

AN INVESTIGATIVE STUDY IN THE UTILISATION AND PROMOTION OF ELECTRONIC RESOURCES IN GOVERNMENT LIBRARIES: A CASE OF NAMIBIA

MEAMENO NAMPA HAMUTUMWA

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DECLARATION

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ABSTRACT

This research study assesses whether a lack of marketing and promotion causes a decrease in the usage of electronic resources or whether there are other prevailing factors that prevent users from using the libraries' electronic resources. The research tried to find out what marketing and promotional techniques are employed and how the electronic resources are organised in the selected libraries.

The study covered the Khomas region in Windhoek, Namibia. The principal method used to collect data for the study was a user survey. A population of 50 participants was selected however only 45 took part in the survey. 37 were government officials, 5 librarians and 3 resourceful persons/experts in different library sectors, giving a 90% response rate, which indicates a very positive response from the participants. Data on the use of electronic resources was gathered through the means of administering user survey questionnaires and conducting interviews with the experts and the ministerial librarians.

Results indicated that a significant number of employees are cognisant of the fact that electronic resources exist in their libraries however they do not use those provided by their libraries for example CD-ROM, Full-text and bibliographic databases. It is noted that researchers are the main users of the libraries and senior management and management staff form the smallest group of people who use library services. Most users prefer using electronic resources as they considered them easier to access and search than print resource based; however, the majority of people who visit the library still make use of print resources because of bandwidth issues of the internet, preference to read and edit printed text and problems of access. All libraries engage in minimal promotional activities and marketing of library services. It was however noted that the majority of people are not aware of the promotional campaigns carried out by the libraries. Users find it easy to use library electronic resources, but none of the libraries provide ICT skill training, carry out library instruction to users or offer in depended online searching to OPAC. Budget constraints, slow internet speed and lack of adequate skills are factors that hinder librarians from providing electronic resources to government employees.

The study concludes that Namibian Government ministerial libraries need to better publicise their services in order to reverse the declines in the usage of electronic resources by staff members. Further training for staff in ICT and information literacy and retrieval is needed.

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LIST OF ABBREVIATIONS USED

AACR2- Anglo American Cataloguing Rules 2

AGORA- Access to Global Online Research in Agriculture

CDS/ISIS- Computerized Documentation System/ Integrated Set of Information Systems

CD-ROM- Compact Disc-Read Only Memory

CILIP- Chartered Institute for Library Information Professionals

GPRS- General Packet Radio Service

HSDPA- High-Speed Downlink Packet Access

ICT- Information Communication Technology

IFLA- The International Federation of Library Associations

INASP- The International Network for the Availability of Scientific Publications

IT- Information Technology

LISA- Library Information Science Abstract

MET- Ministry of Environment and Tourism

MME- Ministry of Mines and Energy

MTC- Mobile Telecommunications

NAWIC- National Water Information Centre

NISC- National Information Services Corporation

NEPRU- Namibian Economic Policy Research Unit

NESEIC- National earth Sciences and Energy Information Centre

NHSGGC- National Health Scotland Greater Glasgow and Clyde

NHS- National Health Scotland

NPC- National Planning Commission

OPAC- Online Public Access Catalogue

PC-Personal Computer

SPSS- Statistical Package for the Social Sciences

UK- United Kingdom

UNESCO- United Nations Educational, Scientific and Cultural Organization

WWW- World Wide Web

3G- Third Generation

CHAPTER 1: INTRODUCTION

1.1 Introduction

This study focused on selected specialised government libraries in Namibia, highlighting on usage and promotion of electronic resources. The following specialised ministries were researched: Ministry of Agriculture, Ministry of Mines and Energy, Ministry of Fisheries, Ministry of Environment and Tourism and National Planning Commission.

This chapter is broken down into eight segments that touch on several key points of the study. It starts with the background of the study followed by the current status of electronic resources in Namibia; Problem Statement; Aims and objectives; Research objectives; Research questions; Type of study; Learning outcomes; Definition of terms; Delimitations and lastly the Structure of the dissertation is provided.

1.2 Background of the study

The Directorate of Namibia Library and Archives Service (NLAS) under the Ministry of Education is the largest co-ordinating body for a large section of libraries in Namibia. It controls all activities of the National, School, Community and Ministerial libraries in the whole country. Alongside its operation, it has the support of Namibia Library and Information Council as an advisory body. (Bucholz, 2003, p.1).

NLAS seconds staff members to oversee the operations of government ministerial libraries; however all issues concerning funding and library management are addressed and catered for by the parent ministry. It is stated in "A policy framework for libraries and allied Information agencies for Namibia" that "information will be provided on request or in anticipation of needs through printed and electronic media" (Legislation Committee, Ministry of Basic Education and Culture, 1997, p.32). In other words, ministerial libraries will see to it that their goals and objectives are in line with those of their parent ministry and should provide tailor made information to their specialised clientèle. Ministerial libraries are mandated to provide electronic resources as stipulated in the policy.

The ministries which constituted part of the research include:

1. Ministry of Agriculture, Water and Forestry-NAWIC

NAWIC (Namibia' National Agriculture Information Centre) is a specialised Resource Centre for the Ministry of Agriculture, Water and Forestry and it is the main resource centre in the Ministry. Amongst the functions they perform are the following; NAWIC Database searches, providing access to online resources, current awareness and selective dissemination of information services. Its main users constitute farmers, tertiary agriculture students, researchers and professional NAWIC staff.

2. Ministry of Mines and Energy: NESEIC

National Earth Science and Energy Information Centre (NESEIC) is specialised and unique in that it is the only library in Namibia that provides earth science, geological and energy information which makes it an important custodian of all geo-scientific information in the country. The library is within the Ministry of Mines and Energy, under the Directorate of Geological Survey. NESEIC's role is to ensure that geo-scientific information is accessible for all to research hence they provide electronic resources including Earth Data database and GEOREF. Geologists, consultants and small miners constitute 70% of the library users. Students account for 15% and the rest are academics with a few farmers and children on library tours.

3. Ministry of Environment and Tourism: MET

The resource centre focuses on providing access to a range of information resources, which are environmentally and socio-economic related. They also have a MET Resource Center and a Namibia Libraries Environment Database. The library is mostly visited by students; staff members; researchers from the Polytechnic and UNAM; learners doing school projects and in some cases international researchers.

4. Ministry of Fisheries and Marine Resource Library

The fisheries library caters for community members who want to learn more about oceans, fish, sea plants and birds that are living along the coast. The library provides materials such as posters to schools as well as information to tourists visiting the coastal town during holidays.

Clients visiting the Fisheries & Marine Resource Library are in the following categories: staff members, learners from UNAM and the Polytechnic doing projects and researchers.

5. The National Planning Commission (NPC)

The National Planning Commission (NPC) library falls under the subdivision of Information System Centre. It is a special library for National Planning Commission Secretariat. Amongst its functions is to provide various NPC's publications and reports; to process information from various surveys and related activities; to analyze, publish and disseminate information on National Development Planning. Its main users are the employees of the institution who also have the privilege of lending out materials. Other users include students and researchers from outside the institution. On average NPC library is visited by about 30 visitors per day.

1.3 The current status of electronic resources in Namibia

The Namibian government is the largest employer in the country, with about 70,000 public servants (Jauch, [2000]). There are eighteen Government Ministries in Namibia, and only a few have libraries that provide electronic resources to their diverse and specialised clients. Chisenga (1997, p.1) noted that since 1995 electronic networking facilities have been made available in Namibia. He emphasised that the potential of using electronic network for resources sharing and provision of library and information services in Namibia is great. Conversely, the former speaker of parliament alluded that:

...access to information of every kind, from the written word, through electronic broadcast media, to digital resources in the so-called information superhighway has for a long time been denied to Namibians. (Tjitendero, 1997, p.3).

A reason for this apparent denial of information could be because the concept of providing electronic resources is a fairly new one in many government libraries including ministerial libraries. However, one would wonder why people have been denied access to digital resources when, there are institutions of higher education which have been providing electronic resources to library patrons for a very long time. These institutions have recognised the importance of information technology for resource-based teaching and learning by enabling "access to electronic resources, rising of internet awareness and training in its use, provision of ICT facilities and connectivity" (Rosenberg, 2006, p.292). Examples worth mentioning are the two prominent academic libraries in Windhoek, namely the University of Namibia Library and the Polytechnic of Namibia library.

According to Chisenga (2006), universities and research institutions in Africa are the major centres for research and consequently the major generators of research based data, information and knowledge. However, many government institutions do not have repositories nor do they provide access to their collections in digital format. The challenge faced by many researchers and scholars in Namibia is the issue of accessing local content and information that is in electronic format. The majority of specialised resources are either locked away from public access or are lost. This is emphasised by Chisenga (2006) when he noted that these valuable knowledge resources are not easily accessible on the continent.

A few government ministerial libraries have embraced new technologies and have migrated their resources from manual catalogues to a computerised catalogue system called CDS/ISIS, which is computer software from UNESCO used for information storage and retrieval. This library management system does not have the capacity to accommodate all the functionalities needed to exploit the electronic resources, nor does it provide facilities to access other online databases in real time. It is freely available for libraries to use, however there is not enough manpower in Namibia to utilise, let alone to maintain it or for trouble shooting. As a result a few libraries especially those in remote areas, in Namibia still face serious problems in the library use of CDS/ISIS. These are challenges that are being addressed by the IT librarian in the directorate Namibia Library and Archives Services (NLAS) but, since he is the only person currently solving all CDS/ISIS related issues, a long standing solution needs to be identified.

Other challenges faced by many specialised libraries in Namibia, is the fact that most of their resources are still in print format and very few have subscribed to electronic databases. One case in point is the Ministry of Fisheries library, which has subscribed to Access to Global Online Research in Agriculture (AGORA) and the Ministry of Mines and energy which, subscribes to electronic journals through EbcoHost and Georef database. These are online databases that provide access to full text online journals and abstracts. However, only a few people make use of these resources. There is a need to advertise this electronic service to users as it is not being utilized by users to meet its full potential. However, with the advancement of new technologies, the need to market and provide electronic and online resources to encourage research and for easier information retrieval is on the increase. Chisenga (1997, p.17) stressed that "creation and processing of information is now largely being done using computers and disseminated in electronic format through electronic networks". This is even more the reason why modern libraries should gear towards the provision of electronic resources.

It is against that background that one would assume that providing government employees in Namibia with the right resources for skills development and performance improvement will ultimately contribute to job satisfaction in the workplace both for staff and for those for whom they are working. It is believed that, by exposing government officials to electronic resources in libraries, employees will make public service more innovative and effective.

The Namibian government is advocating for a reading nation and to encourage research and innovation. It is thus necessitated that civil servants are provided access to adequate resources to enable them to effectively carry out their duties as mandated in their job descriptions. The former minister of education, Mutorwa in his article "National report on the development of education in Namibia" reported that:

...if we want learning to be relevant to people's interest and to contribute to national development, then we must invest in libraries and information systems so that research at many levels is possible

(Mutorwa, p.1).

1.4 Problem statement

The trigger of this study came as a result of the author's own personal experiences during her tenure as a librarian in a specialised library in Namibia, NESEIC. The author observed that there was a high need for electronic resources in the specialised library. However, given the nature of governments in Africa, many have insufficient funds to implement such developments.

An interesting point to note is also that, many employees are involved in research and publications especially in the health, agricultural, environmental and mining sector. These are areas where you find continuous and intensive research being conducted. Many people in public service are also engaged in pursuing a degree of some sort, be it an undergraduate, Masters or a PhD. Not only do you find scholars in the public service, you also find researchers who are engaged in researching information necessary for their day to day jobs. However, one of the key challenges in libraries with electronic resources is, delivering access to those resources. In most cases resources are only available in print format making it very difficult to access or it is only accessible to a selected few. It is vital to provide convenient ways for users to find the information they need within those resources. Librarians face a complex set of challenges in managing electronic resources, a situation which was

experienced by the author, hence the need for an investigative study into how the electronic resources which are acquired at great cost are being utilised and marketed.

1.5 Aims and objectives

The study was aimed at investigating issues relating to the usage as well the promotion of electronic resources in government specialised/ministerial libraries.

1.6 Research objectives

In order to achieve these aims the following objectives were determined:

- To find out what electronic resources are being provided by government ministerial/specialised libraries.
- To determine the need and importance of electronic resources.
- To seek users perceptions on electronic resources being provided.
- To assess the methodologies employed in marketing and promoting the resources to employees and whether the current methods are effective or not and to suggest best practices on how to improve these services.

1.7 Research questions

The research will address a number of questions such as:

- What types of electronic resources are provided?
- How well are these resources used?
- What are the users' experiences to the resources being provided?
- How are the resources and services promoted?

1.8 Type of study

This is a survey based study whereby the research tries to investigate opinions regarding a systems issue using a suitable survey instrument, analysing the data collected, and forming recommendations and conclusions based on this analysis.

1.9 Learning outcomes

The research evaluated the worth of electronic resources to policy makers thus enabling them to sensibly adjust future funding. Conversely, it provided a valuable baseline and information on needs, problems and positive practices to be used for further development and training. A list of recommendations on how to market and promote library resources for optimal use by all employees of the respective institution is created, which would assist library managers to draw on good marketing and promotional techniques. Finally, the study encouraged the creation of digital libraries that would help library managers to organise electronic resources and thus to facilitate fast and easier access to electronic resources by library users.

1.10 Definition of terms

1.10.1 Government ministerial library

Government ministerial libraries are often called specialised libraries in that they provide specialized services tailored to their organizational needs. Government libraries according to Singh and Kumar (2005, p.23) are those whose primary function is to serve the government at different levels. Some call them "administrative libraries", which are attached to various ministries, their departments, divisions, branches or sections to serve the legislative, administrative, judicial and constitutional functions of the government. The two authors further stated that "they provide all the necessary information, helpful to take appropriate decisions and to support different types of developmental activities" (Singh and Kumar, 2005, p.25).

1.10.2 Electronic resource

The Anglo American Cataloguing Rules 2 (AACR2) defines an electronic resource as:

...materials (date and/ or programs) encoded for manipulation by a computerised device. These materials may require the use of a peripheral directly connected to a computerized device or a computer network. These materials may be in the form of CD-ROMs, databases or websites (Balleste, Luna-Lams and Smith-Butler, 2007, p.79).

Brophy, Clarke, Brinkley et al. (2000) also affirmed that "electronic resources include digital documents, electronic serials, databases, patents in electronic form and networked audiovisual documents".

As for the purpose of this study, the term electronic resources will be used to refer to ...any reference information available through a computer. This is mainly CD-ROMs, the Internet and any free information found through it, subscription databases that the library pays for and any digitised information specifically accessed through the library (Gardner, 2002, p.15).

1.11 Delimitations

Although the literature review conducted for the purpose of this report did not identify any studies focusing specifically on the public service sector, there existed studies which revealed the needs of employees from other specialities, for example the industries and commercial sectors, which proved significant to the study.

It is important to note that this survey is not concerned with the technical aspects of setting up infrastructure to facilitate access to electronic resources however; they have been touched on but not in greater details. It also looked at case studies on electronic resources embarked upon by both the developed and developing nations.

There was in the survey a certain degree of respondent bias as a result of unresponsiveness, lack of cooperation and false information provided on purpose due to mistrust, fear and conformity by respondents. It should also be noted that, due to the limited time, it would be advisable that an in-depth and thorough analysis be carried out in order to find out what users want from the library, perhaps as another Masters or PhD dissertation.

