted regularly to ensure that the library remains relevant. This would further ensure that SLs in PGDs adopt new practices and procedures that assist in fulfilling the objectives of the organization and maintain the expectations of users.

Measuring and communicating the value of SL services is a complex exercise and may differ from one organization to the other. Therefore, this strategic framework should be used as a guide for SLs to be strategically aligned to the objectives of their PO. This process takes time and considerable effort and requires collaboration from all parties involved. In this way, SLs would be functional and be seen as a primary source of valuable information for the organization.

7.6.2 Contribution to policy

The outcomes of the study could be used by IPs to develop their SL's policy or framework, especially those in PGDs in KZN where it is evident that there is a lack of policy to assist in their development thereby diminishing their value in the PO. The development of a policy for SLs in GDs could improve the quality of services and resources provided by these libraries and, in turn, transpose their position and significance in corporate organizations. Furthermore, professional bodies such as the Special Libraries Association and the Library and Information Association of South Africa (LIASA) could use the outcomes of this study to develop a general policy that IPs in GDs can adopt and alter according to their users' needs and their libraries' objectives. In a similar vein, professional bodies like LIASA could use the outcomes of the

study to establish a partnership with GDs to raise awareness and promote the value of libraries in corporate organizations, especially in the current 4IR.

7.6.3 Contribution to practice

The results of the study could help raise awareness of SLs in PGDs and enlighten staff in those departments about the benefits of using library services, thereby enhancing their utilization and improving their significance in the departments. The study also places SLs in PGDs in a better position to underline areas that need to be addressed by both IPs and management for these libraries to be strategically aligned with the objectives of their organizations. In this way, SLs would become an integral part of the organization, and their value improved. The study has also provided sufficient evidence for IPs to demonstrate the value they provide to their PO and how they are overcoming the shift from the provision of traditional services and resources to those more in tune with the current 4IR which is characterized by easy online access to any information. Through the framework proposed by the researcher, this study contributes to determining appropriate techniques for measuring and communicating the value of libraries. IPs in the public sector could refer to the results of this study when planning to assess the quality of their library services and resources offered as this could influence the population to be included and the size of the sample. Lastly, the outcomes of the study could be used to shed new insights into the management of the POs regarding the value of SLs, the challenges they encounter, and their need for redevelopment.

7.6.4 Contribution to methodology

This study applied the MMR approach to measure and communicate the value of SLs in KZN PGDs in Pietermaritzburg. The application of this method to this type of study contributed to the body of knowledge in terms of methodology since there are limited studies that have considered both quantitative and qualitative data to investigate the research problem. Furthermore, the use of a multiple embedded case study design was implemented for the first time in this study which enabled the researcher to get a rich understanding of how SL services and resources are perceived and to ascertain their value to library users and the POs. Thus, the value of the SL was determined from different points of view. This research affirms the view of Hands (2022:16) that researchers should be encouraged to include explicit examples of mixed-methods integration in LIS-related studies to contribute to the methodological canon.

The integration reported in this research aimed to contribute to a transparent example of mixed-methods integration from a LIS perspective. Furthermore, the use of MMR in LIS is limited and this research can thus be seen as a contribution to what Ngulube (2020:2-3) refers to as the “third methodological movement whose time has come.”

The next and final section of the study presents suggestions for future research.

7.7 Suggestions for future research

When a study has been completed, the researcher should, under consideration of the findings, be in a good position to decide the next step that needs to be taken to explore further the subject area (Nieswiadomy and Bailey 2018:281). The findings of the study revealed that SLs in KZN PGDs are valued by management and their users; however, the lack of support from the former in terms of library development is diminishing the value and significance of these libraries. Erima (2022:300) avers that no study can claim to be comprehensively and thoroughly conducted. Hence, suggestions for future research to extend, compare, or challenge the findings of the current study are presented below:

- i. This study’s population was limited to employees (library users) in the head offices of the departments under study as they were considered regular users of the SLs. Future research on the same topic could be conducted with employees from the regional offices of these departments to get their perspectives on the significance of having a library that is only situated at the head offices and how this impacts its usage and their perceptions of its value.
- ii. The findings of the study revealed that there is a growing preference for online services compared to printed library collections in SLs. Bitagi and Garba (2014) found opposite outcomes in Nigeria as academic library users preferred printed collections. Thus, comparative research should be undertaken to investigate users’ preferences for either physical print-based or online collections (or a combination of the two) in terms of the provision of services and resources by SLs in corporate organizations.
- iii. The findings of the study also revealed that the satisfaction of users with the quality of services rendered in the SLs was contingent on different factors. However, the

provision of an adequate budget and qualified IPs are the main pillars for ensuring service quality. Future research should be conducted to assess how SLs have developed to improve the quality and delivery of services offered to effectively meet the needs of the users and ensure that optimal satisfaction is sustained. This research could be conducted in SLs in the GDs of other provinces as well as in SLs in the private sector.

- iv. The conceptual framework synthesized by the researcher aimed to expose the strengths and weaknesses of SLs in terms of how they contribute (or not) to improving service delivery in PGDs. Similar studies could be replicated in both private and public organizations – the latter including GDs in other provinces of South Africa as well as those in other countries. These investigations could be undertaken using a different research design, sampling method, or conceptual framework. The findings can be compared and contrasted with the current findings, including, importantly identifying best practices.

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Appendices

Appendix A: Online survey questionnaire

Declaration of Consent

I..... (full names of participant)
hereby confirm that I understand the contents of this document, the nature of the research project, and
I consent to participating in the research project. I understand that I am at liberty to withdraw from the
project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg

The objective of this questionnaire is to evaluate the quality of services offered by special libraries in KZN Provincial Government Departments by means of establishing users' perceptions, expectations and satisfaction of services in order to measure the value of these libraries.

***Required**

Email address *

Section A: Demographic Questions

Please complete all questions by clicking the correct answer (Mark only one oval)

1. What is your gender? *

- Female
 Male

2. What is the term of your current position? *

- Permanent
 Contract

3. Which Department are you currently working under? *

- Agriculture and Rural Development
 Eco Development, Tourism & Environmental Affairs
 Health
 COGTA
 Public Works
 Transport

4. Which position do you currently hold in your Department? *

- Senior Management level
 Junior Staff level

5. How long have you been working for the above-mentioned Department? *

- Less than a year
- 1-2 years
- 3-4 years
- 5-10 years
- More than 10 years

6. Are you currently studying? *

- Yes
- No
- Planning to study

7. Highest level of education attained *

- Secondary School
- Diploma
- Bachelors
- Masters
- PhD
- Other

Section B: Awareness, use of services and purpose of use

For this study, the value of a special library is measured based on the impact the library has towards the parent organization in terms of accomplishing work and individual activities. Please complete all questions by clicking the correct/applicable answer/s relevant to you.

