Electronic Records Management and information Culture in Botswana's Parastatals

By

Mogogi Thabakgolo

BA, MARM

Submitted to fulfil the requirements for the Degree of Doctor of Philosophy in the Information Studies Programme, School of Social Sciences, College of Humanities, University of KwaZulu-Natal, Pietermaritzburg, South Africa

2023

Declaration

I, Mogogi Thabakgolo affirm that:

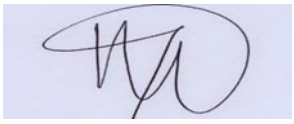
1. The research reported in this thesis, except where otherwise indicated, is my original research.
2. This dissertation/thesis has not been submitted for any degree or examination at any other university.
3. This dissertation/thesis does not contain other persons' data, pictures, graphs or other information unless specifically acknowledged as being sourced from other persons.
4. This dissertation/thesis does not contain another person's writing unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

a. Their words have been re-written, but the general information attributed to them has been referenced.

b. Where their exact words have been used, then their writing has been placed inside quotation marks and referenced.

5. This dissertation/thesis does not contain texts, graphics or tables copied and pasted from the internet, unless specifically acknowledged, and the source being detailed in the thesis and the reference sections.

Mogogi Thabakgolo

Signed……  ……Date:22 March 2023

Supervisor

Dr Zawedde Nsibirwa

Signed…*ZG Nsibirwa*……..Date: 22 March 2023

Dedication

This thesis is dedicated to my late father who impressed upon me that “the race is not to the swift” and my wife and daughters, Orefile, Pelia and Entle for the understanding and support they offered me during my studies.

Abstract

Records provide evidence of and information about the transactions of individuals and organisations. Therefore, proper electronic records management (ERM) is vital for the safeguarding of organisational information. It has been observed that sound records management is a crucial mechanism for holding individuals, governments, societies and organisations accountable. Studies conducted on electronic records have shed light on the need for proper records management and associated challenges. While many studies have been conducted on electronic records, none have probed Botswana's electronic records and information culture. Therefore, the purpose of this study was to investigate the electronic records and information culture in that country. The specific objectives of the study were to: establish the information cultures that exist in Botswana parastatals; investigate how information culture affects records creation and capture; examine the value accorded to electronic records; and determine how trustworthy the records keeping systems are. Furthermore, the study came up with recommendations aimed at providing guidance on the measure that parastatals can employ to remedy the challenges they face.

The Information Culture Assessment Framework, the Information Culture Conceptual Framework and the Records Continuum Model were adopted for the study. A mixed methods approach allowed the study to collect both qualitative and quantitative data. Three parastatals were purposively selected and a target population of 139 employees from the three organisations was identified. Using list-based random sampling, a sample of 133 respondents was selected and each of the respondents was sent a link to an online questionnaire. Of these respondents, 101 completed the questionnaire giving a response rate of 75.9%. In addition, five interviews (out of six targeted) were conducted with records managers and the representatives of the chief executive officers of the parastatals. The Statistical Package for the Social Sciences (SPSS) was used to analyse quantitative data to generate frequency counts, percentages, bar charts and tables. The software program ATLAS.ti-9 was used for the thematic content analysis of the qualitative data collected in the study.

The study found that there is a significant relationship between ERM and information culture; that records creation and capturing in the parastatals are still besieged with many challenges; that while the organisations accorded some value to records, less value was accorded to electronic records; and, finally, the respondents from the participating parastatals trust the records keeping systems to some extent. Recommendations based on the findings were given as well as suggestions for further research.

Acknowledgements

This work would not have been possible without the assistance, efforts and guidance of several people:

I thank my Lord and Saviour, Jesus Christ, for guiding me and giving me the strength to accomplish this work.

My sincere gratitude to my supervisor, Dr Zawedde Nsibirwa, for her guidance and patience throughout this study.

I am also thankful for the Office of the President and CEOs of the parastatals for permitting me to conduct this study. In particular, I would like to extend my gratitude to Doreen Barreto at the BURS, Fiona Baruti at the WUC, and Thapelo Kenosi at the BQA who ensured that my data collection was possible. I would also like to thank Innocent Gabajesane for assisting with data analysis. Finally, I thank the respondents who provided valuable data for this research. Without them, this work would not have been possible.

Although the author acknowledges the assistance of others, the author remains responsible for interpreting the data and any short comings that may be contained in the study.

Contents

List of tables

List of figures

List of abbreviations

BQA	Botswana Qualifications Authority
BURS	Botswana Unified Revenue Service
CEO	Chief Executive Officer
DRAMBORA	Digital repository audit method based on risk assessment
DWMS	Document workflow management system
ECMS	Enterprise content management system
EDMS	Electronic document management systems
EDRM	Electronic document and records management system
ERM	Electronic records management
ICA	International Council on Archives
ICT	Information and communication technology
IT	Information technology
IMRT	International Records Management Trust
InterPARES	International Research on Permanent Authentic Records in Electronic Systems
ISO	International Organisation for Standardisation
MoReq	Model requirements for the management of electronic records
NESTOR	German Network of Expertise in Long-term Storage of Digital Resources
REDCap	Research Electronic Data Capture
SADC	Southern African Development Community
SDGs	Sustainable Development Goals (United Nations)
UKZN	University of KwaZulu-Natal
USA	United States of America
VPN	Virtual private network
WUC	Water Utilities Corporation

Chapter 1

Introduction to the study

1.0 Introduction

Electronic records have always presented challenges to records practitioners and scholars. Given these challenges, the current study investigated electronic records management (ERM) and information culture among selected parastatals in Botswana. The study focused on three selected parastatals, namely, the Botswana Qualifications Authority (BQA), the Water Utilities Corporation (WUC) and the Botswana Unified Revenue Services (BURS). These parastatals were selected because they have established records management units. While parastatals in Botswana are mandated by legislation to keep records, many parastatals, despite this, have been marred by issues of poor corporate governance, corruption in awarding of tenders, fraud, maladministration, inefficiency, and poor oversight mechanisms (Magang and Kube 2018). However, proper records keeping practices have been found to control malpractices. Malpractices emanate from negative values, behaviour and attitudes toward electronic records. Therefore it was significant for the current study to establish how information culture (values, attitudes and behaviour) affects electronic records.

To investigate electronic records and information culture the study used information culture as a framework. The nexus between electronic records and information culture stems from the latter being an assessment framework of the former. Information culture provides a window through which we can understand people's behaviour towards information/records and how information is communicated in the process of creating, sharing and using information. Records management ensures the systematic creation, capture and disposal of records. There is a need to understand how information culture affects records management because the two exist together in any organisation with information/records. This is supported by Oliver and Foscarini (2014:11) who state that "Information culture exists in any organisation, whether or not they facilitate effective information management". Understanding the relationship between records management and information culture can provide another perspective on the state of records in most organisations.

Apart from the introduction and background to the study (as outlined above), this chapter covers the significance of the study, statement of the problem, research objectives, research questions and provides a brief outline of the theoretical framework underpinning the study and the research methodology used. This is followed by the

delimitations of the study and the definitions of terms and concepts. The chapter ends with how the study is structured and a summary.

1.1 Background to the study

Information culture is "emerging complex systems of values, attitudes, beliefs and behaviours that influence how information is used in an organization" (Oliver 2014:30). Electronic records refers "to recorded information, documents or data that provide evidence of policies, transactions and activities carried out in e-government and e-commerce environments" (Pan 2017:3). How records are used and treated in any organization can reflect on the organisation's information culture. The focus on people is the recognition that people play a role in implementing information/records management. The creation, capturing, organizing, maintenance and preservation of information and records are all activities that people perform to hence the organisation's information capability.

The few previous studies on electronic records and information culture by Oliver (2004) conducted a qualitative study in Germany, Hong Kong and Australian universities using Hofstede theory. They found that probing people's actions and attitudes is key to understanding records and information culture. However, Oliver (2004) did not cover issues on creating and capturing records in the records continuum. Wright (2013) also qualitatively investigated the self-perceived level of records management competency using information culture. A study by Oliver and Foscarini (2014) provided a framework for analysing and assessing information culture. Another study by Svärd (2014) also qualitatively examined the interface between Enterprise Content Management and records management and the role information culture played in public records management. The current study uses the information culture in depth as an assessment framework to examine electronic records and differs from the other studies regarding methodological orientation.

Sundqvist and Svärd (2016) aver that there is a lack of research on information culture and records management, and only a few researchers have explored the impact of cultural aspects on records management. They also noted that the cultural impact on how records are created, captured and organised has rarely been acknowledged in the literature on information culture. Therefore the current study is unique as it seeks to investigate information culture and electronic records management from the perspective of a developing country, as previous studies were carried out from the perspective of developed countries. Therefore the current study will contribute to the body of knowledge on how electronic records impact information culture.

In sub-Saharan Africa, problems of ERM include general management and issues of implementation with most of the focus being on creating an ERM enabling environment. Studies by Asogwa (2012), Lowry (2013), Wamukoya (2014) and Adamu (2016) have summed up the problems of ERM, namely, a lack of government policies on records and capacity building. Similar findings were presented in Southern Africa by Muchaonyerwa and Khayundi (2014), Katuu and Ngoepe (2015) who pointed to poor infrastructure and a lack of skills. In a similar vein, Mutsagondo and Chaterera (2016) and Sigauke, Nengomasha and Chibakwa (2016), identified the lack of legislation, policy and stewardship in Zimbabwe as impediments to ERM. Similar findings were reported by Uutoni, Yule and Nengomasha (2011) in Namibia. In sub-Saharan Africa records management and information culture have not yet received attention. Studies in ERMS have focused on general management and challenges of ERMS with the most focus being on creating ERM enabling environment. The researcher is unaware of any study tackling issues of records management and information culture in the sub-region.

Information culture and records management are concerned with how people behave towards electronic records therefore there is a need to understand Botswana's electronic records landscape. The selected parastatals in the current study face challenges in managing electronic records. A study by Mothasedi (2012) revealed that BQA lacks e-records management policies and procedures, lacks requisite skills, and poor staffing reported that some e-electronic records created through other systems, such as Oracle were not regarded as records as such there was no connection between other systems to TRIM. In BURS, Kekopa (2013) revealed that BURS faced critical challenges in managing records and information. The main challenge was the lack of effective systems and procedures that allow the creation, maintenance and retrieval of records and information in both paper and electronic formats. Lack of awareness of the importance of records; inappropriate storage facilities; inadequate staffing levels in the Documentation Section; lack of clearly defined classification system; absence of retention schedules; lack of disaster preparedness plan and procedures manual.

Few studies on electronic records in the parastatals and those participating in the current study were limited. The information culture landscape in these parastatals is not known as there are no studies known by the researcher that addresses information culture issues. However, fragmented efforts address issues of information culture on attitudes and trustworthiness that could be gleaned from the works of Mosweu, Bwalya et al. (2016); they found a lack of change management and technophobia. The study reflected resistance to culture change, as switching from manual to automated records was not well received. The attitudes of users, as observed by Mosweu, Bwalya

et al. (2016), of resentment and indifference to electronic records provide a glimpse into user attitudes to the system. The InterPARES Trust Project (2018) admits that legislation is important in controlling human activity and encourages trust in records management. Despite such an argument, Botswana legislation was found inadequate to enforce trustworthy records. Therefore there is a need to understand how people behave toward electronic records. The absence of current studies on information culture and the electronic record landscape will deprive records practitioners and scholars of how people behave towards records in the Botswana context. Therefore the current study arises to fill the knowledge gap on how people behave toward records.

1.1.1 Parastatals and records management

The BURS (one of three parastatals selected for this study) is mandated to assess and collect revenue and, as such, has to ensure that proper records are maintained. In 2009 BURS engaged a consultancy to do a records keeping situation analysis. The consultancy revealed that BURS was faced with critical challenges in managing its records and information. The main challenge was the lack of effective systems and procedures that allowed for the creation, maintenance and retrieval of records and information in both paper and electronic formats. There was also a lack of awareness of the importance of records, inappropriate storage facilities, inadequate staffing levels in the documentation section, a lack of a clearly defined classification system, and the absence of retention schedules, a disaster preparedness plan and procedures manual.

The BURS Act No 34 of 2018 mandates the organisation to maintain adequate accounting records and be responsible for the content and integrity of financial information. Part VI, 28 (1) of the Act states that "the revenue service shall keep and maintain proper accounts and other records in respect of every financial year relating to its activities, and shall prepare in respect of each financial year a statement of such accounts". Doing so is dependent on BURS keeping and maintaining proper records which justifies the need for records management to be a key function in the operations of the revenue service.

The second parastatal, the WUC is mandated by the Water Utilities Corporation Act of 1970 Chapter 74:02 to keep records for accounting and audit purposes. Financial year statements of accounts showing in detail the assets and liabilities and income and expenditure of the Corporation need to be provided. The Act further states that auditors should be satisfied that they have received all the information and explanations necessary for the performance of their duties as auditors and that accounts and related records of the corporation have been properly kept. Part V: 17 of the Act states that the corporation shall keep accurate records to facilitate present or future research, operations and planning. Furthermore, Part VII:30 of the Act confers powers to call information on the

minister who seeks the "Corporation to provide him/her with estimates of the Corporation's future revenue and expenditure, and with such other information relating to its activities and operations, including books of accounts, records, documents, and agreements relating to the purchase or sale of water". This relies on the Corporation being able to keep records and validates the need for the corporation to put mechanisms necessary for proper records keeping.

The third parastatal, the BQA, is underpinned by the Botswana Qualifications Authority Act No. 24 of 2013. Similar to the WUC Act above, the BQA Act mandates the Authority to keep and maintain proper accounts and records relating to the financial year and statement of accounts showing in detail the assets and liabilities and income and expenditure of the Authority. The Act further states that auditors should be satisfied that they have received all the information and explanations necessary for the performance of their duties as auditors and that accounts and related records of the Authority have been properly kept. The Authority's establishing Act supports the provision of records keeping. However, Mothasedi (2012) found that the Authority lacks a records management policy and procedures for the creation, use, maintenance and disposition of electronic records thus leading to a lack of guidelines on electronic records in the organisation.

1.1.2 National frameworks – policies and legislation

Laws and policies control how information flow is controlled in a large national setting. These also tend to influence how information is held or viewed within organisations hence the inclusion of these frameworks in this chapter. These policies and laws shape employees' behaviour toward information/records. In an organisation where records are accorded high value and recognised as strategic assets, there are laws that aid to shape such attitudes towards records. However, it is widely held that many organisations do not pay sufficient attention to records keeping. In Botswana, most organisations keep business records for regulatory reasons. The Botswana Company Act of 2018 Chapter 42:01 and Income Tax Chapter 52:01 mandate organisations to keep records. Failure to comply with the Act has dire consequences for organisations. If organisations keep records for compliance only, specific procedures and standards may be disregarded as attention will be paid to the minimum standards and procedures required for compliance.

