

AN ASSESSMENT OF THE RECORDKEEPING FUNCTIONALITIES OF THE
NAMIBIAN COURT INFORMATION SYSTEM (NAMCIS) AT THE OFFICE OF
THE JUDICIARY

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OF THE REQUIREMENTS FOR THE DEGREE OF
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ABSTRACT

This study sought to assess the recordkeeping functionalities of the Namibian Court Information System (NAMCIS) to determine the efficiency and/or loopholes in the functions and the management of the system. The assessment was guided by the Modular Requirements for Records Systems, standard (MoReq2010) and the IRMT guidelines for integrating records management procedures into ICTs (Information Communication Technologies). The objectives of the study were to: evaluate the standards and procedures used to capture, store, retrieve, disseminate and retain records in NAMCIS; establish the benefits and challenges associated with NAMCIS; determine the knowledge and skills of the people who are responsible for managing the system, and; recommend ways in which NAMCIS can be optimised for the benefit of all users. The study adopted an interpretivism paradigm that aims at understanding individuals' subjective experiences and their interpretations of the world around them. A qualitative research design was adopted, using a case study. The target population was the Khomas Region employee cohort of the Office of the Judiciary. Non-probability purposive sampling was used to select four (4) IT personnel, six (6) chief legal clerks, fourteen (14) court clerks, seven (7) magistrates, and nine (9) prosecutors. Data were collected through face-to-face interviews, observations and document review. Descriptive narratives were used to analyse data through content analysis. The major findings from the study revealed that although NAMCIS had adequate security measures, it was outdated and it did not meet all the mandatory functional requirements of an electronic recordkeeping system due to the fact that, it was acquired as a transactional system. It was also discovered that, the implementation process was not guided by records management professionals or internationally recommended records management standards. This study therefore concludes that NAMCIS is outdated and

incompatible with new software and hardware. The study recommends that: a retention and disposal schedule should be implemented to determine how long information must be retained on the system; a policy framework should be developed to enable the Office of the Judiciary to manage electronic records kept in NAMCIS according to recommended records management standards; end-users should be trained regularly; and the Office of the Judiciary should liaise with Office of the Prime Minister (OPM) (Department of EDRMS) and the National Archives of Namibia, on the improvement of the system's technicalities. This research builds on the knowledge of electronic recordkeeping systems in general, and in particular, NAMCIS.

Keywords: *Court Records, MoReq2010, Electronic Records Management System, Recordkeeping, Recordkeeping Functionalities, NAMCIS.*

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DEDICATION

I dedicate this Thesis to my Siblings that went out of their ways, strained their monthly budgets to finance my studies. God bless you.

DECLARATION

I, Uahengo Hileni Nangula, declare that *An assessment of the recordkeeping functionalities of NAMCIS (Namibian Court Information System): A case study of the Office of the Judiciary*, is my own work, and that all sources used in this research have been properly acknowledged through APA referencing. I further declare that this study is a true reflection of my own research, and that this work or part thereof, has not been submitted for a master's degree in any other institution of higher education.

I, Uahengo Hileni Nangula grant the University of Namibia the right to reproduce this research project as a whole or in part, in any manner or format, which the University of Namibia may deem fit, for any person or institution requiring it for study and research; providing that the University of Namibia shall waive this right if the whole research project has been or is being published in a manner satisfactory to the University.

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ABRIVIATIONS AND ACRONYMS

AOJ	Administration of Justice
CCAS	Court Case Administrative System
CRMS	Court Records Management System
CMS	Content Management System
DMS	Document Management System
DLM	Donnees Lisibles par Machine (Machine-readable data)
ERM	Electronic Records Management
ERMS	Electronic Records Management System
EDRMS	Electronic Document Records Management System
GRS	Government Record Service
ICT	Information Communication Technology
IRMT	International Records Management Trust
ISO 15489	International Organisation Standardization
IT	Information Technician
ICA	International Council on Archives
KNADS	Kenyan National Archives and Documentation Services
MOREQ	Model Requirements for Electronic Recordkeeping Systems
MOREQ 2010	Modular Requirements for Records Systems
NAMCIS	Namibian Court Information System
OoJ	Office of the Judiciary
PDF	Portable Document Format
UNAM	University of Namibia

DEFINITION OF TERMS

Capture: In a computer environment, the deliberate actions that result in the storage of a record in a recordkeeping system, including the registration and classification of the record, and the addition of metadata about the record. For certain business activities, these actions may be designed into electronic systems so that the capture of records into record-keeping systems takes place when those records are created (IRMT, 2009a).

Digital record: A record maintained in a coded numeric format that can only be accessed using a computer system that converts the numbers into text or images that can be comprehended by the human eye. Digital records include records stored in electronic and non-electronic formats such as optical disk (ICA, 1999).

Docket: Papers or files relating to a specific action, event, person, place, project or other subject. Also known as dossiers, dockets, particular instance papers, project files or transactional files (IRMT, 2009a).

Electronic records: Records stored in a form that only a computer can process. Records can be numeric, graphic, and text information; media can include, but are not limited to, magnetic media, such as tapes and disks, and optical disks (National Archives of Australia, 2007).

Electronic recordkeeping: A subset of electronic records management (ERM) which is simply the development of automated techniques to facilitate the management of electronic records (IRMT, 2009b)

Electronic Records Management System (ERMS): An electronic system or process – managed with the aid of computers and software – implemented in order to manage different kinds of records in an organisation. Electronic Records Management Systems

may also operate as Electronic Document Management Systems (EDMS) (IRMT, 2009b).

Evidence: In a legal environment, information or proof admitted into judicial proceedings and relevant to a specific case to establish an alleged or disputed fact (IRMT, 2009b).

Functional requirements: In a computer environment, the tasks a computer application must perform to carry out a process satisfactorily, or the conditions or performance standards that a computer system should meet in order to support the business of the organisation (DLM Forum Foundation, 2010).

ICT system: A coherent collection of processes, people, and technologies brought together to serve one or multiple business purposes. ICT stands for Information and Communications Technology; the acronym is used more often than the phrase itself (IRMT, 2008).

Information system: An organised set of procedures and techniques designed to store, retrieve, manipulate, analyse, and display information. If automated, an information system also includes hardware and software (Hoque & Sowar, 2015).

ISO 15489: Is the first global standard for records management, published in 2001. It establishes the core concepts and principles for the creation, capture and management of records. The Standard applies to records regardless of structure or form, in all types of business and technological environments, and over time (ISO 15489-1, 2001).

Metadata: Data describing the context, content, and structure of records and their management through time. The preservation of the record with its associated metadata is necessary to maintain the integrity of the record. Types of metadata include technical/structural, administrative, descriptive, preservation, and use (IRMT, 2008).

MoReq2010: A functional specification offering a modular set of requirements for the management of electronic records in a system (DLM Forum Foundation, 2011). This specification is applicable to public and private sector organisations which wish to introduce an ERMS, or which wish to assess the ERMS capability (European Commission, 2008; Adams, 2008).”

Recordkeeping requirements: Statements in statutes, regulations, or agency directives providing general and specific guidance on particular records to be created and maintained by an agency (Adams, 2008).

Recordkeeping system: A manual or automated information system having the necessary functionality that enables it to carry out and support the various records management processes such as collection, organisation, and classification of records to facilitate their retrieval, distribution, use, disposal or preservation (Government records service, 2011, p.8).

Records management: A field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposal of records. Records management includes processes for capturing and maintaining records as evidence of, and information about, business activities and transactions (ISO 15489-1, 2001).

Retention and disposal schedule: A document identifying the records of an organisation or administrative unit and specifying which records should be preserved permanently as archives and which can be destroyed after a certain period as obsolete or superseded. The retention and disposal schedule provides ongoing authorisation for the transfer of records from offices to records centres, along with the destruction of obsolete records and the preservation of archival materials. Also known as a disposal

list, disposition schedule, records schedule, retention schedule, or transfer schedule (IRMT, 2009b).

Software: The automated instructions that allow a computer to manipulate data and execute particular functions or tasks (IRMT, 2009a).

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Organisations rely heavily on information, without it, it cannot function and good recordkeeping can help easy retrieval and the sharing of information. Recordkeeping systems are generally required to capture, organize, protect, retain and destroy records in accordance with approved records schedules (IRMT, 1999). In order to make a system an appropriate recordkeeping system for managing paper or digital records, the system also needs to be used to define roles, responsibilities and ongoing training for the end users (IRMT, 2011; Horsman, 2001).

Technology is rapidly growing and the use of information and communication technology (ICT) is considered to be one of the key drivers of the administration of justice. However, Kalusopa (2016) noted that the ICT systems used in many organisations were introduced without the essential processes and controls for the capture, long-term safeguarding, and accessibility of electronic records.

Recordkeeping systems in the legal fraternity are created for the sole purpose of having complete and timely information about crimes and offenders available at the right place, and at the right time. This minimises case postponements, misguided rulings due to missing dockets, and delays in court proceedings. Furthermore, these systems are very important in the management of records as they help shield the reflection of transparency and good governance in providing back-up for paper-based records (Association of Commonwealth Archivists and Records Managers, 2007).

A justice system without an effective recordkeeping system cannot be trusted amidst delays in registering cases, locating records, and filing documentation (Kettani &

Moulin, 2014; IRMT, 1999). Good record keeping within the legal system can help maintain a high level of accountability. An accountable legal system portrays good evidence of a strong and honest government. Magistrates' courts generate large volumes of physical and electronic data that are important for the smooth functioning of courts (Mosweu & Kenosi, 2018; Motsaathebe & Mnjama, 2009). In line with the latest technology, magistrates' courts' in Namibia have partially been migrated from paper-based filing systems to an electronic case management system, herein referred to as the Namibian Court Information System (NAMCIS).

1.2 Office of the Judiciary (Custodian of NAMCIS)

The Office of the Judiciary (OoJ) is an Office within the Public Service of Namibia. In January 2016, the Office of the Judiciary was legally mandated to operate as an autonomous entity, separate from the Ministry of Justice. This change was facilitated by Article 78 (5) of the Namibian Constitution. This legally meant that the Judiciary could be managed by its own Executive Director, operate its own budget, and determine its policies and priorities within the public service (Office of the Judiciary website, 2022).

The Judiciary Act incorporated all courts under one office- Office of the Judiciary. Before the establishment of this Act, the Ministry of Justice was the custodian of all courts in Namibia. However, on the 31 of December 2015, the custodianship was reformed to the newly established Office of the Judiciary, an independent administrative office that supports the courts to fulfil their constitutional mandate in upholding the rule of law and in delivering justice speedily, effectively and efficiently (Office of the Judiciary website, 2022; Office of the Judiciary annual report, 2020).

1.3 Background of magistrates' courts

In the past, only a limited number of traffic fines could be captured per day and court records were physically kept piling up in offices at magistrates' courts. They were manually filed according to the date they were created and arranged (as- case with evidence and case without evidence) (Abankwah and Hamutumwa, 2016). The introduction of the Namibian Court Information system to all magistrates' courts has drastically improved the operations of magistrates' courts. However, with the introduction of NAMCIS information is electronically captured, stored and made available among magistrates' staff to utilise when necessary.

Magistrates' courts are situated in all thirteen regions of Namibia, namely, Khomas, Erongo, Hardap, Karas, Omaheke, Oshana, Ohangwena, Omusati, Kunene, Otjozondjupa, Caprivi, Kavango, and Oshikoto. These courts are also referred to as lower courts that have a jurisdiction over all offences except serious cases. Most court cases such as criminal cases (when someone has been arrested for committing a crime) and civil cases (disputes between two individuals, such as divorce, labour matters, unlawful assaults, payment of car accident damages, etc.) begin in a magistrates' court, and decisions of magistrates' courts can be appealed at the High Court of Namibia (Hans Seidel Foundation, n.d).

NAMCIS was introduced by a German organisation, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in partnership with the Ministry of Justice in 2006 (Schickerling, 2006). Upon completing the project between the two organisations in 2008, the Ministry of Justice, the then custodian of all magistrates' courts in Namibia, officially introduced NAMCIS to all magistrates' courts in the country (Hartman, 2008). However, magistrates' courts no longer fall under the Ministry of

Justice. They have been restructured to fall under the Office of the Judiciary as mentioned above, which is responsible for the system server connecting NAMCIS to all magistrates' courts in Namibia.

NAMCIS captures records emanating from processes such as roll calls, pleas, court cases, court orders, and completion of warrants (Schickerling, 2006). Court cases require registration on NAMCIS before appearing in court for any type of court proceeding or judgement. It is a requirement that a record about the nature of the case (accused's details, case type, and witness statement) is created prior to the court appearance. Without that crucial record entry, court proceedings will be delayed and postponed to await the registration process on NAMCIS. It is the responsibility of the prosecutors and magistrates to register their cases on NAMCIS before they enter the courtroom; without that record entry, there will be no judgement. Within a legal environment, a recordkeeping system should ensure that information about individuals is maintained in a secure environment so that their privacy is not violated in any way. However, (Kalusopa, 2016; IRMT, 1999) noted that the information systems conducting business in most organisations are not able to operate as recordkeeping systems as they have been set up without any consideration of recordkeeping standards and procedures. As a result, these systems are not able to manage, preserve, and avail the records which provide evidence when needed for day-to-day operations. There are three common processes that take place when NAMCIS is utilised during court proceedings.

Stage 1: NAMCIS functionality processes

The first process is where the main activities performed on the system by magistrates take place. The very first process begins with logging onto NAMCIS. The magistrate

then opens a case that is already registered on the system under the court diary. As court proceedings continue, information about the case, such as the proceeding court order, status order, and judgement, are captured. At the end of every session, the system captures the judgment, saves the entire session, and prints out the court order document (Schickerling, 2006).

Stage 2: External intervention input

These are the external inputs that occur at the beginning of a court session just after the logging in process. They involve prosecutors verbally announcing the case in court to start with the proceedings. This stage includes a presentation of possible evidence, requests, and arguments from the different parties during the court session. This information is recorded on the system by a magistrate along with other information. This forms a court order at the end of a session (Schickerling, 2006).

Stage 3: Manual functionality processes

These are functions done manually, such as handwritten records/notes, and typed word documents of what was discussed by the different parties (i.e. the judge, the accused, and the prosecutor). These are then copied onto the system after all the court proceedings are complete. These processes are done manually because NAMCIS has no spell check function to correct the mistakes in the notes taken during the proceedings, and it therefore cannot be used during court proceedings (Schickerling, 2006). Appendix A shows an illustration of how NAMCIS activities flow on a daily basis, as explained in the three processes above.

1.4 Statement of the problem

Lack of standards and absence of adequate technologies, capable of supporting records management requirements and techniques, results in system faults (Ndambuki, 2015;

IRMT, 2008). Ngoepe and Makhubela (2015) maintained that the adage “justice delayed is justice denied,” is prevalent in Namibia as instances of case postponements due to delayed case registration on the system, and delays of judgements due to the absence of court orders obtained from the system continue unabated. For an electronic record management system to adequately capture a record’s content, context and structure, it needs to possess all mandatory functional requirements (Adam, 2008). Nengomasha (2009) argued that the absence of technologies to support records management requirements can be aggravated by the fact that many organisations tend to acquire transactional and information management systems with the misguided belief that such systems are also electronic records management systems (Nengomasha, 2009). This author stressed that there is a need for further investigation of electronic information management systems in the Public Service of Namibia. In view of the arguments raised above, this study sought to determine the functionalities of the electronic recordkeeping system, herein referred to as NAMCIS, in an attempt to address the gaps left by previous studies.

1.5 Objectives of the study

The main objective of the study was to assess the recordkeeping functionalities of NAMCIS. The specific objectives of the study were to:

1.3.1 Evaluate the standards and procedures used to capture, store, retrieve, disseminate and retain records in NAMCIS;

1.3.2 Evaluate the knowledge and skills of the people who are responsible for managing NAMCIS;

1.3.3 Establish the benefits and challenges associated with NAMCIS; and

1.3.4 Recommend ways in which NAMCIS can be optimised for the benefit of all users.

1.6 Significance of the study

At the time of this study, there was no policy or standard regulating the management of electronic records at the magistrates' courts in Namibia. Therefore, this study will encourage the formulation of standards and regulations by the host ministry to guide the users in the management of records kept on the system. The study will also contribute to the body of knowledge on court recordkeeping systems, in general and in particular, NAMCIS. The Office of the Judiciary and all magistrates' courts in Namibia will benefit from a well-managed court recordkeeping system. Lastly, it will also serve as an additional guide for researchers who are interested in conducting further research on the same subject.

1.7 Limitations of the study

These are restrictions and/or weaknesses of any particular study that are usually out of the researcher's control closely associated with the chosen research design, financial constraints or other factors. This study had two major limitations explained as follows:

1.7.1 A dearth of previous local studies on the topic

Literature review findings from studies done in the past on the same topic are a basic foundation for scholars embarking on new studies as this helps to identify the gaps, and also helps in achieving a new set of objectives or aims (Theofanidis & Fountouki, 2019). There were few previous studies on court recordkeeping systems in Namibia.

1.7.2 Challenges of conducting face to face interviews during COVID-19 pandemic

Getting the respondents to fully participate in the face-to-face interviews was a challenge due to the COVID-19 pandemic. Some of the respondents were either sick (not at work), working from home, or working in shifts. Nevertheless, the researcher eventually interviewed 32 participants out of 40. This resulted in a response rate of 80%, which is good according to Morton, Bandara, Robinson, and Atatoacarr, (2012), who suggested that good response rates must be at least 60%.

1.8 Delimitations

These are what the researcher decides to set as the boundaries or limits of their work so that the study's aims and objectives do not become impossible to achieve at the end of the study.

This study had the following limitations explained below:

1.8.1 Target population

- The study only covered the magistrates' courts in the Khomas Region namely; Windhoek Magistrates' Court, Windhoek Traffic Court, and the Katutura (Mungunda) Magistrates' Court under the care of the Office of the Judiciary. Other regions in Namibia were not included. Therefore, the results of the study cannot be generalised to all magistrates' courts in Namibia.
- The study was limited to staff that work with the system on a daily basis; staff from HR department, finance and procurement departments were not included.

1.8.2 Research area/Scope

- The study only focused on the way information was created, retrieved, disseminated, and managed on NAMCIS. It did not dwell on other aspects of electronic recordkeeping systems such as pre-implementation phase.

1.9 Outline of chapters- organisation of the thesis

This thesis is divided into six chapters as explained below:

Chapter 1: This is an introductory chapter that covers the background of the study, statement of the problem, objectives of the study, significance of the study, limitations and delimitations of the study, and lastly, it provides an outline of the thesis and a summary at the end.

Chapter 2: This chapter discusses the conceptual framework on which this study is based. It discusses the mandatory functional requirements which an electronic recordkeeping system must have in order to correctly capture a record's content, context, and structure. Furthermore, it discusses the importance of the integration of ICTs in records management activities.

Chapter 3: This chapter presents the research methodology employed by the study. The chapter discusses the research procedures used to execute the study: the study population, data collection methods and instruments in detail, data collection procedures, and the research ethics upheld.

Chapter 4: This chapter presents the findings on the Namibian Court Information System. These findings are guided by the objectives presented in Chapter One. The findings are also based on the variables derived from the standards of electronic recordkeeping functionalities that an electronic record management system must have in order to capture the records.

Chapter 5; This chapter discusses and interprets the findings presented in Chapter 4, guided by the objectives raised in Chapter 1. The chapter compares the findings with literature on electronic recordkeeping systems.

Chapter 6: This chapter consolidates the study by summarising the research findings and making recommendations as to how NAMCIS could be optimised for the benefit of its users among all the magistrates' courts in Namibia.