1.12 Structure of the dissertation

This thesis is divided into five parts. The first chapter looks at a brief introduction of what is expected from the research study. Chapter two then discusses and reviews different literatures on the subject area. Chapter three, research methodology, summarises the research tools and designs used by the researcher to gather pertinent information for this study. Chapter four gives a discussion on the interview results both by experts and librarians. Chapter five looks at data analysis, chapter six discuses the research findings and lastly, conclusions of this thesis as well as the recommendations are drawn in chapter seven.

CHAPTER 2: A LITERATURE REVIEW

2.1 Introduction

In today's electronic information environment, the role of the special librarian has evolved to meet the demands of both the technology revolution and the information revolution. Most libraries now offer an online public access catalogue (OPAC), public PCs equipped with CD-ROM drives and scanners, or public terminals connected to the Internet. More and more libraries are building homepages on the Worldwide Web from where users have access to a variety of services without physically entering a library. (Ghosh and Wesley, 2002, p.136). Similarly a number of special libraries are moving towards providing electronic resources to supplement their traditional print resources. However, all these developments have challenges that need to be addressed.

The issues discussed in this chapter are grouped under the following broad headings:

- 2.2 Review of the literature
- 2.2.1 Provision of electronic resources.
- 2.2.2 The concept of digital libraries
- 2.2.3 Facilities needed to access electronic resources and services
- 2.2.4 Challenges faced in delivering and accessing electronic resources
- 2.2.5 Users study in the electronic environment
- 2.2.6 Marketing and promotion of electronic resources
- 2.3 Summary

2.2 Review of the literature

2.2.1 Provision of electronic resources

Information technology, especially access to the Internet, is said to be the driver of "service delivery and reaching clients when they need it and wherever they are" (Muller, p12). One of the main reasons why libraries provide electronic resources is because they can be shared easily at relatively low cost via modems or by means of computer communication networks (Barker, 1994, p.228).

The motivation for wanting to apply new technologies to library systems according to Barker, (1994) arises from three basic sources which are, the need to make existing library resources more easily accessible to users; the need to use resources in a way that is friendlier to the environment and the need to make the jobs of library staff easier, less frustrating and, hence, less stressful.

A reason why it would seem relevant for institutions in developing countries to provide electronic resources is suggested in Kanyengos' study on 'Managing Digital Information Resources in Africa: preserving the integrity of scholarship'. According to him, "most of the higher institutions of learning are still largely dependent on print resources in accessing knowledge resources" (Kanyengo, 2006, p.5). Similarly to the thoughts of Kanyengo, are those discussed in Kaaya's 2004 study, where Kanyengo quoted Kaaya as saying "in sub-Saharan Africa, government agencies are still operating in a paper-based environment" (Kanyengo, 2006, p.10).

Balleste, Luna-Lams and Smith-Butler (2007, p.97) noted a number of factors to consider before providing electronic resources to users. The decision to acquire digital products should be made in accordance with the entire collection development policy, and whether a library considers materials available online as a substitute for print materials depends on several factors, including; how often the materials are used; the content and quality of the product; ease of use; usage restrictions (especially the ability to download and print); costs and continued access to the content after subscription expires.

There are free and commercial journal publishing companies out there that libraries are encouraged to have a look out for. These companies give libraries the option to either subscribe to full-text databases as part of their digital resources. Some of the major players in electronic full-text journal publishing include Elsevier Science publishers (Science Direct); Springer Verlag (Link Electronic Service); American Chemical Society (ACS); Wiley Interscience just to mention but a few (Mulla and Chandrashekara, 2006).

In other words, one has to bear in mind the users' preference on the different types of resources provided by the library. A distinct selection on whether to provide electronic resources as opposed to print resources has to be carefully decided upon.

2.2.2 The concept of digital libraries

There are many definitions of what a digital library is in the literature. A more simplistic definition of a digital library is coined by Zhou (2005). Two Russian scholars, Sokolova and Liyabev quoted Zhou (2005, p.434) saying that a digital library is a distributed system that has the capability to store and effectively utilize various electronic documents, which may be conveniently accessed by end users via network transmission.

A digital library is usually an additional service to the existing collection of a library. Digital libraries allow librarians to greatly extend the range of available information, increasing accessibility and at the same time "give the public easy access to information and knowledge Source" (Nuys, 2005).

2.2.2.1 Advantages and disadvantages of digital libraries

There are several benefits pointed out in the literature to introducing digital libraries. Naturally, one great advantage of having information in digital form is that it can be shared instantaneously at relatively low cost. Therefore, while a conventional academic library might only hold one or two copies of a book (perhaps for 80 students to share) a digital library could generate an unlimited number of copies at the touch of a button. (Barker, 1994, p.228).

In short, digital libraries enable users "to add to and modify stored information, provided that they have the necessary access rights" (Barker, 1994, p.228). They also enable library users to access and browse the library catalogue and resources in their own free time however access to these documents often requires an authenticated password.

The study by Rosenberg (2006) on 'digital library in Africa' investigated the connectivity of libraries in provision of electronic resources. A few of the libraries that were surveyed reported that they were connected, however they said that slow speed and reliability was a real barrier to the use of electronic resources. The findings further revealed that the acquisition and implementation of a library management system would appear to be essential in the construction of a digital library.

2.2.2.2 Funding

Funding is a challenge faced by many libraries both in developed and developing countries. Within institutions, libraries are competing with other departments for funds, therefore they have to prove their worth and their value for money through intensive marketing campaigns.

More than ever, institutions are asked to quantify the usage of electronic resources and value for money. Since the budget of most special libraries is controlled by their parent organisations, the amount of money the library gets therefore depends on the financial allocation to the parent organisation. (Alemna, 1989, p.25). Library funding and budgets came under the spot light in the literature. Alemna also asserts that "at present, funding levels in libraries cannot keep pace with requirements for equipment, books and journals" (Alemna, 1998, p.9). If Libraries are to bid for more funding, they are advised to have working projects in place. This was noted in a recent workshop, which took place in Windhoek, Namibia 28 – 30 July 2008 at the Goethe Centre on Lobbying and Public Relations. It was agreed that "libraries need to involve the community if they are thinking of surviving competition regarding attracting customers to take libraries seriously" (Chanakira, 2008, p2).

2.2.2.3 Training of personnel

Another challenge faced by most African countries is the lack of retention of qualified and trained library staff as well as human resources to manage and maintain electronic resources. It is alleged that skills in electronic resources, electronic services development and teaching skills were particularly lacking. (Rosenberg, 2006).

Digital electronic resources change formats frequently and it is up to librarians to get the necessary skills to be able to meet up with this constant change. Librarians need to build knowledge based skills on new developing matters such as IT-techniques or IT-knowledge. (Wittwer, 2001, p.223).

There should also be close communication ties between librarians and IT or computer professionals for technical support. Information professionals need to be equipped with the necessary knowledge and handling-skill in the maintenance of electronic resources in order to make the best use of these resources. Institutions are encouraged to build capacity in digital information management, so that those engaged in digital developments are familiar with the various issues concerning digital information, including copyright issues amongst many others (Chisenga, 2006). Chanakira reported that:

...the challenges brought about by the emergence of Information Communication Technologies (ICTs) calls for the redefinition of library skills and values as it is now emerging that libraries are becoming active change agencies as well as active change partners that are influencing clients to have a new mind set regarding service delivery by modern libraries. (Chanakira (2008, p3)

2.2.3 Facilities needed to access electronic resources

The Facilities needed to access electronic resources include technical infrastructure such as existing networks, intranets and internet. Ideally the library should have good infrastructure, otherwise the quality and delivery of electronic resources will be affected.

In as much as these facilities are required, there is no other way to gain access to electronic information in the absence of a computer. Barker regards computers as an important "tool for accessing a wide range of electronic publications" (Barker, 1994, p225). Svoboda noted that in order to gain access to electronic resources and services one needs:

...a computer with communications software and a modem that connects the workstation via satellite to the global network. In the case of commercial databases, the host usually allocates the password either for a nominal annual fee or against the payment of a subscription. (Svoboda, 1995, p.329/230)

Computers are a necessity in gaining access to electronic resources. Microchips were introduced 30+ years ago. With improvements in microchip technology, computer processors nowadays are becoming faster and cheaper. Therefore there is an opportunity to redesign the way many of electronic resources and services are delivered.

2.2.4 Challenges faced in delivering and accessing electronic resources

The notion of providing commercial software systems is an issue that is faced by most developing countries. There are various reasons why systems concerned with software do not top the agenda of developing countries. One of the reasons why this is the case is highlighted by Celik (1994). He argued that commercial software systems are expensive and not easy to

maintain. Another challenge faced by most government libraries is the failure to maintain and renew subscriptions to online and electronic resources. Subscription to online resources and electronic databases has its good and bad sides and one of the reasons pointed out in the literature is the fact that "access to affordable broadband of sufficient capacity is a huge problem in South Africa" (Muller, p.117) and probably in many other African Nations including Namibia. ICTs required to access electronic resources are not fully developed. Most institutions especially the government cannot afford adequate internet bandwidth to enable them to provide reliable access to electronic resources. (Chisenga, 2008, p.11).

2.2.4.1 Technological advancements

The technology and electronic environment has become more complex due to the volatility of information. The world has changed dramatically since the last century. This has brought more challenges to the Library and Information profession.

"The impact of ICTs on librarianship and librarians is considered as an eye opener for libraries to revisit and revise library collection development policies so as to streamline how modern libraries should function" (Chanakira, 2008, p.3).

The profession nowadays is confronted with the effects of globalisation, technological developments and economic growth factors. A challenge faced by developing countries is the fact that they "are still struggling to even make the policy decision to move to an electronic environment in daily government operations" (Kanyengo, 2006, p.10). In a study conducted by Kaaya in 2004 to determine the pattern of e-government adoption from 1998 to 2003 using the three East African countries of Kenya, Tanzania and Uganda, "it was determined that there was slow adoption of e-government services. This slow pace was attributable to resource constraints, lack of pressure from governments, and lack of demand from potential users" (Kanyengo, 2006, p.10). However the real issue according to Kanyengo is that the "citizenry has not yet realized the power of the digital media to demand that most government services and polices be made available to them via the internet for faster and broader dissemination" (Kanyengo, 2006, p.10).

The ICT Alliance Namibia (2004) reported that "the extent to which the Namibian society is affected by technological changes differs across regions and income groups". In a study conducted by NEPRU on national household survey on access to financial services in Namibia in September 2003, results revealed that:

Ten times more households had fixed telephone lines installed in their homes in urban areas compared to rural ones. Nearly twenty times more households had computers in urban areas compared to rural areas. (ICT Alliance Namibia, 2004).

Clearly there is an issue of digital divide. One worrying factor is that, even though one provides electronic resources to users, there will be those who will be left out of benefit from the service due to a lack of facilities and infrastructures. A case in point is that of the recent developments in the wireless network Switch from Telecom Namibia and GPRS/3G/HSDP from the mobile phone operators MTC (Mobile Telecommunication) and Cell One. These phone operators in Namibia currently provide users access to the Internet through the technology enabled by the 3G (third generation) device. It is alleged that:

"For mobility of use and access to the Internet, 3G/HSDPA is becoming faster and very reliable. HSDPA (High-Speed Downlink Packet Access) enables a user to access the Internet and transfer data wirelessly through mobile telephone technology at up to 1.8 Mbps" (Kavetu, 2008).

These are great initiatives however the problem that many people especially those with minimum wage would face is the issue of affordability.

2.2.4.2 Licensing of electronic resources

If libraries are to provide electronic resources, they have to seek permission to use and distribute the resources especially electronic journal articles, electronic databases and CD-ROM databases. According to McMenemy and Poulter (2005, p.31) the purchase of CD-ROMs cannot be assumed to be as straight forward as that of traditional resources such as books. When dealing with electronic information one has to be very cautious to keep within the law frame as this can have detrimental and legal consequences not only to the librarian but to the organisation as a whole. McMenemy and Poulter (2005) further suggested that when in doubt seek advice or ask, and ensure that all staff members are knowledgeable about the license of all CD-ROMs available for use in the library.

There are legal issues surrounding the digitization of information. Kanyengo (2006) suggested that a library should try to obtain copyright permission from either the publishers or authors to be able to duplicate anything in large quantities. This is perceived as a daunting task that libraries have to undertake in respect of intellectual property.

2.2.5 User study in the electronic environment

Technology and the developments in digital information have influenced the way in which users' access information. There are several studies carried out on information usage of electronic resources by users and access to electronic resources. It is argued that the availability of information in the electronic media has created an opportunity for global access to information. These developments facilitate the

"enhancement of the speed of service, number of users served, and the quality and exhaustiveness of information provided. The way in which users search for information to support research, teaching and creative activities is changing as new technologies and information delivery systems emerge" (Varghese, 2008, p.83).

An interesting investigation cited by Arms (c2000, p.266) on the usage of online resources signifies that more people are reading online materials than before. He highlighted that habits have clearly changed. These habits could refer to reading habits or the manner in which users seek for information. As evidence to this observation, he suggested that if one visited a university campus or any organization that uses information intensively, it was obvious that people were spending hours every week in front of computers, using online information. However, a question that would need to be asked is, are library users using any of the non-electronic resources provided by their institutions? According to Arms (c2000, p.266) in a study conducted in 1997, a student who asked to find information in the university's library reportedly said "please can I use the web? I don't do libraries". This tells us that there are still those users who would prefer doing their own research in the comfort of their own home or offices rather than visiting the physical or traditional library. These people still rely heavily on the WWW for information as opposed to using electronic resources provided by the library.

A study conducted by Gardiner, McMenemy and Chowdhury (2006) touched on some pertinent issues relevant for this study which, include the general use of the internet and search engines by academics from different disciplines, with special reference to their use of, and attitude towards, printed as well as electronic information resources. In their report, Gardiner, McMenemy and Chowdhury (2006, p.342/3) revealed the findings of Armstrong et al., 2001; Urquhart et al., 2003), which found that:

...reluctance to use electronic information seemed to be based upon previous bad experiences, the perceived time and effort necessary to change current working practices to embrace electronic information, familiarity of paper-based resources, as well as limited confidence and skills. (Armstrong et al., 2001; Urquhart et al., 2003)

These findings are quite relevant in understanding the challenges users face when researching for information from electronic resources. Many users, who are used to printed materials, find it difficult to adapt themselves to the use of electronic resources. The ability to use information technology varies from user to user. Some may lack abilities to search for information in electronic formats while others may have adequate expertise in information retrieval skill, which can influence a user's decision on whether to use print resources or electronic resources for research. One can assume that there is a certain degree of fear about the usage of electronic resources by the older generations. Singh and Kumar (2005) justified this fear by saying that "the change from print resources to electronic resources involves changes in workflows and procedures. Some staff members, especially those who are young, may adopt easily but others who find it difficult may even oppose" (Singh and Kumar, 2005, p139).

2.2.6 Marketing and promotion of electronic resources

Marketing is defined by Kotler (1996) as "the process of planning and executing the conception, pricing, promotion and distribution of goods, services and ideas to create exchanges with target groups that satisfy customer and organizational objectives" (Kaur and Rani, 2007). An important part of any marketing strategy is to "research the needs of the service community and to match those needs with the competencies of the library, being very careful to set user expectations at a realistic level" (Boudreau and Manley, 2004). However with the emergence of new technology peoples' needs change too. It is due to this fact that there is a serious call for libraries to refocus their thinking and marketing strategies towards the changing needs of their users. Therefore one of the basic aims of marketing is to know and understand users' needs so in order to satisfy those needs in an effective way. (Nicholas, 1998).