There are several laws concerning freedom of information and data protection that control the flow of information. In Botswana, Sebina (2006) states that the flow of information is controlled and enshrined in the Constitution and the Botswana National Archives Act of 2007 Chapter 59:04. However, these laws are inadequate. For example, Botswana has not yet enacted a freedom of information law which is central to facilitating how

information/records are accessed. Therefore, the lack of these laws enables a culture of secrecy to emerge, one in which the sharing or dissemination of information, even within the organisation, becomes difficult. Sebina (2006) observe that the Botswana Government had adopted overcautious strategies that favour secrecy rather than openness with regard to information. Cain, Doig, Flanary and Barata (2001) purport that Anglophone sub-Saharan African countries inherited a strongly entrenched culture of secrecy and conservatism within their civil services. This culture was codified in official secrets acts and service regulations. However, the Government of Botswana, in passing the Cybercrime Act and Electronic Evidence Act in 2014, has made significant gains in terms of the admissibility of electronic documents.

Keakopa (2013) contends that most organisations have not developed the necessary policies and procedures to manage records and information. There is a general concern in the literature about the lack of development in essential policies for implementing records management strategies (Tshotlo and Mnjama 2010; Ngoepe and Keakopa 2011; Kalusopa and Ngulube 2012; Mothasedi 2012; Keakopa 2013). Heritage institutions in Botswana were found to be without records management policies and Kalusopa and Ngulube (2012) established that labour organisations in Botswana did not have such policies either. Similar findings were reported by Mutula and Van Brakel (2006) concerning small enterprises in Botswana. Kalusopa, Mosweu and Bayane (2021) admit that there is no national policy on records management in Botswana. In one of the parastatals covered in the current study, the BQA, Mothasedi (2012) observed that there was no records management policy. However, Keakopa (2013) reported that records strategies at the BURS have been developed.

Policies are needed to ensure that ICT and records management interact effectively. Moloi and Mutula (2007) and Mosweu, Bwalya and Mutshewa (2016) have reported that to enjoy the benefits of ICT infrastructure, there is a need to develop records management policies. There are also problems of synergy between records management officers and ICT officers and, in addition, there is no interface of the records management system with other systems. The Botswana National Policy on ICT aims to provide a roadmap for the effective use of ICT. However, it has been observed by Moloi and Mutula (2007) that the Policy covers the administration part of the archives and not the records management function. The Policy emphasises the need for services to be accessed electronically. Although the Botswana National Policy on ICT has a shortcoming as noted above, it does have the potential to shape human behaviour toward electronic records. One of the documents that can also shape people's behaviour towards electronic records is the Botswana e-Government Master Plan 2015-2021. The current Plan emphasises the need to provide innovative service delivery through seamless connectivity between government agencies by establishing the foundation to support effective administrative processes.

1.2 Statement of the problem

Records contain evidence that can be instrumental in governments and institutions promoting a culture of trust and demonstrating an overall commitment to good governance. Proper records management is the basis for transparency, eliminating corrupt tendencies and enabling the efficient use of resources (Mutula and Wamukoya 2009). Policies and regulations will not lead to the success of an organisation in the absence of trust. Having an efficient records keeping system ensures effective administration and decision-making and encourages transparency which, in turn, leads to stakeholder and public confidence. Trust is likely to be strong when there is openness and transparency in decision-making based on evidence. Most parastatals in Botswana have breached this trust as studies attest to inadequate records keeping systems (Keakopa 2013). A viable records management system can support the capacity to build trust.

Parastatals play a significant role in the management and implementation of Botswana's development policy and contribute to socio-economic development. Over the years parastatals have contributed considerably to the economy. However, there have also been inefficiencies and losses as well as reports of poor service delivery. With many parastatals receiving government subventions, accountability and transparency mechanisms seem inadequate. Ideally, parastatals must have good records keeping measures as provided for by the different acts of parliament that established them. In reality, the little research that has been conducted shows that parastatals are inadequate in managing electronic records (Mothasedi 2012 and Keakopa 2013). Blackie (2018) study found that the WUC of Botswana lacks an information policy and qualified information professionals. Furthermore, the author found that the different information sources were not well kept, they were inaccessible and there was duplication of information sources as well. A study by Mothasedi (2012) of the BQA found that the electronic records system acquired had not helped the problems associated with electronic records. Keakopa (2013) indicated that in the BURS there was a lack of electronic records policies, procedures, trained personnel, mail management and a lack of appreciation of records. Over and above these problems, it has not been established how employees behave towards electronic records and whether such behaviours impact electronic records management.

The consequences of not addressing the problem identified above can be devastating for parastatals. Without proper records and their management, it is not easy to establish whether particular actions and transactions meet the criteria of efficacy, legitimacy and good governance. Records assist in providing evidence that actions and transactions meet the above-mentioned criteria. Parastatals need to demonstrate accountability to their

stakeholders and the public as part of the evidence of social responsibility. This can be achieved through creating, capturing and managing records effectively and efficiently.

1.3 Research objectives

The study's main objective was to investigate how records management is influenced by organisational information culture. The specific objectives of the study were:

1. To establish the information cultures that exist in Botswana parastatals.
2. To investigate how information culture affects the creation, capture and management of electronic records.
3. To examine the attitudes and values accorded to electronic records.
4. To determine how trustworthy the records keeping systems in the parastatals are.
5. To make recommendations on improving records management and information culture based on findings.

1.4 Key questions

In light of the main objective above, the key questions that this study aimed to answer were:

1. What kind of information cultures exist in Botswana parastatals?
2. How does information culture affect the creation, capture and management of electronic records?
3. What attitudes and values are accorded to electronic records?
4. How trustworthy are the records keeping systems in the parastatals?
5. What recommendations can be drawn from the finding of the study?

1.5 Scope and limitation of the study

The scope of the research was limited to electronic records management at BURS, BQA and WUC. The three parastatals were chosen because of their strategic importance to the national economy, and the level of the development of electronic records. Botswana Unified Revenue Service contributes 20% tax revenue to Gross domestic products (GDP).WUC provides water to support the social development of Botswana. Furthermore,

BQA was among the early institutions adopting Trim, an electronic record-keeping system (Mothasedi 2012). Though these parastatals have branches across the country, the study was confined to Gaborone, where the headquarters of these parastatals are based.

The study focused on Gaborone because most parastatals are based there, and budgetary and time constraints prevented the researcher from moving beyond the area. The study focused on records officers and managers, IT personnel, chief executive officers (CEOs), and all other officers referred to as "action officers" who interact with records daily. The study is limited to these employees because some are custodians of records while others are accounting officers. The latter take decisions or actions concerning correspondence, such as creating and circulating memos and generally generating information within their organisations.

The study has some limitations. The data were collected between 09/03/2021 and 27/04/2021 during the outbreak of the Covid-19 pandemic. This resulted in changes having to be made to the ethical clearance permit and data collection methods, as presented in Chapter 4, section 4.7. The researcher had requested staff email addresses from the parastatals to send the research link to each of the selected members of staff. However, this was not agreed to, and instead, one staff member from each parastatal was appointed to assist the researcher who then sent the link to the specific staff members. This was not ideal as the researcher could not encourage the employees to complete the questionnaire, limiting the study's response rate. However, all was not lost as an acceptable response rate of 73% was achieved.

Organisation A was going through retrenchment processes at the time of data collection. These changes contributed to a low response rate from the parastatal. Delays were also experienced in carrying out interviews as the records manager who was supposed to be interviewed had already received a retrenchment letter and, therefore, refused to schedule an interview. The organisation later appointed another records manager who the researcher then interviewed. The disgruntlement within the organisation contributed to the low response rate and time taken to complete the data collection.

1.6 Significance of the study

Several phenomena warranted the conception of this study and, as Creswell and Clark (2018) point out, a study should inform practice, theory and policy.

The study contributes to policy formulation by establishing the nexus between electronic records and information culture. Hopefully, the current findings will provide input to policymakers to consider people issues in electronic records promulgation. The lack of electronic records policy among most institutions in Botswana and parastatals included has been cited as an impediment to proper electronic records (Tshotlo and Mnjama (2010), Keakopa 2013, Mosweu, Bwalya et al. (2016). The study provides a baseline for policy development in electronic records. Furthermore study is significant in supporting efforts towards ensuring that electronic records are managed with proper policy guidelines.

In terms of practice, the current study provides practical approaches to how information culture can impact electronic records management. The study will provide records practitioners such as records managers, archivists, IT personnel, and organisational leadership/management with an understanding of employees' behaviours and attitudes towards records. It also informs records managers to look into internal administrative processes in their quest to solve records management problems and consider the "people issue" as well. The study provides a shift in that there is a focus on human behaviour. Knowledge of the human factors affecting records management will provide a better understanding of how organisations can align their policies such as IT and training to influence positive behaviours towards records.

The study findings raise awareness among parastatals on what McLeod and Childs (2013) call neglected people issue. The study has brought out behaviours and attitudes that impact on records consequently, and parastatals can devise a programme that can rectify any negative behaviour. The findings will assist parastatals in improving records user satisfaction and perception. This will assist parastatals in detecting any anomaly at the earliest stages.

The Botswana National Vision 2036 recognises that information and communication technology (ICT) enables efficient product and service delivery across all economic sectors. Electronic records are important for service delivery as they support timely decision-making. Furthermore, Vision 2036 seeks to transform Botswana into a knowledge-based economy through research and development. The records managers as the custodian of records/information aggregate and provide access to this information that can promote a knowledge-based economy. The current study, therefore, is significant as it investigates how human attitudes and values can impact this resource that supports the knowledge economy.

In the global arena, the study advances the United Nation's Sustainable Development Goals (SDGs) of "promoting peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels" (United Nations Development Programme 2015). Records management and the library and information discipline support this by ensuring that information is made accessible. The SDGs are based on the assumption that trustworthy digital information will be accessible for governance and poverty eradication. The study envisages that sustainable development can be attained by creating and capturing accessible and trustworthy information/records to drive development.

1.7 Overview of Theoretical framework

The study was underpinned by the Records Continuum Model, the Information Culture Assessment Framework and the Information Culture Conceptual Framework. Each is briefly discussed below (and discussed in detail in Chapter 2).

1.7.1 Records Continuum Model

The Records Continuum Model is viewed as a consistent and coherent regime of managing records from the time of their creation (and before creation, in the design of records keeping systems) through to their preservation and use as archives (McKemmish, Upward and Reed 2010). The Model has four major themes in archival science, that is, transactional, authority (identity), evidential and records keeping.

Accounts of the Records Continuum Model have drawn inspiration from Anthony Gidden's structuration theory, a social theory that is a conceptual and heuristic model of human behaviour. Therefore, the selection of the Continuum Model is based or built/founded on structuration theory that investigates human behaviour. It is for this reason that the Model best fits this study which sought to investigate human behaviour/activity within records management through the first two dimensions of the Model (dimensions one and two) which concern the creation and capture of records. The Model focuses on the multiple purposes of the record through its capture, management and maintenance. It promotes the integration of records keeping into the organisation's business systems and processes. The Model helped the study assess the state of records keeping in the parastatals and identify the human behaviours or actions in records management processes across the Continuum dimensions. The study focused on the transactional, evidential and contextual aspects of the Model noted above. Focusing on these aspects allowed the study to answer how information culture affects records creation and capture, as actions/activities that reflect human behaviour are expressed in these dimensions. This study holds that records are evidence of action.

1.7.2 Information Culture Assessment Framework

The Information Culture Assessment Framework is relatively new and has not yet received any engagement within records and archival literature. According to Oliver and Foscarini (2014), the Records Continuum Model has informed the Framework. The Framework seeks to assess information culture within a records management setting.

This Framework has three levels: Level I consists of factors deeply rooted in human beings and their social institutions that are very difficult to change. At this level, the study asks what values employees of the parastatals accord to electronic records. Level II is placed in the middle of the triangle (see Figure 2.2 in Chapter 2) because training development will take into account those fundamental influences at the bottom. At this level, the focus is on people's skills, knowledge, and experience in relation to the information. Level III consists of the information governance model in the organisation as reflected in the organisation's IT resources as well as the trust in the organisation's records keeping. At this level, the study asks how trustworthy the records keeping systems in these organisations are.

1.7.3 Information Culture Conceptual Framework

Information culture consists of socially shared norms, values, behavioural patterns and assumptions that people espouse in managing, creating and sharing information in an organisation. Choo, Bergeron, Detlor and Heaton (2008) adapted six information behaviour types and values identified by Marchand, Kettinger and Rollins (2001) to profile the information culture of an organisation. These are information integrity, formality, control, sharing, transparency and pro-activeness. These components were used in the study as a scale to measure information culture as well as provide a base for the study. The Information Culture Conceptual Framework informed the key question concerning the kind of information cultures that exist in the Botswana parastatals. The Framework has been used in the studies by Choo et al. (2008) and Lauri, Heidmets and Virkus (2016) that investigated attitudes and behaviour related to information culture, and this was a further reason for its adoption in the current study.

1.8 Overview of Research methodology and methods

The study was based on a mixed methods approach which allowed it to mix both qualitative and quantitative methods. As such it was anchored on the post-positivism paradigm and followed a concurrent triangulation

design. The methodology, however, was more quantitative than qualitative. Data were collected via an online questionnaire-based survey and through interviews conducted via video conferencing. The study population included records officers, IT personnel, action officers and administrators. In the qualitative phase of the study, purposive sampling was employed whereas in the quantitative phase, simple random sampling was used. Quantitative data were analysed through the Statistical Package for Social Science (SPSS) software. The qualitative data were analysed and coded for themes using ATLAS.ti-9 software.

1.9 Definitions of key terms and concepts

This section presents the working definitions of the key concepts and terms used in the study.

1.9.1 Information culture

Information culture can be studied from different perspectives. It has been used to describe processes and phenomena in organisations and management thereof usually linked to organisational culture. According to Kisilowska (2015), the idea of information culture comes from observations of social, technological and economic changes, new products, values, norms, and lifestyles that are faced daily in society. Information culture in a societal context is linked to ICTs, information literacy, information activity within cultural norms, and the creation and transfer of information. It encompasses how human beings communicate in an organisation. As a result of the multi-views on the concept it has received divergent definitions:

"Information culture represents values and attitudes against information: what to do and what not to do in regard to information processing, publicizing, and communicating" (Davenport 1997:21).

"Information culture is where the transformation of intellectual resources is maintained alongside the transformation of material resources" (Ginman 1987).