1. Are you aware that there is a special Library for your Department? *

- Yes, I am aware
- No, it is the first time I hear about the library

If you answered “No” in the above question, please proceed to question 5 below.

2. How often do you use the library?

- Daily
- Weekly
- Monthly
- Never

3. Which of the services provided by the Library are you aware of and use?

Tick all that apply.

- Archiving
- Reference services (e.g Literature searches)
- Electronic resources (Journals)
- Provide credible sources of information
- Lending service (Borrow books and buildings plans)
- Newspapers
- Leisure (e.g reading/studying)
- None of the above

4. After your visit, the Library services helped

Tick all that apply.

- By contributing to a higher quality of service delivery
- To make better-informed decisions
- To save time in information retrieval and delivery
- By offering new knowledge
- With higher success rate in research
- To avoid duplication of tasks in the Department

5. When you need information to make an informed decision while working, which of the following do you prefer? *

Tick all that apply.

- I just Google information from the internet
- I consult the Librarian to provide information from reliable sources
- I consult past documents with similar cases
- All of the above

SECTION C-SERVICE QUALITY QUESTIONNAIRE: EXPECTATIONS AND PERCEPTIONS

EXPECTATIONS - refer to what you personally want from the service in the Library.

PERCEPTIONS - refers to your actual experiences of the services the library currently provides.

The scale for Section C Part I & II rates as follows: 1 = Strongly Agree; 2 = Agree; 3 = Neutral; 4 = Disagree; 5 = Strongly Disagree

PLEASE TICK ONCE IN EACH ROW

ASSURANCE ASSESSES THE KNOWLEDGE AND COURTESY OF THE LIBRARY STAFF AND THEIR ABILITY TO TRANSMIT CONFIDENCE

1. Behaviour of Library staff instills confidence in users, which makes them want to use the Library again *

	Strongly	A	Ne	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Library users feel safe when transacting with the library *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Library staff are always considerate *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Library staff are knowledgeable to answer users' queries *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EMPATHY ASSESSES THE BEHAVIOR, ATTITUDE AND APPROACH OF THE LIBRARY STAFF TOWARDS USERS

1. The Library gives users individual attention *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Convenient opening hours for the Library (opening and closing times) *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Library staff give personal attention to the users *

	Strongly		N	Di	Strongly
EXPECT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The Library has the users' best interests at heart *

	Strongly		N	Di	Strongly
EXPECT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Library staff understand the specific needs of the users *

	Strongly		N	Dis	Strongly
EXPECTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RELIABILITY MEASURES THE DELIVERY OF THE SERVICE AS IT RELATES TO DEPENDABILITY AND ACCURACY

1. The Library shows sincere interest in solving users' problems *

	Strongly		N	Dis	Strongly
EXPECTATI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Library staff provide services as promised *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. The library provides services at the promised time *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSIVENESS REFERS TO THE READINESS OF LIBRARY STAFF IN PROVIDING THE SERVICE TO THE USER.

1. Library staff are never too busy to respond to user's questions *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Library staff keep users informed about when services will be performed *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Library staff are willing to help users *

	Strongly	A	N	Dis	Strongly
EXPECTATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TANGIBLES EVALUATE THE APPEARANCE OF PHYSICAL FACILITIES, EQUIPMENT, AND COMMUNICATION MATERIAL.

1. Equipment is modern and in good condition *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Facilities are visually appealing (such as computer, audio-visual, shelves, tables, chairs, etc) *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Library resources (books, journals, newspapers, etc.) are visually appealing and up-to-date *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Library resources (books, journals, newspapers, etc.) are visually appealing and up-to-date *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GENERAL LIBRARY EXPECTATIONS

1. The library that helps me stay abreast of developments in my field(s) of interest *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. The library that helps me to advance in my academic field *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. The library that helps me with my research needs *

	Strongly	A	N	Disa	Strongly
EXPECTAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERCEPTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION D: LIBRARY QUALITY QUESTIONS

Please rate the following statements as follows:

Minimum (1) -- the level of service is minimum from what you would find acceptable

Perceived (2) -- the level of service exceeds what you expected from the library

Desired (3) -- the level of service represents what you personally want from the library

Should you not relate to the said statement, kindly tick N/A (4)

Mark only one oval per row.

When it comes to service affect... *

	Mini	Perce	De	
The library gives users individual attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The library has employees who are consistently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The library staff are always ready to respond to users' questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library staff are knowledgeable when answering user's questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library users can depend on library staff to respond to service problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library staff care and understand user's n	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When it comes to information control... *

	Mini	Perce	De	
The Library makes electronic resources accessible from my office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A Library Web site/page enable me to locate information on my own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library provides printed information resources I need to complete my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library makes information easily accessible for independent use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library has print and/or electronic journal collections I require for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When it comes to the Library as a place... *

	Mini	Perce	De	
The Library has space that inspires study and	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library has quite space for individual activ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library is a comfortable and inviting loc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library has a community space for group learning, meeting or study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When it comes to my satisfaction with the Library in my Department... *

	Mini	Percei	De	
The Library services rendered by staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Library resources (books, journals, newspapers, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION E: INTERNAL BENCHMARKING AND GENERAL QUESTIONS

Internal benchmarking measures the library's performance in comparison with the other sections in the Department. This is done to justify the existence of the library and to prove the library's contribution towards the Department's success.

1. Compared to other sections in your Department, do you think there is enough attention put by the management on the development of the special library? Briefly explain your answer. *

2. Does the Library resources and services in your Department meet your general needs of information? * *Mark only one oval.*

Yes

No

3. If you answered 'Yes' on the above question, please name at least one (1) of the best library service/resources that you receive. *

4. List some of the things that you think your Departmental library should be providing for it to be seen as the support structure of the Department. *

5. Which Section/s in your Department to you think the Library should be working together with? *

THANK YOU FOR YOU TIME!!

Appendix B: Interview schedule for information professionals

Please complete this form

Title of study: *“Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg”*

I hereby confirm that I understand the contents of this document and nature of the research project, and I consent to participate in the research project as outlined in the document about the study.

I....., **I consent / do not consent** to have this online interview recorded. I acknowledge that I have been informed of the purpose of this interview. I am aware that participation in this study is voluntary and I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Participant

Signature: _____

Date: _____

Interview questions for IPs.

For this study, the value of a special library is measured based on the impact the library has on the parent organization in terms of accomplishing work and individual activities.

Awareness, Use of Services, and Purpose of Use

1. Are your users (staff) aware of the library and its services?
2. How do you keep the users informed about the library to make them keep using the library services?
3. What do you think is the main reason why most, if any, staff use/visit the library?
4. Do you think that the use of the library has any positive influence on staff members' personal information needs and their jobs? How do you evidence that?