Rowley (1998, p.280) emphasised the need to promote databases. He identified channels such as electronic mailing lists and bulletin boards as means to promoting databases. Other promotional techniques that came to the fore in the literature include publicity on the intranet, introductory sessions to the users and the induction of new employees to available resources. Library orientation and individual instruction on library services give users skills in how to

use electronic resources and therefore create an enduring pattern of users. For the marketing of electronic resources, a library/information centre can make use of websites and online catalogues as well as the inclusion of holdings in subject portals and other resource discovery systems. The website is a vital tool for conveying information, from opening hours to details of particular collections.

2.2.6.1 Advantages and disadvantages of promotion

Academic libraries are finding that incorporation of marketing concepts and techniques can facilitate the achievement of important organisational goals. Marketing facilitates libraries strategic planning and goal achievement. However, promoting the services, helps to create awareness of library resources, and provides valuable information to users so that they know and understand how to maximize the potential of the services available. Libraries should continuously promote their resources to control their competitive advantage. It is believed that problems of underutilisation of resources can be solved "by applying marketing principles" such as identifying your objective, identifying target users and their particular needs; and developing products and services. (Kaur and Rani, 2007)

Promoting library electronic resources enables users to make the best use of electronic resources available in the library to meet their academic and research needs. This ensures that users utilise the resources at capacity. (Spalding and Wang, 2006).

A challenge faced by librarians, is funding promotional activities and the skills in marketing and advertising.

2.3 Summary

In order to fully understand the research topic, it was appropriate to review some of the relevant literature associated with the area of electronic usage. Amongst the key questions for government library managers and staff to consider are why provide electronic resources and what do library users gain from using electronic resources and services? Do people really want to use electronic resources as opposed to printed resources? Digital libraries are a booming and fast growing development in the world now (Zhou, 2005).

Providing electronic resources is a great initiative; however there are legal issues libraries are required to take into consideration before providing access to electronic resources. Libraries

should obtain copyright permission from either the publishers or authors, if they wish to "duplicate anything in large quantities" as suggested by Kanyengo (2006, p.12).

One needs facilities such as a computer to access electronic resources and good infrastructure in place so as to access online as well as electronic resources. Internet connectivity and broadband is regarded as an essential facility to accessing online resources, however, issues of connectivity, affordability and internet speed are still a problem in many developing countries, including Namibia. Many African countries have embarked upon great initiatives in efforts to reduce the digital divide gap. In Namibia, Mobile Telecommunications (MTC) and Telecom Namibia are the drivers towards the realisation of a balanced gap in accessing ICT facilities provided by them. However a challenge faced by most consumers is the issue of affordability to access the internet.

Several studies have investigated and analysed the behavioural study of usage of electronic resources by students both in academic and public libraries but very little is known on government libraries. There are users who are embracing new technologies provided by libraries however; it is believed that the older generation still prefer print based resources to electronic resources because of several factors such as skills. The points raised by Singh and Kumar (2005) on users preferring electronic resources because of change in work flow are relevant. However, skills can be a factor. But working habits, for example highlighting bits of the text can also be another disadvantageous factor. These thoughts are changeable. Eyesight capability normally declines quite sharply beyond middle age; and is the reason why the older generation for example will scan on the screen but study the printed page. This drawback may be even more adverse in Namibia than it is in relatively wealthy nations like Scotland in the UK, where eye care can be relatively easily and cheaply obtained.

These shortfalls could all be ironed out if resources are well marketed and promoted as suggested by Rowley (1998) when he emphasised the need to promote databases. It is suggested that library orientation and individual instructions on library services should be conducted as this creates an enduring pattern of users. A possible challenge for librarians to overcome though is funding promotional activities and skills needed to successfully market and promote electronic resources.

CHAPTER 3: METHODOLOGY

3.1 Introduction

Data relevant to the usage and promotional activities within a sample of ministerial libraries in Windhoek, Namibia was collected. A combination of quantitative and qualitative research methods along with a comprehensive literature review was used. The following methods and procedures were carried out in the research and they are discussed below. These include Research design; Target population; Sampling; Research instrument one (questionnaires); Research instrument two (interviews); research process; Data analysis; Limitations; Ethical considerations. Lastly, a conclusion is provided at the end of the discussions.

3.2 Research design

This is an explanatory survey, which tried to account for the phenomena described. Theories try to answer questions, which require testing as they guide the design of the survey, data collected and the way it is analysed. (Greenfield, 2002, p.173).

Poll (2007) advises the use of a survey as a good research instrument to assess and evaluate the usage of electronic resources in specialised libraries. He noted that "for special libraries serving a defined clientèle, user surveys will be more effective than for libraries serving the general public. Poll (2007) further noted that satisfaction surveys can be offered to users in different formats including print questionnaires which have a high recall but only active library users will be included.

Questionnaires by mail to a sample potential user are another method, which includes non-users but has a lower recall rate. The last design is the telephone survey, which has a high recall by direct contact but a challenge is that it is time-consuming and may be influenced by the interviewer. (Poll, 2007, p.6).

In order to seek answers to what users' perceptions are on electronic resources provided by the library, the author used the first and second method as discussed by Poll (2007).

3.3 Target population

The sample population consisted of 50 participants, of whom five are senior librarians in the academic and other sectors, five ministerial librarians and 40 library users of ministerial libraries. Participants in this study are key researchers in the different Government ministries from specialised disciplines. The researcher was interested in librarians with a degree in Information and Library Studies from any institution. However this was not entirely feasible because at the time this research was carried out, NAWIC was managed by an acting library assistant with only a certificate. Hence she was also included in the research.

3.4 Sampling

Hart defines sampling as "a sub-set (sample or samples) of a specific population that can be shown to share the properties or variables of the population" (Hart, 2005, p.339). He noted that not all research studies need to use a sampling procedure when the population is small. However, one has to take into account the cost, feasibility, time and quality of the sample selected. The advantages of sampling are pointed out by Greenfield where he noted that "a sample can increase the quality of the research, which may lead to more accurate results" (Greenfield, 2002, p.185).

This research made use of two sampling techniques, namely the accessible sampling and the snowball sampling techniques. The accessible sampling technique was used since the sample was easily accessible. This is a non-probability sample, which is generally believed to be "less complicated and more economical (in terms of time and financial expenses) than probability samples" (Huysamen, 1994, p.44). This method was however, supplemented by a snowball sampling technique, which is also another form of non-probability sampling technique. The reason for the change of sampling techniques was due to the fact that the first technique was prone to bias and there was no way to assess the validity of the inferences drawn from such a sample.

Snowball sampling was chosen because only a few individuals from the population are approached to be included in the survey. It works on the basis where you have individuals who work as informants to identify other members in the population for inclusion in the sample (Huysamen, 1994). In this case, the research population of users are hidden. The researcher did not know who the key researchers were in the respective institutions or knew how to get hold of them. Therefore, she had to rely on the librarians from the researched

libraries to select key researchers on her behalf as well rely on the chief librarian of ministerial libraries for those libraries to be included in the sample.

A disadvantage of the Snowball sampling technique, like accessible sampling, is that it is also subjected to numerous biases because sample members are not selected from a sampling frame. This caused problems because it was difficult to determine the probability of selection for any given element; hence, the precision of the statistics cannot be estimated (Maxim, 1999, p.108).

3.4.1 Means of selecting the samples

3.4.1.1 Selection of the experts

Four resourceful persons (experts) from the academic field and a specialised field, health in the United Kingdom were selected for interviews.

The researcher was referred to the three persons in Strathclyde University by their colleagues as these are the people who are more knowledgeable and deal with the subject area on a daily basis. The NHS staff was referred to the researcher by her work mate who is studying in the Department of Computers and Information Sciences, University of Strathclyde. The NHS staff was chosen because she was said to be well-informed and had lots of experience in working with electronic resources. The two colleagues from the University of Namibia were selected on the basis of the researcher's personal networking circle.

3.4.1.2 Selection of the Ministerial libraries

An administrative list of all the ministerial libraries was provided to the author by the Head of Ministerial libraries in Namibia, in the Ministry of Education. This list was used as a frame from which the sample population of ministerial libraries and librarians was selected. Greenfield (2002) suggested that the frame should not include individuals who are not part of the target population, otherwise results will be distorted.

3.4.1.3 Selection of the key researchers

Key researchers were selected by the librarians. The technique employed by Librarians to select key researchers in their institutions was based on a random sampling technique. Selecting researchers randomly was useful for this research since the n units from the population have an equal chance to be selected, as noted by Greenfield (2002). This is preferable; however this research was only interested in key researchers and frequent users of

the library. Therefore, not all government officials in the respective institutions could be included in the study. If they were then the reliability of the responses could not have been tested.

3.5 Research instrument one (Questionnaires)

According to Patton (1990) quoted by Li, questionnaires are used predominantly to collect quantitative data, although they can yield an elementary level of qualitative data (Li, 1999, p.39). A mixture of both structured and semi-structured questions were asked. Three sets of questionnaires were constructed well in advance giving the researcher ample time to consider what information was required.

3.5.1 Questions design

The questionnaire was designed to find out the usage of electronic information resources and the patterns of different practices used by Librarians to market and promote their electronic information/services. Eight principles in designing questions as recommended by (Greenfield, 2002) were followed. These include reliability; validity; description; response rate; same meaning for all respondents; relevance; exhaustiveness and inclusiveness. In this instance, "a mixture of open and closed questions (asking for both facts and opinions) was used, as recommended by Peterson" (Gardner, 2002, p.34). Therefore an optional section consisting of open ended questions was asked at the end of each questionnaire to gather respondents' openended thoughts related to their preferences and use. Closed questions were used because they are "easier to answer and help to aid recall" (Gardner, 2002, p38). Library users were also asked to rate questions on the importance and usage of electronic resources. Rating scales are mutually exclusive and not ordered in relation to each other. (Gomm, 2008, p27).

Questionnaires for the different user groups were designed as follows:

a) Ministerial Librarian questionnaire

21 questions were designed with the goal of achieving a high response rate. Six of the questions were open ended.

b) Users questionnaire

A cluster of 14 questions was designed to gather information about the perceptions, preferences, and use of electronic resources of Government employees/ officials. Of the 14 questions, 3 were open-ended and 1 was based on scaling.

3.5.2 Administering of questionnaires and data collection

Before questionnaires were administered, they were first edited to ensure legibility and accuracy of the answers provided. Librarians identified members of their institution's staff to approach with the questionnaires. These were people who were involved in research and those who are likely to use the library services but also individuals involved in management decisions, thereby ensuring a broad range of responses, from a variety of professional perspectives. 40 questionnaires were printed and administered to 40 library users, however only 37 were returned giving a 92% response rate.

The questionnaires were administered by means of face-to-face administration and internet based, which included electronic mail (e-mail). The email was sent as an attachment. Two of the ministerial librarians received an emailed questionnaire and the other three received a face-to-face/ hand delivered questionnaire and all were returned giving a 100% response rate.

The researcher found the electronic mail (e-mail) method fast and cost effective in comparison to printing questionnaires. A disadvantage of using an e-mail survey is the possibility of misdirected or failed addresses (Schaefer and Dillman, 1998). Another problem was that the manner, in which the questionnaire was designed, was not email friendly. It was initially designed to be printed and completed by hand. A possible problem faced by users could have been that they may not understand how to return an e-mail attachment or even complete the questionnaire. This was partially solved by the inclusion of clear, concise instructions, but it may have been off-putting for some respondents. (Garner, 2002).

There are other methods, such as telephone and postal that could have been used, however the above two were chosen because of their reliability. The sample population was within reach and administering the questionnaire on a face-to-face basis was easier to do.

3.6 Research instrument two (Interviews)

The main purpose of the interviews with the experts was to determine the need for digital libraries and to investigate their usage and promotion of electronic resources. Their findings will provide ministerial libraries with invaluable ideas on how best to organise electronic resources for effective information delivery and retrieval through the introduction of digital libraries. Findings also helped in providing workable recommendations for ministerial libraries.

Face-to-face Interviews were chosen to supplement the answers provided by ministerial librarians in the questionnaires and to clarify any ambiguities. This is proved by Greenfield (2002, p.208) when he noted that interviews "facilitate access for immediate follow-up data for clarification and omission". Interviews are useful for gathering information that is rich in facts and opinions and the data collected is generally qualitative in nature. (Rowley, 2006, p.183). In face-to-face interviews, "interviewer can monitor respondents' body language and by their presence may encourage respondents to provide more, and more through responses" (Maxim, 1999, p.281). One of the disadvantage of interviews as noted by Greenfield (2002, p210) depends on the ability of the researchers to be resourceful, systematic and honest, to control bias. Marshall and Rossman (2006, p.102) noted that interviewers may fail to comprehend responses to the questions or elements of the conversation. High costs in transportation can also be a challenge for interviewers as they might have to travel to the subjects to conduct face-to-face interviews.

Structured interview questions are relatively easier to analyse than unstructured questions. However a disadvantage of qualitative research is that the research tends to become subjectively immersed in the subject matter. Under the qualitative approach, in depth structured interviews were conducted.

3.6.1 Design of interview schedules

Questions were prepared beforehand and structured interview questions were designed to generate qualitative data. Structured interview questions were "guided by a list of set topics; the interviewer allows the interview to develop in response to the interviewee's comments. Such interviews are useful for discovering the unknown and identifying facts or attitudes that might not have been predicted to be an issue...based on a predetermined checklist" (Rowley, 2006, p.183).

Seven questions were devised for interviews with ministerial libraries and eleven questions were drawn up for interviews with the experts. A series of structured questions for the interview were drawn up with the assistance of the supervisor and the senior librarian at the National Library of Namibia.

3.6.3. Interview process and data collection

Meetings were arranged with Librarians and the experts well in advance. The meeting with the Director of Information Resources Directorate was scheduled through the secretary. Scheduling an interview proved useful because the interviewees were receptive to the researcher since she showed a concern for the staffs' valuable time.

Interviews were conducted with four librarians in 4 respective ministries in Namibia. One could not be interviewed because she went on work vacation before the interviews could be conducted. (Detailed interview analyses of ministerial librarians are attached as appendix 4). Three resourceful persons in the UK, one at the Andersonian library, University of Strathclyde, one in the Information Resources Directorate, University of Strathclyde and one in NHS, Glasgow were interviewed.

The Librarians at the University of Namibia were unfortunately unable to meet with the researcher due to time constraints therefore they were not interviewed.

The interviews were very informal but yet the researcher maintained the order and focus of the interview. The interviewer allowed the interviewee to express their views on service provision.

All interviews were recorded by means of hand written notes.

3.7 Research process

3.7.1 View points from the experts

The first approach in gathering information for the study was to seek opinions from libraries who are already involved in the dealings and handlings of electronic resources. These were NHS (National Health Service) in Glasgow, the University of Strathclyde, Andersonian Library and the University of Namibia. One of the reasons for this was to probe more deeply into what these resourceful persons, whom I have referred to in this study as experts, had to say regarding the usage and promotion of electronic resources in their respective institutions. It also aimed to find out the need for developing digital libraries. This was essential so as to have a foundation upon which the research could be built.