Information culture is a "culture in which the value and utility of information in achieving operational and strategic success is recognized, where information forms the basis of organisational decision making and Information Technology is readily exploited as an enabler for effective Information Systems" (Curry and Moore 2003).

"In an organisational context – Information culture is shaped by information processes within an organisation and people involved in them. It also positions information, supports expected information behaviour and motivations" (Kisilowska 2015).

The definitions point to information use, the influence of information on user's behaviour and information as the driving force behind organisational communication. They highlight the critical nature of information in an organisation with regard to its functioning. In this study, information culture encompasses the values accorded to records and the attitudes demonstrated by employees towards records and information drawn from the records.

1.9.2 Records

According to the International Records Management Trust (IMRT) (2009:10), "A document regardless of form or medium created, received, maintained and used by an organisation (public or private) or an individual in pursuance of legal obligations or in the transaction of business, of which it forms a part or provides evidence".

1.9.3 Electronic records

"An electronic record is created, generated, sent, communicated, received, or stored by electronic means and that requires some form of computer technology to access and use" (Smallwood 2014:3). For the purpose of this study electronic records mean any document or medium that is created, captured and stored electronically.

1.9.4 Electronic records management

Electronic records management entails the effective management of records stored on computerised systems. Smallwood (2013:50) state that "electronic records management simply implies the automation of records management processes and procedures".

1.9.5 Parastatals

Parastatals, also known as state-owned enterprises, are semi-autonomous corporations set up by the government through acts of parliament (Magang and Kube 2018). A parastatal is defined as a state corporation which is wholly or partly owned and controlled by the government. Parastatals are legal entities that work in relatively the same manner as private firms. In Botswana, the principal shareholder of a parastatal is the government and the board of directors of the parastatal reports to the government minister under whose portfolio the parastatals fall. For the purpose of this study, parastatals are defined as organisations that are partially independent of government and accountable to the government.

1.10 Structure and organisation of the study

The thesis is structured and organised as follows:

Chapter 1: Introduction and background to the study

This chapter provides the background to the study and presents the statement of the problem, research objectives and key questions, the significance of the study and delimitations of the study. The theoretical framework and research methodology adopted are briefly discussed and the definitions of key terms and concepts are given.

Chapter 2: Theoretical framework

This chapter presents the theoretical framework underpinning the study. The Information Culture Conceptual and Assessment Frameworks are discussed as well as the Records Continuum Model. The chapter begins with a discussion of the use of theory in records management.

Chapter 3: Literature review

This chapter presents the empirical and theoretical literature review. The literature review is organised according to themes derived from the key research questions and includes issues such as parastatals, ERM and information culture. The literature reviewed was sourced from, amongst others, books, journal articles, conference proceedings, technical reports and dissertations.

Chapter 4: Research methodology and methods

This chapter presents the research methodology and methods adopted for the study. The research paradigm, approach and design are described and discussed. This is followed by a description of the population and sampling procedures, the data collection methods and data analysis. Also discussed are the issues of validity and reliability and the ethical considerations of the study.

Chapter 5: Research results

This chapter presents the findings of the study collected from the self-administered questionnaires and interviews. Findings are presented using tables and figures as well as in narrative form.

Chapter 6: Interpretation and discussion of results

This chapter discusses the findings of the study in the light of the literature review and the theoretical framework.

Chapter 7: Summary, conclusions and recommendations

This, the final chapter, presents a summary of the findings, the conclusions and the recommendations. Potential future research areas are also proposed.

1.11 Summary

The chapter introduced areas of focus of the current study. It provides identity and background information on the parastatals that have been studied. Furthermore, the chapter gives general information on the study's areas. The chapter also established the and research question that provides the impetus to carry this research. The chapter provided an overview of the three theories employed by the study and the methodology adopted. It also provides the scope of what is covered and the limitation experienced in carrying out the study.

Chapter 2, the theoretical framework underpinning the study, follows.

Chapter 2

Theoretical framework

2.0 Introduction

This chapter provides a general overview of the models and conceptual and theoretical frameworks used in this study. Theoretical frameworks, models and conceptual frameworks are terms that are often used interchangeably. However, scholars such as Miles and Huberman (1994), Leshem and Trafford (2007) and Maxwell (2012) have all pointed out that the terms mean different things. For example, Leshem and Trafford (2007) argue that the term conceptual framework is a contradiction because concepts are abstract whereas frameworks are concrete. The succeeding paragraphs attempt to provide definitions and descriptions of these terms.

A theoretical framework is based on theory; it is the field of inquiry that reflects the hypothesis of a study and serves as the foundation upon which research is constructed. The theoretical framework is the specific theory or theories about aspects of human endeavor that can be useful to the study of events. It discusses the inter-relationships between the variables deemed integral to the dynamics of the situation being investigated. Therefore, testable hypotheses can be developed from the theoretical framework to examine whether the theory formulated is valid or not (Eagleton 2008). A theoretical framework aims to make research findings meaningful and generalisable. Theories help to stimulate research and extend knowledge by providing both direction and impetus. They assist in identifying critical areas for further investigation as they disclose gaps in our knowledge and enable researchers to postulate the existence of previously unknown phenomena (Cohen, Manion and Morrison 2007).

Theories are analytical tools for understanding, explaining and making predictions about a phenomenon or subject matter. In research, theories help researchers draw conclusions, develop a body of knowledge, and even generate more advanced and improved theories (Kothari 2004; Ginzburg 2005). Theory serves as a lens through which a researcher examines a particular aspect of his or her subject field. Redish (2004) describes theory in research as a shared language and assumptions that can guide and allow one to compare different approaches and ways of thinking. Therefore, every research project must have some theoretical inclination within the subject of study, against which the researcher can build his or her thinking and draw conclusions.

Unlike theoretical frameworks a “conceptual framework is a tool for structuring research and helps the researcher to make meaning of subsequent research” (Nsibirwa 2012:35). Moreover, it is regarded as a starting point for

reflection on research and its context. The conceptual framework aids the researcher in developing awareness and understanding of the phenomenon being researched. Miles and Huberman (1994:18) define a conceptual framework as a "visual or written product, that explains, either graphically or in narrative form, the main things to be studied – the key factors, concepts, or variables and the presumed relationships among them". Conceptual frameworks can act like maps that give coherence to empirical inquiry. Despite their utility, Smyth (2004:2) cautions that a conceptual framework is "A construction of knowledge bounded by the life-world experiences of the person developing it and should not be attributed as a power that it does not have." In addition, the author states that no researcher can expect that all data will be analysed using the framework without the risk of limiting the results from the investigation.

In addition to a conceptual framework, this study also employed an assessment framework to interpret the context of records management and information culture. Crisp, Anderson, Orme and Green Lister (2006) assert that an assessment framework has assessment concepts and theoretical assumptions that allow others to relate to the framework and potentially adopt it to other assessment domains. It has a conceptual basis that sets out the parameters for assessment and guidelines for practitioners. It provides the constructs to be measured and the links between those constructs.

Kemoni (2008:106) defined a model as a "description of a phenomenon that is abstracted from the details of reality". Remler and Van Ryzin (2011) state that a model can be used to articulate and communicate a theory; it is used to explain the theory. It is a representation that is specific and clear and helps makes sense of complex phenomena and think clearly about those phenomena. A model uses graphics to illustrate the theory – it is a simplified representation of a real situation and includes the main features of the real situation it represents (Kemoni 2008). Models can, therefore, serve the purpose of analysis and prediction.

In records management, the terms theory and model are used interchangeably to refer to the main theoretical frameworks that are used in the discipline. For example, Kemoni (2008) used both the term model and theory to refer to the Records Life Cycle and Records Continuum. Similarly, Cox (2005) used the term model to refer to the Records Life Cycle. In other instances, the Records Life Cycle has been referred to as a concept (Atherton 1985; Yusof and Chell 2000). Nonetheless, Yusof and Chell (2000) and Penn and Pennix (2017) argue that the Records Life Cycle concept has also been regarded as a theory that provides a framework for the operation of records management programmes. The Records Continuum is usually referred to as a model as depicted by scholars such as Atherton (1985), Upward (1996), McKemmish (2001) and Reed (2005). The Records Continuum is also accepted as a theory within the records management discipline.

It is observable that the citations above have used the terms theory and model interchangeably in the records management discipline, with the most dominant being the term model. A model can be seen as an illustration of a theory.

2.1 Use of theory in records management

Theoretical issues in records management have been contentious from the outset. Buckland (1994) asked how trivial or complex records management is and the prevailing notion at the time was that records activities are too trivial to formulate a theory. Buckland (1994) argued that if records management is viewed as a trivial activity, the theory will not be interesting. The author further stated that if records are viewed as access to the working records of an organisation, then some more complex aspects arise, which some people will consider for the development of theory. Yusof and Chell (2002) argue that the problems of records management in formulating its theory stem from it being a professional practice. This is further buttressed by the Association for Intelligent Information Management (2009) which posits that the context in which records management occurs is evolving at a great rate, especially with the use of technology as evidenced by increasing digitisation programmes. However, records management has been slow to adjust to these changes.

The use of theory in records management has been debated by authors such as Cox (1995) who observed that when it comes to theories in records management, the discipline is under-developed as there is little in the way of a body of knowledge in terms of the nature, theory and practice of records management. Brumm (1992:335), however, had earlier dismissed the notion that records management was devoid of theoretical knowledge. The author instead suggested that records management has a large base of theoretical knowledge such that it suffered from "multiple theory disorder". Similar sentiments were later expressed by Yusof and Chell (2002:55) who observed that:

> The discipline has not been based on a discrete theoretical foundation, rather it is based on borrowed or applied theories from cognate disciplines such as archive administration, information science and management and from the pragmatism evolving from the discipline.

Walters (1995) asserted that the base of records management theory lies in archival theory. Duranti (2010) also emphasised that the theoretical roots of records management lie in archival diplomatic theory. The author argued that some archival diplomatic concepts and principles guide the management of electronic records.

Given the above, it is apparent that records management theory comes from different streams of thought. Nonetheless, Yusof and Chell (2002) contended that in seeking their theoretical framework foundation, records management professionals should acquire a theory unique to the records management occupation. Conversely, Buckland (1994) argued that the goal of professional practitioners of records management is to find a theory unique to their particular discipline. The benefits of using concepts, laws and models from other disciplines have been outlined by Duranti (2010). He considers that fostering useful transfers from one field to another encourages the development of theory in a new area, reduces duplication of theoretical efforts, and promotes consistency of scientific knowledge.

It is thus evident that the theories that can be applied in records management are diverse. The following paragraphs present other frameworks that are not applied in the study but are reviewed to show the researcher's knowledge of their existence and justify why they could not be applied to the current study. The frameworks reviewed are the Integrated Records Management Approach, the Records Entity Life History Model, and the Records Life Cycle Model.

2.2 Integrated Records Management Approach

The Integrated Records Management Approach supports the development of a coordinated information management programme. It helps eliminate duplications and reduces expenses for records management services. According to the IRMT (1999:55), the Integrated Approach aims:

- To preserve records and archives in an accessible, intelligible and usable form for as long as they have continuing utility or value.
- To make information from records and archives available in the right format, to the right people, at the right time.

The idea of an integrated model has been discussed by the IRMT (1999) which also offered a slightly different framework modelling. The IRMT contends that an integrated approach is the blending of life cycle and continuum in a records system. Furthermore, the organisation holds that the actions of identification and acquisition, access, intellectual control and physical control which are also present in the Records Continuum Model, are also present in the Life Cycle Model. However, An (2003) stresses that the Records Continuum Model is superior when it comes to the integration of records and archives management because it focuses on:

- Similarities and differences.
- Positive and cohesive ways of thinking rather than a passive way.

- Integrated control of policy implementation.
- Integrated policymaking rather than a fragmented approach.

Despite the argument for Records Continuum Model presented above, the IRMT (1999) still views the Integrated Approach as the best framework for managing electronic and paper records. Hence the IRMT (1999), views the Approach as an archival business aimed at customer satisfaction, service, cost-effective management and best value. The organisation contends that the Approach should be customer-driven and integrated into records management through work. Figure 2.1 below shows the Integrated Approach as depicted by An (2003):

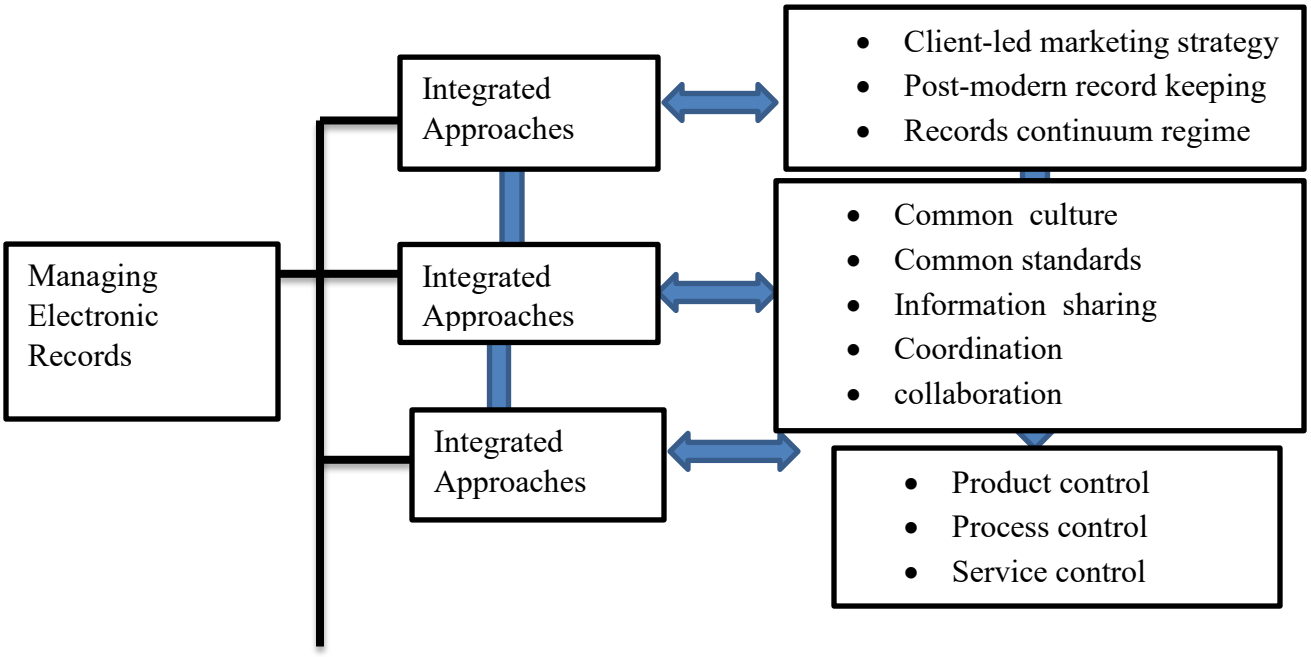


Figure 2.1: Integrated Records Management Approach

Source: An (2003)

An (2003:28) purports that the best practice framework consists of three components:

- Integrated frameworks that provide levels of integration for best practice;
- Integrated approaches that provide positive ways of thinking about archival concepts; and
- Integrated control provides a set of unified criteria for measuring models and methods.