1.10 Summary

This chapter provides background information about the magistrates' courts information system; it describes the origin of NAMCIS, and how it is operated during a court session. The chapter discusses the rationale of the study, pointing out that many organisations acquire electronic recordkeeping systems without proper research to determine if the system contains the required mandatory functionalities for an electronic recordkeeping system. The chapter also discusses the importance of recordkeeping standards in the management of electronic records in a system. The chapter further outlines the objectives of the study, statement of the problem, significance of the study, limitations of the study and delimitations of the study. Finally, the outline of the thesis is highlighted. The next chapter presents the literature review and conceptual framework.

CHAPTER 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

This chapter reviews the literature on managing electronic court records. Guided by the research objectives outlined in Section 1.3, it aims to establish the breadth and depth of existing knowledge on court recordkeeping systems. Firstly, it lays out the conceptual framework, MoReq2010, that informs this study, as well as the procedures of capturing and storing electronic records. Secondly, it discusses the integration of records management into Information and Communication Technologies (ICTs), which complements the conceptual framework. Thirdly, it presents previous case studies on court recordkeeping systems, together with the challenges faced, and the potential benefits of introducing electronic recordkeeping systems. Lastly, it looks at the knowledge and skills required for recordkeeping system personnel.

2.2 Conceptual framework

The conceptual framework relates to the management of electronic recordkeeping systems. The study was guided by MoReq2010 which explains what an electronic recordkeeping system must possess. It provides an in-depth outline of mandatory and non-mandatory functions a system must have. Adams (2008) stresses that, for an electronic record management system to adequately capture a record's content, context and structure, it needs to possess all mandatory functional requirements. It is also crucial that, the implementation process of an electronic recordkeeping system be guided by recommended records management standards that stipulate how electronic records must be managed. The process of digitising records cannot exist without ICT systems and therefore the strategy of integrating records management into ICT systems

explains how the implementation of any recordkeeping system must be guided by both IT specialists and records managers. Records managers and IT specialists need to work hand-in-hand on how records in an electronic environment should be managed. IT specialists work on the technicalities of the system, by adding necessary fields/functions to suit the organisation's needs while records management specialists advise IT specialists on all the crucial procedures/fields/functions that must be available on the system to protect and correctly capture their records. The evolution of technology in recent years has prompted governments across the world to take advantage of ICT and digitise their court proceedings in order to improve service delivery. The conceptual framework is guided by the following standards:

- The MoReq2010 (Modular Requirements for Records Systems) standard; and
- The IRMT Records management integration into ICTs procedures

2.2.1 Modular Requirements for Records Systems (MoReq2010)

Studies by Smallwood (2013) and Adam (2008) posit that each time an organisation retains information, especially personal information, certain legal requirements must be followed. Complying with standards helps organisations increase operational transparency. Adam's views are supported by the International Records Management Trust (IRMT, 1999) and the International Council on Archives (ICA, 2013) which both emphasise that standards play a crucial role in the management of electronic records by minimising the costs associated with changing technologies. They also provide a benchmark against which organisational performance can be measured, which in the end demonstrates professionalism, operational efficiency, and organisational accountability. Standards further ensure safe, reliable and high-quality service delivery to all stakeholders (IRMT, 1999).

The DLM Forum is a multi-disciplinary forum that was established by the European Commission. It created MoReq specifications for Electronic Records Management (ERM) system requirements in 1996 (Lukicic & Sruk, 2009). DLM is short for the French phrase “Donnees Lisibles par Machine,” which means “machine-readable data.” In 2002, the acronym was changed to Document Life-Cycle Management at a conference in Barcelona, Spain. The forum’s main goal is to promote and implement wider cooperation in the field of electronic records in public administration. The latest version of MoReq is referred to as MoReq2010, a standard that focuses mainly on the functional requirements of managing electronic records.

Studies (Adam, 2008; DLM Forum Foundation, 2011; Vieira, Valdez & Borbinha, 2011) collectively define MoReq2010 as a functional specification offering a modular set of requirements for the management of electronic records in a system. The first functional specifications of MoReq were developed in 2001 and made available by the European Commission as an Information Summary on Archives (INSAR) publication supplement in early 2002 (Lukicic and Sruk, 2009). The current specification consists of 360 requirements categorised into mandatory and non-mandatory functionalities (DLM Forum Foundation, 2011). This study only covered the mandatory requirements for an electronic recordkeeping system.

2.2.2 Mandatory functionalities for recordkeeping systems

MoReq2010 aims to provide a comprehensive set of requirements for an electronic records system suited to different organisational activities (DLM Forum Foundation, 2011). There are nine functional requirements for an electronic recordkeeping system, which are outlined below.

1) User and group service

Proper management of user and group service is important for the successful operation of a recordkeeping system (DLM Forum Foundation, 2011). MoReq2010 requires such systems to keep data on who used the system, when they used it, and at what capacity. This can also mean creating entities to represent all users and groups within the system by using system identifiers, tracking changes to the metadata of these entities, and logging the information. More importantly, the recordkeeping system must also support updating the title of the user, providing a description of an active user entity, and logging user changes (DLM Forum Foundation, 2011). A user and group service should only be accessed by authenticated user entities and generate the following system metadata:

- System Identifier
- Created Timestamp
- First Used Timestamp
- Group Identifier
- Title and Description
- Destroyed Timestamp

NAMCIS, as an electronic recordkeeping system, is required to contain a user and group service function in order to protect the information it holds by monitoring the users closely as they use the system. This service provides crucial details such as who made a change, what type of change was made, and if any information was deleted. NAMCIS is required to be able to track who did what, when, and in what capacity to identify any culprits. In other words, if a user or group accesses the recordkeeping system, the system should be able to show who just logged in, and in what capacity (through a System Identifier). The system should also show when a record was created, when it was accessed, and who accessed it (DLM Forum Foundation, 2011).

II) Role service

MoReq2010 features administrative and non-administrative roles; each of which offers different access levels depending on the tasks a user is authorised to perform on the system (DLM Forum Foundation, 2011). The International Council on Archives (2008) further stresses that organisations need to limit access to their records to specific users only. Granting a role to a user allows that user to perform any of the functions listed in the role definition applicable to that entity. However, granting roles to groups rather than individual users is recommended, as managing user access to confidential entities becomes easier when they join or leave the organisation. MoReq2010's role service requires the recordkeeping system to be able to fulfil all the following functions:

- A. A user must not be able to access any system entity until authorisation has been granted, either individually or as a group member.
- B. There should be multiple user-configurable levels of access to entities, including the discretionary ability to set user permissions regarding entity discovery and system functions.
- C. The authority to access entities and perform functions may be set differently in different parts of the system. For example, it should be possible to set a user's authority to perform functions to some classes, at a different level from that same user's authority over other classes within the same classification service.
- D. New entities should be given an appropriate set of default permissions, especially if they are part of an aggregation of other entities or records.
- E. Users should not be able to override certain roles or permissions so as to allow for proper system administration (DLM Forum Foundation, 2011).

Systems can be accessed by different people with different intentions in an organisation. Establishing strict role service lowers the risks of unauthorised system

manipulation. This explains why a user service must allow the creation of roles with the following fields (DLM Forum Foundation, 2011):

- System Identifier
- Created Timestamp
- Originated Date/Time
- First Used Timestamp
- Administrative Role Flag
- Description
- Function Definition Identifier
- Destroyed Timestamp

It is mandatory for every recordkeeping system to have role services to categorise different tasks operated on the system. It is important for NAMCIS to have different roles assigned to different staff according to their duties. Creating role services protects and separates confidential records from ordinary records, i.e. an ordinary traffic ticket captured on the system cannot be in the same location as a criminal record sheet, a court judgement sheet or any other confidential record. Court clerks cannot have the same access to the system as prosecutors and magistrates because they do not have the same roles. Certain roles contain very confidential information and therefore it is not appropriate to give access to such roles to just anyone.

III) Classifications service

The DLM Forum Foundation (2011) recommends classifying every record in the system by associating it with a class entity. This is supported by the International Council on Archives (2008), which adds that a classification scheme lies at the heart of any electronic records management system since it defines the way records are grouped. Classes are known to represent business functions, activities, and transactions in a system. Therefore, associating a class with a record gives it a purpose and shows

the business transaction that led to its creation. Records can be aggregated for operational convenience, allowing them to share the same set of access controls (DLM Forum Foundation, 2011). MoReq2010 also allows for various aggregations that contain records falling under different business classifications. These may be aggregated together for operational reasons related to a particular project, event, case, client, or incident.

As part of the functional requirements, a classification service should allow authorised users to create new classes with at least the following system metadata (DLM Forum Foundation, 2011):

- System Identifier
- Created Timestamp
- Originated Date/Time
- First Used Timestamp
- Title
- Description
- Scope Notes
- Default Disposal Schedule Identifier
- Destroyed Timestamp

It is crucial for NAMCIS to be equipped with a classification service in order for information to be located easily. This could be done by creating main folders followed by sub-folders, until the last level referred to as a file. Classification of information on any particular system makes the retrieval of information easy. Data entered on the system without any direction as to what it pertains to, or to which group it belongs can get completely lost. Without a classification service, there is no order on a system. NAMCIS is required to be equipped with a classification for the easy retrieval of information for its users.

IV) Record service

The DLM Forum Foundation (2011) posits that a record service manages records within a system under differently grouped levels of aggregation. Records are placed into aggregations for all or some of the following reasons (DLM Forum Foundation 2011):

- They relate to the same business transaction or process
- They share the same subject area or topic
- They relate to the same person, place, project, case, client, event, or incident
- They have the same level of access control
- They are held under the same retention and disposal conditions

Aggregation often enhances the value of records by purposefully placing them into meaningful contexts (DLM Forum Foundation, 2011). A record service makes it easier to locate records relating to the same topic. Organisations such as magistrates' courts generate huge amounts of records on a daily basis (Mosweu and Kenosi, 2018). These records need to be grouped according to the subject and transactions that led to their creation. Therefore, any such system must implement the following fields when grouping records (DLM Forum Foundation, 2011):

- System Identifier
- Created Timestamp
- Originated Date/Time
- First Used Timestamp
- Last Addition Timestamp
- Class Identifier
- Title
- Description
- Closed Timestamp

- Destroyed Timestamp (DLM Forum Foundation, 2011).

NAMCIS is required to have a record service in order to efficiently group their records in the system. Record services group records into the main functions of the organisation, i.e. functions that emanate from work done during court proceedings. This type of service helps users to easily upload information to the right functions, e.g. a witness statement or possible evidence to be filed according to its relevant case. The above metadata makes it easier to locate records relating to similar activities within the system.

V) Metadata service

The State Records Office of Western Australia (2015) defines metadata as elements providing contextual information about a record, in a similar way that a file's cover provides context about its content. Examples include the date the file was created, who created it, what it contains, when it was closed, and a location number. MoReq2010 aims to facilitate interoperability between compliant recordkeeping systems (DLM Forum Foundation, 2011). Interoperability means that entities can be directly exported from one system to another. It also facilitates the transmission of data between two recordkeeping systems which must preserve the integrity and context of the entities being transferred (DLM Forum Foundation, 2011).

- System Identifier
- Title
- Scope Notes
- Is-Modifiable Flag
- Is-Entity Reference Flag
- Entity Reference Type Identifier
- Datatype
- Is-Textual Flag
- Default Value

- Default Language Identifier and
- Retain on Destruction Flag

Metadata explains what the record is all about; it is data that explains what that specific data is about. NAMCIS is required to have metadata services on the system that capture and represent a record's full content, i.e. what a record is about, who created it, why it was created, and its complete content. In an electronic recordkeeping system, it is mandatory to capture a record's content, context, and structure.

VI) Disposal scheduling service

The International Council on Archives (2008) posits that an electronic recordkeeping system must be able to restrict data or record disposal to the administrator of such a system. The DLM Forum Foundation (2011) explains that disposal schedules are used to manage the life cycle of records in a system. They further state that once a record has been created, it can never be completely deleted, as although the complete record and its contents no longer exist, there remains a residual record to show it was once held by the system and properly disposed of under an appropriate disposal schedule (DLM Forum Foundation, 2011). The record's disposal schedule also determines how long a record is retained. This concept of accountability is necessary for good records management. MoReq2010 requires that all disposal schedules must specify one of four possible outcomes as outlined below (DLM Forum Foundation, 2011):

- Retain permanently
- Review at the end of the retention period
- Transfer at the end of the retention period
- Destroy at the end of the retention period

NAMCIS, as a court information system, is required to be in possession of a disposal scheduling service that specifies when records are to be disposed of or sent to another server. Disposing of records that are no longer required for day-to-day operations creates space for new records. This way, NAMCIS will have more space for their current records on the system. An overloaded system poses challenges of slow loading and browsing; however, if the system is not overloaded, these problems do not occur. Records in a system must always have a defined retention period and disposal schedule so that space can be cleared up for newly-generated data.

VII) A Disposal holding service

According to the DLM Forum Foundation (2011), modern records management practices have demonstrated the necessity of disposal holds. A disposal hold is known as a legal or otherwise administrative order that interrupts the normal disposal process and prevents the destruction of records while the disposal hold is in place. Under MoReq2010, a disposal hold is created within a system as part of a disposal holding service, and active disposal holds are then associated with entities such as records, aggregations, and classes. Where the disposal hold is associated with an individual record, it prevents the destruction of that record. Once the disposal hold is destroyed, the record's disposal process continues (DLM Forum Foundation, 2011). The following are the fields that a system must show and provide when a user is utilising disposal services on the system:

- System Identifier
- Created Timestamp
- Originated Date/Time
- First Used Timestamp
- Held Record Identifier
- Held Aggregation Identifier

- Held Class Identifier
- Title
- Description
- Destroyed Timestamp

Before records are disposed of completely, they are prepared for the destruction process. NAMCIS is required to have this function that keeps records awaiting disposal: a service that separates records that are no longer needed for business activities, records that have served their purpose. It is crucial for a records system to provide the above fields when either generating or verifying record disposal dates.

VIII) A search and reporting service

MoReq2010 requires all records systems to have a search engine for finding entities based on their metadata, and must be presented in a user-friendly, easy to navigate way. Therefore, The DLM Forum Foundation (2011) suggests that systems should be able to:

- Search for any entity by its system or contextual metadata.
- Support full-text searching using the same search term, entered once, across all textual metadata elements simultaneously. This means the system must be able to interpret and recognise terms used previously.
- Combine the results of searches to perform complex searches. This means a system must be able to give a variety of search results containing all closely-related results to the actual search.

The DLM Forum Foundation (2011) stresses that a system must allow users to find records, using a search query, of any entities that have been granted authorisation to browse or inspect them. Moreover, the system must allow a user to specify a search

criterion that returns a match for metadata based on any of the following (DLM Forum Foundation, 2011):

- Values occurring after a particular date, date/time, or timestamp
- Values occurring on a particular date
- Values occurring before a particular date, date/time, or timestamp
- Values occurring weekly; and
- Values occurring monthly

This is the service that helps users to navigate around the system. NAMCIS is required to have a search bar for users to use when they need to search for records on the system. Another important component is the reporting back service that informs the user of the progress of the results of a search, and whether or not that particular item is available. The reporting tool also helps users to know why their searches did not go through, providing reasons as to why they failed completely. A system's search and reporting services should have a user-friendly query tab that offers information on previous searches, suggestions on current searches, and other options available as stated above.

IX) Export services

A recordkeeping system must allow an authorised user to export entities to an XML data file (DLM Forum Foundation, 2011; Vieira, Valdez & Borbinha, 2011). This file should allow validation using the MoReq2010 XML schema. The system must therefore allow the user to export any of the following information:

- All disposal schedules from a disposal scheduling service
- All aggregations and records, with their components, from a record service
- All element definitions and templates collectively from a metadata service
- All disposal holds from a disposal holding service
- All users and groups from a user and group service

- All roles from a role service

All of the above relate to the issue of migrating records from one computer to another. In some cases, each service may be implemented individually or bundled together on the system for simplicity (DLM Forum Foundation, 2011). It is thus clear that records management standards should be implemented in organisations. These standards ensure that records are kept in a systematic manner according to the legal and administrative requirements of the organisation or government (IRMT, 1999). Similarly, NAMCIS ought to have an export service where information can easily be exported from one computer database to another. Since technology evolves at a fast pace, there is a need to transfer data to the latest software.

This study sought to determine whether or not NAMCIS has the export service, among other mandatory functions, inbuilt to allow data exportation at any given time.

2.3 Electronic recordkeeping systems

Similar to the DLM Foundation's view on the functional requirements of an electronic recordkeeping system, the Government Record Services of Hong Kong (GRS) (2011) supports MoReq2010 because it enables the following records management processes and controls:

- A. Registration: This process provides evidence that records have been created or captured in a recordkeeping system.
- B. Setting of retention and disposal arrangements: This ensures that records are kept only as long as needed for the organisation's business activities, while reducing storage and management costs.

- C. Storage: With this process, space is created to determine the most efficient and effective ways of maintaining, handling, and storing records.
- D. Records capture: This process determines whether a record should be made and kept, and establishes a relationship between the record, its creator, and the business context that originated it.
- E. Classification: This process links records with the business context under which they were created/received.
- F. Access and security classification: This process assigns rights or restrictions to records access.
- G. Use and tracking: This process manages and tracks the use and movement of records to prevent loss, detect unauthorised use, and ensure ready use when required.

These are all basic functions that any electronic recordkeeping system must be able to produce. Without these crucial functions, a system will not be able to fully capture and protect information on a system.

2.4 Procedures for capturing electronic records

The General Commission on Archives and History (GCAH) (2013) posits that the procedures for managing digital records are an important element of a digital recordkeeping framework. These procedures are aimed at outlining how policies will be implemented and provide clear instructions for their practical application. IRMT (2009b) agrees that procedures show how records must be captured, retained, and disposed of appropriately and legally.

Studies (Hoque & Sowar, 2015; GCAH, 2013) define electronic records as consisting of metadata which describes the context, content, and structure of records. Metadata allows users to control, manage, find, understand, and preserve records over time. For a record to be entered into the system, it should have at least the following metadata:

- Title
- Subject
- Format
- Date of creation
- History of its use
- Details of its disposal

More importantly, the GCAH (2013) points out that the procedures an organisation establishes to capture its digital records will depend on the type of recordkeeping system in use, the types of digital records generated, and the specific recordkeeping requirements (standards) the organisation must satisfy. However, according to Charles Darwin University (CDU), (2017) a record in the system must first be identified as part of the regular work process by identifying the transaction that led to its creation. When creating a work process or function that involves record capture, the following must be identified and included (CDU, 2017):

- The records to be captured (type, number, format, etc.)
- The system that each of the records must be captured in
- The most appropriate method of record capture, such as:
 - Scanning
 - Direct digital capture
 - Data entry
 - Hard-copy storage

Record capture procedures vary between organisations due to the size and type of records they create daily. However, it is mandatory that they meet at least the above-mentioned criteria. In this case, NAMCIS captures its records through direct digital capture and data entry process.

2.5 Integrating records management into ICTs

The IRMT (2008, p.6) defines ICT systems as “coherent collection[s] of processes, people, and technologies brought together to serve one or more business purposes.” The introduction of ICTs into records or archives management has made electronic recordkeeping in many African countries easier compared to previous manual methods (Asogwa, 2012). This is also the case in Namibia as public services have improved drastically by going digital. The integration of records management into ICTs simply means integrating records management functions into information systems. These are functions integrated to protect electronic systems such as: adequate access restrictions to protect the system against unauthorised users; retention and disposal schedules to determine how long records must be retained and when they should be disposed of; and security measures in place to control changes done on the system, etc. These processes are facilitated by qualified records managers and IT personnel.