3.7.2. Literature searching

The second stage of the research was to consult the secondary literature to establish the main issues. This began by undertaking a literature review of the key themes of this topic. This process assisted the author to gain a better understanding of the complexity and diversity of the subject.

The first step to effective information retrieval was to define what was expected from the study. As a result the researcher had to define keywords and use different phrases and formulate questions for the search strategies.

Keywords identified were: special libraries in Africa, electronic resources, electronic services, digital libraries, library marketing, library promotion, Namibia libraries

Searches for literature on the topic were conducted on LISA (Library and Information Science Abstracts) and the Emerald Management Database. The majority of the articles which formed the base of this study were found on these databases and provided relevant links to full text journal articles and abstracts.

Further searches were conducted on the University of Strathclyde's and the University of Namibia's library catalogue. Books borrowed from the Andersonian library, University of

Strathclyde, University of Namibia library and the National Library of Namibia yielded a greater wealth of information on research methodologies, marketing and promotion of library resources.

Other literature used consisted of newspaper articles and previous dissertations from the Department of Information and Computer Sciences at the University of Strathclyde. The previous dissertations provided useful bibliographies and insights that helped to broaden the search. However, Journals overall proved to be the most valuable sources as there are a few books published on the subject, while websites and newspaper articles were even of greater benefit because of their currency.

Finally, several Google searches were carried out, which yielded some interesting websites, including IFLA (International Federation of Library Association) and CILIP (Chartered Institute of Library and Information Professionals).

3.7.3 Data collection techniques and procedure used

Questionnaires were administered and interviews were conducted. (See the details in the two sections on research instruments).

3.8 Data analysis

Data was analysed using the SPSS (Statistical Package for Social Scientists) and Microsoft Excel. This helped draw critical evaluation of the data on the overall picture of the usage of electronic resources and services patterns of information seeking by government employees in the Public sector in Namibia. This also helped in drawing conclusions on the need for digital libraries and promotion and marketing of electronic resources and services in ministerial libraries.

3.9 Ethical considerations

In terms of ethics, respondents were asked to voluntarily complete the questionnaires or fill in their personal details however their confidentiality was guaranteed. Questionnaire results were subsequently made anonymous, to preserve respondent confidentiality. A decision was also made to make interview responses with the experts anonymous. Their names were excluded from the data analysis, however their institution names were provided.

3.10 Limitations

Questionnaires were not piloted due to the limited time frame, nevertheless they were examined by the project supervisor and by senior staff at the National Library of Namibia before they were sent out to respondents. The researcher was limited in the number of instruments to use. However, other research instruments could have been used for example observation as a mystery shopper, which would have otherwise provided relevant results. "The engagement of different research methods seeks to assist towards the validity of the findings" (Siatri, 1998). The Snowball sample helped in deciding what sample to select for the study however; there were many contradictory findings from the analysis. This might prove that this was not the best sampling method to use. Although qualitative data presents a particular challenge, in terms of analysis and presentation of results, it was hoped that this kind of data would be most useful to those involved in the promotion and marketing of library services, guiding them in how to tailor services to the needs of users.

Only three experts were interviewed giving a 60% response rate. Their findings were taken into consideration. Eventually, three responses may not provide the quantities of detailed data needed to conduct thorough information on electronic resources from one academic library and one specialised library, which would perhaps be more feasible if undertaken as part of another Masters dissertation spanning over 6 months or longer. As a result the internal and external validity of the responses given cannot be affirmed. Internal validity: refers to the truth of a claim made about the research itself. External validity or generalisation: refers whether what was found in the research can be generalised to other people, places and time. (Gomm, 2008, p.13)

3.11 Conclusion

Although survey methods can be obtained with other methods, the structured questionnaire remains the most common method of obtaining a structured set of survey data. (Greenfield, 2002, p.174). The sample was very small however; it was feasible to study a small sample of the population given the limited time frame to carry out the research. Not only was it

feasible, but it was also cost effective in terms of transportation to and from the chosen population.

The information gathered from the interview allowed the researcher to draw up valuable conclusion to guide library policy and decision-making. Not only that, the findings also helped in drawing up possible recommendation for future marketing and promotion of the ministerial library services.

CHAPTER 4: INTERVIEW RESULTS

4.1 Introduction

This chapter provides a detailed discussion of data collected from primary sources by means of interviews. The findings are analysed, in order to enable feasible, relevant, and reliable recommendations and conclusions. Findings on issues such as types of electronic resources, promotional activities and challenges faced both by experts and librarians in their institutions are provided.

4.2 Results from interview with the experts

The following information was obtained from participants, with regard to the provision and promotion of electronic resources in academic and specialised libraries in the United Kingdom (UK).

4.2.1 Whether they provide electronic resources and the type of resources provided and its main users.

All interviewees stated that they provided electronic resources. It was noticed that they provide similar types of resources. The expert at Andersonian library said they provide: Library Catalogue; Subject Guide Pages; Legal Database Services (including access to case law and legislation); journals; books and other commentary (some included within other database services). Students and Academic staff are said to be the main users of these resources.

The librarian in NHS said they provide Databases; electronic journal; SPSS (statistical software); CD-ROMs; library audiovisual collection (DVDs, audiotapes and videos); Library Services website; Staffnet (intranet) pages and Maria Henderson Library blog. Its main users according to the librarian are NHSGGC staff and partners as well as some undergraduate students and staff of voluntary organisations. Meanwhile, the Director of Information Resources Directorate alluded that they provide electronic books and digitise special collections which are marketed to the whole world.

4.2.2 They were further asked what criteria they use in determining which resources to buy.

All interviewees have similar approaches and one common criteria used by each is cost. The expert at Andersonian library said they are likely to use cost and alternative availability of content. The librarian in NHS also said they use costs as well as the "relevance to organisation's needs and reputable source". The Director of Information Resources Directorate said "we try experimenting and look for materials that are easy to digitise and out of copyright." They select materials that other libraries do not offer already and digitise rare and special books that the University of Strathclyde specialises in.

4.2.3 What electronic services do you provide and how well are they used. Alongside this question a follow up question was asked on how they determine the usage of their resources.

The expert at Andersonian library said that they provide Electronic Library Account (online renewals etc); Email enquiries which he said are quite well used. To determine the usage of their resources, what they do is according to the librarian, "Enquiry statistics are recorded; hits on web pages are recorded; database services providers feedback usage statistics".

The librarian in the NHS stated that they have 9 PCs with Microsoft packages and internet access – 8 of them are on NHSNet and one on the Glasgow University network. We also have 3 laptops and a projector. Also a TV/DVD/video player, printers and a photocopier/scanner. These resources are well used as well, she said the following... "PCs and printers and photocopier/scanner used every day we're open. TV/DVD/video player rarely used, as people borrow DVDs etc to watch at home." Similarly, the NHS also record circulation statistics for items borrowed. They have door statistics for people visiting the library however from what the librarian said, "We don't have to monitor PC usage yet, so there are no figures kept for that – I believe that IT would have login details if we asked". The Information Resources Directorate provides a large collection of books on the web, about 36000 for future researchers.

4.2.4 They were asked to state what the most significant barriers they face in providing electronic resources.

The expert at the Andersonian library said Licensing / copyright restrictions and high cost to subscription. Different from what a specialised library faces, the librarian in NHS said that the major barrier is IT.

IT because of the fact of "not having the budget to replace elderly equipment. Also the local network is slow and firewalls cause problems in using the internet". A challenge faced by the Information Resources Directorate at the University of Strathclyde is the fact that they have not developed the process of how to handle digitised materials yet.

4.2.5 They were asked to explain in their view what they think are the main advantage of having electronic resources.

The expert in Andersonian library responded by saying "Ease of access; multiple access and flexibility of searching" whilst the librarian in NHS said Accessibility – people can (when it works) access resources from their desktop and don't have to travel across the city to contact us". Advantages pointed out by the Director of Information Resources Directorate were that it is easy to reach data in long term and there is storage for it.

4.2.6 They were asked what they think is the main disadvantage of having electronic resources

The expert at the Andersonian library respondent by saying "users become unable to use traditional resources, which must on occasion be used". Similar thoughts were echoed by the librarian in the NHS, when she said "when the computer or the network fails you can't get the information you need. It also encourages people to think that all they need is available on Google for nothing, and there is a responsibility on us to make sure people are made aware of reputable sources of information".

"No one is controlling the born digital resources. We need to hire professionals to deal with the daunting task of electronic resources" said the Director of Information Resources Directorate at the University of Strathclyde. He further explained that "getting people to understand the importance of electronic resources is a challenge".

4.2.7 They were further asked whether they market their electronic resources, who they target and what marketing techniques they use.

The marketing of electronic resources is geared toward new students. The reasons for this according to the expert in the Andersonian library is because, if they are introduced at an early stage they are more likely to make use of the resources. The methods they employ are user induction at beginning of term; guides; and publisher-supplied advertising merchandise (such as pens) for distribution.

From the librarian the NHS's point of view, they target NHS staff members as well as users and non-users of the library. When it comes to marketing, they use anything they can think of for example targeting existing staff training (e.g. offering resource lists and eLibrary training to people doing courses), emails, posters and flyers, speaking at inductions and meetings, word of mouth, website and blog.

4.2.8 They were further asked if there were other issues they feel the library needs to address

The expert in Andersonian library feels that there is a need for utilising online methods of information skills training.

According to the librarian in NHS "they will have a new training and marketing strategies in a few months, which should tie their efforts together a bit". She further said that electronic resources and services add so much to what they do example "our library serves staff across hundreds of sites in Glasgow and Clyde, many of whom would never hear of us or visit us without a targeted email or a visit to Staffnet when we have some new information. If only the NHS IT could keep pace with what we want to do".

A crucial point that she mention was shortage of funding. She ascertained that "we don't have enough staff or funding to do what we want to do, but that's the same everywhere – we just have to do the best with what we have and try not to over-stretch ourselves".

The Director of Information Resources Directorate responded by saying that the digitisation of electronic resources and handling or restoring born digital resources is a global problem that would require one to continuously talk about to key decision makers.

4.3 Findings from librarians interviews

The interviews conducted with the librarians revealed a great deal about electronic resources and promotion in their respective libraries.

It was interesting to note that the NPC library does not provide electronic resource apart from what she says "apart from CDS/ISIS". The Fisheries library agreed that they have a bibliographic database "We had inmagic but the system has long failed and now we are using CDS/ISIS". Apart from providing electronic resources one library (NESEIC) is also engaged in digitisation of electronic resources "we will soon have a database for reprint articles on Namibian geology because of a scanning project that is currently on going". To have

electronic resources mean one should have a high level of understanding and skill to know how to handle these resources. Librarians were then asked whether they had training before. The fisheries librarian received one week training with INASP and NESEIC said "I have taught myself but more still has to be learned if we want to assist clients effectively". This shows the enthusiasm of librarians by taking initiatives to go the extra mile to teaching themselves on how best to serve their clients.

With the skills gained and the skills they currently have, librarians will be able to assist users with information retrieval as well as provide ICT training to library users. It was uncovered that, one library (NESEIC) provides easy reading instructions or steps on searching techniques attached next to their computers for users to follow. None of the libraries however provide independent searching. Most of the responses given were "*No we don't*".

It was also interesting to hear that it looks like as if librarians do not really have an idea of what their budgets were. A few responses were: "I don't have the figures just yet". "I cannot confirm this but..." Some of the figures given were sniffed around from under piles of papers. It was however expressed by some librarians that they do not have independent budgets. NPC said "there is no specific budget for the library. We purchase library materials through the Directorate's budget. There were those who had no problems in renewing their electronic resources subscription because of an organised structure in place. Fisheries is a good example, they said "We don't have problems in paying our electronic resources because we have a library committee in place, which is a deciding body for the library"

The resources are very expensive and it looks like libraries are just providing these resources without keeping track of their usage. They could not provide official figures on the usage of electronic resources. The fisheries librarian concurred with this point, when she said "It is not easy to determine the usage because users need passwords".

In terms of marketing and promoting library services, the Fisheries library subscribe to CTA for selective dissemination of information and other libraries are busy creating library brochures for promotion purposes.

When asked about the challenges they face in the usage of electronic resources. Library staff were unanimous: Staffing and access to the internet is a challenge faced by most libraries. NESEIC raised interesting comments "You can download just one article the whole day...we get access through OPM which causes great bandwidth problems. There are too many firewalls that prevent us from providing users with useful information and links to useful sources".

Finally, librarians were asked if they had anything to say regarding the use and promotion of electronic resources in their libraries. The majority expressed positive comments regarding the future of their libraries. Fisheries stated that they want their library to be effective and

hopefully decentralise and target a wider audience. Meanwhile NPC emphasised the importance of informing clients of where to go for relevant information.

CHAPTER 5: DATA ANALYSIS

5.1 Introduction

This chapter looks at the findings derived from data collection, which was coded from the questionnaires and analysed quantitatively using Microsoft excel and SPSS software. It will be recalled that the objective of the study was to investigate issues relating to the usage as well the promotion of electronic resources in Government specialised/ministerial libraries. Graphs, tables and statements are used in this chapter to highlight principle points raised by respondents. A detailed interpretation of the findings is discussed in chapter 6.

It is important to note that the numbering sequence of the tables and the figures are based according to the sub-section they come in.

5.2 Data analysis

5.2.1 The response rate from the ministries that were researched

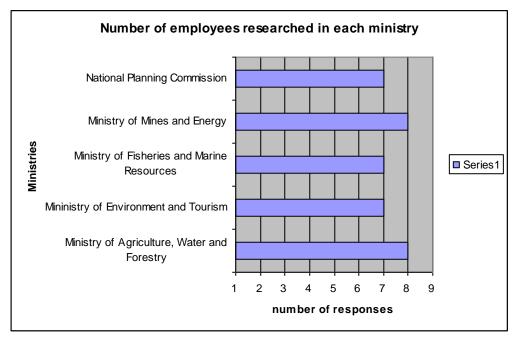


Figure 5.2.1a Ministries researched

Eight users from each ministry were administered with a questionnaire however only a total of 37 questionnaires were returned back, giving a 92% response rate.

5.2.2 Main users of the different libraries

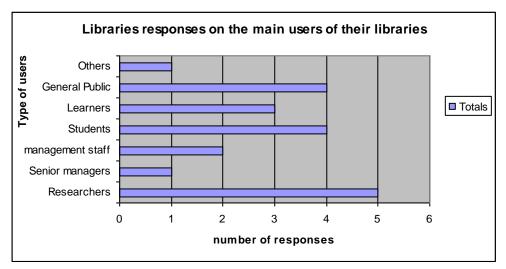


Figure 5.2.2a Main library users

Key decision makers such as management staff and senior managers form the smallest group of library users.

5.2.3 Purposes of visiting the library

(N=5)

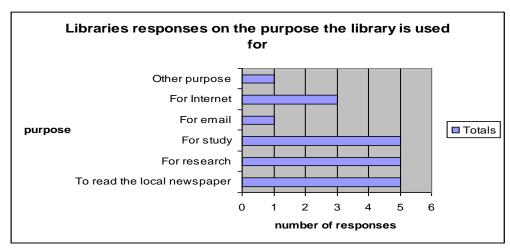


Figure 5.2.3a Purpose for visiting the library (libraries)

Results in Figure 5.2.3*a* indicate that Government ministerial libraries in Namibia are mostly used by people for research, study and reading the local newspaper but less people use it for internet activities. This is similar to the responses provided by library users in Figure 5.2.3*b* bellow.