An (2003) asserts that the Integrated Approach develops a collaborative way of thinking to guarantee reliable, authentic and integrated memory for the organisation and society, and to provide consistent and sustainable records keeping services. Furthermore, the author posits that the Records Continuum Model is an integrated model

control, meaning that the control of the process, product, and service should be integrated into records keeping management.

It is worth noting that the IRMT (1999) outlines the following disadvantages of the Integrated Approach:

- The de-emphasis of one aspect of information management favours another (for example, the cultural value of archives management can be reduced as the administrative value of records management increases).
- The mishandling of information because the appropriate tools and techniques are not applied (for example, using library methods to manage records, or records management practices to manage computer programmes).

It is observable that the application of the Approach will differ with the context and emphasis and the application of the two contending theories may vary. Kalusopa (2011:66) adopted the Integrated Approach in his study as one of the key objectives of the study was to establish the current records (both paper and electronic) management practices in labour organisations in Botswana and the Approach, therefore, was considered suitable for the context. The current study did not use the Integrated Approach as its focus was on electronic records. Furthermore, other studies similar in nature to this one (Svärd 2014) did not use the Approach.

2.3 Entity Life History Model

Jackson developed the Entity Life History Model in 1983. The Model is seen as a way of refashioning the life cycle. According to Shepherd and Yeo (2003:8), a systems analyst has used the Model to represent different events that affect materials or other entities used in the conduct of business. The Model considers an entity or record as having a life history that is constructed of sequences, iterations and selections of objects and actions. Shepherd and Yeo (2003:8) purport that a record created or received is captured into a records management system and is then subject to actions, that is, maintenance and use, and these will be repeated as necessary until the records are destroyed. The authors add that the records of continuing value should not be destroyed but when this does occur it is the final event in the life of the record. Shepherd and Yeo (2003:8) emphasise that the Model is valid for all records, whether in paper or electronic formats. However, since this Model is less popular in records management, there is minimal information available for discussion.

Although Shepherd and Yeo (2003) assert that the Model is valid for all records whether paper or electronic, it does not apply to this study because the Model's interest is in the systematic analysis of records' processes. The

current study was about records and information culture and the intention was to focus on human behaviour and records management and not only on records processes. Moreover, the behaviour studied is iterative and cannot be systematic. Finally, the Model does not link in with any of the research questions posed, hence its irrelevance to the study.

2.4 Records Life Cycle Model

The Records Life Cycle is a well-known Model within the records management discipline. The Life Cycle concept dates from the 1930s and is attributed to Schellenberg of the National Archives of the United States of America (USA) (Shepherd and Yeo 2003; Kemoni 2008). It provides a framework for identifying the function of records and the operations of a records management programme (Yusof and Chell 1999). The Model views records as physical entities. As such, it illustrates the life of a record from its creation to its use, storage and final disposition. It holds that records have a laid-out life cycle from birth to death (Shepherd and Yeo 2003). Records are seen as biological organisms that live and eventually die. Shepherd and Yeo (2003) contend that the Model has been criticised for its assumption that records "die". The critics contend that some records do not die but are retained indefinitely because of their continuing value.

The Life Cycle Model has three stages, namely, active or current, semi-current or intermediate, and non-current or archival stages. In the active or current stages, records are used for daily business activities and are maintained in their place of receipt to ensure easy access. The semi-current records are not frequently used for daily business activities. Non-current or inactive records are not required for daily business activities and can be appraised, transferred to archives, or disposed of. The Model thus presents a progression of actions taken at different times in the life cycle of a record, that is, its creation, capture, storage, use and disposal. Records life is sometimes presented as a linear progression while others describe a loop or a circle (Shepherd and Yeo 2003). The circular progression shows that records return to their point of creation. Smith, Siller, Poynton and Exon (1995) contend that this Model is misleading as the circular progression is not usually the case. Brothman (2006) argues that the life of records is uni-directional – they move forward from an originating point to some future terminal point and never move back toward a previous stage or point. Hurley (1998) argues that in real life records relive stages; therefore, the division of the Model into three stages is seen as artificial. The Model is focused on the record as a physical entity and operational tasks, especially those associated with the custody of paper records.

The Model contributes to the demarcation of roles between records managers and archivists as it identifies what will happen to a record at different stages. Hence, records managers are the key players in the primary use of the

records while archivists are managers of records for their secondary uses. This strict separation of roles is viewed as a weakness, especially by proponents of electronic records who argue that records must be managed from the moment of creation by the record-keepers, that is, the records managers and archivists working together. They contend that there is no separate distinction between a record and an archive, especially in the digital era (Shepherd and Yeo 2003; Brothman 2006).

Ndenje-Sichalwe (2010:67) employed the Life Cycle Model to underpin her study because the context of the study was government ministries which create and maintain paper records. The Model was also used by Pereira (2017) to investigate and assess the state of implementation of the National Archives and Records Management Act at the Eduardo Mondlane University in Mozambique. The use of the Model was in line with the study context in which paper records were more dominant.

As alluded to above, the advent of electronic records opened a new frontier that rendered the Life Cycle Model ineffective (Kemoni 2008). The Life Cycle Model regards electronic records as different media that need special handling requirements (Atherton 1985). The weakness of the Model is its inability to function in an electronic environment hence it cannot be applied to this study as its focus was on electronic records only. The Model's use was limited to informing the study objectives. The inherent challenges with the Records Life Cycle Model led scholars to seek alternative responses to the growing criticisms. The weakness led to the development of the Records Continuum Model. This Model is discussed under 2.5 below. Table 2.1 summarises the different aspects of both models.

Table 2.1: Records Life Cycle Model and Records Continuum Model

Model aspects	Records Life Cycle Model	Records Continuum Model
Origins	• Evolved from the need to effectively control and manage physical records after World War II	• Evolving from the more demanding need to exercise control and management over electronic records for the digital era
Elements of records definition	• Physical entity	• Physical and virtual record
Major concerns in records management	• Records-centred, product-driven • Focus on records as tangible physical entities, the physical existence of records themselves • Paper world	• Purpose-centred, process and customer-driven • Focus on the nature of the records, the records keeping process, the behaviours and relationships of records in certain environments • Digital and paper world
Records movement patterns	• Time-based: records pass through stages until they eventually die, except for the chosen ones that are reincarnated as archives • Time sequence: records processes that take place in a given sequence	• Multi-dimensional: records exist in space/time not space and time • Simultaneity: records processes can happen at any point in the record's existence, or even precede it
Records keeping perspectives	• Exclusive • Single-purpose • Organisational or collective memory • Current or historical value	• Inclusive • Multiple purposes • Can be organisational and collective memory • Can have current, regulatory and historical value from the time of creation simultaneously not sequentially
Record keeping process	• There are clearly definable stages in records keeping and they create sharp distinctions between current and historical records keeping	• The records keeping and archiving should be integrated

Criteria for selecting archives	• Historical value	• Continuing value, including current and historic value
Time of archival appraisal	• End of records movement	• From beginning to end
Role of records professional	• Passive and reactive • Locked into custodial role and strategies	Proactive-post custodians: • Records keeping policymakers • Standard setters • Designers of records keeping systems and implementation strategies • Consultants • Educators/trainers • Advocates • Auditors
Records management tasks	• Things are done to the records in fixed stages, in a given sequence by a particular professional group • Records managers and archivists have no business directing what records an organisation creates; they are relegated to receiving the physical objects once created • Fragmented and desperate accountability of creators, users, records managers and archivists	• Integration of business processes and records keeping processes - the task can happen in almost any sequence by any professional group • Records managers are accountable for not only the maintenance but also for the creation of evidence of the organisation's purposes and functions • Integrated framework for the accountabilities of players and partnerships with other stakeholders

Source: An (2003:1)

2.5 Records Continuum Model

The Records Continuum Model has been defined by An (2003:2) as

> A consistent and coherent regime of management processes from the time of the creation of records (and even before creation in the design of records keeping systems) through to the preservation and use of records as archives.

The Model's origin is traced to Canada, although it was developed in Australia in the 1990s (Upward, 1996). Its development was in response to the criticisms leveled against the Records Life Cycle Model (Shepherd and Yeo 2003:9). The model is applicable in Botswana context. Reed (2005) and Cumming (2010), argue that the Records Continuum Model can be used for multiple readings and can support different interpretations of the cultural context in which the records are generated and used. The Model is culturally oriented and open to interpretations to suit the cultural context in which the records are generated and used (Chachage and Ngulube 2006). This justified its adoption in the current study as it helped to understand how records creation and capture are affected by information culture through its emphasis on transactions and evidence. In the Botswana context, the model is applicable.

The Model is interpreted as a metaphor and a new worldview, representing a technology-driven pattern shift in records management. According to McKemmish, Acland and Reed (1999), the Model intends to understand records and records keeping processes regardless of form and situation and from which practices for records keeping in digital environments may be developed. Upward (2000:118) posits that "The continuum is a fully-fledged paradigm shift in which a worldview is being replaced". Kemoni (2008) opines that the Records Continuum Model has gained international acceptance as a basis for the management of records in both paper and electronic formats. This is supported by the view that the universality of the Model is not only intellectual but also practical. It can be applied to "an analysis of recordkeeping practices in any period of history" (Upward 1997:31).

A diagrammatic representation of the Records Continuum Model is depicted in Figure 2.2 below:

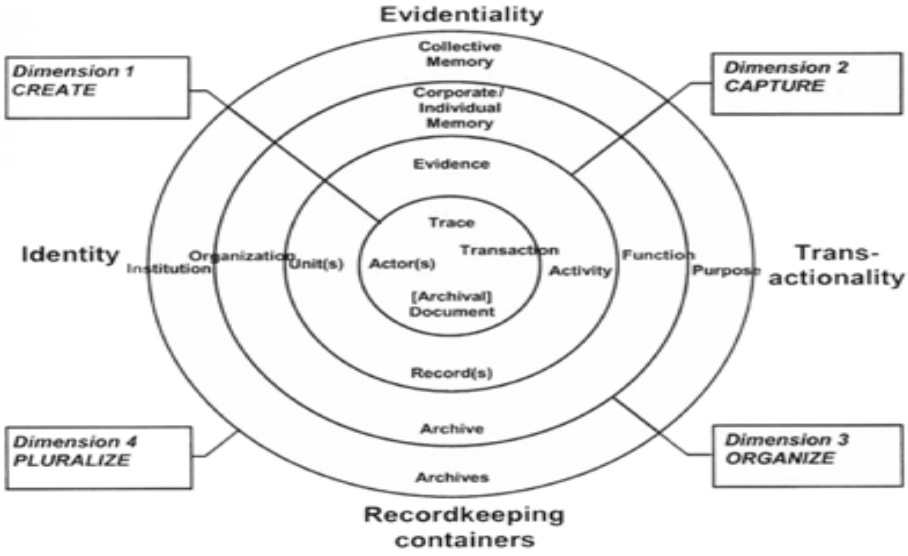


Figure 2.2: Records Continuum Model

Source: Upward (1996: 66)

As reflected in Figure 2.2, the Model has four major vectors or themes, namely, transactional, authority (identity), evidential and records keeping.

- Transactional vector – relates to records as products of activities;
- Identity vector – relates to the authorities by which records are made and kept, including their authorship, establishing particularities of the actors involved in the acts of records creation, the empowerment of the actors and their identity viewed from broader social and cultural perspectives;
- Evidential vector – relates to the records as evidence; and
- Records keeping vector – relates to the objects created to store records (Upward 2000:123).

The Records Continuum Model also has four dimensions that guided this study. The dimensions are linked by concentric circles representing the layers of the continuum joining the individual record to its contexts (Flynn 2001). The dimensions are:

- Create – records creation involves the actor (creator). The transactions that the actor/creator engages in result in a document (archival document) that presents the trace (evidence) of acts by capturing records supporting transactions. Records of business activities are created as business communication processes in the organisation.
- Capture – consists of the unit in which the work takes place. Documents that have been created or received in an organisation are tagged with metadata including how they link to other records. The created document and its information create a context for the record which, as a result, is presented as evidence.

- Organise – the accountable acts are taken to be important enough to permit retaining evidence of them beyond their immediate business and regulatory use in dimensions one and two. The records will certainly become part of the cumulative corporate memory represented by dimension three (An, 2001). It is here that records are organised as evidence by placing them in the context of the corporate or individual archive and managing them in frameworks that enable the records to function as an individual, group, or corporate memory.
- Pluralise a collaborative records keeping establishment under the guidance of a suitably empowered public records keeping authority serves the needs of the total society, its constituent functions, and the entities that carry them out. The records keeping establishment serves the documentary needs of many entities within its jurisdiction and ensures the accountability and the cultural memory of the society as a whole.

Flynn (2001) observes that the Records Continuum Model provides for a unified and homogeneous system for the management of records (including archives) in any format throughout their life irrespective of how long or short that life is. The Model thus allows records managers and archivists to operate at appropriate stages of the records continuum to meet their different but harmonious objectives. The Model is useful in observing the behaviour and actions exerted throughout the stages of the record. The Model provided the study with a framework to answer the research question concerning the influence of information culture on the creation and capture of records.

Cumming (2010) argues that the Records Continuum Model considers the relationship between the system and individual actors, recognising that human activities are mediated by communication and the organisational context. This links in with the current study's identification of behaviours that influence information culture in a selected organisational context thus making the Model relevant to the study. Furthermore, McLeod and Hare (2006) posit that the Model focuses on processes and activities rather than on the records and their status, hence making it valuable within the electronic environment where systems are central. The Model emphasises the need to incorporate records keeping into business and societal procedures and purposes. This study identified with the Records Continuum Model because, as Flynn (2001) points out, it emphasises the concept of service to the users of records whether internal or external to the creating organisation throughout the lifetime of those records. It also provides a sense of the provenance and the organisational and social contexts in which records are created and maintained.

As noted, the Records Continuum Model applies to records including archives regardless of whether they are in paper or electronic form. The Model considers records as logical rather than physical entities regardless of their format. This is particularly significant for electronic records given that the essential qualities of record content, structure and context are not necessarily all physically present in an electronic record but may be available to the user logically or virtually (Upward 2000).