The integration of records management into ICTs is very important because this way, an electronic recordkeeping system operates efficiently from the start. This is because, information is captured according to standard procedures put in place for capturing electronic records; information is arranged accordingly to represent a full record because all the necessary fields are infused in the system; information is stored and retrieved in a systematic way that is easy to navigate all around the system; the system works faster and more conveniently because all semi-current records are offloaded

from the system; information is safe from unauthorised users because there are adequate security measures in place to control access levels; and finally, the system works properly because it's updated and improved regularly by IT specialists.

Major challenges of information systems —which NAMCIS is also experiencing — stem either from unqualified staff that did not go through adequate training for system usage, or the organisation has acquired a system without prior knowledge about the abilities of the system. This is why it is important to consult the relevant authorities (National Archives, records managers, and IT specialists) to scrutinise and test any system before adopting it for capturing the organisation's records.

While ICTs have improved record management, choosing the wrong type of electronic recordkeeping system is still a common occurrence. Studies (Kettani & Moulin, 2014; IRMT, 2008) stress the importance of evaluating the strengths and weaknesses of recordkeeping systems to determine whether they are capable of maintaining, capturing, and providing access to records over time. Kalusopa (2016) concurs that ICT systems must be able to provide trusted information that is usable, reliable, complete, and unaltered. Organisations including OOJ (the custodian of NAMCIS) often fail to keep up with system changes due to limited training, onboarding, and troubleshooting skills.

Although IT systems increase the quality of services and reduce overall operational costs, they do not necessarily perform full electronic recordkeeping functions (Asogwa, 2012). The latter is only achieved when records management functionalities are integrated into ICT systems by a team involving records management specialists (Moatlhodi, 2015; IRMT, 2008). Hussin and Johan (2014) argue that, even if IT systems are widely used in organisations to store, protect, process, transmit, or retrieve

information, they tend to store records permanently, thus disregarding essential records management principles. Hussin and Johan (2014) attribute this to IT systems lacking the capacity to execute retention schedules, resulting in an ongoing need for increased storage space. This also means that IT does not incorporate data disposal schedules, thus retaining records no longer needed for daily business activities. Nthomiwa (2007) argued that the absence of records retention schedules within an organisation may result in file overloading, misfiling of documents, and case backlog. NAMCIS is currently faced with this challenge as it contains all the records created ever since its inception. The IRMT (2008) suggests that for records management and ICT integration to occur, the process should be undertaken within an appropriate framework, as outlined below.

2.6 Records management framework

Adam (2008) stresses that an electronic recordkeeping system captures a record's content, context, and structure. A system with full records management functionalities will be able to retain digital records in their original formats. It guides the process of acquiring information systems that capture records correctly. It provides procedures to be followed, standards to be used as a benchmark, and basically a roadmap for implementing a new recordkeeping system or improving a current system. Establishing a records management framework guides the integration of records management into ICT by outlining the necessary procedures. This must be supported by the following;

- Technologies that facilitate records management through the records life cycle through best-practice standards.

- Staff (records managers) and senior officials who understand the importance of records management in supporting operations (IRMT, 2008).

The successful integration of IT and records management requires IT and records management personnel to work together during the implementation. This enhances communication and full systems compliance. IRMT (2008) emphasises that the main goal of this integration is to enable the generation and management of accurate and reliable records of actions and transactions. This provides trusted and contextualised information to support decision-making.

A policy framework consists of regulations and standards, and it ensures that recordkeeping is considered when first designing and implementing an ICT system (Hoque & Sorwar, 2015; Weisinger, 2011; IRMT, 2008). Most importantly, the integration of records management into ICT systems must be authorised through a formal approval process undertaken by a governing body such as the National Archives; in this case, the National Archives of Namibia. The National Archives body in any country usually provides laws, standards and policies prescribing general and more detailed implementation requirements (IRMT, 2008).

Nengomasha (2009) held similar views and she also noted that the National Archives of Namibia regulated the filing, care, and disposal of records. She further stated that the integration of records management into ICT systems was crucial and must be authorised and guided by relevant authorities. Electronic recordkeeping should be implemented according to internationally accepted records management standards, such as MoReq2010. The system functionalities should possess mandatory functions as outlined above, to enable the system to adequately capture records context, content, and structure. Thus, an electronic records management system such as NAMCIS

should be able to capture, store, and disseminate information efficiently while at the same time meeting the required standards and regulations.

2.7 Previous studies on court recordkeeping systems

A study conducted by IRMT (2011) revealed that ICT has been introduced in several countries around the world, which has enabled many African countries such as Uganda, Kenya, South Africa, Tanzania, and Botswana to introduce digital court recording machines and transcription systems in courts. The judiciary is an important institution that upholds the rule of law and creates a conducive environment for political, economic, and social transformation (Ojielo, 2010). Computerised record systems speed up court proceedings, i.e. cases ought to be resolved faster, both at trial, and on appeal. This occurs as a result of a well-managed electronic record system. Such a system should have all the mandatory functions, and it should be managed and implemented by records management specialists, IT specialists, and the National Archives.

Nonetheless, (Moemi & Rotich, 2015; Nyampong, 2015) argue that, generally speaking, recordkeeping systems in Africa have either collapsed or are in an alarming state. The authors further state that neglected records have become a major barrier to the general development of most African countries. This is because many countries, including Namibia, lack the resources and qualified personnel to support electronic recordkeeping. Nengomasha (2009) discovered that the public service of Namibia lacked standards as well as policies on hardware and software applications. Similarly, Kaupa and Chisa (2020) also pointed out that, there was an inadequate legal and regulatory framework in Namibia to facilitate electronic records management implementation. They recommended that there was need for the development of a

comprehensive legislative and regulatory framework for managing electronic records in the public sector of Namibia. Below are some studies that have been undertaken in other African countries.

2.7.1 Botswana

In a study on Botswana's Court Records Management System (CRMS), Mosweu and Kenosi, (2018) revealed that the country's Administration of Justice (AOJ) had adopted an American-made, locally-customised CRMS to manage case files electronically. The authors reported that a team of local experts configured the system to meet the needs of the Botswana High Court to improve the processes of records capture, storage, and retrieval of accurate and up-to-date case files. The system further aimed to address issues such as missing files, unreliable statistics, and misfiling of case records. However, document scanning remains unimplemented due to a shortage of human resources and a lack of interest by some officers.

The study conducted above did not mention whether the human resources included qualified records management specialists or IT specialists who possessed knowledge of how to manage electronic systems. The study also did not mention whether the implementation of the CRMS was adopted based on any records management standards.

According to the authors, five years after adopting the CRMS, the AOJ boasted strong security access levels and data integrity, as no evidence had been brought before the law for interrogation. However, problems such as missing files, postponed hearings, and unreliable statistics persisted (Mosweu & Kenosi, 2018). The researchers also reported that the computers and scanners used for the CRMS were inadequate. This

was compounded by a lack of awareness of the legal regulatory frameworks for electronic records management.

It is important to adhere to a records management framework which provides a road map of procedures and a regulatory framework for the management of records kept in the system. It is also important to include records management experts on the local experts team to guide the latter on the crucial functions that must be integrated into the system before its adoption. This was also not mentioned in the study.

2.7.2 Kenya

A study (Lowry, 2013; Mosweu & Kenosi, 2018) revealed that in Kenya, the Judiciary computerised its courts processes without the involvement of records managers or archivists such as the Kenya National Archives and Documentation Service (KNADS). This is also the case in Namibia. Records managers provide the records management framework, and without the framework, there is no guidance. A successful recordkeeping system is implemented with the assistance of records managers to assist in the integration of all the crucial functions of a system. Without this, challenges are experienced.

In their annual report of 2017-2018, however, the Judiciary of Kenya (2020) reported adopting a Judiciary Transformation Framework. This framework features new strategies to automate court processes towards speedier trials, enhanced administrative efficiency, and e-filing, among others. The Judiciary aimed to automate all its functions by 2021. The committee involved with its implementation comprised a Court of Appeal judge, a stakeholder within the Judiciary, and a representative from the ICT Authority. No records management specialist, or a representative from the National Archives of Kenya, was invited to be part of the committee to offer their guidance.

In another study, Ambira (2016) similarly stated that in 2010, the Kenyan Judiciary embarked on a project to automate its court processes to improve service delivery. It was further indicated that, by October 2011, 60 million records had been digitised on the new Document Management System. The automation of information at the Judiciary was intended to make access to information easier and faster, and to have an effective justice system that all its citizens could trust (Ambira, 2016).

2.7.4 Tanzania

In Tanzania, the Dar-es-Salaam High Court uses a Case Management System (CMS). The committee responsible for managing the Judiciary's ICT capacity does not include records management experts (Lowry, 2013). This has contributed to the absence of digital records management components in Tanzania's ICT road map. Lowry (2013) further states that the system is limited in its ability to manage the records life cycle, because it is unable to capture records in all formats or assign unique identifiers to documents. This in turn limits search ability, slows data retrieval, and weakens the system's audit functionality. The system does not include predefined record metadata or rules for controlling metadata.

In another study, Kamatula and Kemoni (2018) discovered that e-records management systems in Tanzanian government offices were very weak, and comprised inadequate information systems and standards, limited knowledge and skills regarding e-records management, an absence of e-records policies, as well as low awareness of the importance of e-records. Both cases highlight the importance of having records management experts and integrating them into ICT to improve organisational efficiency.

2.7.5 Uganda

Studies (Lowry, 2013; Ngoepe & Makhubela, 2015) report that the Judiciary of Uganda has implemented a Court Case Administration System (CCAS) in its Court of Appeal but the system only stores documents in Office 2003 (Word document/.doc) and PDF formats, as the Court is rarely required to store records in any other format (Lowry, 2013). This means that the system lacks some of the most crucial mandatory functions. Formulating a records management framework before the implementation of a system is very important. None of the studies above pointed out how the CCAS was adapted. Lowry (2013) further posited that there were no rules regarding the disposal of records kept in the CCAS, nor did the system have any disposal scheduling feature. In addition, no records management specialists had been involved in the system's design, nor were any international records management standards consulted. This demonstrates a need to adopt a system that is managed by records management and IT specialists.

2.8 Knowledge and skills for recordkeeping system personnel

Records management has been described as a constantly evolving profession. The Government Record Services of Hong Kong (2011) and Nyampong (2015) urge organisations to establish ongoing training programs to upskill records management staff. Kemoni and Wamukoya (2000) and IRMT (2009a) noted that in Africa, most recordkeepers and archivists are not professionally trained. They are recruited after secondary school and rise through the ranks by promotion or seniority. IRMT (2009a) realised that, users of electronic systems are largely not trained to know what documentation to keep for evidential purposes. Furthermore, it was also noted that

users had no knowledge of how to describe, file, or maintain records in an electronic environment; as a result, records were mismanaged.

Nengomasha (2009) asserted that the downfall of any recordkeeping system begins with staff that have no previous background of working with electronic recordkeeping systems. This is prevalent in Namibia. Nengomasha (2009) further pointed out that, Namibia's ICT and record's management sector suffered from a lack of trained and skilled human resources. She argued that, staff needed to be competent and adequately trained in order to create, use, manage, and disseminate information in the system efficiently. The competencies that staff must possess include records and information management skills, project management skills, technological applications, traditional records management, and archival skills (Nengomasha, 2009; IRMT, 2004; Shonhe and Grand, 2019). These skills should be complemented by in-depth knowledge of the e-records environment, best-practice methods, and ongoing trends in electronic records management (Shonhe and Grand, 2019; IRMT, 2004). This way, systems will run smoothly and reduce the dependency on IT personnel to solve simple issues which are time consuming.

Such challenges could be solved by end-users, thereby minimising unnecessary delays in the work process. Some challenges only require a restart of the system, but not all staff working with the system receive the necessary training to handle such simple system errors. Therefore, training in the use of records in an electronic environment is critical to all end-users.

2.9 Challenges of electronic recordkeeping systems

Studies (Katani, 2014; Adam, 2008) emphasise that electronic records can easily be manipulated without leaving a trace, potentially rendering them useless as evidence in

court if there are no adequate security measures in place. The adoption and use of these systems have been slow in many countries, and some systems have failed (Boikhutso, 2013; Thurston, 2005). These challenges can lead to delays and lowered judiciary effectiveness. The most common challenges experienced when managing electronic recordkeeping systems include IT dependency, security concerns, weak legislation, and low levels of ICT literacy. These challenges are briefly outlined below.

2.9.1 Dependence on the Information Technology (IT) department or provider

Access to records using tracking and auditing devices requires IT personnel who may be internally or externally based (GRS, 2011; IRMT, 2009b; Smallwood, 2013). These IT providers often do not have the same perspective and priorities as the departments they serve, which can hamper organisational efforts (Smallwood, 2013). This affects the rate at which technical difficulties experienced on the system are resolved, because launching a query is a process and there is no guarantee that the query will be successfully solved on time. As a result, work processes are delayed.

2.9.2 Security concerns

Electronic records are very fragile and as a result, they need a lot of protection. One of the mandatory functionalities of electronic recordkeeping is to ensure user restrictions. This way, there is complete control of who has access to the system and in what capacity. Records management standards recommend the use of passwords and different access levels to control what transpires on the system (DLM Forum Foundation, 2011). This is why it is important for IT personnel and records managers to work hand in hand to secure the records on the system, while still making them accessible to authorised users.

2.9.3 Weak legislative and organisational structures

Asogwa (2012) outlines cases of weak records management legislation, policies, and organisational frameworks in Sub-Saharan Africa. Abdullah, Yusof & Mokhtar (2019) add that, underfunded technology development initiatives across the continent have hampered the implementation of e-records management, thus making recordkeeping difficult. This is why implementing a regulatory framework to guide the management of electronic records is crucial. This does not only provide procedures on how to go about managing the records, but it also provides solutions to challenges associated with the system. Without a proper regulatory framework, it is difficult to conduct an efficient electronic records management system.

2.9.4 Low levels of ICT literacy

Asogwa (2012) argues that successful electronic recordkeeping systems may fail if policies and structures are not supported by trained, qualified, and experienced personnel. In Namibia, Nengomasha (2009) also discovered that the lack of trained records management professionals was one of the problems hindering the implementation of Namibia's record management programme. In Kenya and Malaysia, it was reported that low competency levels resulted in difficulties in managing electronic records (Kemoni & Wamukoya, 2000; Abdullah, Yusof & Mokhtar, 2019). Shonhe and Grand (2019) explain that when changes are first introduced into an organisation, for instance, a new electronic system, the most likely response is user resistance. As a result, some African recordkeepers lack the basic competencies for handling records and archives in the public sector. This is why it is crucial to employ personnel with backgrounds in the field of information science as opposed to just anyone with a Grade 12 certificate.

2.10 Benefits of electronic recordkeeping systems

Regardless of the above challenges, IRMT (2009a) emphasises the benefits of using computer technologies to create and manage records. These benefits have also been experienced with the inception of NAMCIS despite its challenges. These include widespread access, flexibility, efficiency, and effectiveness. Each is briefly outlined below.

2.10.1 Widespread access

Nengomasha (2009) and IRMT (2009a) support the need for widespread electronic access to information, especially in environments where resources are scarce or judiciary cases are transferred to different courts. Widespread access in an electronic recordkeeping system facilitates convenience of information sharing among different offices of the same organisation. Such time-independent and space-agnostic access improves service delivery and enhances operations over and above paper-based systems (IRMT, 2009b). This has been the case in Namibia as magistrates and prosecutors from different offices can access the same system from different magistrates' courts. The sharing of information on the system currently provides benefits to those dealing with similar cases as they are able to access the summaries of finalised cases and how they were resolved.

2.10.2 Flexibility

IRMT (2009b) explains that, ICTs enhance flexibility through the concurrent creation, storage, access, use, and management of records within an organisation. This means that, processes such as creating a record, using a record, or looking for a record, are simplified. Therefore, electronic recordkeeping systems create a more convenient way

of delivering justice in courts. Nengomasha (2009) adds that, corporate accountability is easily established since records are tagged with appropriate audit trails. Furthermore, a richer, more accessible repository of accurate, up-to-date information promotes data-sharing amongst employees in different departments. Hence, the Namibian magistrates' courts proceedings could be processed more smoothly through NAMCIS.

2.10.3 Economic benefits

Electronic records free up physical space in the form of costly shelves, filing cabinets, and storage boxes (IRMT, 2009b). Magistrates' courts no longer need to invest in costly shelves that require maintenance over time, looking for records that were possibly misfiled or having to buy boxes to keep physical records (IRMT, 2009b). Therefore, the implementation of an electronic recordkeeping system would enable magistrates' courts to save a lot of money in terms of resources which are expended on physical records storage. The implementation of electronic records also provides greater security and archival benefits through long-term access (Nengomasha, 2009).

2.11 Summary

This chapter aimed at reviewing relevant literature for the study. The literature has shown that the use of ICTs in courts has, to some extent, made a positive impact on court proceedings serving justice to the Namibian people and elsewhere in Africa. The chapter discussed the mandatory functional requirements that an electronic recordkeeping system must possess in order to adequately capture records content, context, and structure. The chapter also highlighted the relationship between ICTs and records management, the importance of integrating the two, and the benefits they jointly provide. The literature has also shown that African countries such as Kenya, Botswana, Uganda, South Africa, Namibia, and Tanzania have succeeded in introducing electronic recordkeeping systems for their judicial systems, albeit with challenges. These challenges can be attributed to the fact that these systems were implemented without following the various international records management standards and guidelines.

The literature therefore illustrates that some African countries, Namibia included, acquire electronic records management systems without conducting enough research to establish the efficiency of the functionalities of these systems. Records managers or archivists are not involved in the identification and implementation of suitable electronic recordkeeping systems. Moreover, no guidance is sought from National Archives bodies, and the knowledge of staff in charge of these systems is often inadequate. Therefore, this study sought to assess NAMCIS to determine if it was integrated with all the mandatory functionalities as per international records management standards. Furthermore, the study sought to determine if the staff operating the systems were qualified and if they had acquired sufficient training in

working with electronic systems similar to NAMCIS. The next chapter presents the research methodology employed.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This study aimed to assess the recordkeeping functionalities of the Namibia Case Information System (NAMCIS) at the Office of the Judiciary. The assessment was done to establish the extent to which the system was guided by international records management standards and procedures. The chapter presents the research methodology and research design that was employed. Methodology is a way of producing and analysing data so that theories and conclusions can be tested, accepted or rejected (Creswell, 2013; Wedawatta, Ingirige, & Amaratunga, 2011). The methodology consists of methods, strategies, and practices that are used to solve a problem. The methodology, in this case, was informed by the research objectives outlined in Chapter 1, and the present chapter is presented in the following order: research paradigm, research design, target population, sampling, data collection methods, data collection instruments, data collection procedures, data analysis, and research ethics. Creswell (2013) agrees that a research methodology is a plan that provides the overall framework for collecting data and therefore, this chapter provides the overall framework of how data will be collected at identified magistrates' courts.

3.2 Research paradigm

Over the years, research has been guided by several paradigms and philosophies. In the social sciences, two major research traditions, namely interpretivism and positivism, have guided the style of reasoning and the shaping of specific methodological outcomes (Creswell 2013; Kumar, 2011). A research paradigm is a lens through which a researcher views the world and examines the methodological

aspects of their work in order to determine the appropriate data collection and analysis methods (Baskarada & Koronios, 2017; Kivunja & Kuyini, 2017). This means that a researcher needs to identify the appropriate methods and styles of reasoning that best suit the data collection process. Furthermore, a paradigm constitutes the abstract beliefs and principles that shape how a researcher sees the world and how he or she interprets the acts within the world (Kothari & Garg, 2014). This is to say that a researcher needs to acquire the skills of blending into a society that is under investigation as a form of respect, and to better understand the respondents' points of view of the subject at hand. Paradigms play a significant role in research because they orient the focus and direction of a study and determine the type and structure of its research questions. Kivunja and Kuyini (2017) categorise these research questions as follows:

A) Ontological: “What is the nature of reality?”