Special library policy / framework / guidelines

1. Does your library have a library policy or framework that you follow for library development?
 - If yes, what does it entails and how often is it reviewed?
 - If no, what policy or guidelines do you follow in the development of your library?

External benchmarking

1. What are the best ways do you use to demonstrate or communicate library quality to senior management?
2. How do you ensure that the library collection is aligned to the objectives of the Department?
3. What key trends are you following in your library?
4. Which other section or unit does your library works in conjunction with the Department?
5. List some of the best practices of your library.

Appendix C: HODs' interview schedule

Please complete this form

Title of study: *“Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg”*

I hereby confirm that I understand the contents of this document and nature of the research project, and I consent to participate in the research project as outlined in the document about the study.

I....., **I consent / do not consent** to have this online interview recorded. I acknowledge that I have been informed of the purpose of this interview. I am aware that participation in this study is voluntary and I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Participant

Signature: _____

Date: _____

Interview questions for Heads of Department.

For this study, the value of a special library is measured based on the impact the library has on the parent organization in terms of accomplishing work and individual activities.

HoDs interview questions

1. As the Head of the Department, what would you consider the key objectives for the organization currently? Explain.
2. How do you think the library service could contribute to those objectives?
3. What indicators or measures would demonstrate to you the contribution of library services to your Department (internal benchmarking)?
4. Do you think that it is necessary for your Department to have a library? Explain
5. Is there a budget allocated for your library and is it being utilized? Elaborate your answer
6. In the current post-truth era where information flows freely through the internet, do you think information professionals have enough skills set to assist the Department in reaching its objectives? Explain your answer.
7. Have you ever visited the library in your Department? Explain your answer.
8. How closely aligned are library services with the strategic goals and objectives of the Department?
9. How well are the library services seamlessly integrated into the Department's workflow?
10. In your view, which section in your Department do you think can work in conjunction with the library?

!!

Thank you for your time

Appendix D: Ethics approval



08 July 2021

Ms Fulufhelo Nenungwi (217052684)
School Of Social Sciences
Pietermaritzburg Campus

Dear Ms Nenungwi,

Protocol reference number: HSSREC/00002935/2021

Project title: Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg

Degree: PhD

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 08 June 2021 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 08 July 2022.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8350/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

Appendix E: Gatekeeper's letter Department A



KWAZULU-NATAL PROVINCE

PUBLIC WORKS
REPUBLIC OF SOUTH AFRICA

Directorate: IMTS
Private Bag X9041
PIETERMARITZBURG
3200
Tel: +27 33 355 5434
Fax: +27 33 355 5568
Email:
Fulufhelo.Nenungwi@kznworks.gov.za
Eng: Fulufhelo Nenungwi
Ref: 2/8/4 (Research Reports)
Date: 2021

To: Mr S. Sibande
Head of Department: Agriculture and Rural Development

Mr S.P Majola
Acting Head of Department: Public Works

Mr N Mtshali
Library Manager: Infrastructure Maintenance & Technical Support (IMTS)

From: Ms F Nenungwi
Librarian: IMTS

Date: 10 March 2021

Subject: Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal Department of Agriculture and Rural Development special library.

1. PURPOSE

- 1.1 To request approval from the Head of Department to conduct a research study for a Doctor of Philosophy (PhD) Degree purpose at the KwaZulu – Natal (KZN) Department of Agriculture and Rural Development (DARD) special library.

2. BACKGROUND

- 2.1 I am a Librarian within the KZN Department who is currently pursuing a PhD Degree: Information Studies through the University of KwaZulu - Natal (Pietermaritzburg campus).
- 2.2 As part of the research proposal, a gatekeeper's letter is required from the Department understudy for ethical clearance purposes and before data can be collected.
- 2.3 The proposed title of this research study is **measuring and communicating the value of special libraries in KwaZulu – Natal Provincial Government Departments, Pietermaritzburg**. Please note the topic may change after presenting the proposal to the University's Research Committee.

3. DISCUSSION

- 3.1 Government service delivery approaches are changing and advancing due to technological developments and financial pressures. This technological growth requires information professionals to continue and adapt their skills set for them to be successful in helping the Department to achieve its goals.
- 3.2 Such skills include flexibility, collaboration, creativity and the ability to respond to continuous change. Therefore, information professionals working in government sectors need to reinforce the value of services they offer to that Department in reaching their goals.

Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal Department of Agriculture and Rural Development special library.

- 3.3 Departmental libraries were established to serve the needs of decision makers, administrators and other employees of their respective Departments as they store government data and other information relevant to their needs. It is the desire of every special library within government department to save time and efforts for the management whenever they require accurate information to perform their duties and often urgently needed. Hence, the provision of specialized information by special libraries within Government Departments is of importance and cannot be undermined if service delivery is to be improved.
- 3.4 Information professionals are battling to place and demonstrate the value of library services to the management and this may lead to lack of recognition of the value for information professional and the services they provide.
- 3.5 Many Government special libraries were created many years ago and a periodic review of their value to the Department, their users and needs is imperative. Equally so, the majority of these libraries follow outdated practices and some fail to provide satisfactory services that will support the Department to achieve the set objectives effectively.
- 3.6 Factors such as user behaviour on information needs, economic decline and an increase in the expectations of special library services from users and the Department has played an important role towards the need for these libraries to evaluate their success in meeting users needs. Some of these libraries have been closed completely as they were seen as an additional cost factor unnecessary to the Department.
- 3.7 There is a need for specialized librarians to demonstrate to the management of the Department that the library is an essential part of the organization that is worthy to be developed according to the changing times and information needs of users.
- 3.8 Government Departmental priorities and that of their special library should be aligned to facilitate its services strategically to the Departmental goals and developments. After all, special libraries are meant to support the overall goals of the Department and assist in providing employees with the information they need to complete their jobs or roles.
- 3.9 Therefore, the purpose of this research will be to measure and communicate the level of perceptions, desired expectations, and satisfaction of special library users within the KZN Government Departments regarding the services and resources offered in the current post-truth era to the management. This study will also determine the value of these libraries by weighing up how library professionals' skills set and their services assist the Department to achieve its mission and vision.
- 3.10 The aim here is to bring about evidence of the extent to which information and services provided by special libraries are strategically aligned to the objectives of Department. Moreover, this study aims to put together special libraries' best practices that can be compared and implemented by other libraries to improve their services and elevate the utilization of these libraries.