This study will add to the records and information culture debate by focusing on the transactional, evidential and contextual dimensions. This focus will enable the study to answer how information culture affects records creation and capture, as actions/activities that reflect human behaviour are expressed in these dimensions. These activities that take place are engaged in by most people in an organisation. The attitudes and values can be reflected in activities that take place in each dimension. As Upward (1996) succinctly put it, "Once we understand these threading outward processes it is easier to see how structures established in the various dimensions can impact the act of document creation".

The Records Continuum Model focuses on the multiple purposes of the record. It promotes the integration of records keeping into the organisation's business systems and processes. Using the Model in this study assisted in assessing the state of records keeping and the identification of actions in records processes. The link between records management and information culture can be identified in these dimensions. With the advent of electronic records, the Model is seen as an alternative to the Life Cycle Model.

According to Cumming (2010), the Records Continuum Model takes a multi-dimensional view of the creation of documents in social and organisational activities, their capture into the records systems, organisation within the framework of personal or corporate archives and pluralisation as a collective archive. Furthermore, Upward (1996) posits that the continuum perspective is that records keeping and archiving processes "fix" documents that are created in the context of social and organisational activity, that is, the human interaction of all kinds, and preserve them as evidence of that activity by disembedding them from their immediate context of creation and providing them with ever-broadening layers of contextual metadata.

2.5.1 Studies that used the Records Continuum Model to investigate information culture

Few studies have applied the Records Continuum Model to investigate information culture within records management and this is a reflection of the lack of research on the presumed relationship between records keeping and information culture more generally (Sundqvist and Svärd 2016). Among the few studies which have been done, Oliver (2004) applied the Model, together with Hofstede's Dimensions of National Culture, as a framework for analysing the interaction of organisational culture with information and its management in comparative case studies of universities in three countries. The findings show that different values and attitudes to information influence the information culture in the organisations studied. Similarly, a study by Svärd (2014) used the Model as an overall analytical framework to study records management and information culture in municipalities in Sweden and Belgium. The findings revealed a lack of collaboration and a lack of developed registry functions in all the municipalities included in the study. Employee attitudes, which affected records across the records continuum dimensions, were identified as a challenge.

It is evident, given the few studies, that there is still a need to understand how information culture can be interpreted using the Records Continuum Model. The different dimensions of the Model need to be tested against the concept of information culture. The current study built on the previous studies by asking how, in a precise question based on the Model's dimensions, the creation and capture of records are affected by information culture. There is a need for more studies to demonstrate how the theory can be useful to researchers working on information culture within records management and this study can be seen as a contribution in this regard.

2.5.2 Applicability of the Records Continuum Model to the present study

The dimensions "create" and "capture" of the Records Continuum Model are the main concepts that the study focused on. These concepts were chosen because the dimensions represent loci where most human activities occur. The dimensions informed the key question relating to how the creation, capture and management of electronic records are affected by information culture. The Model's multi-faceted nature and identification of elements applicable to each dimension contributed to establishing clarity and focus for the study. The dimensions provide focus because it's around the dimension constructs that research questions and literature review themes are coined around. Moreover, in the data analysis, the constructs from the Model provide a major theme for the qualitative data analysis.

The Records Continuum Model was used in the study to examine the contexts of records creation and capture. It assisted the study in answering how information culture affects the creation, capture and management of electronic records. Creswell (2013) states that when advancing a theory in research using mixed methods one has to state how it informs the quantitative and qualitative components of the research. In terms of the quantitative component of this study, the construct "creation and capture of electronic records", as the dependent variable, was analysed via descriptive statistics while correlational statistics were used to analyse the relationship between this construct and the "information culture" construct. Context is of the essence in the Model, hence informing the qualitative component of this study. Creswell and Clark (2018) observe that a qualitative approach attempts to understand experiences occurring in a natural setting. Battley (2013) argues that viewing records through the lens of the Records Continuum Model allows them to be examined within the context of creation and capture. The Model provides different dimensions in which records simultaneously exist thereby offering a context that allows one to identify the information culture of an organisation. Battley (2013) emphasises that the Model underscores the importance of gathering information about the entire context of records and the people making decisions about them.

Osanloo and Grant (2016) observe that the theoretical framework will dictate the data collection plan that is developed and illuminate information within the data, especially where the theory has concepts or constructs. Each of the constructs can be used to structure the data collection and data analysis plan. The Records Continuum Model guides the data collection as the constructs derived from the Model are where most activities that inform and shape information occur in the organisation.

Cumming (2010) argue that those who criticise the Continuum do it on the basis that it focuses too specifically on "evidence" and does not emphasise the social, personal, historical and cultural values of records is also a misreading of the model. The term itself, "evidence", is perhaps the problem. Although the Records Continuum Model provides a general framework for managing records, it could not specifically address the trust in records management as one of the questions addressed in this study. Therefore the model could not be used as a stand-alone model for the study.

2.6 Information Culture Assessment Framework

The Information Culture Assessment Framework is a three-tier framework. Svärd (2014:45) advises that "The information culture framework is fairly new and has not yet received much engagement within records and archival literature". Therefore, the literature on this subject is minimal. According to Oliver and Foscarini (2014),

the Records Continuum Model has informed the Assessment Framework. In the current study, the Framework was used to assess the information culture within selected parastatals' electronic records management settings. Oliver and Foscarini (2014) state that knowledge of the influences of information culture and how it affects the features of information objects and systems is a vital step towards a concrete understanding of the context in which those objects and systems are embedded. The Framework considers all the factors that affect the attitudes and values towards information according to the different cultural layers in the organisation. The Framework is depicted in Figure 2.3 below.

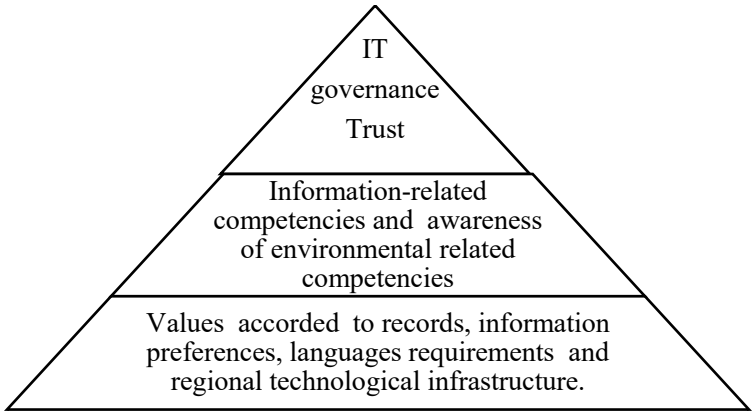


Figure 2.3: Information Culture Assessment Framework

Source: Oliver and Foscarini (2015:17)

The Framework consists of three levels:

Level I comprises the factors that are deeply rooted in human beings and their social institutions and that are very difficult to change. At this level, the study asked: What values do employees of the parastatals accord to electronic records? How do these values impact ERM and shape information culture? A lack of understanding of these factors may hamper the ability to effect change or implement records management strategies (Upward, Reed, Oliver and Evans 2013). The respect or value accorded to information can be motivated by the need to keep records for evidence or accountability purposes. Oliver (2017) states that distinguishing the purposes for which records are kept is important because there is a significant variation in the understanding and readiness to carry out procedures. For example, people in different settings can behave differently. Although there may be international or local standards developed on records management, their effectiveness depends on how people value records. Information preferences can be considered in a broad category that can be associated with national cultural differences. This consists of the need for either explicit or implicit information in order to communicate successfully (Oliver 2017). Communication can be in a high or a low context. In a high context, communication is implicit in pictures and images, whereas in a low context, communication is explicit in text form. Information preferences will indicate what kind of information is created and what media are selected and consulted.

Level II is placed in the middle of the triangle because training development will take into account the fundamental influences at the base. At this level, the focus is on people's skills, knowledge, and experience in relation to the information. There are two perspectives to be considered here: literacies (information and digital literacy) and knowledge of relevant societal requirements. Information and digital literacy skills are important in today's environment where technologies to access, create, use and disseminate information are at everyone's fingertips without the need for an information professional to assist (Oliver 2017). The need for skills, knowledge and experience in digital literacy continues to increase. The basic information and digital literacy skills needed in the workplace include the ability to deal with information overload, different file formats, cloud computing, and very specific software (Oliver 2017). In terms of the relevant societal requirements perspective, people need to know the laws, standards and norms applicable in the environment in which they live. There is a need to assess employee competency skills and develop training programmes. The training programmes should take into account factors identified in Level I.

Level III consists of the information governance model in the organisation as reflected in the organisation's IT as well as the trust in the organisation's records keeping. At this level, the study asked how trustworthy the records keeping systems in these organisations are. The two factors at the apex of the triangle indicate that they are susceptible to change as long as they are approached with an understanding of the characteristics of the features identified at levels I and II (Oliver 2017). The concern at level III is corporate IT governance. The governance principles will manifest through IT policies, procedures and specifications for the overall information architecture and security considerations (Upward et al. 2013). The IT policies should take into consideration all information aspects. If the policies reflect IT interests only, they can have an adverse effect on the records and archival objectives.

The Information Culture Assessment Framework provides a new perspective on how to look at what McLeod, Childs and Hardiman (2011) acknowledge as "people issues" in records management. The issues emerging from the Framework include attitudes towards records keeping, values accorded to records, and trust in the information records keeping system. The principal focus of the Framework is on how people's behaviour and their inherent values and attitudes may influence how information is created and managed. Through the Framework, the study sought to identify and explain issues of trust in records keeping in the parastatals. Thus, the Framework helped in explaining employees' trust in relation to records keeping and the people who manage the records. The Framework provides a link between records management and information as it shows various elements such as information preference, records management competencies and trust in IT. It enables the analysis of what

influence the way individuals and groups in organisations behave and the assumptions they make concerning the information they create in their daily activities. In applying the Information Culture Framework as an assessment tool, organisations will realise what factors impinge on the achievement of their objectives, and might eventually be able to develop more appropriate and effective policies and strategies, targeted at specific aspects of their records management (Oliver and Foscarini 2014).

2.6.1 Studies that used the Information Culture Assessment Framework

While the information culture concept has been discussed before, this discussion took place in different disciplines. The studies in which these discussions took place were mainly about information systems (Ginman 1987), business performance (Ginman 1987; Travica 2005; Choo et al. 2008), knowledge management (Bergeron, Heaton, Choo, Detlor, Bouchard and Paquette 2013; Vick, Nagano and Popadiuk 2015), and information literacy (Crawford and Irving 2009; Lepik and Kannukene 2017; Widén and Karim 2017). Few studies focused on information culture and records management. The application of the Information Culture Assessment Framework is limited to the records management discipline. Svärd (2014) conducted a case study on information culture and records management in municipalities in Sweden and Belgium in which the Framework was used. The Framework was successfully employed and the author was able to determine the impact of information culture on records management.

Sundqvist and Svärd (2016) conducted a review of the literature on information culture and records management. The authors concluded that information culture is used in different ways, that is, as an analytic and evaluative framework, explanatory framework and as a normative standard. Sundqvist and Svärd (2016) posit that most research on information culture focuses on general information. However, the authors also decry the lack of research on information culture and records management.

It is thus apparent that given the few studies cited above, the Information Culture Assessment Framework still needs to be investigated to further determine how it can be useful for records management. Svärd's (2014) study focused more on the general purpose of the Framework. The current study focused on specific components of the Framework, that is, the value accorded to records and the trust in records keeping. Therefore, the study builds on what previous studies have done, focusing on the attitudes and values that employees accord to records management, and how trustworthy the records keeping systems in the organisations are. These two questions have not been addressed by previous studies.

2.6.2 Applicability of the Information Culture Assessment Framework to the study

According to Creswell (2014), Osanloo and Grant (2016), the theoretical framework serves as the structure and support for the rationale of the study, the problem statement, the purpose, the significance, and the research questions. It also provides a grounding base, or an anchor, for the literature review, and most importantly, the research methods. The theoretical framework informed the statement of the problem in Chapter 1. It identified a gap with regard to the factors that affect records management, namely, cultural and philosophical attitudes. The theoretical framework's identification of the knowledge gap also justified this study. The framework informed the study questions on the attitudes and values that employees accord to records management and how trustworthy the records keeping systems in the organisations are.

This study regards Oliver and Foscarini's (2014) Information Culture Assessment Framework to be more comprehensive and appropriate to the problem and population under study than other frameworks (or models) because it allows for a description and explanation of attitudes and behaviours that can be displayed by employees. The Framework informs the quantitative component of the study. Neuman (2014) opines that a survey best addresses attitudes and behaviour hence the Framework informed the quantitative component of the study, that is, to measure the values accorded to records. The data collection instruments were thus also informed by the Framework. The instruments collected both narrative and numerical data to understand the complex issues of information culture and records management given that they comprise people, technical, and cultural issues.

The Information Culture Assessment Framework also informed the qualitative component of the study in that it sought to determine how the employees interact with records and the activities they engage in which, therefore, required one to look into the context. According to Chilisa and Preece (2005), a qualitative approach is a naturalistic inquiry because it places the researcher in a setting where the participants live/stay or work and who then attempts to make sense of, or interpret, the meaning that participants bring to a phenomenon. The constructs of the Framework were used as themes for data analysis. The aggregation of the findings relating to the three levels of the Framework helped address information culture and records management issues.

Although the framework assesses information culture, this study will inadequately identify activities and transactions from which attitudes and values can be observed. In this regard, it cannot be used as a stand-alone framework in this study and records continuum fills in this inadequacy. It should be noted that according to the authors, Oliver and Foscarini (2014) this theory was informed by a continuum in its formation.

2.7 Information Culture Conceptual Framework

The study holds that people's values and attitudes towards records reflect information culture. Information culture consists of the socially shared norms, values, behavioural patterns and assumptions that people espouse in managing, creating and sharing information in an organisation (Choo et al. 2008). Marchand and Kettinger (2011) developed a theory of effective information use that concerns the orientation toward information that people have. This development came about because the authors realised that organisations do not recognise the people-centric view of information despite it being people who implement the information management practices used to collect, organise, process, and maintain information. Moreover, it is people who create a proactive culture in which information is used creatively and shared. Information orientation determines the degree to which an organisation possesses competence across three information capabilities, namely, IT practices, information management practices, and information behaviours and values. It is from the organisational information capabilities that Marchand and Kettinger (2011) developed six information behaviour types and values, that is, information integrity, formality, control, sharing, transparency and pro-activeness.