This explains the situation at hand, which was partially established in Chapter 1 of this study. Chapter 1 explained the background of NAMCIS and the situation at hand as to where NAMCIS currently stands, i.e. the reality.

B) Epistemological: “How do you know something?”

This refers to how the researcher may better understand that specific reality, i.e. how he or she may approach a research problem in order to obtain accurate results.

C) Methodological: “How do you go about finding out?”

Research methodology is essentially tied to all of the above questions. However, in this particular study, the focus was more on the methodological question, “How do you go about finding out?” This question seeks to understand how one goes about collecting data in a professional way that respects the respondents' humanity and

dignity. Researchers try to get as close as possible to the participants being studied because subjective evidence is assembled based on individual views (Creswell & Poth, 2018). This is how knowledge is gained through the subjective experiences of people.

Paradigms are thus defined by the reality of things (ontology), knowledge of that reality (epistemology), and the tools used to identify that reality (methodology), (Cranford, 2013; Anderson, 2013). This study employed interpretivism to gain an understanding of NAMCIS from the perspective of its users (Kivunja & Kuyini, 2017). These are the end-users that work with the system on a daily basis and have the knowledge of what transpires on the system.

A brief primer on the approach used in this study follows.

3.2.1 Interpretivism

Interpretivism is about understanding an individual's subjective experiences and their interpretation of the world around them. The researcher makes meaning of the data through their thinking, and the processing of participant interactions (Rosenthal, 2018; Baskarada & Koronios, 2017; Kivunja & Kuyini, 2017). In this study, the researcher engaged with respondents through face-to-face interviews that contained open-ended questions, in order to obtain their unique perspectives by engaging with them physically. The interpretivism paradigm best suited this study due to its ability to enable the researcher to understand the issues at hand through the end-users, in this case, the NAMCIS end-users and system administrators (IT technicians).

To understand a particular phenomenon, it is best to approach it by inquiring with those closest to it; by inquiring about their experiences and how these impacts them on a daily basis (Creswell & Poth, 2018). Accordingly, interpretivism, in its naturalistic quality, assisted this study in understanding the individuals' experiences throughout

their journey with NAMCIS ever since its inception. This is because qualitative methods answer questions about the complex nature of phenomena in an attempt to describe and understand them from the participants' perspectives (Baskarada & Koronios, 2017). Thus, this study opted for the qualitative approach as opposed to the quantitative approach, due to the flexibility of qualitative research, which allows methods to be devised as the research progresses. Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings, focusing mainly on the actor's perspective aimed at understanding social action in terms of its specific context (Kothari & Garg, 2014). This study was concept-driven; the concept being the recordkeeping functionalities of NAMCIS. The researcher was able to gain a deeper understanding of the subject under investigation as she had an opportunity to inquire further. Both e-government systems and electronic records systems are physical realities that these users have to experience daily in their attempts to administrate court services to citizens. The focus was on describing the experiences of the end-users responsible for creating electronic records, with regards to the management of electronic records generated by NAMCIS.

Bryman and Bell (2014) and Neuman (2011), noted that the qualitative approach focuses on interviewing a small group of participants, which helps the researcher to draw conclusions within a specific context. Creswell (2013) posited that the qualitative method is used when a problem needs to be explored or when there is a need for a complex and detailed understanding of an issue. In the context of this research, there was a need to understand the functions of NAMCIS to determine why magistrates' courts were experiencing the challenges mentioned in Chapter 1 of this study.

3.3 Research design

Igwenagu (2016) defines a research design as a plan or structured framework for solving a research problem. The research design employed in this study was a case study. Case studies are also employed when there is a need to empower individuals to “share their stories and hear their voices.” This study is a case study of the Office of the Judiciary. Starman (2013) defines a case study as a description of an individual case and its analysis, i.e. a general term for the exploration of an individual, group or phenomenon. Furthermore, case studies illustrate complex problems and provide opportunities to gain an understanding using first-hand information from respondents (Wedawatta et al. 2011). MoReq2010 standards, together with the records management integration into ICTs, guided the in-depth assessment to: investigate the current functions of the system; recognise the legal and policy frameworks in place; identify procedures for electronic records, standards, and compliance to policies; and understand the involvement of records managers and the National Archives of Namibia in the management of electronic records. Furthermore, the training of staff working with the system on a daily basis was also scrutinised in-depth. The respondents were asked to state whether they were aware of the above-mentioned components in detail, to understand the system from the view of the users.

The aim of this study was to obtain raw information about the system’s current functionalities from the system administrators and end-users of the system, hence the usage of a case study design. A case study is typically known to be used when we analyse and describe, for example, each person individually on his or her activity and/or special needs (Starman, 2013). This research design was therefore ideal for this study.

3.4 Population

A research population is a collection of individuals or objects known to have similar binding characteristics or traits (Saunders, Kitzinger & Kitzinger 2015; Silverman, 2010). The target population for this study was the Khomas Region employee cohort of the Office of the Judiciary (73), the Windhoek Magistrates' Court (32), the Windhoek Traffic Court (30), and the Katutura (Mungunda) Magistrates' Court (33). Therefore, a total of 168 employees were targeted (Office of the Judiciary, 2019).

3.5 Sampling

Sampling is the statistical process of selecting a subset called a "sample" of a population of interest (Lim & Ting, 2013; Bhattacharjee, 2012). Furthermore, sampling is also referred to as a practical way to collect data from a large population. The sampling frame used was the Office of the Judiciary staff list (sometimes called an establishment register).

Vehover, Toepoet, and Steinmelz (2016) explain that, with non-probability sampling, participants are selected based on their accessibility or by the purposive, personal judgement of the researcher. Therefore, it was best to choose respondents that worked with the subject under assessment, i.e. NAMCIS.

Purposive sampling identifies and selects individuals or groups that are knowledgeable or experienced with the phenomenon of interest (Neuman, 2011). Accordingly, this study chose participants according to their work duties in relation to their experience with, and knowledge of, NAMCIS. From the population of seventy-nine (79) employees of the Office of Judiciary, a sample of four (4) IT personnel who maintain the system's server (system administrators) were purposively selected. From a population of thirty-two (32) employees of the Windhoek Magistrates' Court, three (3)

prosecutors, four (4) court clerks, two (2) chief legal clerks, and three (3) magistrates were purposively selected. From a population of thirty (30) employees of the Windhoek Traffic Court, two (2) prosecutors, two (2) magistrates, four (4) court clerks, and two (2) chief legal clerks were purposively selected. From a population of thirty-three (33) employees of Katutura (Mungunda) Magistrates' Court, four (4) prosecutors, two (2) magistrates, five (5) court clerks, and two (2) chief legal clerks were purposively selected. In total, a sample of forty (40) respondents were selected.

3.6 Data collection methods

There are many data collection methods in research, such as observation, focus group discussions, surveys, questionnaires, and interviews. Research instruments are derived from data collection methods. According to Lim and Ting (2013), research instruments are defined as research devices that are used to collect the actual data. These include observation checklists, questionnaires, interview guides, and document review worksheets (Rasjasekar, Philominathan & Chinnathambi, 2013). The instruments selected usually depend on the type of data being collected (e.g. qualitative or quantitative). This particular study (qualitative in nature) made use of interview guides, observation, and document reviews. Below is a discussion of data collection methods used in this study.

3.6.1 Interviews

An interview is an information-gathering conversation meant to elicit people's opinions, thoughts, experiences, and feelings (Hartman, 2011). Interviews are personalised interactions between the researcher and a respondent. The interviewer (researcher) is the facilitator whose job is to lead the discussion and ensure that the topic at hand is analysed to meet the objectives of the study. Interviews are useful

when the topic of inquiry relates to issues that require complex questioning and considerable probing (Bhattacharjee, 2012). Data were collected through interviews to gather the views and experiences of NAMCIS end-users. Interviews were conducted with the IT personnel, chief legal clerks, legal clerks, prosecutors, and magistrates to gather more insight into their areas of their responsibility when it comes to NAMCIS. Face-to-face interviews were deemed most suitable for the study to solicit the subjective views of those involved. Below are the advantages and disadvantages of interviews.

Table 1: *Advantages and disadvantages of interviews*

Advantages	Disadvantages
Interviews are effective in obtaining data that are specific to a given topic.	It can be challenging to arrange a suitable place and time for an interview.
Interviews enable the researcher to see the surrounding environment, i.e. home or office, of the respondent.	There is no room for brainstorming and, therefore, less creativity in responses.
Interviews allow a researcher to prompt an interviewee by providing a set of example responses.	Time restrictions usually mean only a small number of people can be interviewed.
Interviews allow the researcher to collect people's ideas, opinions, values, and beliefs about a specific topic.	Interview planning, execution, and analysis can be time-consuming.
Interviews have a high return rate, i.e. a vast amount of information can be collected.	Interviews are regarded as never being 100% anonymous.

There are usually few incomplete responses; most questions are answered.	Interviews are mostly suitable for small-scale studies.
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Source: (Kfourri & Batmanabane, 2017)

Although interviewing is known to be a powerful way of gaining insight into interviewees' perceptions, it should go hand-in-hand with other research methods which provide in-depth information about participants' inner values and beliefs about a given topic. In addition to interviews, this study has also used document review and observation as data collection methods.

3.6.2 Document review

Document review is a systematic procedure for evaluating printed and electronic documents to identify relevant information (Wach, 2013; Bowen, 2009). Bowen (2009) further explains that document review requires data to be examined and interpreted in order to obtain meaning, gain understanding, and develop empirical knowledge of a given subject. This study used document review to analyse the existing manuals on NAMCIS. Documents that can be reviewed include manuals, system specifications, procedures, and organisational training guides (Cardo, Anderson & McDonald, 2017). The key NAMCIS documents, including NAMCIS guides and manuals about how to use the system in place, were thus examined for appropriateness, relevance, and applicability.

3.6.3 Observation

Observation is a data collection method which researchers use to gather data in a well-defined and procedural manner (Kothari, 2011). There are different types of

observation in research methodology. Ciesielska and Boström (2018) outlined them as follows:

- i) Participant observation: The researcher strives to immerse himself/herself in a specific culture, preferably for a longer period of time, in order to acquire an insider's understanding of the culture either as a (marginal) member or as a visitor;
- ii) Non-participant observation: The researcher tries to understand the world, relationships, and interactions in a new way, without prevalent categorisations and evaluations;
- iii) Indirect observation: The researcher relies on observations made by others (e.g. other researchers), on various types of documentation, recordings, or on auto-observation (Ciesielska & Boström, 2018).

In this study, participant observation was used as explained above to supplement the information gained from the interviews. Under the participant observation method, the researcher had an opportunity to observe the system set-up, i.e. how traffic tickets are entered into the system; how a charge sheet is created; how the main functions appear on the system's main page; how staff log onto the system using their usernames and passwords; and how to enter as a user into folders within the system functions, etc. The researcher carried out observations that took 5-10 minutes with the respondents (chief legal clerks and prosecutors) that demonstrated the system's functions.

According to Kothari (2011) participant observation eliminates subjective bias because the researcher observes without questioning the respondents. Some respondents (mostly prosecutors and chief legal clerks) demonstrated what they were trying to say by

actually using NAMCIS. The researcher then used this opportunity to observe the demonstrations on the system. This resulted in lengthier interview sessions.

3.7 Data collection instruments

As stated above, data collection instruments are used to collect the actual data in research. Below is an explanation of the data collection instruments used in this study.

3.7.1 Interview guides

Interview guides are suitable when a study is aimed at obtaining interviewees' personal views, beliefs, and feelings about a subject (Hartman, 2011). Interview guides are also used because of their ability to neutralise some of the weaknesses inherent in other data collection instruments, such as misunderstanding of questions affecting how they are answered, and having no means of reverting (Harris & Brown, 2010). Interview guides were used to give the respondents room to explain their answers and clarify information. Separate interview guides were used for the system end-users and the system administrators, because the issues investigated were addressed from different perspectives and approaches. The interview guide for system end-users concentrated on issues of records management, such as the standards and procedures in use, security measures, and access to records kept on the system. For the system administrators, the interview guide focused on more technical issues and the functions of the system. The interview guides used in this study are all reflected in Appendices A to D, at the end of this document.

3.8 Data collection procedures

Without a plan and appropriate procedures in place, researchers cannot conclude their research questions and objectives. Data collection procedures are one of the critical

steps carried out in the execution of research (Kothari & Garg, 2014). One such step is obtaining ethical clearance from an appropriate governing body. In this study, ethical clearance was obtained from the UNAM Centre for Research and Publications and then taken to the Office of the Judiciary for further permission to be granted (see Appendix G). After this was done, appointments were scheduled with key contacts within the Judiciary and magistrates' courts, through which specific respondents were contacted for interview scheduling. The data collection period took about five weeks; one week for each magistrates' court, namely, Katutura Magistrates' Court, Windhoek Traffic Court, Windhoek Magistrates' Court, and the IT department within the Office of the Judiciary. The interviews were conducted in the respondents' offices in Windhoek and they lasted 30-45 minutes with each selected respondent.

3.9 Data analysis

Data analysis refers to how data collected from the field are interpreted and classified (Creswell & Pont, 2018; Creswell, 2013). According to Lim and Ting (2013) data analysis is the categorisation and summarisation of gathered data to help answer research questions. The researcher gathered all the collected data and systematically grouped them according to the questions asked and reported them as presented in Chapter 4. This process is done to obtain the answers to the research questions and/or the objectives. For this particular study, the process was undertaken in order to achieve the objectives (Creswell, 2013).

The instruments of qualitative content analysis can comprise all sorts of recorded communication, which includes interviews from open-ended questions, video tapes, voice recordings, documents, and observation (Creswell, 2013). In this study, the instruments of qualitative content analysis were the written transcripts from

interviews, voice recordings that took place during face-to-face interviews, observations, and document reviews. As a result, themes were then extracted using thematic analysis. This is a method used to identify, analyse, and report patterns or themes within data (Nowell et al., 2017; Vaismordi et al., 2013).

Figure 1 shows the thematic model used by the researcher to indicate how data were analysed using thematic analysis.

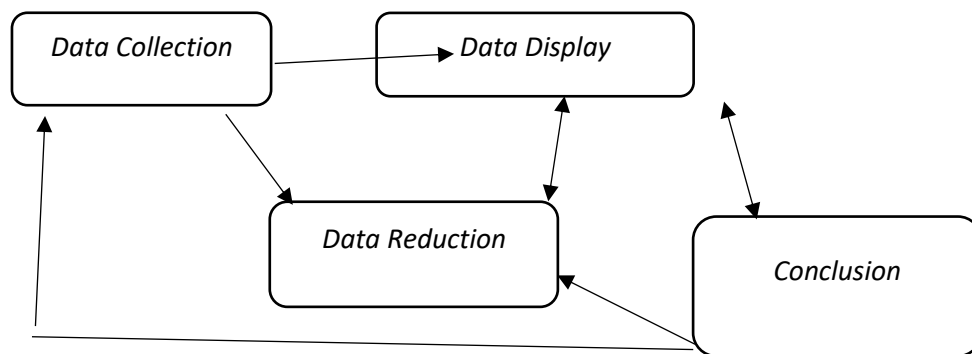


Figure 1: *Thematic analysis model*
(Source: Ibrahim (2012 p. 30))

Thematic analysis is used to analyse and present themes (patterns) that relate to the data. It illustrates the data in great detail and deals with diverse subjects via interpretations. This method was considered the most appropriate as it seeks to discover a phenomenon of a given research topic using interpretations. The use of the model above was aided by the six methods below, which further elaborate how thematic analysis was executed in this study.

3.9.1 Methods of thematic analysis

Kiger and Varpio (2020) offer guidelines on how to conduct thematic analysis in six steps, which were used in this study as a benchmark during data analysis. The six steps, and how they assisted the researcher in this study, are explained below.

Step 1: The first step in the process of thematic analysis is becoming familiar with the entire data set, which entails repeatedly and actively reading through the data. In this study, all the data that were collected from the respondents was laid out and read in order to identify any similarities and differences. This assisted the researcher in attaining a valuable orientation for the raw data, which was the foundation for all the subsequent steps.

Step 2: Next, the researcher creates codes to protect the identity of the respondents. Generating codes helps to organise data at a granular, specific level. In this study, unique codes were created for each respondent as highlighted in Table 2 in the next chapter. It is advised that a code should be sufficiently well-defined so that it does not create confusion with other codes and fits logically within a larger coding framework.

Step 3: This step involves examining data extracts to look for potential themes of broader significance, i.e. looking for related responses from different respondents to make meaning of the information. Themes do not simply emerge from the data; themes are constructed by the researcher through analysing, combining, and comparing the information. As a result, themes identified from the study were closely linked to the original data that were collected through interviews and observation.

Step 4: This step involves reviewing the data within each theme to make sure that they have adequate commonality and coherence, and data between themes; it should be distinct enough to merit separation. The study grouped data that were related in order to ensure that relevant information was grouped together. Themes can be added, combined, divided, or even discarded. Here, the researcher decides whether individual themes fit meaningfully within the dataset, and whether the thematic map accurately and adequately represents the entire body of data.

Step 5: This step consists of defining and naming themes. This assisted the researcher to unfold the issues that this study sought to find and understand. This step enabled the researcher to create a definition and narrative description for each theme, including why it was important to the broader study question. This step further assisted the researcher to focus on the most important aspect of each theme and which aspects of the dataset it covered.

Step 6: Here, the report or manuscript is produced. This final step involves writing up the final analysis and description of findings. Any direct data extracts should contain adequate context to understand their meaning and be supported by linked textual descriptions that explain their importance (Kiger & Varpio, 2020).

Bryman and Bell (2014) also add that thematic analysis entails identifying major and minor themes emerging from the research data, and categorising them to determine patterns of association. Some of the major themes that emerged from this study included: computer literacy; in-house training; electronic records management procedure manuals; and the functional requirements for ERMS (such as role service, classification service, record service, and disposal services, etc.). All the themes that emerged from the study are outlined in detail in the next chapter.

3.10 Research ethics

Research ethics refer to how researchers should treat their participants and whether specific actions should or should not be taken (Gajjar, 2013; Labaree, 2013; Bell, 2008). Ethics in research prohibit falsifying, fabricating, and misrepresenting data; they promote the upholding of accountability, and mutual respect and fairness for both the researcher and the respondents (Labaree, 2013). For this study, a written ethical clearance was obtained from the UNAM Centre for Research and Publications to validate the purpose of the study. Other considerations included gaining access to the

research site, getting informed consent from the participants, and ensuring privacy, anonymity, and confidentiality.

Anonymity was maintained throughout the study, as respondents were never asked or required to reveal their names during interviews. Additionally, no information directly linked to individuals will be published. Self-determination was also exercised, with respondents being informed about the study beforehand, hence enabling voluntary participation. They were also free to opt out of the study at any time and without penalty.

On the issue of keeping recorded data, the researcher will keep the data for a period of five years, guided by the University of Namibia's (UNAM) Policy on Research Ethics, which stipulates that research data must be stored for a period of five years, after which they are discarded following acceptable environmental standards (UNAM, 2019).