4. METHODOLOGY OF THE STUDY

- 4.1 The population of the study will consist of all employees within the selected Departments, Librarians or Library Managers of the special libraries and Head of Departments (HoDs). The common characteristics of the population under study is that they are employed under the KZN Provincial Government Departments in Pietermaritzburg thereby considered as users of the special library.
- 4.2 Special libraries that are operative within the KZN Provincial Departments had been purposively selected for this study.
- 4.3 There are six selected special libraries in Provincial Government Departments in KZN, Pietermaritzburg. These includes KwaZulu-Natal Department of Public Works; Provincial

Treasury; Department of Transport; Department of Health; Department of Agriculture and Rural Development; and Department of Economic Development, Tourism and Environmental Affairs.

4.4 As the whole world is experiencing the COVID-19 pandemic, this study will acknowledge and adhere to all the regulations and guidelines for prevention to further spread the virus. Therefore, the Researcher will resort to collecting data through Internet research procedures.

4.5 The main data collection method for this study will be the web survey questionnaire, which will be complemented by online interviews. That is, web survey questionnaires (refer to appendix A) will be distributed through an email address to twenty-three (23) sampled library users (Departmental employees) and online interviews will be conducted separately with the Librarians or Library Managers (refer to Appendix B for suggested interview questions) and HoDs (refer to Appendix C) for suggested interview questions).

4.6 Data will be collected once the University has approved the Researcher for ethical clearance and the Department has approved this request.

5. FINANCIAL IMPLICATIONS


5.1 There are no financial implications applicable to the Department with this request.

6. RECOMMENDATION

6.1 It is recommended that the Head of Department approve the request to conduct a research study for a PhD Degree purpose at the KZN DARD special library.

6.2 It is also recommended that the Researcher be granted access to the list of Departmental employees email addresses for data collection purposes.

Regards,


Ms F Nenungwi
Librarian: IMTS


Date

Recommended / Not Recommended


Mr N Mtshali
Library Manager: IMTS



Date

Supported / Not Supported


Mr S.P Majola
Acting Head of Department: Public Works


Date

Approved / Not Approved


Mr S. Sibande
HOD: DARD


Date

Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal Department of Agriculture and Rural Development special library.

Appendix F: Gatekeeper's letter Department B



KWAZULU-NATAL PROVINCE

PUBLIC WORKS
REPUBLIC OF SOUTH AFRICA

Directorate: IMTS
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3200
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Fax: +27 33 355 5508
Email: Fulufhelo.Nenungwi@kznworks.gov.za
Enq: Fulufhelo Nenungwi
Ref: 2/8/4 (Research Reports)
Date: 2021

To: Mr T Tubane
Head of Department: Cooperative Governance and Traditional Affairs (COGTA)

Mr S.P Majola
Acting Head of Department: Public Works

Mr N Mtshali
Library Manager: Infrastructure Maintenance & Technical Support (IMTS)

From: Ms F Nenungwi
Librarian: IMTS

Date: 25 March 2021

Subject: Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal COGTA special library.

1. PURPOSE

- 1.1 To request approval from the Head of Department to conduct a research study for a Doctor of Philosophy (PhD) Degree purpose at the KwaZulu – Natal (KZN) COGTA special library.

2. BACKGROUND

- 2.1 I am a Librarian within the KZN Department of Public Works who is currently pursuing a PhD Degree: Information Studies through the University of KwaZulu - Natal (Pietermaritzburg campus).
- 2.2 As part of the research proposal, a gatekeeper's letter is required from the Department understudy for ethical clearance purposes and before data can be collected.
- 2.3 The proposed title of this research study is **measuring and communicating the value of special libraries in KwaZulu – Natal Provincial Government Departments, Pietermaritzburg**. Please note the topic may change after presenting the proposal to the University's Research Committee.

3. DISCUSSION

- 3.1 Government service delivery approaches are changing and advancing due to technological developments and financial pressures. This technological growth requires information professionals to continue and adapt their skills set for them to be successful in helping the Department to achieve its goals.
- 3.2 Such skills include flexibility, collaboration, creativity and the ability to respond to continuous change. Therefore, information professionals working in government sectors need to reinforce the value of services they offer to that Department in reaching their goals.
- 3.3 Departmental libraries were established to serve the needs of decision makers, administrators and other employees of their respective Departments as they store government data and other

Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal COGTA special library.

information relevant to their needs. It is the desire of every special library within government department to save time and efforts for the management whenever they require accurate information to perform their duties and often urgently needed. Hence, the provision of specialized information by special libraries within Government Departments is of importance and cannot be undermined if service delivery is to be improved.

- 3.4 Information professionals are battling to place and demonstrate the value of library services to the management and this may lead to lack of recognition of the value for information professional and the services they provide.
- 3.5 Many Government special libraries were created many years ago and a periodic review of their value to the Department, their users and needs is imperative. Equally so, the majority of these libraries follow outdated practices and some fail to provide satisfactory services that will support the Department to achieve the set objectives effectively.
- 3.6 Factors such as user behaviour on information needs, economic decline and an increase in the expectations of special library services from users and the Department has played an important role towards the need for these libraries to evaluate their success in meeting users needs. Some of these libraries have been closed completely as they were seen as an additional cost factor unnecessary to the Department.
- 3.7 There is a need for specialized librarians to demonstrate to the management of the Department that the library is an essential part of the organization that is worthy to be developed according to the changing times and information needs of users.
- 3.8 Government Departmental priorities and that of their special library should be aligned to facilitate its services strategically to the Departmental goals and developments. After all, special libraries are meant to support the overall goals of the Department and assist in providing employees with the information they need to complete their jobs or roles.
- 3.9 Therefore, the purpose of this research will be to measure and communicate the level of perceptions, desired expectations, and satisfaction of special library users within the KZN Government Departments regarding the services and resources offered in the current post-truth era to the management. This study will also determine the value of these libraries by weighing up how library professionals' skills set and their services assist the Department to achieve its mission and vision.
- 3.10 The aim here is to bring about evidence of the extent to which information and services provided by special libraries are strategically aligned to the objectives of Department. Moreover, this study aims to put together special libraries' best practices that can be compared and implemented by other libraries to improve their services and elevate the utilization of these libraries.

4. METHODOLOGY OF THE STUDY

- 4.1 The population of the study will consist of all employees within the selected Departments, Librarians or Library Managers of the special libraries and Head of Departments (HoDs). The common characteristics of the population under study is that they are employed under the KZN Provincial Government Departments in Pietermaritzburg thereby considered as users of the special library.
- 4.2 Special libraries that are operative within the KZN Provincial Departments had been purposively selected for this study.
- 4.3 There are six selected special libraries in Provincial Government Departments in KZN, Pietermaritzburg. These includes KwaZulu-Natal Department of Public Works; COGTA; Department of Transport; Department of Health; Department of Agriculture and Rural Development; and Department of Economic Development, Tourism and Environmental Affairs.

Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal COGTA special library.