The above information behaviour types and values were adopted to profile the information culture of Canadian organisations. The framework used was formulated under a theory that seeks to establish effective information use and hence its applicability to the current study can be questioned. It can, however, be argued that Choo et al's (2008) study used the Framework to systematically identify information behaviours and values that can describe the information culture of an organisation. The main question underpinning their study was what kind of information cultures exist in Botswana parastatals. The findings from their study suggest that the questionnaire used elicited the information cultures that characterised the studied parastatals. It was thus concluded that it is possible to describe an organisation's information culture. In a similar vein, the current study attempted to establish the information cultures of the three selected parastatals in Botswana and to determine how the identified cultures affected records management. The study adopted the following concepts of the Information Culture Framework: information formality, information integrity, information control, information transparency, information sharing, and pro-activeness (these are elaborated on below).

The current study adopted Choo et al's. (2008) conceptual framework because the attributes/axioms of the framework were empirically derived, it has shown both face and empirical validity and has integrated many of the dimensions derived from research. The Information Culture Conceptual Framework provides a dashboard for measuring an organisation's information orientation. The use of the Framework was purely an attempt by this study to answer the question on the kind of information cultures that exist in the selected parastatals. The

Framework does share some attributes with Oliver and Foscarani's (2013) Information Culture Assessment Framework. Choo et al. (2008:775-776) developed definitions for these information behaviours and values and these are outlined below:

Information integrity is defined as the use of information in a trustful and principled manner at the individual and organisational levels. It sets boundaries beyond which people may not go. It implies that there are ways of using information that are not appropriate and will be sanctioned. The authors identify *information formality* as the willingness to use and trust institutionalised information over informal sources. Oliver and Foscarini (2014) assert that employees tend to trust formal such as memos, reports, and correspondence or informal sources (such as colleagues). *Information control* is the extent to which performance information is continuously presented to people to manage and monitor their performance. Managers use the information to monitor and control operational activities and decisions to achieve intended strategies and improve business performance. *Information transparency* is defined as openness in reporting and presenting information on errors and failures, thus allowing members to learn from mistakes. Here, the regular sharing of failures or errors openly needs to be encouraged. *Information sharing* is the willingness to provide others with information appropriately and collaboratively. This relates to with whom one shares information, whether it is those within the organisation (internal information sharing) or outside the organisation. Finally, *proactiveness* is the active concern that is attributed to obtaining and applying new information in order to respond quickly to business changes and promote innovation in products and services. The attributes of the Framework enable one to determine the existing information culture.

Organisations are differentiated by their information cultures. It is acknowledged that the information culture of an organisation is determined by a large number of variables such as its mission, history, leadership, employee traits, industry, and national culture (Choo et al. 2008). In addition, information culture would also be shaped by the cognitive and epistemic expectations embedded in the way that tasks are performed and decisions are made in an organisation. Finally, information culture may also be a function of the maturity or stage of development of an organisation.

2.7.1 Studies that used the Information Culture Conceptual Framework

The Information Culture Conceptual Framework was chosen based on its use by other studies. As noted, Choo et al. (2008) adopted it as did Lauri, Heidmets and Virkus (2016) in investigating attitudes and behaviours related to information culture. As alluded to above, Choo et al. (2008), using an online survey, found that it is possible

to systematically identify behaviours and values that describe an organisation's information culture. Their research settings included a public health agency, a national law firm and an engineering company. Lauri, Heidmets and Virkus (2016), using an online survey of 160 faculty members from twelve institutions of higher education in Estonia, explored the different types of information cultures in higher education institutions in Estonia.

It can be noted that the Information Culture Conceptual Framework has been used to identify information cultures in organisations other than parastatals and from disciplines other than records management. This study brought a different perspective and contributes new information by integrating the Framework with records management. It is hoped that the study will also inform theory by determining how behaviour in records management influences information culture.

2.7.2 Applicability of the Information Culture Conceptual Framework to the study

The attributes of the Information Culture Conceptual Framework are able to capture behaviours and values that reflect the information culture in an organisation. Choo (2013) has argued (and as pointed out earlier) that the Framework is empirically derived, has shown both face and empirical validity, and has integrated many of the dimensions derived from research. The Framework was relevant for this study because it provided axioms/attributes to measure information culture, namely, information integrity, formality, control, transparency, sharing and pro-activeness. In the study by Osanloo and Grant (2016) the Framework served as a building block informing the literature review and providing content for the information culture construct.

Kumar (2019) notes that core variables gained from a theoretical framework form the solid basis for research inquiry. In presenting the general picture that reflects the relationship between the framework of the study and the research questions, Table 2 above maps the research questions of the study to the axioms of the Framework and the data collection instruments used. The Information Culture Conceptual Framework informs the quantitative aspect of the study by providing variables (information integrity, formality, control, transparency, sharing and pro-activeness) that were used to determine the information cultures that exist in the selected parastatals. The Framework informed the qualitative component of the study as the attributes identified formed the questions to be asked and provided themes for the data analysis. The Framework also informed the data collection instruments, as the instruments collected numerical data. A conceptual framework provides variables that guide the type of validity to be achieved. Benson and Hagtvet (1996) posit that a theory construct should be validated to provide empirical evidence. A conceptual framework measures the construct validity of identified

variables to draw conclusions that can confirm or disconfirm the framework. In the current study, the framework was limited to be used on its own. The model could not explain records management processes. Therefore, a records continuum model was employed along the framework to remedy this weakness.

After establishing the frameworks that apply to the current study, there is a need to show the connection between research questions, the frameworks and the data collection instruments used. Table 2.2 below reflects the relationship between the research questions, the axioms of the study's theoretical framework and the data collection instruments. In other words, the theoretical axioms are mapped to the research questions and instruments.

Table 2.2: Mapping study theoretical framework axioms to research questions and instruments

Research questions	Model or framework	Model or framework axiom	Instruments
Q1. What kind of information cultures exist in Botswana parastatals?	Information Culture Conceptual Framework	Information integrity, formality, sharing, transparency and pro-activeness	Questionnaires
Q2. How does information culture affect the creation, capture, management, organisation and use of electronic records management?	Records Continuum Model	Create Capture	Questionnaires Interviews
Q3. What are the attitudes and values that employees accord to records management	Information Culture Assessment Framework	Behaviour and attitudes towards records	Questionnaires Interviews
Q4. How trustworthy are the records keeping systems in the parastatals?	Information Culture Assessment Framework	Trust in records keeping system	Questionnaires Interviews

Source: Field data

The first research question established the information cultures that exist in the selected parastatals. This question was guided by the Information Culture Conceptual Framework (as reflected in Table 2.2). The conceptual framework axiom/attributes of information integrity, formality, sharing, transparency and pro-activeness were applied to investigate the first question. After identifying the kind of information cultures that exist, it follows then to probe how the identified information culture affects the creation and capture of records. To answer this question the Records Continuum Model was applied and the axioms creation and capture were used. This led to

question three on the attitudes and values that employees accord to records management. Question four links to question three because trust in records keeping systems is based on shared practices and perceptions of employees. Both questions three and four were examined through the Information Culture Assessment Framework.

2.8 Summary

This chapter provided a discussion of the theories and models that are commonly used within records management or, more broadly, the information science discipline. The chapter discussed how theories are viewed in records management. The theories discussed were the Records Life Cycle Model, the Records Entity Life History, the Integrated Records Management Approach, the Records Continuum Model, the Information Culture Assessment Framework, and the Information Culture Conceptual Framework. The chapter further discussed the applied models and their relevance to the current study and the studies that have used the models. Also presented was a table in which the research questions of the study were mapped to the axioms or attributes of the frameworks and the data collection instrument used. The attributes or axioms of the frameworks offer direction for developing the literature review.

Chapter 3, the literature review, follows.

Chapter 3

Literature review

3.0 Introduction

This chapter, the literature review, builds on the previous chapter, using the constructs from the theoretical frameworks. Hartas (2015:3) defines the literature review as an analysis, critical evaluation and synthesis of existing knowledge relevant to the research problem. The literature review can be conducted systematically through a laid down methodology and one of the first steps in this regard is to select published and unpublished materials on the topic of study. These materials contain information, ideas, data and evidence written from a particular standpoint. The literature review expresses personal views on the nature of the topic and how it will be investigated (Hartas 2015). As Oliver (2004) observes, the review enables one to see how new studies and research are like building blocks that are laid upon the ideas built by others and thus help one to appreciate the sequence and growth of knowledge.

This chapter thus attempts to position this study in the existing body of knowledge and identify what has been done on the subject. In addition, it assists in determining the research gaps that provided the impetus to conduct the study. As Hartas (2015) points out, the literature review helps determine where research boundaries are located, identify where knowledge is missing or contested, and identify the existing gaps in research that the researcher's study can fill. The current reviews seek to contextualise the study by showing how it fits into the records management field. Leedy and Ormrod (2009:33) argue that the literature review "enables a researcher to develop a clear understanding of the research topic; establish what has already been researched on the topic". Furthermore, Kumar (2019:53) postulates that to advance the goal of the research requires the researcher "to know what has been done before, the strengths and weaknesses of existing studies and what they might mean".

This review of the literature aims to critique, analyse, and collate ideas and arguments presented in a wide range of studies. Babbie (2013) advises that a literature review should be an informative and unbiased summary of the information, providing balanced views as well as conflicting findings and inconsistencies. It should present established and current thinking on the topic. The literature review provides the context for the research and sets up the justification for conducting the inquiry. Baker (2016:13) provides the following reasons for the literature review:

- The researcher familiarises himself/herself with the current knowledge on the topic and identifies gaps around the topic.
- It identifies methodologies and research techniques used in previous research.
- It defines relevant key terms and important variables used in the study.

The online databases EBSCOhost, Emerald, Science Direct, and Google Scholar as well as online institutional repositories were searched to identify relevant literature. The main keywords used in the search strategy were "information culture and records management" "information culture" "electronic records and information culture" and "information culture*records". The Boolean operator AND was frequently used while the truncation symbol was rarely used. Backward snowballing was also used in that the researcher perused through the reference lists of the studies to determine additional relevant authors. The researcher searched for literature that was as current as possible but reverted to older papers where necessary. Papers written in languages other than English were excluded. To determine the relevancy of the literature identified, the researcher read the abstract and should the abstract not succinctly present the content of the study, the entire paper or article was read.

The literature review is based on the themes of the study which were derived from the specific research questions and guided by the theoretical variables of the study. To begin with, parastatals in sub-Saharan Africa and Botswana are discussed. This is followed by an overview of electronic records and their management in developed and developing countries including Botswana. Information culture, records creation and capture of electronic records are discussed. The issue of trust in records keeping is highlighted as are the various systems used in the management of records including electronic records. The review then returns to the information culture concept and ends with an outline of the nexus between records and information culture.

3.1 Parastatals in sub-Saharan Africa

Parastatals, also referred to as state-owned enterprises, are independent entities wholly or partially owned by the government. They usually perform or offer particular services and are established by acts of parliament. The reason for establishing parastatals is, in essence, to promote more effective and efficient service delivery. Parastatals exist to support the government's development efforts hence their performance is critical in achieving the government's broad development objective of boosting economic growth (Mbekomize and Wally-Dima 2013). Despite the importance of parastatals to national development, parastatals in sub-Saharan Africa face several governance issues. Mazikana (2019), for example, observed that parastatals in Zimbabwe are facing issues such as transparency, disclosure and accountability. Similarly, Chilunjika and Mutizwa (2019) revealed corporate

governance failures, mismanagement, financial distress, corruption and political interference among parastatals in that country. In Kenya, Getuno and Awino (2014) noted that the challenges faced by parastatals were the result of poor implementation of the regulations, poor organisational structure, use of non-competitive procurement methods, poor records management and unfamiliarity with rules and regulations. In South Africa, studies by Malgas (2021) and Chitiga-Mabugu, Henseler, Mabugu and Maisonnave (2021) reveal that parastatals are underperforming because of governance issues. The under-performance of parastatals has a negative effect on an economy and this consequently affects the national gross domestic product and public debt of a country.

Many challenges faced by parastatals can be addressed by proper records management. Keorapetse and Keakopa (2012), for example, argued that proper records keeping practices have been found to control corruption, fraud and embezzlement. Ngoepe and Mello (2021) found that Rand Water's (a South African water utility) enterprise resource planning and enterprise content management systems (ECMSs) were not integrated. There was also incompatibility, non-agile technology, technical architecture that excluded an ECMS, and a lack of human and non-human resources to achieve the needed integration. In Zimbabwe, Chikomba, Rodrigues and Ngoepe (2021) observed that financial parastatals in the country still lacked the necessary tools such as policies, guidelines and standards, adequate infrastructure and skilled manpower for the effective and efficient management of digital records. Similarly, Mzerah (2013) established that the Kenya Ports Authority faces challenges such as the lack of standardisation of classification, the lack of filing records retention and disposal schedules, the lack of proper storage facilities and conditions (including storage space), the lack of effective file tracking tools and, finally, the lack of effective security measures.

Despite revelations made by Mintah, Gabir, Aloo and Ofori (2022) that business records management has a positive indirect effect on business growth, parastatals in sub-Saharan Africa are still riddled with poor governance as a result of a lack of proper records management. The link between poor governance and poor records management is attested to by Mosweu and Rakemane (2020) who argue that the principles of good governance such as accountability, transparency and the rule of law are ascertained with records made available by good records management. The current study contributes to the literature as few studies have focused on electronic records and parastatals.

3.2 Parastatals in Botswana

In Botswana, there have also been inefficiencies and financial losses as well as reports of poor service delivery by parastatals. Many of these issues have caused budgetary constraints for the government (Magang and Kube 2018). It has been observed that while parastatals have established various internal control systems, adherence to these in some entities is a challenge. Many parastatals have been marred by issues of poor corporate governance including corruption in the awarding of tenders, fraud, maladministration, inefficiency and money laundering, political meddling and poor oversight mechanisms (Magang and Kube 2018). The government has lost a lot of money through parastatals which are not profitable and, as pointed to above, many are entangled in corruption, economic crimes, mismanagement and unethical governance. Furthermore, Jefferis and Sejoe (2017) argue that the appointment of boards of directors has not been done on merit but on membership to the ruling party. This has destroyed all prospects of oversight and undermined corporate governance in most of the parastatals.