3.11 Pretesting of the research instruments

Pretesting takes place before actual data collection in order to mediate non-sample errors, such as respondents' bias due to the incorrect interpretation of questions. Therefore, the key purpose of pretesting research instruments is to identify potential problems, and find possible solutions prior to data collection, thereby improving the credibility of the data collected. Testing of instruments is an activity designed to evaluate their capacity to collect the desired data, the capabilities of the selected mode of data collection, and the overall adequacy of the field procedures (Bhattacharjee, 2012).

The interview guides were pretested on four (4) legal officers from the Department of Civil Litigation, which falls under the Ministry of Justice. This was done because the Ministry of Justice Case Management System (e-Justice) is specifically used by

lawyers to file for civil matters before those matters are defended in court. All four respondents noted that the layout of the interview guides was clear.

3.12 Evaluation of the research methodology

Kothari and Garg (2014) and Lim and Ting (2013) stressed that one of the things a researcher must do at the end of a study is to evaluate their research methodology. Kalusopa (2011) also highlighted that it is important to evaluate the research methodology in terms of the research design used, its shortcomings in the execution of the study, as well as ethical issues that occur during the data collection process. In this study, the evaluation of the research methodology was centered on the research design, research paradigm, and the appropriateness of the data collection instruments.

Cresswell (2012) explains that a research question starting with “what” or “how” may call for a qualitative study with the results resembling what is really going on. The qualitative research approach adopted in this study, was appropriate as it enabled respondents to answer the questions prepared by the researcher. Respondents did not express discomfort or hesitate to respond to the questions. The study adopted a case study design because of its ability to examine, in- depth, a case within its real-life context.

The case study was suitable because the Office of the Judiciary is a large ministry, and focusing specifically on one ministry as an area of study provided the researcher with the opportunity to thoroughly and deeply investigate NAMCIS.

Nonetheless, it is argued that interviews can be time-consuming, which causes delays in the research process (Bhattacharjee, 2012; Kfoury and Batmanabane, 2017). During the data collection process for this study, the researcher also experienced difficulties in obtaining interview slots with all the targeted respondents due to the Covid-19

pandemic. Some respondents fell ill during the data collection period, and some worked in weekly shifts. This prolonged the data collection process as the researcher had to go back and forth to magistrates' courts for rescheduled interviews. However, a majority (32 out of 40) of the respondents were eager to participate in the study.

This study used different data collection methods to improve the quality of the data, i.e. interviews, the observation method, and document review. The three methods assisted the researcher in confirming what was said by the research participants. Triangulation of data is said to be undertaken as a way to increase the validity of research results. It is further stated that triangulation of data increases scope, depth, and consistency in methodological proceedings (Wilson, 2014). For that reason, triangulation was adopted to supplement what was said in the interviews to mainly obtain accurate information for all the objectives of the study.

3.13 Summary

This chapter aimed at discussing the research methodology employed, specifying the research paradigm, research approach, and research design, and how appropriate this methodology was for this study. Furthermore, the chapter presented how data were collected, how they were analysed, the population, sample selected, and data collection methods, and the instruments where all highlighted in detail. The chapter also discussed the processes and procedures of collecting data, research ethics, and pretesting of data collection instruments. The chapter ends with the evaluation of the research methodology. The next chapter is Chapter 4, which presents the findings.

CHAPTER 4

PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

The previous chapter discussed the methodology employed in this study. This chapter provides the findings of the study on the *Assessment of the recordkeeping functionalities of NAMCIS; A case study of the Office of the Judiciary*. The findings relate to the following research objectives;

1. Evaluate the standards and procedures used to capture, store, retrieve, disseminate and retain records in NAMCIS;
2. Evaluate the knowledge and skills of the people who are responsible for managing NAMCIS and;
3. Establish the benefits and challenges associated with NAMCIS.

Data for this study were collected using face-to-face interviews, observation, and document review, which formed the primary data collection instruments based on the above objectives of the study. Interviews were conducted with prosecutors, magistrates, chief legal clerks, legal clerks, and IT personnel. Observation of the system functionalities and reviewing of documents about NAMCIS also formed part of the data collection strategy. The presentation of the findings is guided by and built around themes arising from the above objectives.

4.2 Response rate

The researcher targeted forty (40) respondents but only managed to successfully interview thirty-two (32) respondents, as indicated in the Table 2. This gave a response rate of 80%, which is good according to Morton, Bandara, Robinson, and Atatoacarr, (2012), who suggested that good response rates must at least begin at 60% for most

studies, and this should be the goal of researchers. Morton et al (2012) further added that a low response rate can give rise to sampling bias if the non-response is equal among participants regarding the outcome. Therefore, a high response rate must be prioritised so that more information is gathered.

4.3 Biographical information about the respondents

Table 2 below shows detailed information about the respondents regarding how long they have been in service and their qualifications. The details of the respondents are summarised below: A1 to E4 are special codes given to the respondents for the purpose of maintaining their confidentiality.

Table 2: *Biographical information about the respondents*

RESPONDENTS		YEARS OF SERVICE	QUALIFICATIONS
Magistrate court A			
Prosecutor	A1	5 years	LLM (Master of Laws)
Prosecutor	A2	1 year 6 months	LLB (Bachelor of Laws)
Prosecutor	A3	18 years	LLB
Magistrate	B1	11 years	LLB
Magistrate	B2	10 years	B. Juris and LLB
Chief Legal Clerk	C1	9 years	Degree in Human Resource (HR)
Chief Legal Clerk	C2	3 years 8 months	Degree in Statistics
Court Clerk	D1	3 years	Hons. Degree in Indust. Psychology
Court Clerk	D2	2 years	Human Resource Management
Court Clerk	D3	3 years	Fashion Design
Court Clerk	D4	2 year 3 months	Criminal Justice/Paralegal Studies

Magistrate Court B			
Prosecutor	A4	4 years	LLB
Prosecutor	A5	15 years	LLM
Chief Legal Clerk	C3	6 years	Information Science
Magistrate	B3	10 years	LLB
Court Clerk	D5	5 years	Certificate in Business Management
Court Clerk	D6	2 years and 5 months	Paralegal Studies
Magistrate Court C			
Chief Legal Clerk	C4	10 years	Diploma in Information Studies
Chief Legal Clerk	C5		Bachelor of Economics
Magistrate	B4	1 year 3 Months	LLB
Magistrate	B5	6 years	B. Juris and LLB
Prosecutor	A6	9 years	LLM (Master of Laws)
Court Clerk	D7		
Court Clerk	D8	7 years	Business Administration
Revenue Clerk	D9		Dipl. in Labour & Employment
Court Clerk	D10	5 years	Bachelor of Accounting (Honours)
Court Clerk	D11	4 years 6 months	Bachelor of Business Administration
Court Clerk	D12	4 years	Arbitration & Dispute Resolution
		3 years	Certificate in Office Management
		6 Months	
		7 years 8 months	
Ministry A			

System Administrator	E1	7 years	Information Technology
System Administrator	E2	5 years	Information Technology
Computer Technician	E3	1 year 2 months	Information Technology
Senior Analyst Programmer	E4	2 years	Information Technology

Source: Field work, 2020

Total number of respondents: 32

In this study, the codes were assigned to respondents from the magistrates' courts in order to maintain respondent confidentiality. Coding permits data to be divided, grouped, reorganised, and linked in order to consolidate meaning and develop explanations, while protecting the identity of respondents (Saunders, Kitzinger & Kitzinger 2015; Saldana, 2016). Data were presented mainly in the form of descriptive narratives, which were drawn from the interview guides. Data from the interviews were integrated within the thematic areas that were condensed in a way that was controllable, and allowed the researcher to look at the issues at hand in the study as a whole, and to process this into meaningful information.

4.4 Themes from the data

The table below summarises the themes that emerged from the study based on the research objectives.

Table 3: Themes that emerged from the data

OBJECTIVES	THEMES
1. Evaluate the standards and procedures used to capture, store, retrieve, disseminate, and retain records in NAMCIS.	<ul style="list-style-type: none"> • Archives Act 12 of 1992 • MoReq2010 standard • DIRKS methodology • Electronic RM Procedure Manual

	<ul style="list-style-type: none"> • Functional requirements for ERMS • Electronic Records Management System
2. Evaluate the knowledge and skills of the people who are responsible for managing NAMCIS.	<ul style="list-style-type: none"> • Records management staff • Computer literacy • Information Studies • Information technicians • In-house training
3. Establish the opportunities and challenges associated with NAMCIS.	<p>Opportunities:</p> <ul style="list-style-type: none"> • Availability of a filing system • Strong access restrictions • Improved work speed <p>Challenges:</p> <ul style="list-style-type: none"> • Limited server capacity • Missing system templates • Inability to proofread • Inadequate support from IT personnel

Source: Field work, 2020

The themes outlined in the above table are presented below:

4.5 Standards and procedures used to capture, store, retrieve, disseminate, and retain records in NAMCIS

4.5.1 Standards and procedures

The researcher asked the respondents about any available standards and procedures used in guiding the management and use of records when working with NAMCIS. The responses are summarised in Figure 2 according to the respondents.

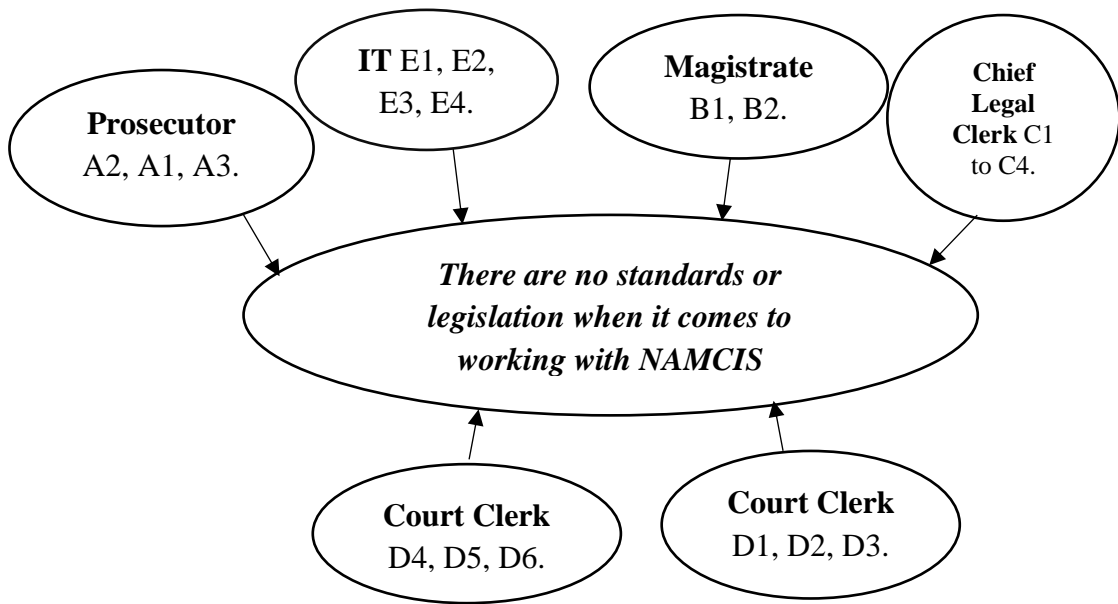


Figure 2: Availability of standards and legislation for system usage

Source: Field work, 2020

To add to the above, Prosecutor A2 emphasised that, “If there are any standards available, only the Office of the Judiciary will know about that since they are the host organisation.” Prosecutor A2 added that, when it came to standards, they were guided by the rules and ethics set out in the Prosecutors’ Act (Criminal Procedure Act 51 of 1977), which is the only form of guidance they have as prosecutors in terms of standards.

Magistrate B2 stated that, despite the fact that there were no standards to guide their work with regards to NAMCIS, magistrates have taken an oath that, “Whatever you capture, or put in the system, must be 100% correct.” She further stated that, “The person entering and capturing data in the system is supposed to make sure that what they are feeding the system is what is actually happening in court and what is being said.”

Chief Legal Clerk C1 acknowledged that in terms of standards, “information entered into the system must be within the codified treasury instructions.”

Chief Legal Clerk C4 from Magistrate Court C also explained that, “in terms of procedures, the system works with case numbers and every entry is allocated a unique number which guides users when entering data into the system”. Interestingly, Magistrate Court C, Court Clerks D7, D8, D9, and D12 all stated that there is a policy that they use called the Government Revenue Management (GRM) Treasury Instruction Document that outlines ethics with regards to their work, i.e. what one is expected to do and what not to do.

4.5.2 Classification scheme

The respondents were asked if there was any document justifying how data are arranged in the system and what guides them in finding information easily. Figure 3 below captures their responses.

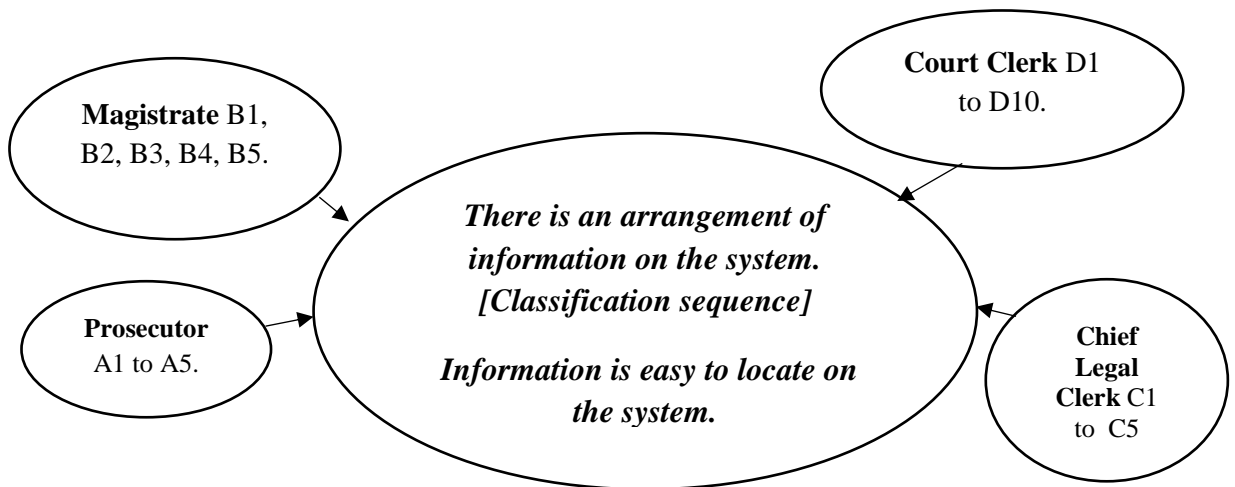


Figure 3: Availability of a classification scheme on the system

Source: Field work, 2020

As illustrated above, all respondents indicated that the functions of NAMCIS are classified into various categories for easy data retrieval. This was also observed by the researcher and it was discovered that the information was indeed classified into different categories according to the magistrates’ courts functions. Chief Legal Clerk C2 pointed out that, “There is no formal document outlining the classification but it

exists on the system.” Chief Legal Clerk C1 added that “information is categorised according to the following functions: “types of criminal matters,” “types of civil matters,” “capturing tickets,” and “capturing of maintenance and reconciliations cases.”

4.5.3 Data sources

In order to establish the type of information the system captures, the respondents were asked what type of data source was used to populate the system, that is, whether it was electronic or scanned documents that were uploaded or attached to the system. This was to determine whether NAMCIS is an ERMS or EDRMS. The responses are shown in Figure 4 below.

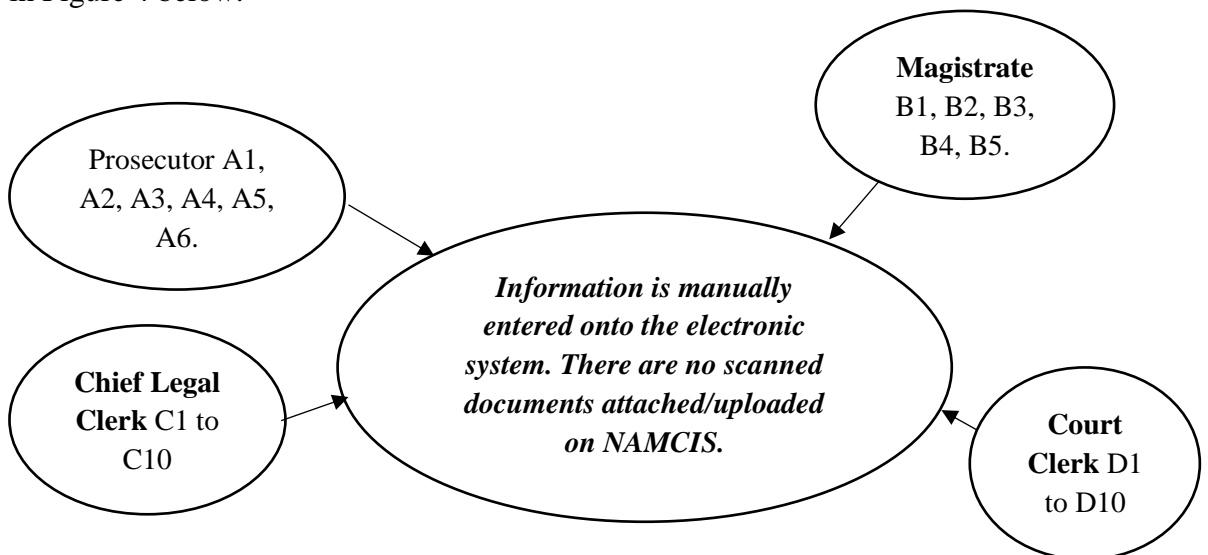


Figure 4: Data sources that populate the system

Source: Field work, 2020

The researcher observed Magistrate B3 demonstrating how she opened a charge sheet during court proceedings, i.e. how everything that transpires during a case hearing is recorded. In another case, Prosecutor A1 also demonstrated how he created a murder charge sheet using information from a docket he received from the Ministry of Safety and Security. Only information such as the name, date of birth, crime committed, ID number, and date was recorded onto the system during the registration of a case before

the case was heard in court. The researcher also observed that witness statements were not captured onto the system but remained in physical files. The researcher further observed that, along with what was recorded as listed above, there were no scanned documents attached to any entry, confirming what the respondents stated in Figure 4, above.

4.5.4 Security measures

To determine the safety measures of the system, respondents were asked about the measures in place that ensured that the data entered into the system were safe. They all had similar responses as shown in Figure 5 below.

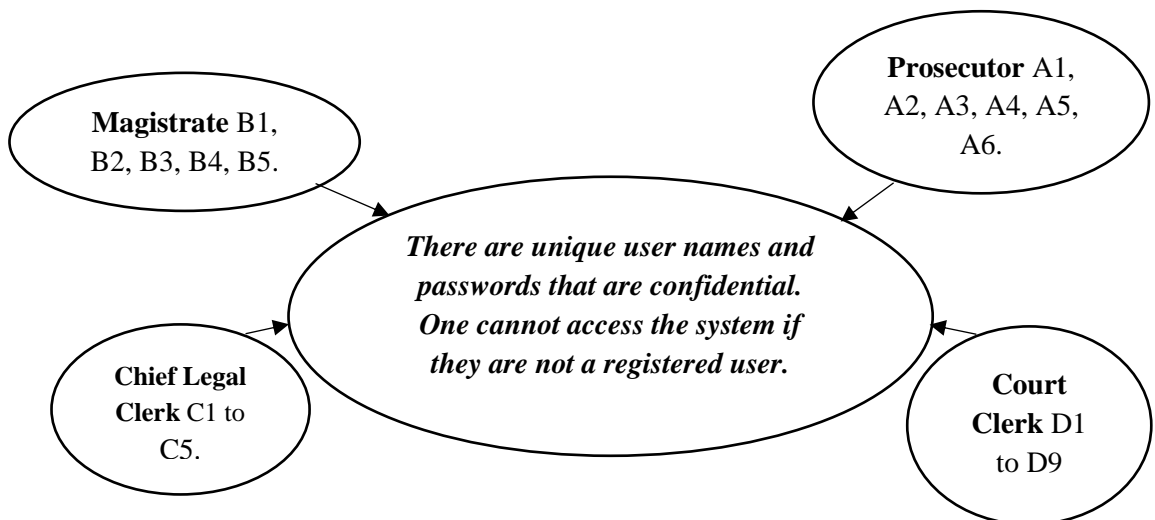


Figure 5: System security measures

Source: Field work, 2020

All respondents clearly indicated that all users had their own login credentials. However, Prosecutor A4 pointed out that, “When you are new, you can use one of your colleague’s accounts while yours is being created, even though this is not advised.”