Thirty seven (N=37) users were also asked for what purpose they use the library for. The results are as follows:

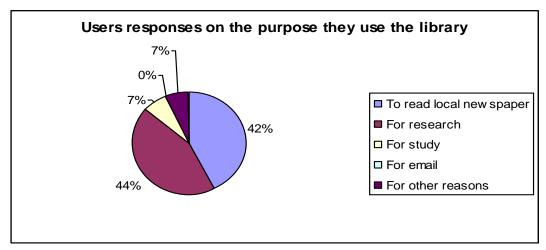


Figure 5.2.3b Purpose of visiting the library (users)

5.2.4 Computer workstations and the internet

Libraries were asked:

Do you have computer workstations?

Yes or No

If yes, complete the following: please give numbers

How many are reserved for exclusively for client use?	
How many are reserved exclusively for library staff use?	

Table 5.2.4a: Computer workstation and reservation for clients and users (N=5)

Libraries	Yes	No	Reserved for client use	Reserved for staff
				use
NAWIC	✓		2	2
MET	✓		2	2
Fisheries	✓		2	2
MME	✓		4	4
NPC	✓		1	1

Libraries were then asked:

Are your library computers connected to the Internet?

Yes or No

If yes, complete the following:

How many are connected to the internet?

Table 5.2.4b: Libraries responses on the number of computers connected to the internet and the number of computers connected (N=5)

Libraries	Yes	No	Number of	computers	connected	to	the
			internet				
NAWIC	✓		4				
MET	✓		2				
Fisheries	✓		4				
MME	✓		4				
NPC	✓		2				

Users were also asked whether they have a computer in their office and whether it was connected to the internet (n=37).

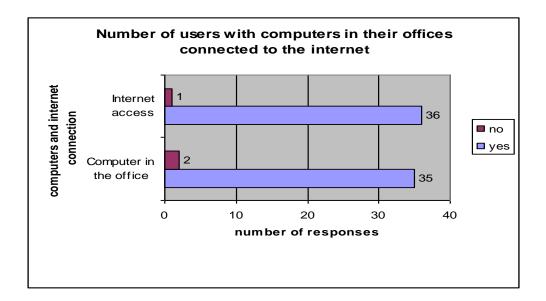


Fig 5.2.4c Usage of computers and Internet

Almost all respondents said they have a computer connected to the internet, which gives a good indication that Government ministries have embraced technology. This technology is being used for various reasons as depicted in Figure 5.2.6f.

5.2.5 Type of electronic resources provided by the different libraries

Libraries were further asked:

Does your library provide Electronic bibliographic databases?

Yes or No

If YES, please state the ones provide by the library.

Table 5.2.5a: Electronic bibliographic databases and the type provided (N=5)

Libraries	Yes	No	Bibliographic databases provided
NAWIC	√		Winisis and SEC
MET	✓		Winisis
Fisheries	✓		NISC
MME	✓		Isis
NPC		✓	None

Libraries were then asked:

Does your library provide Electronic full text databases?

YES or No

If YES, please state the ones provide by your library.

The results are summarised below in a table form:

Table 5.2.5b: Electronic full text databases and the type provided (N=5)

Libraries	Yes	No	Full test databases provided		
NAWIC	✓		ISIS		
MET	√		Research discussion papers publications/ reports and statistics		
Fisheries	✓		OARE and AGORA		
MME	✓		Earth data, Ebscohost and Georef		
NPC		✓	None		

(N=5)

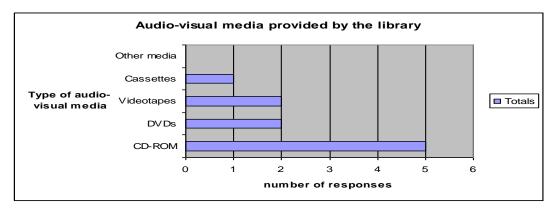


Figure 5.2.5c Audio-visual media provided by the library

CD-ROMs are amongst the basic electronic resources provided by Government ministerial libraries as depicted in Figure 5.2.5c. It is also revealed that only 1 library still uses radio/tape cassettes.

Libraries were then asked to:

Indicate what percentage of their current collection is print based, and what percentage is electronic resource based.

The results are summarised below in a table form:

Table 5.2.5d: percentage of your current collection in the library (N=5)

Libraries	Print	Electronic
NAWIC	90%	10%
MET	95%	5%
Fisheries	60%	30%
MME	90%	10%
NPC	99%	1%

Libraries were also asked:

Does your library provide any of the following digital services and user access?

They were asked to tick the ones they provide.

Table 5.2.5e: Digital services provided to user access as remote access or in the library

Type of	Remote access	In library o	only			
Digital Service		NAWIC	MET	Fisheries	MME	NPC
Digital enquiry, reference services	0 0 0 0 0	0	√	✓	√	0
Digital reservations, renewals, etc.	0 0 0 0 0	0	√	√	✓	0
Digital Inter Library Loan	0 0 0 0 0	0	0	✓	√	0
Access to online / electronic resources	0 0 0 0 0	0	√	✓	√	0

Online catalogue (OPAC)	0 0 0 0 0	0	✓	✓	✓	√
Other Digital ser	rvices, please give details	s:				

Libraries do not provide remote access to their electronic resources and services. A user has to be within the library to use digital resources. This means that even if they have a computer accessed to the internet, they will still be unable to access library resources remotely.

Table 5.2.5f: Users responses to whether their libraries provide electronic resources (N=34)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	59.5	64.7	64.7
	No	4	10.8	11.8	76.5
	Don't know	8	21.6	23.5	100.0
	Total	34	91.9	100.0	
Missing	0	3	8.1		
Total		37	100.0		

The results in Table 5.2.5*f* indicate that the majority of users (65%) are aware that their libraries provide electronic resources.

5.2.6 Determining the need and importance of electronic resources

Although, people do not have to physically go to the library to know it exists, it was felt that if people are to use the library resources they should be familiar with the library services. It was motivating to find out whether people were actually using the library resources. This was important because this will determine the pattern of library usage and to see if people actually know a library exists or not. This will also help in determining the need and importance of the library.

Table 5.2.6a: Users responses to the number of times they visit the library (N=37)

		Frequency	Percent
Valid	Frequently	23	62.2
	once a week	9	24.3
	once a month	3	8.1
	less frequently	2	5.4
	Total	37	100.0

Most users as depicted in Table 5.2.6a visit the library on a frequent basis, for newspapers, research and study as seen in Figure 5.2.3a and Figure 5.2.3b.

Users were further asked how often they use online resources for work or study purpose. The results are as follows:

Table 5.2.6b: Users responses to how often they use electronic resources for work or study purposes (N=35)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very often	19	51.4	54.3	54.3
	Seldom	15	40.5	42.9	97.1
	Never	1	2.7	2.9	100.0
	Total	35	94.6	100.0	
Missing	0	2	5.4		
Total		37	100.0		

Table 5.2.6b shows that 54% of the users use electronic resources very often; however, they do not use those provided by their respective libraries, as depicted in Table 5.2.6c bellow.

Libraries were then asked:

To state in their opinion, what services are mostly used by users.

Table 5.2.6c: Libraries responses to services mostly used by users (N=5)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Print based resources	3	60.0	60.0	60.0
l	Both	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

Users were asked to state what type of information sources they consult first when doing research.

Table 5.2.6d: Users responses to the type of information sources consulted first when doing research (N=36)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Print materials	7	18.9	19.4	19.4
	electronic resources	11	29.7	30.6	50.0
	all the above	18	48.6	50.0	100.0
	Total	36	97.3	100.0	
Missing	0	1	2.7		
Total		37	100.0		

Users were asked to explain which resources they feel most comfortable with using.

Responses that came to the fore are as follows:

Table 5.2.6e: Users preference

Preference of using electronic resources over	Preference of using print resources over
print resources	electronic resources
"I can access that from my office and it is faster" "are easier to access, but again not all resources are online. Available anytime as long as there is internet connection"	"print resources: This is because one can always have a backup in case of system failure, and I can take it with at home, so that I do the research at home, as I currently do not have a computer at home that I can use an electronic
"it is fast and easy to use"	resource with. It is also preferable for a print resource as it saves time to wait for assistance for the electronic version,
"easy and faster to browse"	as there are few computers used for information searching, and many people need assistance"
"I can read and print at the same time. Also it	
is easy to copy and paste always"	"print resources are easier especially for editing purposes"
"are easy to access anywhere"	"Print resources because they are
"it is easy to carry"	accessible anytime"
"Electronic resources are easier to store, office space' and easier to carry around".	

Users were asked to indicate what they use the internet for. The results are as follows:

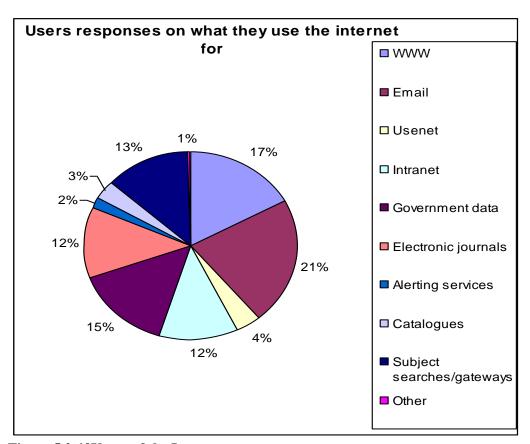


Figure 5.2.6f Usage of the Internet

Library users use the internet for emails and the WWW as depicted in Figure 5.2.6f. This could be the reason why users do not use those electronic resources provided by their respective ministerial libraries because they probably use the WWW to research information for their study materials or for general information.

5.2.7 Users' experiences of electronic resources provided by the library

Libraries were asked whether they offer ICT skills training in their libraries. All of the libraries said NO they do not offer ICT skills training.

However when users where asked to state how easy to use library resources were, the following responses came to the fore.

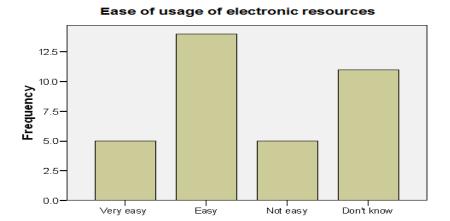


Figure 5.2.7a: Ease of usage of library's electronic resources

The majority of users find electronic resources easy. However, we have seen in Figure 5.2.3a that most users go to the library to read the local newspapers, for research and to study. We also saw in Table 5.2.6c that most users use print based resources as stated by the libraries.

Users were also asked to indicate how important to them the following aspects of usage of electronic resources are.

Table 5.2.7b: Users responses to the importance of using electronic resources

	Very important	Important	Neither important nor unimportant	Not important	Very unimportant
Fast downloading Speed of articles	21	3	1		
Easy to use	9	2	1		

5.2.8 Methodologies employed in marketing the resources to employees

The five libraries were asked to explain how they promote and create awareness of electronic resources to their users. The first library said "there is no promotion done on that side". The second library said "I provide information literacy to student and some staff member on how to access the information on electronic resources". The third library stated that "currently I am

informing the users during library orientation, which especially targets new staff member in the ministry and also old staff members who were not provided with this service before. At the moment I am also doing a user survey in order to see whether the library is delivering good quality services to staff members where a question on e-resources is asked". The fourth library explained that, "they promote electronic resources by email" and the last library "use to email everyone in the institution"

Users were also asked whether their libraries market and promote electronic resources. The graph bellow depicts their responses. (N=18)

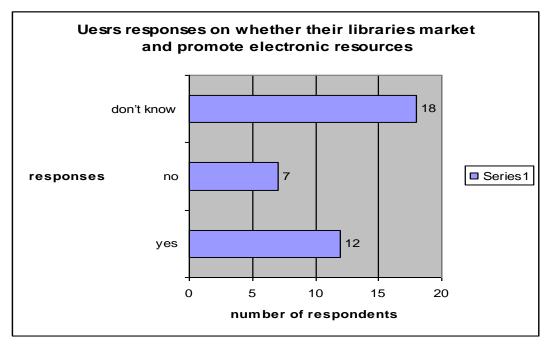


Figure 5.2.8a: Resource marketing and promotion

The majority of users in Figure 5.2.8*a* have no idea whether their libraries promote electronic resources. However, one can argue that, the 12 respondents who said yes, are amongst those few who consult both print and electronic library resources (Table 5.2.6*d*) and find it easy to use (Figure 5.2.8*a*).

5.2.9 Major challenges identified with the usage and provision of electronic resources

In pursuit of a better understanding of the problems faced by users when using electronic resources, users were asked to explain the most significant barriers they face in their use of electronic resources.

The results are recorded in table 5.2.9a as follows:

Table 5.2.9a: Significant barriers in using electronic resources

Most significant barriers in using electronic resources experienced by the users

"More often then not one cannot access these things, due to slow internet, limited computers on which these items appear"

"Users with high educational degree tend to spend more time, on the internet and find internet resources more useful than less educated users and some time internet is very slow or offline"

"First and foremost, the poor internet connection/service. To access journals and databases we still need to use internet"

"We need to have subscription of full text articles to various journals. Barriers is financial in nature i.e budgetary"

"Membership fee payment that is mostly done with visa cards, which to me is not safe, and is not of interest to most of us"

"Slow speed frustrates the use of internet resources"

"Have to be a member of some institution and have access"

"We don't have or we are not subscribed to electronic journals as a Ministry and we need that urgently. The internet is very slow. The database is effective though"

"Internet connection. Sometimes it is offline, slow or not available at all. Payment methods"

"Some need subscription or are of pay to view nature. Some could be expensive to access"

Librarians were also asked to state the challenges they face when providing electronic resources. Results are as follows:

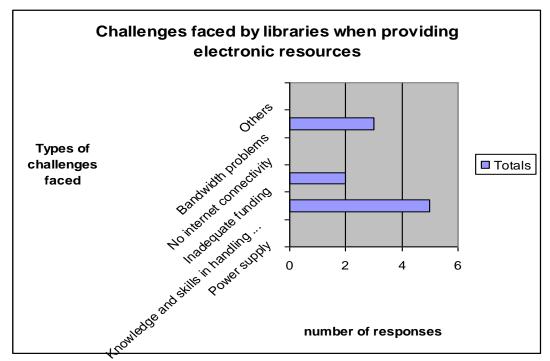


Fig 5.2.9b: Challenges faced when providing electronic resources

All librarians felt the lack of knowledge and skills in handling electronic resources was a major challenge. Only a small number said inadequate funding was a problem.

Libraries were then asked:

How would you rate the adequacy of the online access speed (bandwidth connectivity) for the library?

Table 5.2.9c: adequacy of the online access speed (N=5)

Libraries	Good	Bad	Reason for the answer
NAWIC		✓	Very slow
MET		✓	Inadequate IT support
Fisheries		✓	Too slow
MME	✓		Fast enough
NPC			No answer

Table 5.2.9d: Users responses to the speed of the internet connectivity (n=37)

V	* * *	
Very fast Fast Slow	Very slow	Don't know 9
2 8 12	6	

5.2.10 Qualifications, training and staffing

Table 5.2.10a: Highest qualification obtained (N=5)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Post graduate degree	1	20.0	20.0	20.0
	Undergraduate degree	3	60.0	60.0	80.0
	Grade 12	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

Table 5.2.10b: Training workshop received on electronic resources

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Six months ago	4	80.0	80.0	80.0
	Never	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

Libraries were also asked:

Libraries were asked to provide their Provide the staffing establishment of their libraries.