In Botswana, parastatals, as noted above, are established by acts of parliament. The legislation that establishes them also mandates the parastatals to keep records. In one of the parastatals, the Botswana Auditor General's (2011) report found that the Public Procurement Assets Disposal Board (PPADB) did not properly maintain procurement records for the stipulated period of seven years as dictated by the PPADB Regulation 18 of 2006. Evaluation reports, letters of award, contract documents and correspondence were absent from procurement files and this could have a detrimental effect on the monitoring and management of procurement activities. The auditors opined that the inadequacy of procurement records resulting from their poor maintenance made it difficult to confirm that there was transparency and accountability for procurement decisions made during the various procurement processes. Similarly, Keakopa (2013) uncovered a lack of records management policies and procedures, buy-in and support for records management. The author also pointed to the need to raise awareness of the importance of records, the need for human capacity building, and the need for infrastructure development for the storage of semi-current records and the management of electronic records. Satisfying these needs is critical if the implementation of any records management programme is to be realised (Keakopa, 2013). Rakemane and Serema (2018) observed that in one parastatal there was a lack of policies and procedures governing the management of electronic records, inadequate security measures, poor ICT infrastructure, a lack of training for ERM, technological obsolescence, a lack of migration strategies as well as a lack of integrated systems for the overall management of electronic records in the organisation

Given the above, it is evident that when it comes to records, parastatals in Botswana face challenges. The current study thus contributes to existing knowledge on records keeping and parastatals in the Botswana context and the Southern African region as a whole.

3.3 Emergence of electronic records

The emergence of electronic records in the early 1970s was met with a certain indifference by archivists and records managers as they were not regarded as records per se and were referred to as machine-readable records. According to Cox (2005), the electronic environment was considered a wild frontier. However, Cox (2005) acknowledges that attitudes changed with the introduction of the personal computer. The introduction of personal computers began debates within archival science on how to manage electronic records. Thus, the mid-1980s saw an increasingly sophisticated IT that brought archivists into contact with what was thought to be complex electronic records of that time. The records were mostly produced by document image processing systems. Adam (2007) notes that some document image processing systems were so developed that they included some workflow elements. The development of electronic records around the 1990s accelerated knowledge, theory and calls for case studies and manuals on this record format. The 1990s also experienced networked computers which brought development in IT. The IMRT (1999) points out that the integration of computing and telecommunications into networks in the 1990s had significant implications for how records are created, stored and used.

Electronic document management systems (EDMS) and ERM systems emerged in this era. According to Adam (2007), records management institutions took cognisance of electronic records, and this heralded an era of research on functional requirements and records management standards. From 1993 to 1996 the University of Pittsburgh engaged in a study of ERM which was intended to develop a framework to ensure the development of functional requirements for electronic records from the time of their capture to final disposition (Shepherd and Yeo 2003). Cox and Duff (1997) posit that Frank Upward developed the Records Continuum Model around the 1990s.

The 1990s also saw several institutions in Europe, Australia and the USA engaging in several research projects. In late 1997, the American Department of Defence developed the standard 5015.2-STD. The standard set mandatory functional requirements for ERM systems software that became the de facto standard in the USA (Adam 2007). The standard was updated and reissued in 2000. According to Adam (2007), in 1999 in the United Kingdom, the National Archives developed functional requirements for electronic records regarding metadata standards. In the same manner, Bearman (2007) reports that in Australia around 1998, the Public Record Office

of the State of Victoria launched the Victorian Electronic Records (Strategy) Project to examine the capture and long-term preservation of the electronic records of the Victorian Government. The project demonstrated the possibility of automatically capturing business process metadata from records (Bearman 2007).

In 2001 the International Organisation for Standardisation (ISO) released ISO 15489-2001 which was based on the Australian standard AS 4390-1996. It is then that the Australian Government withdrew AS 4390-1996 and replaced it with ISO 15489-2001 (Adam 2007). ISO 15489-2001 has been updated and replaced by ISO 15489-1:2016. At the writing of this chapter, part 2 of ISO 15489 has not been realised. Barnes (2016) argues that the 2001 version was replaced because it could no longer fit the new business models adopted by organisations. Moreover, there was the realisation that records were no longer constrained by physical limits. According to Convery (2016), the ISO 15489-1:2016(E) version has moved away from specialised records management principles toward a more holistic understanding of records management and its relationship with the digital world. It shows an appreciation of the more diverse business contexts and systems in which digital records currently need to be managed. The main focus of the 2016 version of ISO 15489 is on records systems and controls. Unlike the 2001 version, the 2016 version omits any prescribed methodologies that could be used to establish a records management programme (Convery 2016). The 2016 version changed some of the terminology, particularly the definition of "appraisal".

In 2001 the Interoperable Delivery of European e-Government Services to Public Administrations, Businesses and Citizens (IDABC) developed the Model Requirements for the Management of Electronic Records (MoReq**).** MoReq provides a functional specification for all the major components of a records management system. There was also the development of MoReq2 which ended in 2008. According to Fresko (2010), there were complaints that MoReq2 was too complex and too demanding and that it would be impossibly expensive to develop compliant software. As a consequence, it was updated to MoReq 2010 which was used to encourage the emergence of different models of records management systems. It adopted a modular structure consisting of a core module, optional modules, dependent modules and extensions (Fresko 2010).

Having developed the functional requirements, there was a need to preserve the records created. The International Research on Permanent Authentic Records in Electronic System (InterPARES 1 and 2) in the period 1998-2006 began to develop theories and methodologies for digital preservation. The InterPARES 3 2007-2012 sought to apply the theories and methodology developed in phases 1 and 2 towards solving existing problems. The InterPARES shows shifting ideas and developments regarding ensuring long-term access by preserving the records created by the world's nations. Thus, to ensure functional requirements were advanced, the InterPARES

developed 5015.2-STD, ISO 15489 and the MoReq. These initiatives have made a significant contribution to the advancement of the fields of archives and records management.

The need to implement electronic records among governments coincided with the introduction of e-government. As Abdulkadhim, Bahari, Bakri and Hashim (2015:17945) note, "Electronic Document Management Systems (EDMS) have been identified globally as one of the key development strategies in e-Government and as such, has influenced many governments to implement electronic records". Although electronic records functional requirements have been developed, it still seems like there are problems with implementing electronic records among governments and other agencies (Asogwa 2012). Several problems have been identified in the implementation stage. Of all the problems the missing link has been the continuous/daily interaction of human behaviour which has seldom been discussed in the literature. It is evident that technological development far outpaces records management development. This affects information culture, as culture evolves with time and the assimilation of such technological development is usually slow. The difficulties of managing electronic records are not only a result of the problem of enforcing policies but organisations have adopted new technologies with little consideration of records' capabilities (Adam 2007).

3.4 Trends in electronic records and information culture

Earlier studies that discussed information culture (Ginman 1987; Grimshaw 1995; Owens, Wilson and Abell 1997; Hoglund 1998;Widén-Wulff 2000) were more concerned with finding the interrelation between information culture and business performance. Other studies (Grimshaw 1995; Choo 2013; Hansen and Widen 2017) discussed information culture in relation to organisations' effectiveness, innovation, and information use while Lauri, Heidmets and Virkus (2015) investigated the relationship between information culture and job satisfaction. The key finding of these studies was that there is a correlation between information culture and organisational performance and organisational effectiveness.

Within the information science discipline, Bergeron et al. (2013) and Vick, Nagano and Papadiuk (2015) discussed the role of information culture in knowledge management. Choo, Furness, Paquette, Van Den Berg, Detlor, Bergeron and Heaton (2006) and Travica (2005) concluded that within information management a good information culture supports the effective creation, use and management of information. Some studies have attempted to investigate the link between information culture and information literacy. Information culture and information literacy have been mainly discussed from the academic perspective with the key finding being the need to focus on students' information culture-related issues by introducing context-dependent values, norms,

and practices (Lauri, Heidmets and Virkus 2015; Alillerie, Cordier and Lehmans 2017; Lepik and Kannukene 2017; Martínez-Rocha, Lau and Díaz 2017). In other instances, information culture has been discussed alongside information literacy in the workplace by Crawford and Irving (2009) and Widén and Karim (2017).

It is evident from the literature presented above that information culture has been investigated in a variety of contexts. Studies reviewed so far focused on information in general, especially the informative quality of the content, whereas records management considers the evidential value of information as well as its transactional value. Earlier studies by Grimshaw (1995), Widén-Wulff (2000) and Choo et al. (2008) established some propositions on the importance of values and attitudes as part of information culture. They concluded that it is possible to identify behaviours and values that describe an organisation's information culture. The set of identified behaviours and values can account for a significant proportion of the variance in information use outcomes. However, if their observations are true the question "How do attitudes and behaviours affect electronic records management in Botswana parastatals?" needs to be asked. Electronic records are about managing change as people will react differently to the introduced system. Gunnlaugsdottir (2008) observed that there have to be supporting factors to implement electronic records successfully, namely, top management support, user participation, and training. The author concluded that there is a strong relationship between the successful implementation factors and positive outcomes of the process. The positive outcomes were a high level of use of the ERM system and better work procedures. Gregory (2005), Zinner and Viborg (2008) and Alzubi (2015) argued that an ERM system is not only about software acquisition but it also involves employee mindset change and cultural change.

The above points are reiterated by Alzubi (2015) who ascertained that challenges to implementing electronic records in Pakistan were more related to administrative culture. There were conflicts related to values as the system workflow did not fit well within the organisational culture and employees' mindsets. Wilkins and Swatman (2008) cautioned that organisations, in the implementation of an ERM system, tend to leave people and processes involved in the creation and maintenance of records and information behind. The authors point out that the uptake of an ERM system requires a major cultural change in an organisation. Likewise, Alshibly, Chiong and Bao (2016) added that the work environment, culture and a change management strategy are key to effective ERM implementation. It is clear that effective ERM implementation requires cultural change. Furthermore, Pan (2017) highlighted the need to understand users of records and information specialists as part of the solution to ERM system implementation.

According to McLeod, Childs and Hardiman (2011), among the challenges of electronic records are "people issues" which comprise their cultural and philosophical attitudes. Furthermore, the authors emphasise the role of people in accelerating change in ERM systems. This was also observed by Oliver and Foscarini (2014) who purport that cultural change is a significant factor when introducing an ERM system in an organisation as people are often unwilling to relinquish "their" information. Notably, mindset and cultural change are vital to the implementation of an ERM system. The findings that culture and people can comprise barriers to the implementation of an ERM system, means there is a need for a new perspective in its implementation. Hence, Joseph, Debowski and Goldschmidt (2012) stress that the information culture embedded in an organisation is important for successful records keeping.

The information culture concept within ERM has been discussed by Oliver (2004) who investigated organisations in Germany, Hong Kong and Australia. In terms of methodology, Oliver (2004) used a multiple case study in which 12-16 interviews were conducted in each organisation. The author concluded that the interaction of culture and information involves investigating people's actions, attitudes and opinions. The values and attitudes became influencing factors of the information culture in the organisations. Oliver (2004) did not specifically elucidate on the creation and capture of records where most human activities/transactions are carried out in the records continuum. However, the study being the first of its kind has paved the way for other studies to pursue aspects related to information culture and ERM.

Wright (2013) investigated information culture in the Canadian public service. A survey method involving 207 participants was carried out to understand the relationship between the records management training provided to staff, self-perceptions of records management competencies, and compliance with a formal records management program. Wright (2013) found that there was a potential relationship between formal training and self-perceived level of records management competency. However, the study did not clearly demonstrate any impact of the training programme on the organisation's information culture. Oliver and Foscarini (2014) purport that within electronic records, values and attitudes shape information culture.

Svärd (2014), using a case study design involving 103 interviews to understand Enterprise Content Management and information culture concept, concluded that Swedish municipalities faced organisational and cultural attitudes that hindered records management. The author concluded that the Swedish municipalities have an immature information culture and an anarchistic information model. Furthermore, the author states that the attitudes demonstrated by employees make it difficult to pluralise records. Sundqvist and Svärd (2016) pointed out that while there is a lack of research on information culture and records management, a few researchers have explored

the impact of cultural aspects on records management. They also noted that the cultural impact on how records are created, captured and organised has rarely been acknowledged in the literature on information culture.

Like the studies discussed above, the current study had an interest in exploring the influence of information culture on records management. However, there is a difference in how it explored this as well as a difference in theoretical orientation. For example, Svärd (2014) used the Records Continuum Model, the Enterprise Content Model and information culture based on Davenport and Prusak (1997). The current study used the Records Continuum Model, the Information Culture Assessment Framework and information culture based on Choo et al. (2008). Thus, the difference between the current study and the ones discussed above is methodological orientation. The studies of Svärd (2014) and Oliver and Foscarini (2014) were qualitative, whereas the current study adopted a mixed methods approach. Also, unlike the previous studies which were conducted in developed countries, the current study took place in a developing country. Therefore, the current study presented information culture and records management from a developing country's perspective.

3.5 Electronic records management in developed countries

It is evident from the above discussion on the emergence of records that the development of electronic records began in developed countries. One would anticipate that with these countries' development status and technological advancement, there would be minimal challenges. However, challenges are reported as well as success in the management of electronic records. The spectrum applied to records management practice has broadened over the years, with many organisations either eliminating or reducing paper in their business processes. However, Information and Image Management (2009) conceded that in most organisations, electronic records are playing catch-up compared to paper records – the former are less rigorously managed and maintained by staff (who have insufficient training) and there is less confidence in their authenticity. Institutions with electronic records have reported poor policy implementation because electronic records policies lack implementation mechanisms (Information and Image Management 2009). This may indicate that records managers are not sufficiently trained vis-a-vis implementation and put their hope in policy statements developed in isolation.

Although there may be such challenges in the UK, success in terms of policy promulgation in the public sector has been reported, especially with the introduction of the Code of Practice on the Management of Records under the Freedom of Information Act 2000 (Smith 2017). This is supported by Hay-Gibson (2011) who argued that there has been success in legislation and procedures pertaining to records management. The author also argued

that there has been a lack of radical change in the development of electronic records infrastructure within businesses. Conversely, Fiebelkorn (2012) observed that in North American universities, the compliance regulation did not encourage proper records keeping whereas in Canada such records keeping was encouraged. The author argued that a sound legal framework helps with implementing good records management but that the laws need to be enforced. It is apparent that the complexity of ERM cannot be controlled by legal frameworks alone. Therefore, there is a need for studies to look beyond the legal frameworks and policies by considering the role of human behaviour in records keeping.

In Australia, Abdulkadhim, Bahari, Bakri and Ismail (2015) and Brogan and Roberts (2009) reported a lack of resources such as funding, expertise and personnel as well as a lack of top management support for electronic records. In New Zealand, Yin (2014) also pointed to a lack of senior management support that hampers the success of electronic records. This resonates with the finding of Kwatsha (2010) that electronic records implementation is successful if it is championed by top management. In the USA, Fiebelkorn (2012) argued that the positioning of a records management programme in an organisational chart is irrelevant if the implementation methodology is wrong or non-existent. However, Fiebelkorn (2012) still acknowledged the need to secure support from senior administration. A survey on the Australian public service by Nguyen, Swatman and Fraunholz (2008:917) uncovered that "technology alone does not improve an organisation's records keeping culture, this comes from the employees' awareness, attitudes and practice". The State Records Authority of New South Wales (2012) purports that change strategy and communication are vital to implementing electronic records, as they prepare users for changes that are coming to their daily routines.