Prosecutor A1 mentioned an issue regarding magistrates: in an event that an error in the order is identified after an order has been made, only the Chief Magistrate can

reverse the order. Prosecutor A2 was in agreement, adding that, “there are roles that determine your access level.

for instance, as a prosecutor, I am unable to change an order but a magistrate can. No one can change charges or access charge sheets except for us prosecutors.” Similarly, Prosecutor A4 stated that, “NAMCIS is unique in the sense that I cannot do something that’s not within my jurisdiction; it will not allow me to do so...I cannot print charge sheets. Only Magistrates are allowed to do that, and I also cannot access payments – only court clerks can.”

The above statements were confirmed through the researcher’s observations by means of end-user’s demonstration using the system.

4.5.5 Retention and disposal schedules

The respondents were asked about the availability of a retention and disposal schedule that determines how long data are stored and retained on the system. The responses are shown in

Figure 6 below.

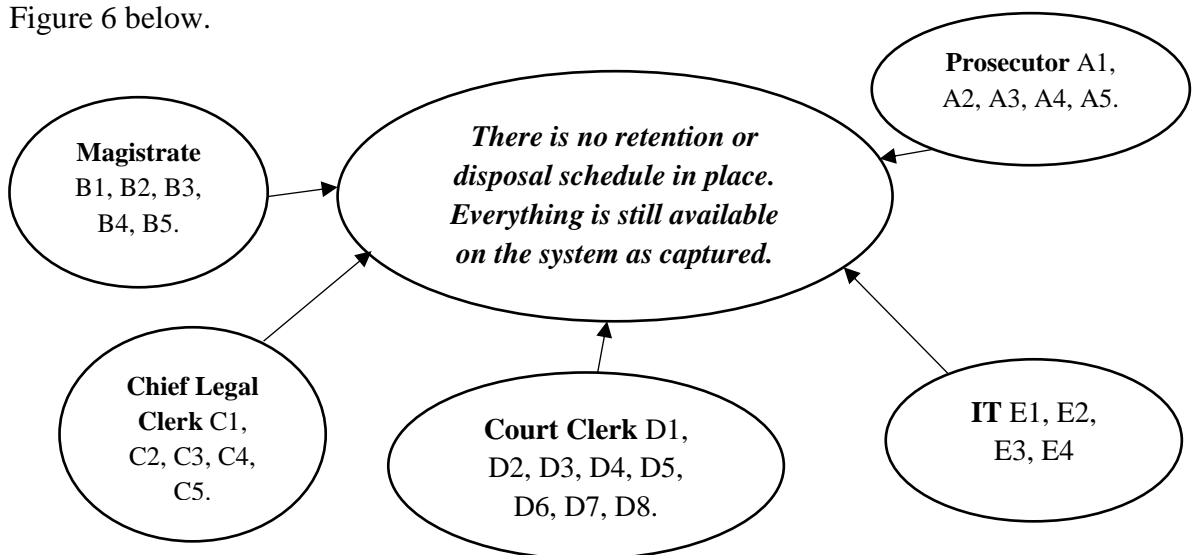


Figure 6: Availability of a retention and disposal schedule
Source: Field work, 2020

The findings on the availability of a retention and disposal schedule are based on responses raised by the different respondents who interact with NAMCIS on a daily basis. As shown above, all respondents indicated that all the information that had been entered into NAMCIS since its inception was still available on the system. For instance, Magistrate B2 explained that when she was searching for a case she had worked on four years ago, she was able to easily find it on the system. She elucidated that, “If ever someone within the legal fraternity needed information from a closed case, whether eight years ago, he or she will be able to find it on the system and print the charge sheet, with all the outcomes of that particular case fully detailed.” In the same vein, Chief Legal Clerk C1 explained that, “Since we started in 2009, we have never had to dispose of any data; everything is there.” Additionally, he suggested that, “It could be because criminal cases are not disposed of permanently, as they always need to be available or accessible on the system.”

4.5.6 System upgrades

To establish whether the system was regularly maintained, respondents were asked whether there had ever been a system upgrade since the implementation of NAMCIS. Below are the responses, in Figure 7.

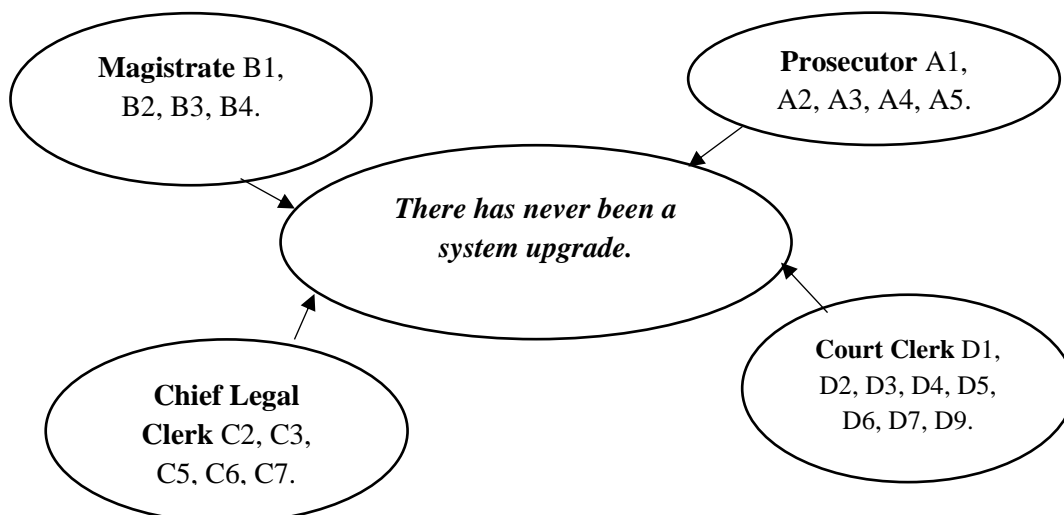


Figure 7: System upgrades over the years

Source: Field work, 2020

Contrary to the above responses, Chief Legal Clerk C1 stated that, “after a few years, when the programmers left, a few changes were seen...some functions took on a different appearance and the process of capturing bail was made easier, in that you no longer have to access it in a separate Windows page but [you] can access it on the same Windows page.” Chief Legal Clerk C2 also expressed that the system had improved: “NAMCIS is a system that worked mostly with the receiving of money and, at first, it did not have many of the options it has today for prosecutors, magistrates, and other users, because it was mainly for cash payments. But IT has migrated it to a more online-based system.” He added that, “you can now process financial transactions linked to a bank; for instance, if a court clerk is carrying out a transaction of paying out child maintenance money, you simply list the beneficiaries on the system.”

4.6. IT technicians from the Office of the Judiciary

In order to identify the functions of the system, IT technicians who backed up the server every day, and attended to all queries related to system technicalities from all magistrates’ courts, were asked what the system’s functions consisted of according to the recommended Moreq2010 standard. The functions and their responses are as follows.

4.6.1 The Functions of the system

a) Role service (administrative and non-administrative duties)

IT technicians E1, E3, and E4 all indicated that the system had a role service, whereby users did not perform the same roles/functions on the system, i.e. they were unable to.

Instead, it was arranged into levels of authority, allowing different users to use it according to their level of authority.

b) User and group services

IT technicians E3 and E4 explained that the system had a user/group service, which permitted a user to log in according to the group he or she belongs to, be it magistrates, prosecutors, court clerks or chief legal clerks.

c) Searching and reporting service

IT technicians E3 and E4 indicated that there was a utility that allowed users to search for different functions in the system and the system reported whenever an entry was not found or an error had occurred.

d) Export service

IT technicians E4 and E3 further indicated that there was an export service, which allowed authorised users to export entities, such as all aggregation and records with their components, from a record service, and all element definitions and templates, collectively, from metadata.

e) System safety measures

IT personnel were asked whether there was any feedback given when the system failed to complete a function requested by itself or an authorised user. All IT personnel responded in the affirmative; the system was able to report back with the date and time of the failure, the system identifier of the function that was attempted, and the system identifier of the authorised user that initiated the function. Also, all users have unique user names and passwords.

4.7 Knowledge and skills

The researcher inquired about respondents' qualifications to determine whether they were qualified to work with records in an electronic environment. All respondents' qualifications (field of study) and working experience are highlighted in Table 2. Individually, every staff member was acquainted with what to perform on the system, and if there were any technical difficulties, they could contact the IT department for assistance. None of the respondents had a qualification in the management of records or information systems. However, one chief legal clerk had a Diploma in Information Science which is related to the management of electronic records. He indicated that he completed the diploma at the University of Namibia.

4.8 Training on the system usage

The respondents were asked if they underwent any training when NAMCIS was introduced, and about the availability of the system user manual. Responses are indicated in Figure 8.

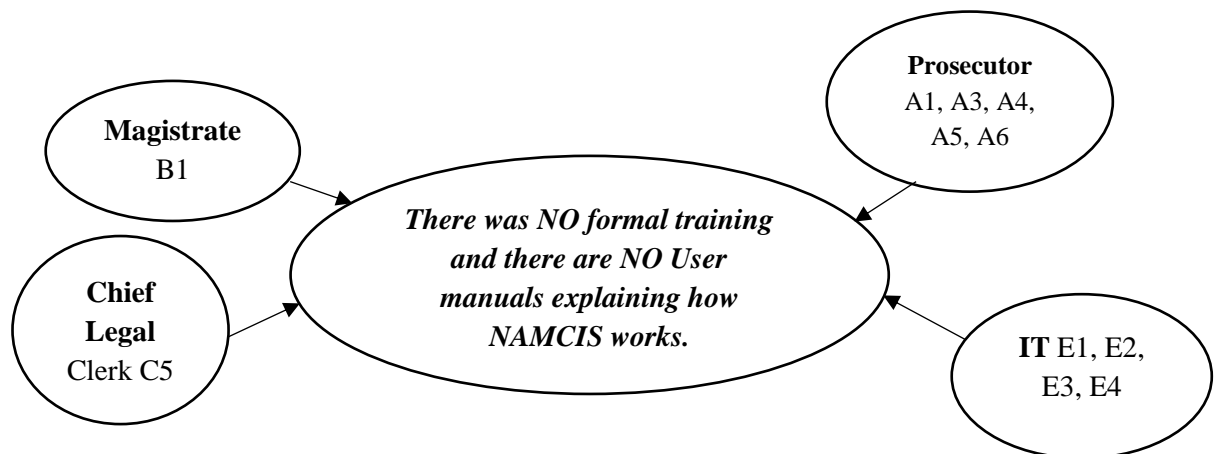


Figure 8: System staff training and availability of manuals
Source: Field work, 2020

Prosecutor A1 stated that they were not trained in using NAMCIS. They were only informed that, “one has to go to court where an account will be created for you, and then you will proceed on your own.” He lamented that, “I have been here for 5 years but I have never gone through training; you basically juggle yourself and make sure that you assist yourself.”

Prosecutor A2, however, stated that she saw a user manual in a colleague’s office when the system was being introduced, but there was no formal training on how to use the system. They basically learned from colleagues who had been around for many years. She further stated that, “It is actually better to learn from someone rather than using the user manual because it is very confusing.” The availability of the user manual was later confirmed by the researcher, as it was presented to her when she requested it from the Office of the Judiciary.

Some of the respondents had different views, as seen in Figure 9.

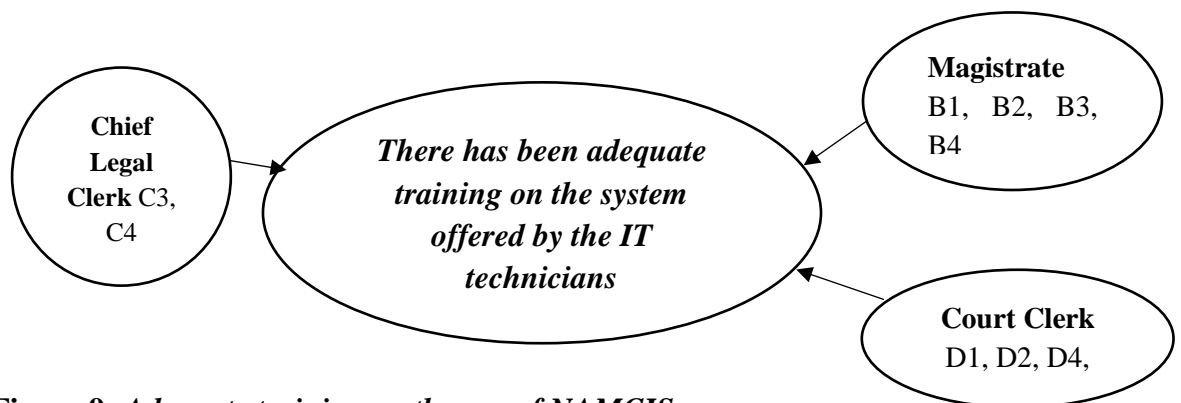


Figure 9: Adequate training on the use of NAMCIS
Source Field work, 2020

Chief Legal Clerk C1, who had been in service since 2012 at Magistrates’ Court A, responded by stating that, upon the introduction of NAMCIS, they were trained, and that they themselves could now offer training to new court clerks at their Magistrates’ Court. “The training is on the job and it involves how court clerks can receive money and register it on the system and how to load tickets...NAMCIS has different

functions. There are different functions when you are receiving money or when you are loading data, so we teach the court clerks how to perform all those functions on the system.”

Chief Legal Clerk C4, who is at supervisory level, was further probed as to what this training entailed, and he explained that the training was mostly focused on the safety measures, “like how to safeguard the information on NAMCIS, confidentiality or access, i.e. who will be authorised to do this and that on the system.”

Magistrate B1 from Magistrates’ Court A stated that they received training that took two to three days. They were trained on the basic use of the system, i.e. “How to open it, enter your details, how to look for a case, postpone matters, how to create a charge sheet and court order, and how to save your work.”

Court Clerk D1 emphasised that one was only trained up to the level that they were permitted to access the system, i.e. “You are only trained on the duties you are authorised to perform on the system.”

This means that, training on the usage of the system was not offered to all the staff members.

4.9 Benefits and challenges associated with NAMCIS

Respondents were asked whether there were any benefits brought about by the implementation of NAMCIS and what challenges they faced since they started using it. The responses were as follows.

4.9.1 Benefits

According to Chief Legal Clerk C4, NAMCIS “is actually a good system and it has helped the Ministry a lot by converting operations from manual to electronic.” He

added that, “A lot of duties are performed faster, e.g. the payment process is very fast, as it is done online.” Magistrate B2 stated that, “It is a good system; it only needs improvements here and there but honestly, it has improved our work because we used to do court proceedings manually in court, filing charge sheets by hand, and it was really time-consuming.” Prosecutor A2 pointed out that, “Although it is slow at times, system security is very good. So far, ever since it was created, there have not been any system hacks or data tampering. It is indeed a good system when it comes to security — we cannot dispute that.”

4.9.2 Challenges

Regarding the challenges experienced by all users, their main challenges were summarised in Figure 10.

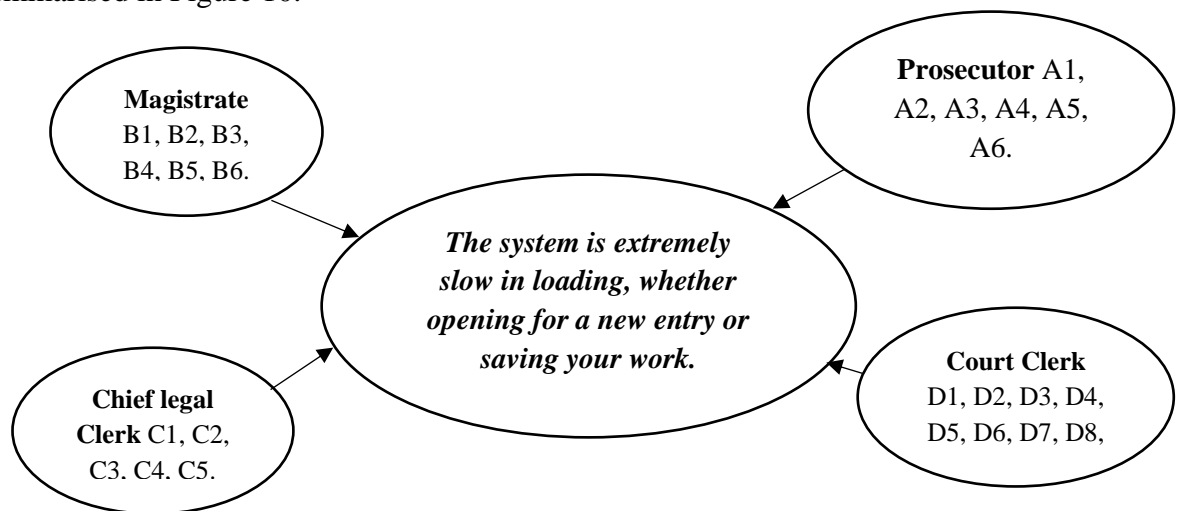


Figure 10: Challenges associated with NAMCIS

Source: Field work, 2020

However, some of the respondents expressed specific challenges. Prosecutor A1 opined that,

NAMCIS is a very old system. The obvious challenge is that we, the prosecutors who load cases, are always required to load them before their first court appearance. This means that each time you bring an application to court, it must reflect on the system before it can proceed ... Sometimes the system is very slow to upload a case and when that happens, even if it takes the whole day, you must sit in court and wait

for the system to finish loading the case...It is very hard for us to explain to the public that the system is off and they need to wait.

Prosecutor A1 further expressed concern that,

The public expects the system to expedite the process and have court orders readily available. [The] slow system does not only affect us but the duties of Magistrates too, because they are unable to create charge sheets before the case is available on the system...One can present a new case using a manual charge sheet if the system is off but the disadvantage is that the court will not be in a position to make an order; they will have to wait for the system to be back online.

Prosecutor A1 concluded by stating that, “The system overload could be as a result of [the] system being shared with other magistrates’ courts including Magistrates’ Court C, which receives thousands of cases per week...”

Prosecutor A3 highlighted the unavailability of some important data fields on the system; such as “ready-made templates for offences such as murder.” “This usually requires one to start from scratch and can be a time-consuming exercise”. Another frequently experienced problem was when the system crashed due to a power outage or slow system. “When the system crashes, it requires one to start over from scratch, re-entering that case and re-uploading it.” This can be a very tedious practice, considering the processes of registering a case which are already time-consuming.

Prosecutor A4 indicated that, issuing summons requires a prosecutor to update the system on the date of appearance. “This allows the system to notify you...when the case is due to appear in court.” He lamented that NAMCIS no longer provided such critical reminders.

Magistrate B2 confirmed that, “There [were] a few incidents where the system...crashed [a] few years ago.” She added that, “The system also does not offer language check options, thus, magistrates’ resort to typing the data in a Word document and thereafter pasting the charge sheets in Word onto the system.”