The results are summarised below in a table form:

Table 5.2.10c: Staffing establishment

Libraries	Staffing establishment
NAWIC	2-library assistants, 1- Junior assistant and 1- senior assistant
MET	1-librarian and 1- senior librarian
Fisheries	1-librarian
MME	1- librarian (on study leave), 1-library assistant, 1-technical assistant and a library geologist
NPC	1- librarian

5.2.11 Budget

The following are the figures of the overall budgets of the different libraries for the current financial year (2007/8). NAWIC has an estimated amount of about N\$937 000.00 MET said they do not have a specific budget for the library, however they estimate their budget to be at about N\$10 000.00. Fisheries have two budgets which belong to two different divisions from where they get their share. The two budgets are N\$861 500.00 and N\$300 00.00. MME estimated their current budget to be about N\$500 000.00 and NPC said they don't have their own budget; it is within the overall budget of the directorate. It is important to note that in comparison to the UK, the exchange rate is "£1=N\$14.090" (Yahoo, 2008).

When they were asked to provide their current budget for electronic resources, the following amounts were provided by the different libraries. NAWIC's is N\$255 000. 00, MET does not have a specific budget as it is part of the bigger budget. Fisheries have an amount of N\$525 000, NESEIC has about N\$550 000.000 budgeted for electronic resources and NPC has none. The budget was also a problem raised by the libraries. Four of the libraries said they did not have their own budge for electronic resources. According to the libraries, their budgets are part of a bigger budget that could not be defined. Only two libraries had a sufficient budget for electronic resources although their budgets were also a portion of a bigger budget. These findings are similar to what Mutula (2004) reported when he stated that "funding that is

provided to libraries is not necessarily separate from the amount the library is often allocated by the parent organisation" (Mutula, 2004, p283).

CHAPETR 6: NTERPRETATION OF THE FINDINGS

6.1 Introduction

This chapter discusses the findings from the analysis, which are interpreted, based on the core and research objectives, as follows. It will be recalled from chapter one that five Namibian Government ministerial libraries are under consideration, namely Ministry of Agriculture, Ministry of Mines and Energy, Ministry of Fisheries, Ministry of Environment and Tourism and National Planning Commission. Please take note that percentage figures have been rounded off to a whole number.

6.2 Electronic resources being provided by Government ministerial libraries

6.2.1 Type of electronic resources provided by the libraries

All libraries excluding NPC provide CD-ROMs and electronic bibliographic databases and the most common bibliographic database amongst them is Winisis. Fisheries library provide access to the NISC bibliographic database and NPC provides none. It was however clarified in the interview with fisheries and NPC librarians that they also provide access to CDS/ISIS library catalogue. This goes to show that there is very little knowledge on terminologies.

All libraries provide full text databases, however the responses that came from NAWIC (ISIS) and MET (Research discussion papers publications/ reports and statistics) in Table 5.2.5b raise queries because these are not full-text databases. ISIS is a bibliographic database. This also is a case of terminologies and lack of knowledge on the meaning of full text database.

From the results provided in Table 5.2.5*b*, it can be concluded that none of the libraries provide access to free online resources, most of the databases mentioned i.e. AGORA, Ebscohost, GEOREF and OARE are commercial databases that require a subscription fee. Access to these databases requires an authenticated password. It also came to the researcher's attention in the interview conducted with NESEIC librarian that, GEOREF only provides

access to abstracts not full text articles and the librarian reported that they also digitise articles on Namibian geology.

None of the electronic services provided by the libraries is accessible remotely as indicated in Table 5.2.5e. Users have to come to the library if they wish to borrow books, make enquiries, reserve for materials- and also access online /electronic resources. This can pose a challenge to users in situations where they urgently need resources but cannot physically visit the library. This could also mean that that even if they have a computer accessed to the internet, in their offices they will still be unable to access library resources remotely.

6.3 Determining the need and importance of electronic resources

6.3.1 Main users of the different libraries

The findings in Table 5.2.6a indicate that 62% of users frequently visit the library for newspapers, research and study. It is obvious from the results in Figure 5.2.2a of the survey that management staff and the senior managers form the smallest group of people who use the library. These are people who are involved in the day-to-day decision making of their institutions. And they do not visit nor make use of library resources. One factor that came out in the literature that could be a contributing factor why senior managers do not visit the library is perhaps based on the nature of their work. Or perhaps rather that they work from the comfort of their own offices as reported by Arms (c2000). They are perhaps the few who do not "do libraries" and would rather use the WWW.

6.3.2 Reasons why people visit the library

It is evident from the findings in Figure 5.2.3*a* that the majority of people go to the library for research purposes, to study and to read the local newspapers. None of the responses from the libraries or from the users stated that they go to the library for electronic resources. They mostly use print resources within the library.

The majority (95%) of the users who were surveyed have computers connected to the internet in their offices as depicted in Figure 5.2.4c and this could contribute to the low usage of internet use and online resources in the library. This would mean government employees use

their computers to either access library resources in their offices, hence the low usage within the library, but the library resources accessed are not those of the various Namibian Government ministerial libraries.

However, when users were asked what they use the internet for, it was uncovered in Figure 5.2.6*f* that most people use the internet for email purposes, WWW and to read Government data. This indicates that, government employees spend more time on email then electronic resources. This was also confirmed by the libraries when asked what purpose the library is used for in Figure 5.2.3*a*.

We can conclude that users do not really use electronic resources provided by the library much. A reason for this low usage of electronic resources could be related to what Spalding and Wang (2006) said. The two authors argue that people still believe that the World Wide Web provides access to the entire world's accumulated knowledge. It is true that, a simple Google search will yield you relevant information to your desired topic however, what people fail to understand is that valuable information will never become available for free. There is always a price charged for it. This is more the reason why, libraries negotiate for licenses to provide users with authenticated and up-to date access to unlimited archival information. (Spalding and Wang, 2006, p.496).

6.3.3 Users' preferences

To survey the users' needs/expectations regarding the usage of electronic resources, users were asked to state their preference of using electronic resources over print resources. The responses analyzed in Table 5.2.6e reveal that more positive comments were geared towards using electronic resources. The respondents prefer using electronic resources because of their convenience in terms of speed, accessibility and portability. These findings have been confirmed by the Andersonian librarian who said *Ease of access; multiple access and flexibility of searching* and librarian and the NHS librarian in the UK who said *Accessibility – people can (when it works) access resources from their desktop*.

However, print resources were also favoured and interesting comments that came forth in Table 5.2.6e are that they are portable, no technical expertise needed, they are easier to edit and are accessible anytime. It is important to note that these are comments raised by employees who do not necessarily make use of electronic resources but who otherwise see the potential and advantages in using them. These findings do not tell us whether those people who said they prefer electronic resources actually use them, nor do they indicate whether these people actually use electronic resources provided by the library. It is interesting to note that, there were some contradictions in a few of the responses given by the users. For example

a user will say she/he has never used electronic resource but will go on to say electronic resources are easy to use. We also saw in Table 5.2.6c that most users use print based resources as stated by the libraries.

It was evident from the findings in Table 5.2.6*d*, that only 31% of the users first consult electronic resources whilst 50% said they consulted both print and electronic resources. It can be concluded that even though, majority of users firstly consult print based materials, those who prefer print based materials also consult electronic resources very often (see Table 5.2.6*b*).

The majority of libraries stated in Table 5.2.6c that 60% of the services used by users are print based resources. The reason for this could be attributed to the fact that the majority of the libraries resources comprise print resources. The highest figure recorded as depicted in Table 5.2.5d is 99% of print resources by NPC library. The Fisheries library has the most electronic resources amongst the five libraries, which constitute of 30% electronic resources and 60% print resources.

6.4 Users' experiences of electronic resources provided by the library

The researcher was keen to know how users felt about the easiness of using electronic resources. Findings in Figure 5.2.7a reveal that majority of users find it easy to use electronic resources. As stated before in point 6.3.3, contradictory responses were noticed, were a users will say they find library resources easy to use, yet they have never used library resources before. The high response rate could mean that the library is providing training on how to use library electronic resources; however we have learned that none of the libraries provides ICT skills training or offer training on how to search the different database at all. It was concluded that, users probably find using databases and other electronic resources other than those provided by the library easy to use, or they have had prior ICT training or information and retrieval skills in their studies or a training workshop.

6.5 Methodologies employed in marketing and promoting of resources to employees

6.5.1 Resource marketing and promotion

The libraries were asked to explain how they promote and create awareness of their electronic resources. From the responses that came from the libraries under 5.2.8, it looks as if they are engaged in the promotion of their resources and services with only one librarian saying "There is no promotion done on that side". The Fisheries library is the only library engaged in library marketing by conducting a user survey to determine users' needs. The librarians also said in the interview that she use CTA for current awareness. NESEIC librarian stated in the interview that they have a brochure for promotion. In conclusion, it can be stated that most of the libraries provide current awareness than promote resources.

The results in Table 5.2.5f: indicate that the majority of users are aware that their libraries provide electronic resources but we have noticed that less of it is being used. It was also interesting to see that libraries said they are engaged in the promotion of their electronic resources however the majority of people from Figure 5.2.8a are not aware of these services that the libraries promote. Clearly, there are almost no promotional campaigns done by any of the libraries. The current awareness campaigns seem only to be reaching a few employees.

6.6 Major challenges identified with the provision and using electronic

6.6.1 Internet speed

Three libraries in Table 5.2.9c .said their internet connection is very bad because of its slowness and inadequate IT support. Library users see fast downloading speed of articles and easy to use of electronic resources in Table 5.2.7b as important. However, from users' comments and those raised by the libraries, we can conclude that, internet connection in most institution is very slow. This is also affirmed by the NHS librarian in the UK.

Users were asked what the most significant barriers in using electronic resources are. From the findings provided in Table 5.2.9a most of them are concerned about the payments to get access to electronic resources. The conclusions that can be drawn from these findings are that

most users do not know which electronic resources are provided by their respective libraries. If they knew, then they will not be concerned with subscription fees, for it is the task of the library to ensure that users get access to full text journal articles either for free or through paid subscriptions.

6.6.2 Qualification, training and staffing

The level of education can also pose a challenge in failing to provide users with electronic resources. The findings in Table 5.2.10*a* revealed that 3 of the staff members have an undergraduate degree, 1 has a postgraduate and 1 has a grade 12 certificate. To the researcher's interpretation, these findings should mean that, if people have the qualification then they should be able to understand and know how electronic resources work. However this was not really the case even for the degree- qualified librarians: most of them (as depicted in Table 5.2.10*b*) last attended a training workshop six months ago, whilst the remainder has never had that opportunity.

This is a problem because managing electronic resources is said to be a daunting task and librarians are encouraged to redefine their skills and knowledge in IT-techniques and IT-knowledge (Witter, 2001). They are also encourage to equip themselves with knowledge and handling skills to be able to meet up with the challenges brought about by technology. Not only has the Internet contributed to information overload but it has also brought about information explosion! This brought in the issue of equipping librarians to have information literacy skills so that they can be able to teach library clients on how to selectively handle information overload (Chanakira, 2008, p3).

Findings in Table 5.2.10c reveal that libraries are mostly managed by a single librarian or by a library assistant. The staffing structure might pose future problems for Government ministerial libraries in Namibia, if this situation is not addressed. Future libraries are becoming more demanding are increasingly making electronic resources available to their users, made through purchases, subscriptions, or by making users aware of the many electronic resources that can be accessed free of charge. These tasks would require skilled and qualified personnel to carry out.

6.6.3 Financial constraints

From the figures provided by the libraries, it looks as if generally most of them can afford subscriptions to electronic resources; however, the problem raised by most libraries is that they do not have their own library budgets. These findings are similar to what Mutula (2004) reported when he stated that "funding that is provided to libraries is not necessarily separate

from the amount the library is often allocated by the parent organisation" (Mutula, 2004, p.283). However, when they were asked to provide their current budget for electronic resources some had funding and others not.

6.7 Conclusion

It has been reported that government officials are cognisant of the fact that electronic resources exist in their libraries however they do not use those provided by their respective libraries i.e. CD-ROM, Full-text and bibliographic databases. It is noted that researchers are the key and main users of the libraries. Most users prefer using electronic resources due to their easiness to carry and speed to retrieve; however, the majority of people who visit the library still make use of print resources due to the slow speed encountered when accessing electronic resources and easiness to read print and edit text. Libraries engage in marketing and promotion of library services; but the majority of people are not aware whether these marketing and promotions take place. It was noticed that in practice (as opposed to in terms of the responses to the researcher's enquiries) there are no promotional activities taking place in the libraries. Poor staffing establishments, budget constraints, slow internet speed and lack of adequate skills are factors that hinder librarians from providing electronic resources to government employees.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter looks at the conclusion and the recommendations drawn from the survey findings.

7.2 Conclusion

Namibia just like many developing nations is experiencing the digital revolution, and electronic networking facilities have been made available in Namibia since 1995, as noted by Chisenga (1997). The automation environment in Africa is improving but there are several challenges to be addressed and these challenges brought about by the emergence of electronic resources are indeed food for thought for Librarians in Namibia to address and overcome. (Mutula, 2004, p.287)

This paper has sought to demonstrate the importance of electronic resources in government ministerial libraries. The premise of the study was based on the assumption that ministerial libraries provide electronic resources, however they are underutilized because people do not know about them and because there is very little marketing and promotion done. It can be said that methodologically, the study was able to meet its aims and objectives through a survey study type of approach by means of administering questionnaires and conducting interviews. The results show that government employees make use of electronic resources for research and work purposes. They also use it very often. However, from the results obtained from the survey, it is obvious that less use is being made of the libraries' electronic resources, hence the low usage of libraries' electronic resources within the confinement of the library. The under-utilisation of resources can be due to a lack of information literacy skills as pointed out by Mutula (2004). Nonetheless the majority of government employees agree that access to electronic resources is indeed a viable alternative to print based resources.

An issue highlighted in the literature is the high cost of access to telecommunications services. There are other factors that information profession should be concerned with if they are to effectively address issues regarding the digital divide and its implications for the provision of information services. Some of the factors that came out in the literature that

hinder libraries to build electronic collection and disseminate digital information are noted by Alemna (1998) as financial allocation of parent organisation. Access to affordable broadband is a problem raised by Muller. Issues of affordability of adequate internet broadband by government were raised by Kanyengo (2006). Other issues that were raised in interviews with librarians were lack of IT trained manpower; lack of awareness of the digital resources, lack of financial support; lack of knowledge about the digital preservation methods and lack of training for the digital access. Different from what the other specialised libraries face, the UK NHS library said the major barrier is IT, because of the fact of "not having the budget to replace elderly equipment. Also the local network is slow and firewalls cause problems in using the internet".

It is believed that lack of marketing and promotion of resources will result in electronic resources being under utilised. Therefore libraries need to intensify their marketing campaigns by promoting electronic resources to users in order for them to gain access to a vast collection in digital format. Alongside commercial journal databases and subscription based resources, there are a number of free online resources that libraries need to capitalise on by providing users with links to these resources. (Mulla and Chandrashekara, 2006) noted that "besides electronic journals, there are several online databases that are now available through the Web including MEDLINE (several versions), AGRICOLA, and ERIC (all free)". There are many others, e. g Directory of Open Access Journals, American Educational Research Association Special Interest Group but these are the ones that are most worth mentioning because of their relevance to work in Namibia.