4.4 As the whole world is experiencing the COVID-19 pandemic, this study will acknowledge and adhere to all the regulations and guidelines for prevention to further spread the virus. Therefore, the Researcher will resort to collecting data through Internet research procedures.

4.5 The main data collection method for this study will be the web survey questionnaire, which will be complemented by online interviews. That is, web survey questionnaires will be distributed through an email address to thirteen (13) sampled library users (Departmental employees) and online interviews will be conducted separately with the Librarian or Library Manager and HoD.

4.6 Data will be collected once the University has approved the Researcher for ethical clearance and the Department has approved this request

5. FINANCIAL IMPLICATIONS

5.1 There are no financial implications applicable to the Department with this request.

6. RECOMMENDATION

6.1 It is recommended that the Head of Department approve the request to conduct a research study PhD Degree purpose at the KZN COGTA special library.

6.2 It is also recommended that the Researcher be granted access to the list of Departmental employees email addresses for data collection purposes.

Regards,

[Redacted Signature]

MS F Nenungwi
Librarian: IMTS

25/03/2021
Date

Recommended / Not Recommended

[Redacted Signature]

Mr N Mtshali
Library Manager: IMTS

25/03/2021
Date

Supported / ~~Not Supported~~

[Redacted Signature]

Acting Head of Department: Public Works

25/3/2021
Date

Approved / ~~Not Approved~~

[Redacted Signature]

Mr T Tubane
Head of Department: COGTA

26/3/2021
Date

Appendix G: Gatekeeper's letter Department C



KWAZULU-NATAL PROVINCE

PUBLIC WORKS
REPUBLIC OF SOUTH AFRICA

Directorate: IMTS
Private Bag X9041
PIETERMARITZBURG
3200
Tel: +27 33 355 5434
Fax: +27 33 355 5508
Email:
Fulufhelo.Nenungwi@kznworks.gov.za
Enq: Fulufhelo Nenungwi
Ref: 2/8/4 (Research Reports)
Date: 2021

To: Ms S. Ngubo
Acting Head of Department: Transport

Mr S.P Majola
Acting Head of Department: Public Works

Mr N Mtshali
Library Manager: Infrastructure Maintenance & Technical Support (IMTS)

From: Ms F Nenungwi
Librarian: IMTS

Date: 10 March 2021

Subject: Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal Department of Transport special library.

1. PURPOSE

- 1.1 To request approval from the Head of Department to conduct a research study for a Doctor of Philosophy (PhD) Degree purpose at the KwaZulu – Natal (KZN) Department of Transport special library.

2. BACKGROUND

- 2.1 I am a Librarian within the KZN Department of Public Works who is currently pursuing a PhD Degree: Information Studies through the University of KwaZulu - Natal (Pietermaritzburg campus).
- 2.2 As part of the research proposal, a gatekeeper's letter is required from the Department understudy for ethical clearance purposes and before data can be collected.
- 2.3 The proposed title of this research study is **measuring and communicating the value of special libraries in KwaZulu – Natal Provincial Government Departments, Pietermaritzburg**. Please note the topic may change after presenting the proposal to the University's Research Committee.

3. DISCUSSION

- 3.1 Government service delivery approaches are changing and advancing due to technological developments and financial pressures. This technological growth requires information professionals to continue and adapt their skills set for them to be successful in helping the Department to achieve its goals.
- 3.2 Such skills include flexibility, collaboration, creativity and the ability to respond to continuous change. Therefore, information professionals working in government sectors need to reinforce the value of services they offer to that Department in reaching their goals.

- 3.3 Departmental libraries were established to serve the needs of decision makers, administrators and other employees of their respective Departments as they store government data and other information relevant to their needs. It is the desire of every special library within government department to save time and efforts for the management whenever they require accurate information to perform their duties and often urgently needed. Hence, the provision of specialized information by special libraries within Government Departments is of importance and cannot be undermined if service delivery is to be improved.
- 3.4 Information professionals are battling to place and demonstrate the value of library services to the management and this may lead to lack of recognition of the value for information professional and the services they provide.
- 3.5 Many Government special libraries were created many years ago and a periodic review of their value to the Department, their users and needs is imperative. Equally so, the majority of these libraries follow outdated practices and some fail to provide satisfactory services that will support the Department to achieve the set objectives effectively.
- 3.6 Factors such as user behaviour on information needs, economic decline and an increase in the expectations of special library services from users and the Department has played an important role towards the need for these libraries to evaluate their success in meeting users needs. Some of these libraries have been closed completely as they were seen as an additional cost factor unnecessary to the Department.
- 3.7 There is a need for specialized librarians to demonstrate to the management of the Department that the library is an essential part of the organization that is worthy to be developed according to the changing times and information needs of users.
- 3.8 Government Departmental priorities and that of their special library should be aligned to facilitate its services strategically to the Departmental goals and developments. After all, special libraries are meant to support the overall goals of the Department and assist in providing employees with the information they need to complete their jobs or roles.
- 3.9 Therefore, the purpose of this research will be to measure and communicate the level of perceptions, desired expectations, and satisfaction of special library users within the KZN Government Departments regarding the services and resources offered in the current post-truth era to the management. This study will also determine the value of these libraries by weighing up how library professionals' skills set and their services assist the Department to achieve its mission and vision.
- 3.10 The aim here is to bring about evidence of the extent to which information and services provided by special libraries are strategically aligned to the objectives of Department. Moreover, this study aims to put together special libraries' best practices that can be compared and implemented by other libraries to improve their services and elevate the utilization of these libraries.

4. METHODOLOGY OF THE STUDY

- 4.1 The population of the study will consist of all employees within the selected Departments, Librarians or Library Managers of the special libraries and Head of Departments (HoDs). The common characteristics of the population under study is that they are employed under the KZN Provincial Government Departments in Pietermaritzburg thereby considered as users of the special library.
- 4.2 Special libraries that are operative within the KZN Provincial Departments had been purposively selected for this study.
- 4.3 There are six selected special libraries in Provincial Government Departments in KZN, Pietermaritzburg. These includes KwaZulu-Natal Department of Public Works; Provincial

- Treasury; Department of Transport; Department of Health; Department of Agriculture and Rural Development; and Department of Economic Development, Tourism and Environmental Affairs.
- 4.4 As the whole world is experiencing the COVID-19 pandemic, this study will acknowledge and adhere to all the regulations and guidelines for prevention to further spread the virus. Therefore, the Researcher will resort to collecting data through Internet research procedures.
- 4.5 The main data collection method for this study will be the web survey questionnaire, which will be complemented by online interviews. That is, web survey questionnaires (refer to appendix A) will be distributed through an email address to forty-three (43) sampled library users (Departmental employees) and online interviews will be conducted separately with the Librarians or Library Managers (refer to Appendix B for suggested interview questions) and HoDs (refer to Appendix C for suggested interview questions).
- 4.6 Data will be collected once the University has approved the Researcher for ethical clearance and the Department has approved this request

5. FINANCIAL IMPLICATIONS

- 5.1 There are no financial implications applicable to the Department with this request.