Chief Legal Clerk C1 signalled the problem to system administration, since the system was controlled by IT. “IT technicians do not always respond to calls immediately during system hiccups, and they are situated far from our magistrates’ court.” He emphasised that, when they had difficulties converting tickets into criminal cases, IT technicians did not help to expedite this task efficiently, and at times this caused a delay in court proceedings, especially if that particular case was not registered on the system yet.

Chief Legal Clerk C4 explained that, “The fact that the system is slow leads to other challenges, such as backlogs (traffic tickets not being registered on time for persons to either make payments or appear in court). If the system can be upgraded, then these other problems will be solved.”

Chief Legal Clerk C5 pointed out another challenge, stating that, “The system shuts down a lot; it takes time to load and the most inconvenient thing is the fact that, as chief legal clerks, we are unauthorised to work on the system at home. Even if you have so many traffic tickets to enter on the system, you are only allowed to do so at work.” Court Clerk D10 stressed that, “The system can go offline at any time while you are using it and it’s very frustrating because you have to start all over again.” The system being extremely slow was also observed by the researcher first-hand. Chief Legal Clerk C1 attempted to log in to demonstrate how slow it was and it took about 5 minutes just to activate the system. Prosecutor A1 also tried to show the researcher how slow the system was, and it kept loading until he finally decided to close the tab.

4.9.3 IT technician challenges

Given the fact that this system is not of Namibian origin and the developers were not part of the IT team at the Office of the Judiciary, IT technicians were also asked about

the challenges they were facing with the system. IT technician E2 said that the system was old — a “legacy system” in IT language. This was supported by IT technician E4 who said,

NAMCIS is a legacy system, meaning it does not run on the latest technology. NAMCIS can only be installed on the Windows Server 2003 operating system. Unfortunately, Microsoft ended support for the Windows Server 2003 operating system in July 2015. After that date, NAMCIS no longer received security patches that help protect PCs from harmful viruses and malicious software, and users would no longer receive software and content updates. This makes it difficult for us system administrators to manage and update the servers. The current work domain is on Windows 2008 domain level which, unfortunately, cannot work well with the Windows Server 2003 operating system. IT E3 also stated that the system’s user interface was outdated, making it difficult to navigate.

4.10 Summary

This chapter presented the research findings according to the objectives of the study. The information was presented in such a way that it protected the respondent's identities, adhering to research ethics. The results revealed a need to improve service delivery. Training and distribution of user manuals was inadequate and not all users were trained in the usage of the system. There were no standards or legislation in place for the system. The system was said to be very slow and its software was outdated, rendering it incompatible with new technologies. It has come to light that not all users were assisted when they launched a complaint about the system. However, the system had improved the work of prosecutors, magistrates, chief legal clerks, and court clerks immensely. The staff working with NAMCIS on a daily basis demonstrated their ability to use the system according to their assigned duties. They also indicated that they had some challenges with the system. The next chapter presents a discussion and interpretation of the research findings.

CHAPTER 5

DISCUSSION AND INTERPRETATION OF FINDINGS

5.1 Introduction

The previous chapter presented and analysed the research findings. This chapter interprets and discusses the research findings presented in Chapter 4. Furthermore, it provides answers to the objectives outlined in Chapter 1. Bavdekar (2015) stresses that, the discussion of research findings requires a researcher to showcase the study, that is, to discuss the results of the study. The discussion and interpretation also looks at the findings, incorporating the literature and, in particular, best practices from which recommendations can be drawn. Interpretation of research results is important because conclusions can be drawn and the researcher is able to identify relationships and processes that underline findings. The aim of the study was to assess the recordkeeping functionalities of NAMCIS, and to determine to what extent the system is built on electronic recordkeeping functionalities. The chapter critically analyses the literature on the topic of electronic recordkeeping systems in line with the findings of the study. The presentation of data interpretation and discussion of findings is based on the order in which data were presented in Chapter 4, that is according to the themes derived from the research objectives, namely:

- The standard and legislation governing the management of electronic records kept in NAMCIS; availability of a classification scheme; and the availability of a retention and disposal schedule
- Knowledge and skills for staff working with the system
- Security measures in place for the safety of records kept in NAMCIS

- System maintenance/upgrade and the availability of manuals/guides for system usage

These themes are discussed and interpreted in detail in the following sections.

5.2 The standard and legislation governing the management of electronic records kept in NAMCIS

The regulatory framework for records management provides a way on how electronic records must be managed (ISO 15489, 2001). These are usually mandatory standard practices and codes of best practice. This study has revealed that there are no standards or legislation available to the end-users or IT technicians that manage and maintain the system on a daily basis, despite them being an essential aspect of electronic recordkeeping systems. However, the National Archives of Namibia is in possession of guidelines for managing records in all formats for all government ministries of the republic of Namibia. International standards that organisations may use include:

- ISO 15489:2001; Information and documentation- Records Management
- MoReq2010, Modular Requirements for Electronic Records

Through interviews, this study has established that none of the above standards, or any other standards, have been adopted in the management of records kept in NAMCIS. This means that, there is no guidance when it comes to the management of records kept on NAMCIS. This challenge was pointed out by Nengomasha (2009), who argued that the lack of relevant legal and policy frameworks was a major challenge in the management of electronic records in Namibia. As per records management standards, records (electronic or paper-based) created, processed, maintained, accessed, and disposed, must always be in compliance with relevant legislation and regulations. This

is supported by (Adams, 2008; Archives New Zealand, 2016) who argued that standards establish the methods of managing information and records efficiently and systematically; these standards make operations transparent by keeping them in line with the laws and regulations of data management and retention. The study has found that, the only guidance the staff working with NAMCIS are equipped with are the codes of conduct relating to their professions, namely, the Criminal Procedure Act 51 of 1977 for magistrates and prosecutors, and the GRM (Government Revenue Management) Treasury Instruction Document for chief legal clerks and court clerks. Mulauzi (2009) echoed that, governments all over the world require records and archives legislation for compliance purposes and to ensure that records are managed accordingly for future and historical purposes. Furthermore, it is emphasised that legislation and policy frameworks work towards ensuring a strategic approach for capturing, processing, storing, usage, conserving, and preserving records, hence their importance. Therefore, any organisation in business — whether public or private — in possession of a recordkeeping system, is required to issue guidelines and procedures on the creation and capture of those records that are necessary to meet operational, legal and other requirements (Government Record Service of Hong Kong (GRS), 2011).

However, it is clear from the findings that NAMCIS is not guided by any records management standards and no records manager or archivist was part of the system implementation process. These are qualified professionals who could have facilitated and provided the necessary support on how records are created, captured, disseminated, and maintained correctly. Smallwood (2014) and Mulauzi (2009) argued that, legislation has a major impact on records and archives administration, and it has an implication on new technology and electronic records. This implies that, if a system

is not built or implemented based on records management standards, there are many implications. This is because the security and protection of records, procedures and guidelines, and the retention and disposal of electronic records may be compromised. These are part of the guidelines that must be executed according to established records management standards and legislation.

Ndambuki (2015), Kalusopa and Ngulube (2012) argued that, due to the lack of legislation and a regulatory framework, creators and users of records can easily manipulate and delete data at their own discretion without any regard for the evidential value of the records. The study found that, although there is no regulatory framework in place, the Office of the Judiciary has never had any incidents of hacking or falsifying of records due to the fact that NAMCIS has adequate access security measures.

5.2.1 Availability of a classification scheme

Caravaca (2017) stated that classification schemes are crucial, as they are used to logically organise and manage the records that are created and maintained by an organisation. This study has found out that, although the system has no classification scheme as a physical (on paper) guide on its own, a classification sequence was set up on the system, which makes information easy to locate. This is in line with the DLM Forum Foundation's (2011) recommendation that each and every record in an electronic recordkeeping system must be classified. This means that, from the creation stage, every record must be associated with a class entity specifying which group it belongs to. For instance, if a record pertains to a criminal case, civil case, or a traffic ticket, it must be filed accordingly. Through observation of the system, the study has established that NAMCIS is made up of different functions (main series) and, within those functions, are sub-series where staff create records which are stored within

folders. Government Records Service (2011) posits that, an organisation's records classification scheme should be able to support accurate capturing and easy retrieval of records, and facilitate segregation of vital records for protection. This means that, a system should be user-friendly at all times and that vital records should be kept separate from ordinary records to avoid being tampered with by unauthorised users.

Government Record Service (2011) also indicates that, organisations must possess a recordkeeping system that has the necessary functionalities to enable it to carry out and support the various records management processes considering the workflow, records quantity, and operational needs for the entire staff working with the system. This study's findings have revealed that there are searching tools on NAMCIS, such as search bars within each different folder, which make it easier to locate records on the system.

5.2.2 Availability of a retention and disposal schedule

Kalusopa and Ngulube (2012) found that most organisations tend to keep records permanently because they have no retention schedules. This is the case with NAMCIS, because when the system was implemented there were no set standards and procedures stipulating the retention and disposal of records. In another study, Hussin and Johan (2014) argued that, IT systems lack the capacity to execute retention schedules, resulting in an ongoing need for large storage space. IT technicians fail to incorporate disposal schedules specifying when a record should be taken out of the system, resulting in the retention of records that are no longer needed for current business activities. Similarly, interviews with IT technicians from the Office of the Judiciary have revealed that there is no disposal and retention schedule of records, as the system

is not built in such a way that it is able to set and execute a retention and disposal schedule.

The National Archives of the United Kingdom (2012) advises that not all information can be retained indefinitely; only records (electronic or paper-based) selected for permanent preservation should be legally retained by the host organisation or transferred to the National Archives. Similarly, Yusof, Abuzawayda and Aziz (2012), state that the retention and disposal schedule ensures that organisations do not keep unnecessary records while, at the same time, preventing the premature disposal of information that they are required to keep. On the contrary, NAMCIS keeps records that are no longer active or required for its day-to-day business activities. This overloads the system because keeping inactive records results in the failure to destroy records that are no longer useful. Moreover, it has been argued that, the accumulation of unnecessary records in an electronic recordkeeping system results in organisations having difficulties sorting out records to perform proper appraisal and retention procedures (Kalusopa & Ngulube, 2012). It is therefore important for an organisation's system such as NAMCIS to have a disposal and retention schedule during the implementation stage of the system.

Although the National Archives of Namibia's retention and disposal guidelines are readily available to all government ministries, the Office of the Judiciary does not apply the guidelines to NAMCIS.

5.3 Security measures in place for the safety of records kept in the system

Security measures are very important for any electronic recordkeeping system to avoid unauthorised access to the use of records, data alteration, and destruction (Ngoepe, Mokoena, & Ngulube, 2010). The study has revealed that there are adequate security

measures in place, such as the use of passwords when accessing the system. It was confirmed during interviews that, indeed, for a user to access the system, they are required to login with a unique username and password. IRMT (2009b) stressed that an electronic recordkeeping system must ensure that both internal users and anyone using the system from external locations, have appropriate access rights to the stored content. With the use of usernames and unique passwords, NAMCIS protects the information it captures from unauthorised users. Access control on electronic recordkeeping systems prevents or limits unauthorised access to electronic records kept in the system, mainly because the legal fraternity generates and stores sensitive records which must be protected at all times.

Kemoni (2007) stressed that, the absence of system security measures results in records being lost, deleted, altered, or hidden, making them unavailable when required. NAMCIS is able to combat this due to the fact that the system indicates who views the system and what changes they perform. Furthermore, Kemoni (2007) emphasised that, it is important to classify records and information according to their level of sensitivity in order to provide them with adequate protection. This would ensure that confidential records are kept separately from non-confidential records. Interviews with chief legal clerks revealed that, there are different access levels on the system. This means that end-users do not have the same access rights; a user can only access records that are within their jurisdiction to protect confidential records in NAMCIS.

Legal records must be kept secure to prevent inappropriate access by persons without correct authorisation, and potential misuse. To ensure that this is prevented, strict security measures should be put in place. Government Records Service (2011) also echoes the same sentiments, saying that an organisation needs to put in place adequate security measures to protect their electronic records from unauthorised access and to

prevent accidental loss or destruction of records stored in the system. The researcher noted that, there have never been any instances of hacking or altering of information on the system. The security measures in place for NAMCIS seem to be adequate.

5.4 System maintenance plan/upgrade

Shonhe and Grand, (2019) and IRMT, (2009a) assert that any organisation undertaking the implementation of a digital repository must ensure that they are current with new technological trends, and with changes in standards, and make updates when required. This study discovered that NAMCIS is not fully upgraded because it does not meet the required regulations and procedures for managing electronic records. IRMT (2008) suggests that an electronic recordkeeping system's hardware and software should be up to date with the latest technology. On the contrary, NAMCIS is a legacy (old) system that is incompatible with the latest software and hardware.

5.4.1 Availability of a manual and guides for system usage

Studies (Moemi, Rotich, 2015; IRMT, 1999) state that whenever a new system is implemented in an organisation, there is a need to create a manual or guide for staff members to familiarise themselves with the system, and use it as a guiding tool when they are experiencing difficulties.

This study discovered that there is a manual in place, titled, "NAMCIS Training Manual: Introduction to NAMCIS." It was, however, revealed that this manual has not been made available to staff working with NAMCIS. It has not been distributed and not enough awareness of its availability has been created. Therefore, staff are unable to educate themselves and expand their knowledge by using the manual. This has made them overly dependent on IT technicians, and resulted in them having to call these technicians for every little problem. Staff are unable to execute some of their duties at

their magistrates' courts in the time periods required, because they have to wait for a response from the technicians regarding the problems they report.

5.5 Knowledge and skills of the people working with the system

Ngulube (2010) argued that, well-managed records and information systems foster good governance and accountability. However, this is only achieved when it is being managed by qualified staff who have knowledge in working with records in an electronic environment. The study discovered that the system server is operated by technicians who are qualified in information technology, as reflected in Table 2. The study further revealed that the system is used by prosecutors, magistrates, chief legal clerks, and court clerks, who all have relevant qualifications in their fields of study; these are also summarised in Table 2.

Government Records Service (2011) posits that, records management staff at different levels should be equipped with the necessary records management concepts, principles and practices at all times, for as long as they are working with a recordkeeping system. Contrary to this, no staff member working with the system actually specialises in records and archives management. There are no records managers, records officers, or archivists among the staff that use and manage NAMCIS. This is not in line with Mulati and Wasike's (2017) views that a lack of unqualified professionals in the area of records management affects the work practices in an organisation and the quality of services offered.

Although training is an important aspect of systems usage, it is clear that training was not offered to all staff working with NAMCIS. This has resulted in staff who are not properly trained and not conversant with the system, leading to delays in service delivery and the execution of their duties.

5.6 Benefits of NAMCIS

Marutha and Ngulube (2012) explain that, recordkeeping systems save retrieval time as they are much faster than the retrieval of paper-based records. It was further explained that, recordkeeping systems are paving the way for paperless offices in the near future. The introduction of NAMCIS has improved the speed with which magistrates' court proceedings are managed. This means that electronic recordkeeping systems improve service delivery in organisations due to the convenience of the systems as compared to paper records.

Another advantage that the study discovered was that, the information in NAMCIS was found to be well-protected. However, if the security measures are not kept intact and continuously upgraded, the system will be exposed to problems.

IRMT (2009b) echoes that applying security and access controls during the process of capturing records is very important in ensuring that the records are protected from unauthorised access, alteration, and destruction/deletion.

5.7 Challenges experienced with regards to NAMCIS

Adams (2008) and IRMT (2009b) stated that, electronic systems are built with a limited capacity to hold data and when they reach full capacity, organisations should either expand the storage space or offload some data onto other media to free up some space.

This study revealed that NAMCIS is very slow; it takes time to load when signing in, searching for a record, uploading a case, or saving one's work. This results in delayed court cases due to cases being unregistered on NAMCIS on time. IRMT (2008) states that, at the implementation stage, it is very important to have an objective means of

assessing the strengths and weaknesses of records systems, and determining whether they are capable of capturing, maintaining, and providing access to records over a long period of time.

The study discovered that NAMCIS is an old system which is incompatible with the latest software and this is its main problem. This is because it cannot be upgraded, as it was built with software and hardware that are outdated and have become obsolete. The system is LAN-based and makes use of archaic programming language. The support base for NAMCIS is very limited and this is challenging for IT personnel, because they no longer get feedback from the developers when issues are brought to their attention.

It was further discovered that, although some improvements have been made to the system over the years, there are still some functions that it lacks. For instance, users have to create a new template for every new entry. This is because, not all charges have a ready-made template (pro-forma) on the system. Offences such as theft, and drinking and driving, are already in the system. All a prosecutor or magistrate needs to do is enter the offender's details and the charge. Offences such as murder and assault, on the other hand, do not have these templates. An electronic recordkeeping system has to be fully programmed and tested to capture all records stipulated at the implementation stage (DLM Forum Foundation, 2011), and NAMCIS does not meet this requirement. The IT personnel responsible for addressing technical issues are situated far from the magistrates' courts where the system is used on a daily basis, and it is cumbersome to get hold of them when a system error occurs. Sometimes urgent cases are delayed because the presence of IT technicians cannot be secured in good time. This is not in line with IRMT's (2009b) suggestion that every organisation

working with an electronic recordkeeping system should have a technical department available to solve technical issues in time.

Babael and Beikzad (2013) emphasised that the majority of problems associated with electronic recordkeeping systems are brought about by the unsuitable implementation of the system, inadequate and incomplete documentation, and a lack of participation from the users for which the system is designed. This study has discovered that NAMCIS was implemented without the guidance of records management standards, and consultation of specialists in the implementation of electronic recordkeeping systems.

The findings from this study reveal that remote access to the system is only given to selected authorised staff members. A major challenge caused by this is that, those who are actually responsible for recording traffic tickets, receive an extremely high volume of tickets that need to be registered but they cannot fulfil their duties in a timely manner because they are unable to access the system remotely.

5.8 Summary

This chapter discussed the findings of the study. It was established that there are no policies and/or legislation to manage the records captured in NAMCIS. It was also discovered that there is no retention and disposal schedule in place to determine how long records should be kept in the system, or when they should be disposed of. However, NAMCIS has adequate security measures such as the use of unique passwords per end-user and usernames that help to protect the records from unauthorised users. The system has a classification sequence that assists users in the easy retrieval of records; however, a physical document that outlines in detail how records are classified does not exist. Even though the system has undergone some upgrades from IT technicians, the study found that there are still several challenges experienced by users. The next chapter presents a summary of the findings, conclusions, and recommendations.

CHAPTER 6

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

6.1 Introduction

The summary and concluding chapter of a thesis is aimed at drawing together the threads of the research to arrive at some general conclusion and suggest the way forward in addressing the main research problem (Faryadi, 2019). This chapter presents a summary of the findings, conclusions, and recommendations on the assessment of the recordkeeping functionalities of NAMCIS at the Office of the Judiciary. The purpose of this chapter is to consolidate the various issues covered in the body of the dissertation and to comment on these issues and make recommendations. This chapter is guided by the research objectives of this study, the data analysed, and what has been presented in the previous chapters.

6.2 Summary of research findings

The findings of the research were driven by the objectives of the study. The primary objective of this study was to assess the recordkeeping functionalities of NAMCIS, and to determine the extent to which the system was guided by international records management standards. Below is a detailed summary of the findings.

6.2.1 Standards and procedures used to capture, store, retrieve, disseminate, and retain records in NAMCIS.

The findings showed that there are no standards or regulatory frameworks for the management of electronic records kept in NAMCIS at the Office of the Judiciary. There is no formal classification scheme to guide the way information is arranged on the system, but information on the system is easy to retrieve because of the way the main functions are set up on NAMCIS. Although there is a detailed electronic user

manual, it has not been made available to IT technicians or the end-users of the system. The results revealed that, information is retained permanently because there is no retention and disposal schedule to specify how long data must be kept on the system, and when they should be destroyed or sent to the National Archives of Namibia. Consequently, all information created since the system was implemented in 2009 is still available on the system.