One of the most important issues is that users need to be computer literate and have the understanding of what is an electronic resource. Therefore, librarians need to continuously upgrade their skills because a skilled librarian will be able to provide the needed ICT and computer literacy skills training to users to ensure optimum and effective usage of these resources.

However, in order to satisfy the needs of the users, it is recommended that the library staff continue to promote the use of electronic resources. However, their efforts will be useless if nothing is done to improve the internet access. The majority of comments that were raised by both users and librarians were the slow speed of the internet. This also affirmed by Rosenberg (2000). Meanwhile, the printed resources should still be made available for use by those who have no access to online/ electronic resources.

Libraries should strive to build digital libraries as ways of organising their electronic resources. The added advantage to build an online collection of serials and electronic resources is the accessibility of the full-text current and retrospective articles from remote

locations. The Library will also benefit because there will no longer be the need for stacks of printed copies. However, libraries need to be sure that when deciding on electronic-only subscriptions, that the criteria identified as being important to the users are present in the interface selected, by means of guided electronic resource policies.

7.3 Recommendations

The following recommendations are based on the data analysis, information gathered from the interviews held with the staff member and findings from the literature review. The study has identified some of the good practices that ministerial libraries can embark upon. The best practices to promote library services and electronic resources are recommended.

7.3.1 Electronic resources being provided by Government ministerial libraries

Most libraries provide electronic resources however, it is recommended that:

- Those libraries that do not provide any access to electronic resources for example NPC, should think towards bidding for funding from the parent organisation to subscribe to reputable online resources and electronic resources.
- It is also advisable that librarians be granted the opportunity to attend more training to get familiar with terminologies and the language used when handling electronic resources. (*Table 5.2.5b raise queries*)
- Libraries should think of providing users access to some of the freely available online journals example the Directory of Open Access Journals, American Educational Research Association Special Interest Group, Health InterNetwork Access to Research Initiative. (None of the libraries provide access to free online resources see Table 5.2.5b)
- When deciding on the type of electronic resources to purchase, libraries are advised
 to follow certain criteria. The experts both in academic library and a specialised
 library pointed out criteria which they use and could be recommendable for
 Government ministerial libraries in Namibia. (see experts interviews)

• Libraries should provide remote access to their electronic resources to enable users to access resources and services from their own offices in their own free time. (*None of the libraries provide electronic resources remotely as indicated in Table 5.2.5e.*)

7.3.2 Determining the need and importance of electronic resources

The findings revealed a great liking of electronic resources by the users and this is revealed in Table 5.2.6d and Table 5.2.6b. It is however, reported in Table 5.2.6c that they do not use those provided by their respective libraries. To most people a Google search holds all their information needs and research answers. Google however does not always provide authenticated sources. With these findings, it is recommended that:

- Libraries should provide information literacy to their users to help them access reputable and authenticated resources from the internet that is relevant for their resources. This advice is also echoed by the NHS librarian in the UK. If they want up-to-date, relevant and authenticated information for research purposes. (Fig.5.2.6f and Figure 5.2.3a indicate that most people use the internet for email purposes, WWW)
- Libraries should provide IT training to users. Libraries should make it a point that the provision of electronic resources is communicated to all people for effective searching. (*libraries do not offer ICT skills training see 5.2.7*)
- Libraries should keep records on the usage of electronic resources to be able to justify their budgets. There are good points raised by the experts that libraries can take on board i.e. record enquiry statistics, record hits on web pages and database services providers' feedback usage statistics. (see experts interviews)

7.3.3 Methodologies employed in marketing and promoting of resources to employees

Findings from Figure 5.2.8*a* indicated that the majority of users have no idea whether their libraries promote electronic resources. The research therefore recommends the following:

7.3.5.1 Promotion and marketing

To promote use of electronic resources among government officials the following recommendations are made:

- 5.2 Before marketing takes place, first conduct a user's needs assessment to discover what their needs are. Dialogues between library users are advisable as a tool that facilitates libraries to be closer to their clients' information needs. Such dialogue can be done through user surveys, library advertising, customer valuation and customer retention.
- 5.3 The library should use Win ISIS which is the internet version of CDS/ISIS to publicize its catalogued records. This approach is one way of marketing library collections not only to Namibian clients but to the global village community as well.
- 5.4 The adoption of public relations as a marketing tool works well in building relationships between the library and its customers.

PROMOTIONAL ACTIVITIES:

- Libraries should design promotional materials such as brochures, posters, leaflets for marketing the library
- Libraries should have a newsletter highlighting events to do with their library.
- The library should collaborate with the communications department in their institutions (if there is one) for the marketing of the library services and activities.
 They could get valuable advice from experts in the field of marketing.
- Organise induction programme and tours for new stuff recruits around the library and give out promotional packs at this induction course.
- Create a library website for marketing and to communicate with users via forums and shared space. These activities contribute a better public image, and so to wider usage.

LIBRARY CURRENT AWRENESS SERVICE:

- Libraries should also inform clients of new services through bulletin boards, visit
 office to office, or have announcements made through the intercom (some institutions
 have intercoms).
- New additions lists, forthcoming events and conferences, lists of translated material should be compiled regularly and used to inform users about new and up-to-date information potentially needed by them. (Kaur and Rani, 2007)

• Selective dissemination of information should be established according to users' interest profiles. (Kaur and Rani, 2007)

7.3.4 Major challenges identified with the provision and using electronic

7.3.4.1 Internet speed

Based on the comments raised by both users and librarians concerning internet connection (see in Table 5.2.9a, Table 5.2.9c and Table 5.2.9d), the following are recommended:

- Libraries should think of changing to a private Internet provider for internet connection, in order to improve internet connection, especially download speeds.
- Libraries should organise electronic resources for effective information retrieval. They can emulate some of the best practices pointed out by the experts in the United Kingdom. A move towards provision of electronic resources is recommended. "Digital libraries expand access, increase usability and effectiveness, and establish new ways for individuals to interact with information". (Mulla and Chandrashekara, 2006). This also ensures that the lowest people in the strata have access to resources without physically visiting the library.

7.3.4.2 Qualification, training and staffing

Most of the librarians (as depicted in Table 5.2.10b) last attended a training workshop six months ago, whilst the remainder has never had that opportunity and a challenge faced by most librarians when providing electronic resources is adequate skills (see Figure 5.2.9b).. With regards to these points, the research recommends the following:

- Librarians should have the opportunity of regular training to keep pace with technology and to upgrade themselves and their service delivery.
- There is need to recruit more professional staff to work in ministerial libraries. The
 Library Assistants are not at the required professional level to undertake certain
 library duties such as ordering of journals, subscription payments and the Namibia
 Library and Archives Services management would be well advices to do something
 about this problem. (see Table 5.2.10c)

7.3.4.3 Financial constraints

In relation to budgets, the following is recommended:

 Parent organisations should have separate budgets for libraries. And librarians should be part of the committees who decide on the budget. Sufficient monies should be allocated to the subscription and renewals of electronic resources therefore there should be a defined budget for electronic resources. (Most libraries do not have their own library budgets see point 5.2.11).

7.4 Concluding comment

This study has emphasised that there are opportunities for the development of electronic resources facilities in the Namibian Government ministerial libraries. However, significant investment in future training will be required, both for library staff and for users of the libraries.

LIST OF APPENDICES

Appendix 1: Questionnaire for librarians

Introduction

The purpose of this questionnaire is to collect information that is going to be used for a research project that is being conducted by a Masters student in the Department of Computer and Information Science from the University of Strathclyde, Scotland.

Please, be informed that this information will be treated with utmost confidentiality and nothing will be accredited to you personally. All information will be used only for the purpose of this research.

If you have any queries or need more information please do not hesitate to contact me on +264 811492037 or email me at utunanampa@yahoo.com

1. INSTITUTION: CONTACT DETAILS

Government department/division:	
Name of Library	
Officer to whom librarian reports:	
Name of the person completing:	
Position:	
Postal: and Physical address	
Ministerial Web address:	
Email:	
Telephone:	

Fax:		
1. Who are th	e main users of the library? Please tick applicable answers	
Researchers		
Senior manage	ers	
Management s	staff	
Students		
Learners		
General public		
Others (please	e specify)	
2. For what p	urpose is the library used? Please tick more than one answer	
To read the lo	cal newspapers	
For research p	urposes	
For study purp	ooses	
For email purp	pose	
For Internet pu	urpose	
Other purpose		
Do you hav	e computer workstations?	
Yes		
No		
If yes, complete	the following: please give numbers	
How many are	e reserved for exclusively for client use?	
How many are	e reserved exclusively for library staff use?	

3.

Y	es	
N	0	
If	yes, complete the following:	
Н	ow many are connected to the internet:	
Ooe	es your library provide Electronic bibliographic databases?	
Y	es	
N	0	
_		
	es your library provide Electronic full text databases?	
	es your library provide Electronic full text databases?	
	es	
Y	es	
Y	es o	

CD-ROM		
DVDs		
Videotapes		
Cassettes		
Other media (Please specify)		
Indicate what percentage of your current ercentage is electronic resource based.	t collection is print base	ed, and what
D		
Print based		
E-resource based 9. Does your library provide any of the second	the following <i>digital</i> se	ervices and user acc
E-resource based	the following digital se Remote access	In library only
E-resource based 9. Does your library provide any of the Please tick more than one answers		
E-resource based 9. Does your library provide any of the Please tick more than one answers Type of Digital Service		
E-resource based 9. Does your library provide any of the Please tick more than one answers Type of Digital Service Digital enquiry, reference services		
E-resource based 9. Does your library provide any of the Please tick more than one answers Type of Digital Service Digital enquiry, reference services Digital reservations, renewals, etc.		
E-resource based 9. Does your library provide any of the Please tick more than one answers Type of Digital Service Digital enquiry, reference services Digital reservations, renewals, etc. Digital Inter Library Loan		

7. Audio-visual media Please tick the ones you provide

8.

Print					
Electronic					
Both					
What challeng	es do you fac	ce when pro	viding electro	nic resource	es such as or
database and p	rint journals? ———	' Please tick r	nore than one a	inswer, if nec	eessary
. Power supply					
. Knowledge and s	kills in handlin	g electronic r	esources		
. Inadequate fundi	ng				
. No internet conne	ectivity	_	_		
. Bandwidth proble	ems				
. Others (please sp	ecify)				
	zou roto tha		of the online	e access sp	oeed (bandw
How would y connectivity) for					
	or the library?				
connectivity) fo	or the library?				
Good	or the library?				
Good	or the library?				
Good	or the library?				
Good	or the library?				

Qualifications and staffing

13. What is your highest qualification? Please tick one answer only

Post graduate Degree	
1 ost gradatio Degree	
Undergraduates Degree	
Diploma	
Certificate	
Grade 12	
None	
14. Provide the staffing establishment of your library.	
Training	
15. When last did you receive training workshop on electronic resour	ces?
A month ago	
Six months ago	
A year ago	
A year ago Never	
Never	
Never 16. Do you offer ICT skills training in your library?	

•	Does your library have an IT Support System?	
Yes	3	
lo		
) 01	n't know	
	<u>Budget</u>	
8.	What is the overall budget for the current financial year? Please give an a	umount
9.	What is your current budget for electronic resources? Please give an amo	unt
0.	Promotion How do you promote and create awareness of electronic resources to you	r users?
1.	Do you have any additional comments regarding promotion of electrons	ic resour
	in your library and its usage?	

Thank you very much for your time and responses, they are greatly appreciated.

End of Questionnaire

Appendix 2: User study survey questionnaire

Introduction

The purpose of this questionnaire is to collect information that is going to be used for a research project that is being conducted by a Masters student in the Department of Computer and Information Science from the University of Strathclyde, Scotland.

Please, be informed that this information will be treated with utmost confidentiality and nothing will be accredited to you personally. All information will be used only for the purpose of this research.

If you have any queries or need more information please do not hesitate to contact me on +264 811492037 or email me at utunanampa@yahoo.com

1. Contact details (optional)

Name:	
Email:	
Cell phone number:	

2. Library usage

2.1 How often do you visit the library? Please tick one answer only

Frequently	
Once a week	
Once a month	
Less frequently	
Never	

2.2 For what purpose do you use the library? Please tick more than one answer	
To read the local newspaper	
For research	
For study	
For email	
For other reasons (please specify):	
3. Usage of computers3.1 Do you have a computer in your office?	
5.1 Bo you have a compater in your office.	
Yes	
No	
4. Internet access4.1 Do you have access to the internet in your office?	
Yes	
No	
4.2 What do you use the internet for? <i>Please tick more than one answer</i>	
www	
Email	
Usenet news	
Intranet	
Government data	
Electronic journals	
Alerting services	

Catalogues	
Subject searches/gateways	
Other	
5. Electronic resources in the library	
1.1 Does your library provide electronic resources?	
Yes	
No	
Don't know	
5.2 How often do you use online sources for your work or studies?	
Very often	
Seldom	
Never	
5.3 What type of information sources do you usually consult first when doing your (Please tick one answer only)	r research'
Print materials	
Electronic	
All the above	
5.4 How easy to use are the library's electronic resource?	
Very easy	
Easy	
Not easy	
Don't know	

1000011000	re.					
		Very important	Important	Neither important nor unimportant	Not important	Very unimport ant
Fast down Speed of article	nloading es					
Easy to use						
6 Please rate answer	the spec	ed of interne	et connectivi	ty in your inst	itution. <i>Pleas</i>	se tick next
ery fast1	Fast 2	Slow	v3 V	ery slow4	don't	know5
Resources ma 1 Does the libra Yes No	J	promote and r	market electro	onic resources?		
7. Which resort sources? Please		you feel mo	st conformat	ole with using?	Print source	s or electro

9. Do you have any suggestions/comments in relation to the use and promotion of electronic resources in the library?
Thank you very much for your time and responses, they are greatly appreciated.
Thank you very much for your time and responses, they are greatly appreciated.

End of Questionnaire

Appendix 3: Interview schedules for librarians

Introduction

The purpose of this interview is to collect information that is going to be used for a research project that is being conducted by a Masters student in the Department of Computer and Information Science from the University of Strathclyde, Scotland.

Please, be informed that this information will be treated with utmost confidentiality and nothing will be accredited to you personally. All information will be used only for the purpose of this research

1. Which electronic resources does your library have access to?

2. Training

Have you ever received any training on electronic resources?

How often do you go on training?

Do you offer in depended online searching in your library e.g OPAC?

3. Budget

Do you have a budget for electronic resources?

How much do you have in your budget for electronic resources this year?

4. Usage

How well are your electronic resources used?

5. Promotion

Do you promote your electronic resources to your users? If yes, how do you do that? Do you carry out library instruction to your users?

- 6. What challenges do you face in the usage of electronic resources?
- 7. Do you have anything that you would want to say regarding the use and promotion of electronic resources?

Thank you very much for your time and responses, they are greatly appreciated.