6. RECOMMENDATION

- 6.1 It is recommended that the Head of Department approve the request to conduct a research study for a PhD Degree purpose at the KZN Department of Transport special library.
- 6.2 It is also recommended that the Researcher be granted access to the list of Departmental employees email addresses for data collection purposes.

[Redacted Signature]

Ms F Nenungwi
Librarian: IMTS

15/03/2021
Date

Recommended / Not Recommended

[Redacted Signature]

Mr N Mtshali
Library Manager: IMTS

15/03/2021
Date

Supported / ~~Not Supported~~

[Redacted Signature]

Mr S.P. Majola
Acting Head of Department: Public Works

15/03/2021
Date

Approved / ~~Not Approved~~

[Redacted Signature]

Ms S Ngubo
Acting Head of Department: Transport

17/3/2021
Date

Appendix H: Gatekeeper's letter Department D



KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

DIRECTORATE:

Postal Address: Private Bag X9050
Physical Address: 330 Langalibalele Str, PM Burg, 3201
Tel: 0333953189/3123/2805 Fax: 033-3943782
Email address: hrkm@kznhealth.gov.za
www.kznhealth.gov.za

Health Research & Knowledge Management Unit

NHRD Ref: KZ_202108_004

Dear F Nenungwi
(UKZN)

Approval of research

1. The research proposal titled 'Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg' was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

The proposal is hereby **approved** for research to be undertaken at KZN-DoH.

2. You are requested to take note of the following:
 - a. *All research conducted in KwaZulu-Natal must comply with government regulations relating to Covid-19. These include but are not limited to: regulations concerning social distancing, the wearing of personal protective equipment, and limitations on meetings and social gatherings.*
 - b. *Kindly liaise with the facility manager BEFORE your research begins in order to ensure that conditions in the facility are conducive to the conduct of your research. These include, but are not limited to, an assurance that the numbers of patients attending the facility are sufficient to support your sample size requirements, and that the space and physical infrastructure of the facility can accommodate the research team and any additional equipment required for the research.*
 - c. *Please ensure that you provide your letter of ethics re-certification to this unit, when the current approval expires.*
 - d. *Provide an interim progress report and final report (electronic and hard copies) when your research is complete to HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200 and e-mail an electronic copy to hrkm@kznhealth.gov.za*
 - e. *Please note that the Department of Health shall not be held liable for any injury that occurs as a result of this study.*

For any additional information please contact Ms G Khumalo on 033-395 3189.

Yours Sincerely

[Redacted Signature]

Dr E Lutge

Chairperson, Health Research Committee

Date: ~~13~~ August 2021

Appendix I: Gatekeeper's letter Department E



KWAZULU-NATAL PROVINCE

PUBLIC WORKS
REPUBLIC OF SOUTH AFRICA

Directorate: IMTS
Private Bag X9041
PIETERMARITZBURG
3200
Tel: +27 33 355 5434
Fax: +27 33 355 5508
Email:
Fulufhelo.Nenungwi@kznworks.gov.za
Enq: Fulufhelo Nenungwi
Ref: 2/8/4 (Research Reports)
Date: 2021

To: Mr S.P Majola
Acting Head of Department: Public Works

Mr N Mtshali
Library Manager: Infrastructure Maintenance & Technical Support (IMTS)

From: Ms F Nenungwi
Librarian: IMTS

Date: 10 March 2021

Subject: Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal Department of Public Works special library.

1. PURPOSE

- 1.1 To request approval from the Head of Department to conduct a research study for a Doctor of Philosophy (PhD) Degree purpose at the KwaZulu – Natal (KZN) Department of Public Works special library.

2. BACKGROUND

- 2.1 I am a Librarian within the Department who is currently pursuing a PhD Degree: Information Studies through the University of KwaZulu - Natal (Pietermaritzburg campus).
- 2.2 As part of the research proposal, a gatekeeper's letter is required from the Department under study for ethical clearance purposes and before data can be collected.
- 2.3 The proposed title of this research study is **measuring and communicating the value of special libraries in KwaZulu – Natal Provincial Government Departments, Pietermaritzburg**. Please note the topic may change after presenting the proposal to the University's Research Committee.

3. DISCUSSION

- 3.1 Government service delivery approaches are changing and advancing due to technological developments and financial pressures. This technological growth requires information professionals to continue and adapt their skills set for them to be successful in helping the Department to achieve its goals.
- 3.2 Such skills include flexibility, collaboration, creativity and the ability to respond to continuous change. Therefore, information professionals working in government sectors need to reinforce the value of services they offer to that Department in reaching their goals.
- 3.3 Departmental libraries were established to serve the needs of decision makers, administrators and other employees of their respective Departments as they store government data and other

Request to conduct a research study for a Doctor of Philosophy Degree purpose at the KwaZulu – Natal Department of Public Works special library.

information relevant to their needs. It is the desire of every special library within government departments to save time and efforts for the management whenever they require accurate information to perform their duties and often urgently needed. Hence, the provision of specialized information by special libraries within Government Departments is of importance and cannot be undermined if service delivery is to be improved.

- 3.4 Information professionals are battling to place and demonstrate the value of library services to the management and this may lead to lack of recognition of the value for information professional and the services they provide.
- 3.5 Many Government special libraries were created many years ago and a periodic review of their value to the Department, their users and needs is imperative. Equally so, the majority of these libraries follow outdated practices and some fail to provide satisfactory services that will support the Department to achieve the set objectives effectively.
- 3.6 Factors such as user behaviour on information needs, economic decline and an increase in the expectations of special library services from users and the Department has played an important role towards the need for these libraries to evaluate their success in meeting users' needs. Some of these libraries have been closed completely as they were seen as an additional cost factor unnecessary to the Department.
- 3.7 There is a need for specialized librarians to demonstrate to the management of the Department that the library is an essential part of the organization that is worthy to be developed according to the changing times and information needs of users.
- 3.8 Government Departmental priorities and that of their special library should be aligned to facilitate its services strategically to the Departmental goals and developments. After all, special libraries are meant to support the overall goals of the Department and assist in providing employees with the information they need to complete their jobs or roles.
- 3.9 Therefore, the purpose of this research will be to measure and communicate the level of perceptions, desired expectations, and satisfaction of special library users within the KZN Government Departments regarding the services and resources offered in the current post-truth era to the management. This study will also determine the value of these libraries by weighing up how library professionals' skills set and their services assist the Department to achieve its mission and vision.
- 3.10 The aim here is to bring about evidence of the extent to which information and services provided by special libraries are strategically aligned to the objectives of Department. Moreover, this study aims to put together special libraries' best practices that can be compared and implemented by other libraries to improve their services and elevate the utilization of these libraries.