Although NAMCIS is a legacy system said to be incompatible with latest software, IT technicians at the Office of the Judiciary made changes to facilitate the magistrates' and prosecutors' records transition from manual to electronic system.

6.2.2 Knowledge and skills of the people who are responsible for managing the system

The system server is only operated by IT technicians whose qualifications are in Information Technology. None of the staff holds a qualification in records management. Moreover, not all of the staff received training on how to use NAMCIS, and as a result, they often experience difficulties when using the system. Therefore, it is clear from this study that there are no records and archives professionals to guide IT personnel in the management of NAMCIS.

6.2.3 The benefits and challenges associated with NAMCIS.

The study also sought to assess the benefits and challenges of end-users and IT technicians' experience with NAMCIS. The findings showed that, to a large extent, the system had adequate security measures. NAMCIS is a LAN-based system developed in an archaic (old) programming language. As a result, the system cannot be upgraded with the latest software and hardware due to incompatibility. The support

base for IT technicians is very limited as they no longer receive feedback from the system developers when experiencing technical difficulties beyond their control. It was also found that, the system can only be accessed remotely by authorised end-users. Other technical issues include the absence of a spellcheck function and a lack of ready-made templates for some court offences. Moreover, there are no IT departments at the magistrates' courts where NAMCIS is installed, for purposes of providing end-user technical assistance.

6.3 Conclusions

The study has revealed that, NAMCIS does not have all the mandatory functionalities, standards, and legislation required of an electronic recordkeeping system. There is limited space on the system server for new records due to an absence of a retention and disposal schedule specifying how long records must be retained or destroyed permanently. There is a lack of awareness and training on managing electronic records among end-users.

Although NAMCIS has improved the productivity of the prosecutors and magistrates during court proceedings, the fact still remains that it uses an old programming language which is incompatible with new software and hardware.

6.4 Recommendations

The study came up with the following recommendations:

6.4.1 NAMCIS is an outdated (legacy) system incompatible with the latest software and hardware.

The Office of the Judiciary should liaise with the Office of the Prime Minister (OPM) and National Archives of Namibia in order to develop a strategy of how to improve the system's technicalities i.e. software and hardware.

6.4.2 No standard or record's management policy has been adopted in the management of records kept in NAMCIS.

The National Archives of Namibia and IT technicians at the Office of the Judiciary should jointly develop a record's management policy to guide the Office of the Judiciary in the management of NAMCIS.

6.4.3 NAMCIS keeps records that are no longer active or required for its day-to-day business activities.

The IT technicians at the Office of the Judiciary should apply the National Archives of Namibia's retention and disposal guidelines, to the records captured in NAMCIS.

6.4.4 Training was not offered to all staff working with NAMCIS.

All the end-users should be adequately trained in the use of NAMCIS.

6.4.5 There are no records managers, records officers, or archivists among the staff that use and manage NAMCIS.

The Office of Judiciary should employ qualified and skilled records and archives management staff in future who should work hand-in-hand with the IT personnel in managing electronic records kept on NAMCIS.

6.4.6 NAMCIS is not fully upgraded as it is a legacy (old) system that is incompatible with the latest software and hardware.

The management at the Office of the Judiciary should ensure that NAMCIS is upgraded with new software and hardware that support its operations (payment transactions and registering of cases) on a regular basis and/or possible linkage of NAMCIS to the existing EDRMS. This should be done under the auspices of the EDRMS unit at the Office of the Prime Minister.

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8. APPENDICES

8.1 APPENDIX A: UNIVERSITY OF NAMIBIA ETHICAL CLEARANCE



ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: FOHM/006/2020

Date: 08-05-2020

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project: AN ASSESSMENT OF THE RECORDKEEPING FUNCTIONALITIES OF NAMCIS (NAMIBIAN COURT INFORMATION SYSTEM): A CASE STUDY OF THE OFFICE OF THE JUDICIARY

Nature/Level of Project: MASTERS STUDY-HON-HEALTH

Researcher: UAHENGO HILENI NANGULA

Student Number: 201211647

Faculty: FACULTY OF EDUCATION

Supervisors: DR. R. M. ABANKWAH

Take note of the following:

- (a) Any significant changes in the conditions, or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.
- (b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.
- (c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.
- (d) The UREC retains the right to:
 - (i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
 - (ii) Request for an ethical compliance report at any point during the course of the research.

REC wishes you the best in your research.

REC Chairperson
Prof CJ Wilders

A handwritten signature in black ink, appearing to read 'CJ Wilders', is written over a horizontal line.

(Signature)

**8.2 APPENDIX B: AUTHORISATION TO CONDUCT RESEARCH AT OFFICE
OF THE JUDICIARY**



REPUBLIC OF NAMIBIA

OFFICE OF THE JUDICIARY

Tel: +264-61-4353400
Fax: +264-61-4353444
E-mail: Innocent.Kandandu@jud.gov.na
Enquiries: Mr. I.M. Kandandu

25 Schönlein Street
Private Bag 13412
Windhoek West
WINDHOEK
NAMIBIA

Our Ref: 2/1/1

Your Ref:

17 May 2019

Ms. Uahengo Hileni
P.O. Box 4762
WINDHOEK

Dear Ms. Uahengo

RE: UNAM MASTER'S CANDIDATE REQUESTING FOR ACCESS TO INFORMATION: YOURSELF

1. Reference is herewith made to your letter dated 3 May 2019 concerning the abovementioned subject matter.
2. The Office of the Judiciary has no objection granting you the required limited access to conduct your research on the electronic system of the Magistrates Courts, NAMCIS.
3. However, it is required of you to confirm in writing to this Office:
 - a. that no part (in full or in part) of any production under this request will be shared publicly, neither locally nor internationally for whatever purpose. Such desired publication must be requested in writing from this Office;
 - b. that the contents of your research/findings will legally be owned by this Office.
4. It is further requested that, the University of Namibia (UNAM) replicates your efforts as indicated in paragraph 3 above as an Institution of higher learning and commit to the same conditions in writing to this Office.
5. Furthermore, you are required to complete the attached form of oath of secrecy.

All correspondences must be addressed to the Executive Director

6. Lastly, you will be required to present your findings/recommendations to the Management of this Office before such findings/recommendations are shared with your research supervisors.
7. I trust the above finds you well.

Yours sincerely,



MRS. ROLANDA L. VAN WYK
EXECUTIVE DIRECTOR



All correspondences must be addressed to the Executive Director

8.3 APPENDIX C: LETTER REQUESTING FOR AUTHORIZATION TO PROCEED WITH DATA COLLECTION

Ms. Uahengo N. Hileni
P O BOX 55311
Rocky Crest
Windhoek
Cell: 081 37 55 238
07 August 2020

ADV. Rolanda L. Van Wyk
Executive Director
Office of the Judiciary
25 Schonlein Street
Windhoek West

Your Ref: 2/1/1

Att: Mr I.M Kandandu

REQUEST FOR AUTHORIZATION TO OFFICIALLY PROCEED WITH DATA COLLECTION AT OFFICE OF THE JUDICIARY: UNAM MASTER'S CANDIDATE


The above mentioned subject bears reference. I am a Masters of Arts in Records and Archives Management student at the University of Namibia (UNAM), currently in the second year of the study.

A prerequisite towards the completion of this programme is conducting research. The topic for this study is " **An assessment of the recordkeeping functionalities of NAMCIS (Namibian Court Information System): A case study of the Office of the Judiciary**". It is against this background that I am humbly requesting your highly esteemed office for final permission to start with my data collection and as per prior communication the data collection will be from the following magistrate courts: Windhoek Magistrate court, Traffic Court and Katutura (Mungunda) Magistrate court.

Attached is my approved proposal by the University outlining everything for your Information and an annexure of our past communication. Kindly note as from our prior communication your office alluded and expressed to the request of facilitating with provision of the persons to conduct at the respective above mentioned courts. It is hence my humble request to set up a formative meeting or telephonic communication in this regard.

Should any queries or need of further information arise please do not hesitate to contact me either on 081 3755 238 or on my email: ciadora93@gmail.com.

Yours faithfully


Ms. Uahengo N. Hileni

8.4 APPENDIX D: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

ANNEX 5



TITLE OF THE RESEARCH PROJECT: An assessment of the recordkeeping functionalities of NAMCIS (Namibian court information system): a case study of the Office of the Judiciary

REFERENCE NUMBER: 201211647

PRINCIPAL INVESTIGATOR: Uahengo Hileni Nangula

ADDRESS Erf 5632 Donkerhoek, Katutura, Windhoek

CONTACT NUMBER: +26481 37 55238

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Research Ethics Committee at The University of Namibia and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and Namibian National Research Ethics Guidelines.

1. What is this research study all about?

The study will be conducted at Windhoek magistrate court, traffic court, Katutura (Mungunda) court and Office of the Judiciary. The study will involve (3) IT personnel from Office of the Judiciary, (6) Chief Clerks; 2 from each court, (12) Court Clerks; 3 from each court, (7) Magistrates; 2 from each court and (9) Prosecutors; 3 chosen from each court.

The study aims to investigate and assess the recordkeeping functionalities of NAMCIS. The significance of this study is that, it will contribute to the body of knowledge on court recordkeeping systems, in particular NAMCIS. It is hoped that the Office of the Judiciary and all magistrate courts in Namibia will benefit from a well-managed court recordkeeping system.

The researcher will obtain a research permission letter from the School of Postgraduate studies at UNAM and authorisation to conduct the study in the four organisations. Participants will sign informed consent forms and interviews will take 30 to 45 minutes. The data will be collected at the premises of Office of the Judiciary, Traffic court, Windhoek magistrate court and Katutura (Mungunda) magistrate court particularly at the participant's offices.

2. Why have you been invited to participate?

You have been invited to participate in the study because of your direct involvement with NAMCIS, be it verifying entered data, entering data or administering/overlooking the system.

3. What will your responsibilities be?

Your responsibility is to answer interview questions as honestly as you most possibly can, unless you opt to not answer particular questions. The interview will take 30 to 45 minutes

4. Will you benefit from taking part in this research?

As a participant, you will gain new knowledge on how NAMCIS can be more efficient and your organization will benefit from the overall study as a guide to policy formulation or review.

5. If you do not agree to take part, what alternatives do you have?

For this study, the participant is free to not agree to be part of the research or to withdraw at any time with no consequences.

1. Will you be paid to take part in this study and are there any costs involved?

This study is for academic degree purpose, there are no payments for taking part in this study.

2. Is there anything else that you should know or do?

- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

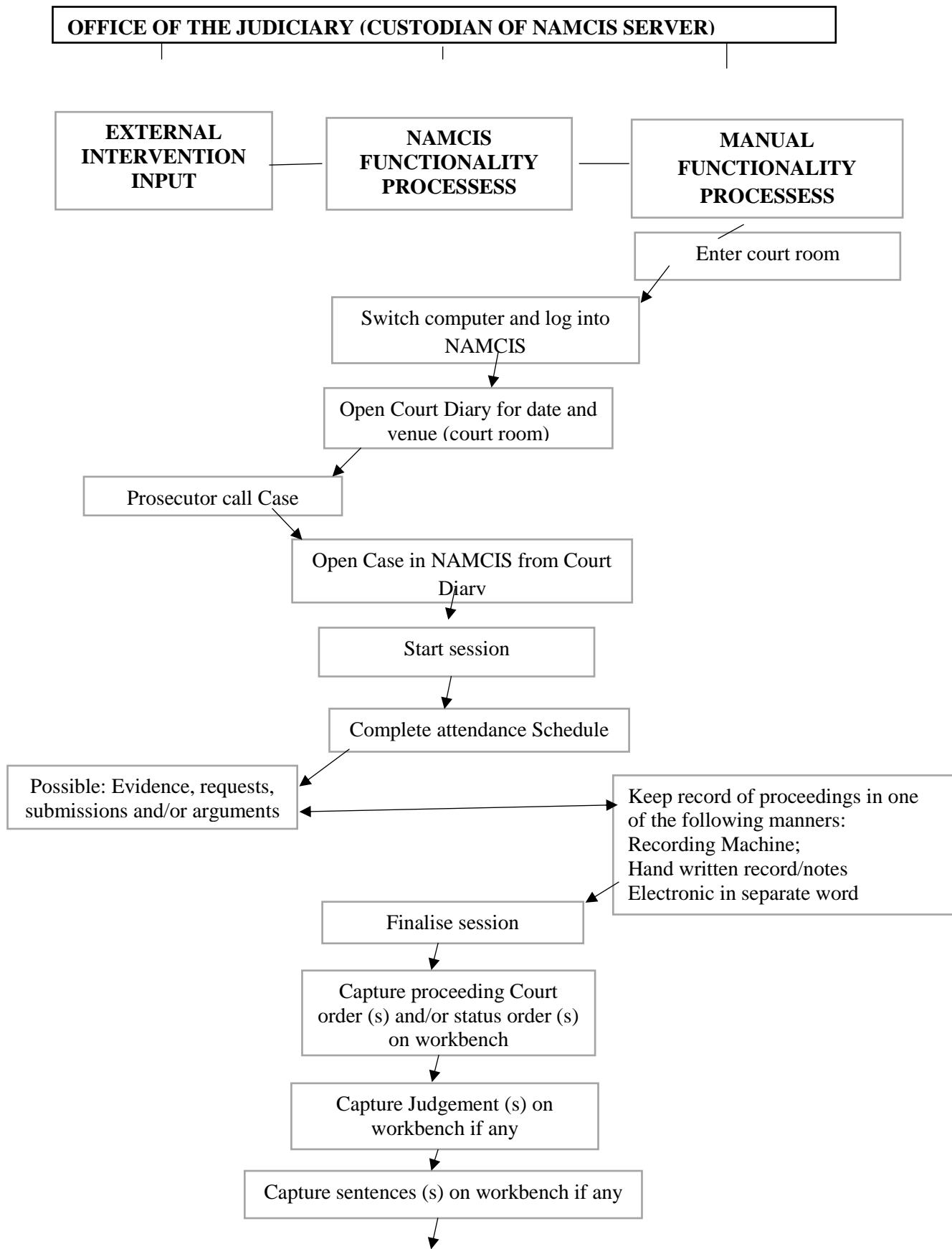
Signed at (*place*) on (*date*) 2019.

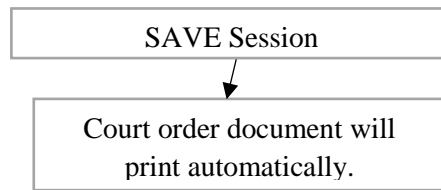
A rectangular box containing a handwritten signature in black ink. The signature appears to be 'Hawley' written in a cursive style.

.....
Signature of investigator

.....
Signature of witness

8.5 APPENDIX E: NAMCIS WORKFLOW PROCESSES DIAGRAM





Adapted from (schickerling, 2006). NAMCIS workflow processes diagram for magistrates and prosecutors

**8.6 APPENDIX F: INTERVIEW GUIDE FOR COURT CLERKS AT
MAGISTRATES' COURTS IN WINDHOEK.**

Designation/Title.....

Years of Service.....

Field of Study.....

Qualification name.....

1. What policies or standards guides you in controlling the creation and use of records kept in NAMCIS?
2. What security measures are in place to prevent unauthorised access to records in NAMCIS?
3. Was there any type induction program or any sort of training for the system usage?
4. Are there any functions you cannot perform on the system?
5. What data sources do you use to occupy the system?
6. Briefly explain the procedure you use when entering data into NAMCIS?
7. What challenges or problems do you experience when using NAMCIS?
8. Is there anything you would like to ask me or comment about this interview?

Thank you for your time

8.7 APPENDIX G: INTERVIEW GUIDE FOR IT (INFORMATION TECHNICIANS) AT OFFICE OF THE JUDICIARY.

Designation/Title.....

Years of Service.....

Field of Study.....

Qualifications

PART A: Legislative and policy framework on court records

1. What policies or standards guide creation, maintenance, use and control of the records in NAMCIS?

2. Are there any available manuals that guide staff on how records should be managed and stored in NAMCIS?

PART B: Functional Requirements for an electronic recordkeeping system

3. Briefly explain the procedure you use when entering data into NAMCIS?

4. Does the system have a User and Group Service functionality? If so, (what does the functionality entail?

5. Does the system have a Role Service functionality i.e Administrative role and non-administrative? If so, what does the functionality entail?

6. Does the system have a Classification Service functionality that allows authorised users to create new classes? If so, what does the functionality entail?

7. Does the system have a Record Service functionality that allows authorised users to create active aggregations? If so, what does the functionality entail?

8. Does the system have a Metadata functionality which allows each metadata service to manage metadata element? (What does the functionality entail)

9. Does the system have a Disposal scheduling Service functionality that allows authorised users to create new disposal schedules? If so, (What does the functionality entail?)

10. Does the system have a Disposal Holding Service functionality that allows an authorised user to create active disposal holds? If so, (what does the functionality entail?)

11. Does the system have a Searching and Reporting Service functionality that allows a user to specify a search criterion that returns a match for date, date/time and timestamp metadata?

12. Does the system have a Searching and Reporting Service functionality that allow authorised users to export entities?

PART C. SYSTEM SAFETY MEASURES

13. What solution (s) is provided when the system fails to complete a function requested by itself or an authorised user?

14. What challenges are you facing with regards to the functionalities of NAMCIS?

Thank you for your time...

**8.8 APPENDIX H: INTERVIEW GUIDE FOR THE PROSECUTORS AT
MAGISTRATES' COURTS IN KHOMAS REGION**

Designation/Title.....
.....

Years of
Service.....

Field of
Study.....

Qualification.....
.....

1. What standards or legislation guides your work with NAMCIS?
2. Are there any instructions or manuals available to guide the system operations? If no, what aids you when you are having difficulties?
3. Explain the procedure of entering records into NAMCIS.
4. Was there any type of induction for NAMCIS that you have gone through? (Explain what it entailed)
5. What data sources do you use to populate the system? (Electronic or paper records)
6. What classification scheme guides the arrangement of records stored in the NAMCIS? (If none what guides you)
7. What security measures are used to prevent unauthorised access to records in NAMCIS?
8. Are there any functions the system unable to perform? (If any, Please specify them)
9. What challenges are you facing with regards to NAMCIS?
10. Do you have any comments about the operation of NAMCIS?

Thank you for your time

8.9 APPENDIX I: INTERVIEW GUIDE FOR THE CHIEF CLERKS AND MAGISTRATES/SUPERVISORS AT MAGISTRATES' COURTS IN KHOMAS REGION.

Designation/Title.....

Years of Service.....

Field of Study.....

Qualification name.....

1. What standards and procedures do you follow to capture, store, retrieve, disseminate and retain records in the NAMCIS?
2. Was there any type of induction for staff working with NAMCIS? If yes explain the induction process.
3. Explain the procedure of entering records into NAMCIS.
4. What security measures are used to prevent unauthorised access to records in NAMCIS?
5. What data sources are used to populate the system? (Electronic or Paper based)
6. Is there a classification scheme in place for records stored in the system? If not what guides you?
7. Is there a retention and disposal schedules in place for records kept in the system? If not what guides the transfer/disposal of records?
8. Have any system upgrades been conducted since the implementation of NAMCIS? [If yes] When were they carried out and what did they entail?
9. To what extent is the National Archives of Namibia involved in the management of NAMCIS?
10. What challenges are you faced with regards to the operation of NAMCIS?
11. Is there anything you would like to ask me or comment about this interview?

Thank you for your time