Appendix 4: Detailed answers to librarians interviews

Questions	MET	NESEIC	Fisheries	NPC
Question 1: Which electronic resources does your library have access to?	We provide access to Winisis And Research discussion papers publications	GEOREF, EBSCOhost and Earth Namibia Database and we have will soon have a database for reprint articles on Namibian Geology because of a scanning project that is currently on going.	CDS/ISIS catalogue, NISC, OARE and AGORA, have an invoice to be paid	We don't have any electronic resources apart from CDS/ISIS
Question 2.1: Have you ever received any training on electronic resources?	Yes but not in depths training, I would still more training because there is so much change in the world and electronic resources is the order of the day.	Yes I have but not on ISIS. A lot of it I have taught myself but more still has to be learned if we want to assist clients effectively.	INASP training for one week	Not really but I have had training on ISIS
Question 2.2: How often do you go on training?	Not too often	Maybe ones in every two years.	I do not go on much training.	I do not really go on many trainings
Question 2.3: Do you offer in depended online searching in your library e.g OPAC?	No we do not have	No we do not but we do have instructions by each computer for users to read and follow.	There is no such system in the library We had inmagic but the system has long failed and now we are using CDS/ISIS. Staff members have their computers in their offices- we give them orientation on library resources but no training.	No we do not have
Question 3.1: Do you have a budget for electronic resources?	We don't have a budget for electronic resources	Yes we have which is controlled by the GSN. Our electronic subscriptions are renewed every year.	Yes we have and half of it goes to journal subscription	We do not have our own budget. It is shared with the whole directorate
Question 3.2: How much do you have in your	I cannot confirm this but I do know that there is not	Last year's invoice was half a million so, I am	Cannot say at this moment but we have two budgets	There is no specific budget for the library. We

budget for electronic resources this year?	much or even nothing that I am aware of. The library does however benefit greatly from a budget of the Directorate	thinking for this year it might just increase slightly. I don't have the figures just yet.	and the main budget was approved in June/July 2008. We don't have problems in paying our electronic resources because we have a library committee in place, which is a deciding body for the library.	purchase library materials through the Directorate's budget.
Question 4.1: How well are your electronic resources used?	They are not really used well because staff	We get people who often request for electronic resources however and Ebscosot sends us monthly statistics to see how frequent the database is use. The statistics said they are not used much. Earth data is used well by external people/investors	We rely heavily on electronic resources however the internet is very slow. The IT department has consulted telecom because they are thinking of changing to another ISP. It is not easy to determine the usage because users need passwords.	Users usually don't respond back to emails to give feedback on whether they are satisfied with the services provided.
Question 5.1: Do you promote your electronic resources to your users? If yes, how do you do that?	We have a website with all library information	We promote through emails and we recently created a library brochure. We also have a website	Yes we do and we forward through emails. We also subscribe to CTI for selective dissemination of information	
Question 5.2: Do you carry out library instruction to your users?	No we don't have	No we don't have	Yes we do	No we don't have
Question 6: What challenges do you face in the usage of electronic resources?	Access to the internet is pathetically slow that access to electronic resources is almost impossible	The internet is fairly slow but we manage to get things done. The problem is downloading speed of articles. You can download just one article the whole day. This is a problem and internet sometimes breakdowns because we get	Staffing is a challenge affecting our work as well as internet speed	Internet connectivity is very slow

Question 7: Do you have anything that you would want to say regarding the use and promotion of electronic	It would be nice if you could give me some additional information on how best to promote electronic resources in the	access through OPM which causes great bandwidth problems. Another problem is the issue of access restriction to certain websites. There are too many firewalls that prevent us from providing users with useful information and links to useful sources. More needs to be done and we would need an extra hand to scan resources and market it the users.	We want the library to be effective, have satisfied clientele and target a wider audience through decentralisation.	Librarians in scientific research libraries are trying their utmost best to make information accessible in real time but the fact
you have anything that you would want to say regarding the use and promotion of	you could give me some additional information on how best to promote electronic	done and we would need an extra hand to scan resources and market it the	library to be effective, have satisfied clientele and target a wider audience through	scientific research libraries are trying their utmost best to make information accessible in real

Appendix 5: Interview schedules for experts

Introduction

The purpose of this interview is to collect information that is going to be used for a research project that is being conducted by a Masters student in the Department of Computer and Information Science from the University of Strathclyde, Scotland.

Please, be informed that this information will be treated with utmost confidentiality and nothing will be accredited to you personally. All information will be used only for the purpose of this research

Thank you very much for your time and responses, they are greatly appreciated.

1. Do you provide electronic resources?

If Yes, what type of electronic resources do you provide?

- 2. And who are the main users of these resources?
- 3. What criteria do you use for determining what resources to buy?
- 4. What electronic services do you provide?
- 5. How well are these resources used?
- 6. How do you determine their usage?
- 7. From experience, what are the most significant barriers you face in providing electronic resources?
- 8. In your view, what do you think is the main advantage of having electronic resources?
- 9. And in your view, what do you think is the main disadvantage of having electronic resources?
- 10. Do you market your electronic resources Yes
- If Yes, What marketing techniques do you use?
- 11. To whom is this marketing targeted? Please explain
- 12. Are there any other issues you feel the library needs to address: for example, staffing numbers, levels of accessibility, marketing at a larger scale etc?

End of Questionnaire

BIBLIOGRAPHY

Articles

Alemna, A. A. (1989). Special libraries in Ghana: an appraisal. *Aslib Proceedings*. 41 (1), p 23-28. URL

http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/2760410103.pdf. Last accessed 29 August 2008.

Alemna, A.A. (1998). An overview of library management practices in West Africa. *Library Management*. 19(1), p9–11. Available: URL http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/Emer aldFullTextArticle/Pdf/0150190101.pdf. Last accessed 29 August 2008.

Barker, P. (1994). Electronic libraries —visions of the future. *The Electronic Library*. 12(4), p221-230. Available: URL

http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/2630120402.pdf. Last accessed 29 August 2008,

Boudreau, G. D and Manley, C. (2004). *Developing a customized database of users as a tool for marketing the library; a database to satisfy customer demand at ORNL*. Available: URL http://findarticles.com/p/articles/mi_m0FWE/is_1_8/ai_n6047479. Last accessed 29 August 2008.

Brophy, P., Clarke, Z., Brinkley, M., Mundt, S., Poll, M. (2000). *EQUINOX: Library Performance Measurement and Quality Management System Performance Indicators for Electronic Library Services*. Available: URL http://equinox.dcu.ie/reports/pilist.html. Last accessed 29 August 2008.

Buchholz, I. (2003). *Country report: Namibia*. Available: URL http://www.imeicc5.com/download/IME-ICC5_Country_report_Namibia.pdf. Last accessed 29 August 2008.

Celik, H. (1994). *Using automation and electronic services to build support for the parliamentary library*. Available: URL http://www.ifla.org/IV/ifla60/60-celh.htm. Last accessed 29 August 2008.

Chanakira, T. (2008). Workshop on lobbying and public relations urges librarians to campaign on raising awareness and profiles of libraries in Namibia. Available email: utunanampa@yahoo.com. Last accessed 29 August 2008.

Chisenga, J. (2006). The development and use of digital libraries, institutional digital repositories and open access archives for research and national development in Africa: opportunities and challenges. In: WSIS follow-up Conference on Access to information and knowledge development. *Presented at the workshop on building Africa Capacity to implement the outcomes of the world summit on the information Society (WSIS) in the sphere of libraries Access to information and knowledge, Addis Ababa, Ethiopia, March 27-30, 2006.*Available: URL <a href="http://www.uneca.org/disd/events/2006/wsis-library/presentations/Development%20and%20Use%20of%20Institutional%20Repositories%20-%20Justin%20Chisenga%20-%20EN.pdf. Last accessed 29 August 2008.

Gardiner, D., McMenemy, D. and Chowdhury, G. (2006). A snapshot of information use patterns of academics in British universities. *Online Information Review*. 30(4), p341-359. Available:

URL http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/Emer aldFullTextArticle/Pdf/2640300402.pdf. Last accessed August 2008.

Gardner, C. (2002). An investigation into the impact of electronic resources on public library reference enquiry services. Available: URL.

http://dagda.shef.ac.uk/dissertations/2001-02/External/Gardner_Cheney_MALib.pdf. Last accessed 29 August 2008.

Ghosh, S. and Wesley, G.Y. (2002). A special library for development research-the role of the ISS library in managing requirements for research. *INSPEL*. 36, p135-145. Available: URL http://www.ifla.org/VII/d2/inspel/02-2ghsh.pdf. Last accessed 29 August 2008.

ICT Alliance Namibia . (2004). *Appendices of the Information, Communication and technology policy for the Republic of Namibia*. Available: URL. http://www.ictalliance.org.na/ictnam/docs/ICT%20Policy%20Appendix%20Document.pdf. Last accessed 29 August 2008.

Jauch, H. ([2000]). *The Namibian labour market at a glance*. Available: URL http://docs.google.com/Doc?id=dcgkcsjk_100cdvcz4dz. Last accessed 29 August 2008

Kanyengo, W. C. (2006). *Managing digital information resources in Africa: preserving the integrity of scholarship*. Available: URL http://www.ascleiden.nl/pdf/elecpublconfkanyengo.pdf. Last accessed 29 August 2008

Kaur, A and Rani, S. (2007). Marketing of Information Services and Products in University Libraries of Punjab and Chandigarh (India): An Exploratory Study. *Electronic Journal of Academic and Special Librarianship*. 8(3) (Winter). Available: URL http://southernlibrarianship.icaap.org/content/v08n03/kaur_a01.html. Last accessed August 2008

Kavetu, M. (2008). Information's critical role in health care: building the integrated national health information infrastructure in the Ministry of Health and Social Services. *New Era*. 2008.04.04. Available: URL http://www.newera.com.na/archives.php?id=20211. Last accessed 29 August 2008

Li, M. L. (1999). The role of promotional activities and measures in improving access to materials and services in public libraries. Available: URL http://dagda.shef.ac.uk/dissertations/1998-99/li.pdf. Last accessed 29 August 2008.

Mulla, K. R and Chandrashekara, M. (2006). E-Resources and Services in Engineering College Libraries – A Case Study. *Electronic Journal of Academic and Special Librarianship*. 7(1) (Spring). Available: URL http://southernlibrarianship.icaap.org/content/v07n01/mulla_k01.htm. Last accessed 29 August 2008.

Muller, B. *Challenges facing special libraries in South Africa*. Available: URL http://www.dissanet.com/ifla/pdf/LIASA%2008%20Muller.pdf. Last accessed 29 August 2008.

Mutorwa. *National report on the development of education in Namibia*. Available: URL http://www.nied.edu.na/publications/National%20Report%20of%20Education.pdf. Last accessed 29 August 2008.

Mutula, S. (2004). IT diffusion in Sub-Saharan Africa: implications for developing and managing digital libraries. *New Library World*. 105(1202/1203), p281-289. Available: URL http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/Emer aldFullTextArticle/Pdf/0721050705.pdf. Last accessed 29 August 2008.

Nicholas, J. (1998). Marketing and Promotion of Library Services Library. Library and Information Services in Astronomy III.

ASP Conference Series. (153). Available: URL http://www.stsci.edu/stsci/meetings/lisa3/nicholasj.html. Last accessed 29 August 2008.

Nuys, V. C. (2005). *The Norwegian Digital Library – Easy Access to Information and Knowledge Sources*. Available: URL http://www.ifla.org/IV/ifla71/papers/120e-vanNuys.pdf. Last accessed 29 August 2008.

Poll, R. (2007). *Quality measure for special libraries*. Available: URL http://www.ifla.org/IV/ifla73/papers/152-Poll-en.pdf. Last accessed 29 August 2008.

Rosenberg, D. (2006). Towards the digital library in Africa. *The Electronic library*. 24(3), p289-293. Available: URL http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldFu llTextArticle/Articles/2630240301.html. Last accessed 29 August 2008.

Shaefer, D. R and Dillman, D. A. (1998). *Development of a standard e-mail methodology: results of an experiment*. Available: URL http://www.sesrc.wsu.edu/dillman/papers/E-Mailppr.pdf. Last accessed 29 August 2008.

Siatri, R. (1998). Information seeking in electronic environment: a comparative investigation among computer scientists in British and Greek universities. Available: URL http://informationr.net/ir/4-2/isic/siatri.html. Last accessed 29 August 2008.

Spalding, H. H and Wang, J. (2006). The challenges and opportunities of marketing academic libraries in the USA: Experiences of US academic libraries with global application Library *Management*. 27 (6/7), p 494-504. Available: URL

http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/0150270617.pdf. Last accessed 29August 2008.

Svoboda, O. (1995). Mining and minerals-processing information: where and how to get it. *The Electronic Library*. 13(4), p329-336. Available: URL

http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/2630130413.pdf. Last accessed 29 August 2008.

Varghese, R. R. (2008). User studies in the electronic environment: Review and brief analysis. *The International Information & Library Review*. 40, p83–93. Available: URL http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6WGP-4S80CYF-1-1&_cdi=6828&_user=875629&_orig=search&_coverDate=06%2F30%2F2008&_sk=999599

zSkzk&md5=c15e8590baf5ec778ee167ae570e6999&ie=/sdarticle.pdf. Last accessed 29 August 2008.

Wittwer, R. (2001). Special libraries-how to survive in the twenty-first century. *The Electronic Library*. 19(4), p. 221-224. Available: URL

http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/2630190402.pdf. Last accessed 29 August 2008.

Yahoo. (2008). *Currency Converter*. Available: URL http://finance.yahoo.com/currency/convert?amt=1&from=GBP&to=NAD&submit=Convert. Last accessed 29 August 2008.

Zhou, Q. (2005). The development of digital libraries in China and the shaping of digital librarians. *The Electronic Library*. 23 (4), p433-441. Available: URL http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/Emer aldFullTextArticle/Pdf/2630230406.pdf. Last accessed 25 March 2008

Books

997&view=c&wchp=dGLbVzb-

Arms, W.Y. (c2000). Digital libraries. Cambridge, Mass: MIT Press. p287.

Ballesta, R.; Luna-Lams, S. and Smith-Butler, L. (2007). *Law librarianship in the twenty-first century*. Lanham, Md.: Scarecrow Press. p229.

Gomm, R. (2008). *Social Research methodology: a critical introduction*. 2nd ed. Basingstoke: Palgrave MacMillan. p428.

Greenfield, T. (2002). (editor). *Research methods for postgraduates*. 2nd ed. London: Arnold. p370.

Hart, C. (2005). Doing your masters dissertation: realizing your potential as a social scientist. London: SAGE. p481.

Hysamen, G.K. (1994). *Methodology for the social and behavioural sciences*. Johannesburg: International Thomson Publishing (South Africa) (Pty) Ltd. p237.

Legislation Committee, Ministry of Basic Education and Culture. (1997). *Information for self-reliance and Development: A policy framework for libraries and allied information agencies for Namibia*. Windhoek: Directorate Library and Archives Services.

Marshall, C and Rossman, G.B. (2006). *Designing qualitative research*. 4th ed. London: SAGE. p261.

Maxim, P. S (1999). *Quantitative research methods in the social sciences*. New York: Oxford University Press. p405.

McMenemy, D and Poulter, A. (2005). *Delivering digital services: a handbook for public libraries and learning centres*. Facet: London. p184.

Chisenga, J. (1997). Using the internet to facilitate networking and resource sharing In: *Proceedings of a workshop on electronic networking and resource sharing in Namibia*. Windhoek: NIWA. p17-26

Rowley, J. (1998). The electronic library. London: Library Associations Publishing, p396.

Singh, S. P and Kumar, K. (2005). *Special libraries in the electronic environment*. New Delhi, India: Bookwell. p402.

Tjitendero, (1997). Using the internet to facilitate networking and resource sharing In: Chisenga, J. and Mchombu. K. *Proceedings of a workshop on electronic networking and resource sharing in Namibia.* Windhoek: NIWA