4. METHODOLOGY OF THE STUDY

- 4.1 The population of the study will consist of all employees within the selected Departments, Librarians or Library Managers of the special libraries and Head of Departments (HoDs). The common characteristics of the population under study is that they are employed under the KZN Provincial Government Departments in Pietermaritzburg thereby considered as users of the special library.
- 4.2 Special libraries that are operative within the KZN Provincial Departments had been purposively selected for this study.
- 4.3 There are six selected special libraries in Provincial Government Departments in KZN, Pietermaritzburg. These includes KwaZulu-Natal Department of Public Works; Provincial

- Treasury; Department of Transport; Department of Health; Department of Agriculture and Rural Development; and Department of Economic Development, Tourism and Environmental Affairs.
- 4.4 As the whole world is experiencing the COVID-19 pandemic, this study will acknowledge and adhere to all the regulations and guidelines for prevention to further spread the virus. Therefore, the Researcher will resort to collecting data through Internet research procedures.
- 4.5 The main data collection method for this study will be the web survey questionnaire, which will be complemented by online interviews. That is, web survey questionnaires (refer to appendix A) will be distributed through an email address to eighteen (18) sampled library users (Departmental employees) and online interviews will be conducted separately with the Librarian or Library Manager (refer to Appendix B for suggested interview questions) and HoDs (refer to Appendix C for suggested interview questions).
- 4.6 Data will be collected once the University has approved the Researcher for ethical clearance and the Department has approved this request.

5. FINANCIAL IMPLICATIONS

- 5.1 There are no financial implications applicable to the Department with this request.

6. RECOMMENDATION

- 6.1 It is recommended that the Head of Department approve the request to conduct a research study for a PhD Degree purpose at the KZN Department of Public Works special library.
- 6.2 It is also recommended that the Researcher be granted access to the list of Departmental employees email addresses for data collection purposes.

Regards,

[Redacted Signature]

Ms F Nenungwi
Librarian: IMTS

10/03/2021
 Date

Recommended / Not Recommended

[Redacted Signature]

Library Manager: IMTS

10/03/2021
 Date

Approved / Not Approved

[Redacted Signature]

Acting HOD: Public Works

10/3/2021
 Date

Appendix J: Gatekeeper's letter Department F



KWAZULU-NATAL PROVINCE

**ECONOMIC DEVELOPMENT, TOURISM
AND ENVIRONMENTAL AFFAIRS**
REPUBLIC OF SOUTH AFRICA

270 Jabu Ndlovu Street, Pietermaritzburg, 3201

Private Bag X 9182

Pietermaritzburg, 3200

www.kznedtea.gov.za

Programme Sub Programme: HRM

Enquiries: C. Singh

Telephone: 033 264 2556

Email: Cheryl.Singh@kznedtea.gov.za

MR. S. G. ZONDI
DIRECTOR : MONITORING & EVALUATION

DEAR SIR

**REQUEST TO PROVIDE ASSISTANCE TO MS. F. NENUNGWU A STUDENT FOR A
DOCTOR OF PHILOSOPHY IN INFORMATION STUDIES DEGREE AT UNIVERSITY
OF KWAZULU-NATAL (UKZN) TO CONDUCT RESEARCH**

This letter serves to confirm that the Department of Economic Development, Tourism and Environmental Affairs (EDTEA) in the province of KwaZulu-Natal, has authorised Ms. F. Nenungwi to undertake research titled "Measuring and Communicating the value of Special Libraries in KwaZulu Natal Provincial Government Departments, Pietermaritzburg", in the Department.

Kindly provide Ms. Nenungwi with your necessary guidance, as required.

The output of the research may be used to improve strategy alignment in the Department.

Regards,

[Redacted Signature]

MR. NHLAKANIPHO NKONTWANA
HEAD OF DEPARTMENT
ECONOMIC DEVELOPMENT, TOURISM
& ENVIRONMENTAL AFFAIRS (EDTEA)

29/4/2021

DATE

Appendix K: Cover letter for interview schedules



Participant Information Sheet (Please read the following information carefully)

Researcher: Ms F. Nenungwi
Principal Supervisor: Associate Professor F. Garaba

Dear Sir/Madam

I am a Doctor of Philosophy (Ph.D.) student at the University of KwaZulu–Natal, South Africa in the Information Studies Programme. I am carrying out research as part of the requirements for the award of a Ph.D. Degree. The topic of my research is titled - **Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg.**

Due to Corona Virus Disease 2019 (COVID-19), data collection must comply with National guidelines, directives and laws during this COVID-19 crisis as spelt out in the HSSREC protocol as well National guidelines and directives from the South African government. The need to avoid community spread of COVID-19 has thus necessitated this Email communication for you to participate in an online interview. The reality of the current situation does not allow researchers to have face-to-face interaction and therefore, I will be making telephonic follow-ups. The information you provide will be kept confidential and used only for the academic purposes of this study and will not be revealed to third parties.

You are kindly asked to select a date convenient to you between 10 August 2021 to 15 December 2021 so that a setup for an online interview can be prepared. Structured questions that will be used for the interview are inserted below for your perusal. You have the right to withdraw at any time in the process. Should you have any queries please do not hesitate to contact me or my supervisor at the Department of Information Studies, University of KwaZulu-Natal.

Thanking you in advance for your time and cooperation.

Yours faithfully,

Fulufhelo Nenungwi (217052684)
Email: [REDACTED]
Contact No.:

Dr. F. Garaba (supervisor)
Email: garaba@ukzn.ac.za
Contact No.:

Appendix L: Cover letter for online questionnaire



UNIVERSITY OF
KWAZULU-NATAL™
INYUVESI
YAKWAZULU-NATALI

Participant Information Sheet (Please read the following information carefully)

Researcher: Ms F. Nenungwi

Principal Supervisor: Associate Professor F. Garaba

Dear Sir/Madam

I am a Doctor of Philosophy (Ph.D.) student at the University of KwaZulu-Natal, South Africa in the Information Studies Programme. I am carrying out research as part of the requirements for the award of a Ph.D. Degree. The topic of my research is titled - **Measuring and communicating the value of special libraries in KwaZulu-Natal Provincial Government Departments, Pietermaritzburg.**

Due to Corona Virus Disease 2019 (COVID-19), data collection must comply with National guidelines, directives and laws during this COVID-19 crisis as spelt out in the HSSREC protocol as well National guidelines and directives from the South African government. The need to avoid community spread of COVID-19 has thus necessitated this Email communication for you to complete the online questionnaire by clicking this link (<https://forms.gle/T8LdufeJ7zk19Vrx5>). The reality of the current situation does not allow researchers to have face-to-face interaction and therefore, I will be making telephonic follow-ups. The information you provide will be kept confidential and used only for the academic purposes of this study and will not be revealed to third parties.

You are kindly asked to answer all questions to the best of your ability. You have the right to withdraw at any time in the process. Should you have any queries please do not hesitate to contact me or my supervisor at the Department of Information Studies, University of KwaZulu-Natal.

Thanking you in advance for your time and cooperation.

Yours faithfully,

Fulufhelo Nenungwi (217052684)

Email: [REDACTED]

Contact No.:

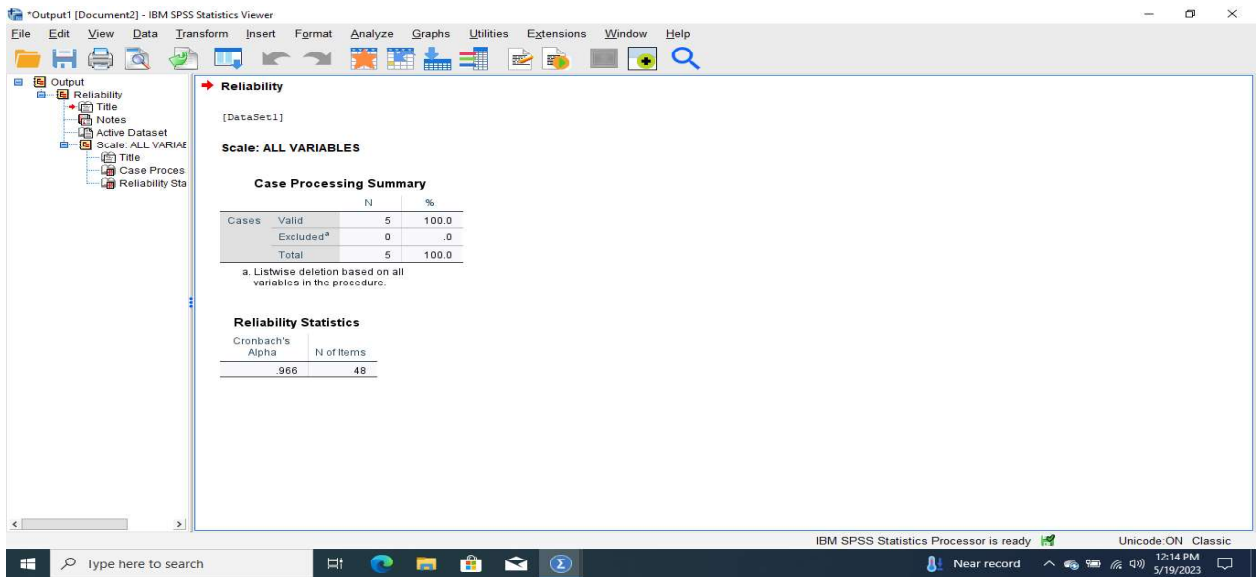
Associate Professor F. Garaba (supervisor)

Email: garaba@ukzn.ac.za

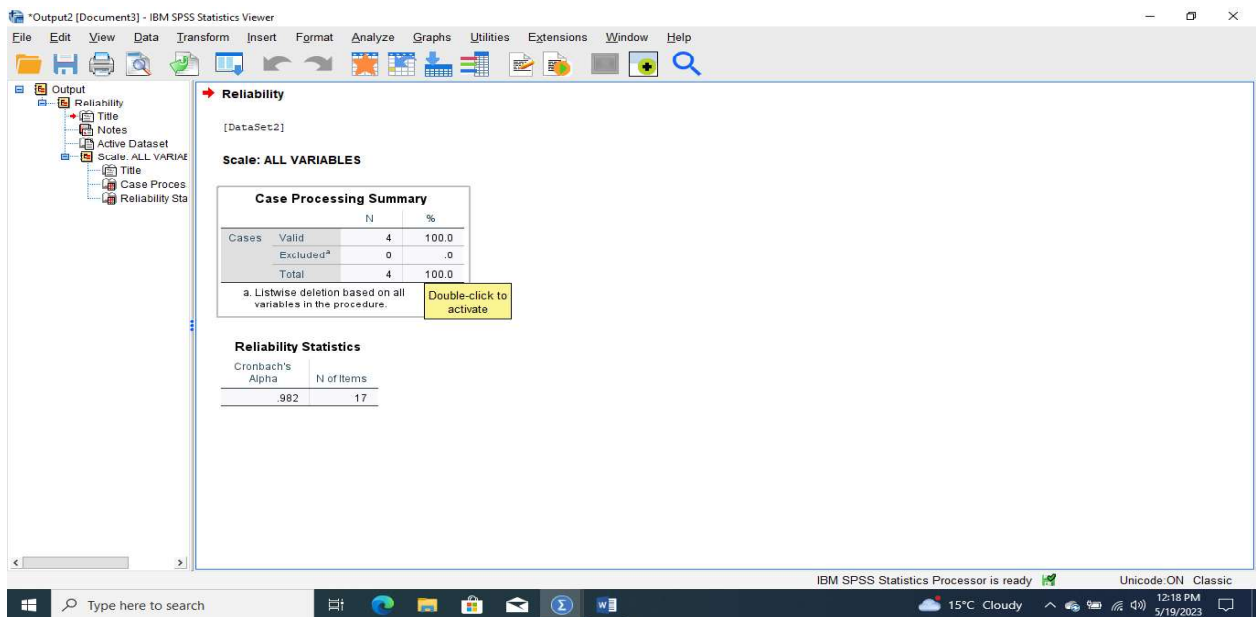
Contact No.:

Appendix M: Cronbach's alpha test results

Part 1



Part 2



Appendix N: Proof of editing letter

Athol Leach (Proofreading and Editing)



Email: [REDACTED] Cell: [REDACTED]

15 July 2024

To Whom It May Concern

This letter serves to confirm that I have edited the following DPhil (Information Studies) thesis by Fulufhelo Nenungwi (Student number: 217052684) titled:

“Measuring and communicating the value of special libraries in KwaZulu-Natal provincial government departments, Pietermaritzburg”

The thesis was edited in terms of grammar, spelling, punctuation, and overall style. In doing so, use was made of MS Word’s “Track changes” facility thus providing the student with the opportunity to reject or accept the changes made.

Please note that while I have checked the in-text references and those appearing in the list of references for consistency in terms of format (the latter as far as possible), I have not checked the veracity of the sources themselves.

The tracked document is on file.

Sincerely



Athol Leach
(MIS, Natal)