In Lithuania, Limba and Gulevičiūtė (2013) argued that the success of the implementation of electronic records is attributed to the adoption of several documents and projects with regard to e-government. However, the authors stated that the biggest problem in implementing electronic public services is the lack of interoperability. It seems that the prevailing thought among scholars has been to look within organisational structures for the internal factors that impede records management. Only a few studies (such as those of Oliver (2008) and Svärd (2014) have brought a different perspective on issues affecting records management. Hence the current study intended to contribute to the body of knowledge by identifying the information cultures that exist in parastatals in Botswana.

The study conducted by Yin (2014) in the New Zealand public sector demonstrates that there has to be a mature records practice to successfully implement electronic records, one where the culture of records practice has been drilled into employees. In Sweden, Klareld (2018) reports that there are no clear guidelines that show how to "capture" and preserve information. Routines that are applied to paper-based administration have not been

adopted for digital records, and the result shows that despite regulations and ambitions in support of proactivity, the capturing of records is not emphasised as a necessity for using, sharing and preserving official information.

Studies from the developed world (such as those done in Sweden and New Zealand) identified the problems with records being technology, users and cultural factors. Although the study of Alshibly, Chiong and Bao (2016) has acknowledged ERM challenges such as implementation, technological readiness, culture and system-related, the solutions to these challenges remain elusive for many organisations.

While governments in the developed world have made significant strides in legislative and IT governance, ERM, however, still presents challenges because of fast-developing technology. From the reviewed studies, it is evident that few studies tackle the issues of ERM from the perspective of information culture. Implementation and policy issues still take centre stage in ERM discussions across the globe. Therefore, the current study determined ERM issues from the perspective of information culture that, as outlined, seem to be lacking in records management discourse. The lack of studies tackling issues of ERM from the perspective of information culture bears testimony for more studies to be carried out in this area. The current study can be seen as a response to this need and, in doing so, complementing the few known studies.

3.6 Electronic records management in developing countries

The experiences of developing countries are not that different from the experiences of developed countries as discussed above. In Malaysia, a developing country, Mokhtar and Yusof (2009) reported that the government has made significant strides in implementing electronic records; however, the implementation of an electronic records policy is problematic among government departments. This is further reiterated by Yaacob and Mapong-Sabai (2011) who state that there is a lack of compliance with the guidelines and policy. The authors also highlighted the need for training. Mukred and Yusof (2015) argued that the placement and location of records management in organisations is important in determining its success. The incorrect placement of records management will only lead to its oversight, which could negatively impact the organisation's running. In Jamaica, Duffus (2016) conceded that staffing and capability in records are substandard and that senior management tends to place a low priority on the needs of the records management function.

Xie (2013) compared ERM in Canada and China and observed that its development in the latter country was at the infancy stage as they were benchmarking Canada for their electronic records strategy. Xie (2013) posited that although Canada has made improvements in ERM it remains unsatisfactory. Both countries' strategies recognised

the shortage of qualified staff, particularly the insufficient understanding of technology. Wang (2006) argued that record specifications and standards seldom address the needs of digital records. The laws, standards, and systems were lagging behind at both the state and the organisational levels. The author also observed the lack of effective measures and proper procedures that are needed to ensure records' authenticity.

McDonald (2014) revealed that the infrastructure for digital records in the developing world needs to be strengthened as there is a lack of management controls. Frameworks are needed to manage the integrity and long-term preservation of digital records as they are either weak or non-existent. Furthermore, the author also identified the absence of laws and policies that should assign responsibilities for the integrity of records. McDonald (2014) also pointed to the lack of qualified personnel to manage digital records and even though technology specialists may have the knowledge to manage data, they are poorly equipped to manage electronic records. Standards and practices that underpin effective records management were also found to be absent. Similar findings were reported by Sataslåtten (2014) who pointed to the lack of adequate management control of digital records, supporting legislation, policies and regulations, and functional requirement standards in both Yemen and Kenya. The author maintained that developing countries have to set standards and demand that system vendors comply with these standards. Furthermore, in Kenya, Sataslåtten (2014) observed that a records management system was procured before policies and functional requirement standards had been adopted.

It is well known that training aims at moulding and instilling certain skills and behaviours. However, it is observable that most studies report the absence of training for records management. Zinner and Viborg (2008) and Issa and Wamukoya (2018) have observed the lack of adequate training for records management in Pakistan and Tanzania respectively. In the absence of such training, one questions what type of information culture is being formed in these contexts. Moreover, what influences the employees' outlook on records? The absence of an answer to these questions in records management reveals the paucity of research in the area. Zinner and Viborg (2008) pointed out that people play a major role in ERM predicaments, and the authors note that power and control are major challenges in ERMS implementation in Pakistani government departments. However, the role that people play in ERM is inconspicuous. McLeod and Childs (2013) have acknowledged this which, in turn, reveals the lack of research on how "people issues" affect records management.

In Turkey, Külcü and Çakmak (2010) and Demirtel and Bayram (2014) observed several challenges including inefficiencies of policies and administration, and there being no integrated structures between information and records management programmes and other information systems. Electronic records in Turkey brought a new culture to organisations and their introduction raised mixed feelings. Kandur (2017) contends that the younger

generation easily adapts to the technological, organisational, cultural and psychological barriers brought about by the shift to electronic records. However, the author also observed that it was not easy for longer-serving staff who were less used to working with technology to adapt to the new format. Developing an infrastructure to address the legal, technological and standard issues with the involvement of many stakeholders is crucial in the implementation of electronic records. While it is apparent that attitudes and other behaviours toward electronic records exist in Turkey, these attitudes and behaviours were not elaborated on in the Turkish studies cited; hence the current study stood to address these gaps.

The studies reviewed indicate that the challenges relating to electronic records are universal rather than simply dependent on the nature of the country. The challenges are similar and spread across organisations. As reflected above, recurring challenges in dealing with electronic records are technology, users/people and cultural factors. There is a need for research to provide a more extensive understanding of human attitudes and behaviours vis-a-vis electronic records. The studies presented above did not use the information culture concept owing to the absence of such research in developing countries. Consequently, there was a need for the current study to bring a different perspective concerning electronic records and their associated problems. It is acknowledged that a few studies have tackled the issue of information culture and records management from the perspectives of developed countries. The current study brought the perspectives and experiences of a developing country regarding electronic records and information culture.

3.7 Electronic records management in sub-Saharan Africa

Records management and information culture have not yet received attention in sub-Saharan Africa. Studies on ERM systems have focused on general management, implementation issues, and challenges of ERM with the most focus being on creating an ERM system enabling environment. Studies by Lowry (2013), Wamukoya (2014) and Adamu (2016) have summed up the problems of ERM to be a lack of government policy on records and capacity building. Katuu and Ngoepe (2015) and Muchaonyerwa and Khayundi (2014) pointed to the poor infrastructure and the lack of skills in South Africa. Mutsagondo and Chaterera (2016) and Sigauke, Nengomasha and Chabikwa (2016) identified the lack of legislation, policy and stewardship in Zimbabwe as impediments to ERM while similar findings were reported by Uutoni, Yule and Nengomasha (2011) in Namibia.

ERM systems in sub-Saharan Africa are facing several challenges when compared with the rest of the world and this is reflected in what has been achieved. In sub-Saharan Africa, the implementation of ERM systems is largely impeded by technological challenges (Asogwa 2012). While most developed countries have transitioned from the

issue of supporting legislation for ERM, in sub-Saharan Africa legislative frameworks, policies, standards and physical infrastructure remain impediments to the implementation of ERM systems (Kemoni and Ngulube 2008; Ngoepe and Keakopa 2011). It is evident that countries in the sub-region are grappling with creating an ERM enabling environment as Mutsagondo and Chaterera (2014) and Ngoepe and Saurombe (2016) concede that most legislation in the Southern African Development Community (SADC), with the exception of South Africa, is silent on the management of electronic records. There have been few success stories that have emerged from sub-Saharan Africa in terms of ERM systems implementation. Studies have mainly concentrated on examining ERM system readiness in organisations (Wamukoya and Mutula 2005; Wato 2006; Moloi and Mutula 2007). ERM systems are commonly discussed in light of the e-government initiatives that most countries in the sub-region have embarked on (Nkala and Ngulube 2012). The embedding of the discussion of ERM systems within e-government overshadows the problems associated with such systems and prevents one from fully comprehending them. This challenge provided an impetus to carry out the current study.

The literature on the implementation of ERM systems within sub-Saharan Africa is scarce. This could mainly be due to the few organisations actually implementing ERM systems. As Wamukoya (2014) points out, the implementation of these systems comes at a hefty financial cost and thus may be unaffordable to many organisations in Africa. Furthermore, the literature is concerned about the challenges of electronic records. Although the enumeration of the challenges does not offer a solution, doing so does help elucidate what records professionals are having to confront. Keakopa, Millar, O'Shea, Nordland, Suderman, Ardern, Griffin, Kenosi, Hoyle and Tale (2009) note that most literature in sub-Saharan Africa has not adequately addressed ERM systems' issues or provided solutions to the challenges they articulate. Moreover, the authors opine that there is a need to develop strategies and practical solutions to design, support, and implement records keeping (Keakopa et al. 2009)

The literature on ERM systems emphasises regulatory frameworks as a solution to sound records keeping. However, Molai, Kyobe and Salie (2009) and Jacobs (2012) point out that such frameworks have been applied before and did not yield success in ERM systems implementation. Wamukoya (2014) opines that digital systems are implemented without paying attention to the infrastructure in Africa. In Uganda, Burundi and Rwanda, problems of ERM are fuelled by the lack of government-wide policy on records. Where policy exists, such as in Ghana, Tanzania and Gambia, the challenge in these countries is capacity building to equip staff with skills in digital records. In Zimbabwe, Mutsagondo and Chaterera (2016) and Sigauke, Nengomasha and Chabikwa (2016), identified the lack of legislation, policy, core competencies and a lack of stewardship as impediments to ERM. As alluded to earlier, only South Africa in Southern Africa has a legislative framework that supports

electronic records (Katuu and Ngoepe 2015). Studies on Africa cited above, addressed issues of ERM system implementation but none attempted to assess ERM system issues from the perspective of information culture; hence the current study intended to fill this gap.

3.8 Electronic records management in Botswana

In Botswana, as in Southern Africa, the findings of studies on ERM systems are confined to issues of policies and procedures and there is a lack of understanding and appreciation of the role of records management in organisations. Several studies on electronic records have been carried out in Botswana. These studies focused on general issues affecting electronic records, electronic records readiness frameworks and e-government implementation concerns. Studies such as Keakopa (2007), Venson (2008), Motsaathebe and Mnjama (2009), Ngoepe and Keakopa (2011), Mothasedi (2012), Kenosi and Moathodi (2012) and Bwalya, Zulu and Sebina (2015) uncovered several challenges that were faced by electronic records. These included limited ICT infrastructure, scarce human and financial resources, lack of policies and procedures, a disconnection between records management units and ICT units, a lack of interest by some officers and insufficient laid out strategies for the management of electronic records. Furthermore, in terms of electronic records readiness, Moloi (2009) and Kalusopa (2011) revealed that the country was simply not ready. This was evidenced by a lack of an electronic records policy and legislative framework, and inadequate records management standards and practices. In light of the challenges outlined above, it is not surprising that Moatlhodi and Kalusopa (2017) observed slow progress in the implementation of ERM systems in Botswana as well as a lack of training for records personnel. However, the authors did claim that there were opportunities in the form of available financial resources for ERM systems implementation and ICT infrastructure as well as commitment on the part of management.

Despite the extensive knowledge that has been produced on records management in Botswana, the problems relating to records management remain unresolved and the adoption of technology has not alleviated the problems. It can be observed that similar challenges have been reported repeatedly by the different studies carried out in Botswana. These challenges are far from over and as Keakopa (2013) points out, records keeping practices remain marginally developed with only a few organisations making an effort to develop records management policies and procedures.

Recent studies on user behaviour particularly concerning the usage of document workflow management systems (DWMSs) (Bwalya, Zulu and Sebina 2015; Mosweu, Bwalya and Mutshewa 2016), uncovered a lack of user guidelines, IT infrastructure, training as well as user resistance. Mosweu, Bwalya and Mutshewa (2016) notably

reported what can be categorised as "people issues" although this was not explicitly stated and can be inferred. These issues were a lack of change management, inadequate top management support and technophobia. The study noted the resistance to a culture change, as switching from manual to automated records was not well received. The attitudes of users as observed by the authors comprised resentment and indifference to electronic records and the DWM system.

Although the studies cited above established the records management landscape in Botswana, the extent to which information culture influences ERM systems in the country has not been assessed before. The studies conducted in Botswana focused on the administrative process of records management and technological impediments to sound records keeping. The Botswana records management landscape lacks the understanding of how values accorded to records and attitudes displayed towards records affect their management. Therefore, the current review has established that there is a gap in the literature in the context of Botswana on how information culture affects records management. Even though the literature on records management captures aspects of technology, culture and philosophical attitudes (which are the main factors of an information culture) there is an absence of literature that specifically addresses these factors in the light of information culture.

3.9 Typology of information culture

The typology of information culture discussed here is informed by the Information Culture Conceptual Framework as discussed in Chapter 2. This section attempts to lay the foundation for the question of what types of information culture exist in the three selected parastatals by exploring the information culture typologies that have been used in the literature.

Organisations are differentiated by their information cultures. It is recognised that the information culture of an organisation is determined by a large number of variables such as its mission, history, leadership, employee traits, industry, national culture and so on. In addition, information culture can also be shaped by the cognitive and epistemic expectations embedded in how tasks are performed and decisions are made (Choo et al. 2008). Information culture may also be a function of an organisation's maturity or stage of development. For example, Ginman (1987) found a link between information culture and an organisation's life cycle stage. There are few studies on information culture typology and those conducted by Choo et al. (2008) and Lauri, Heidmets and Virkus (2016) have elicited different perspectives. This may be due to the different methods employed to profile an organisation's information culture. Choo et al. (2008) observed that an information culture typology is context

specific. Several factors such as leadership, communication flow, processes and procedures determine the kind of information culture that can exist in an organisation. In the context of Botswana, the information culture of the three parastatals is not known, hence the need to profile the information culture found in them.

It is evident from the above that information culture has several typologies. Based on the six components of information culture identified by Marchand, Kettinger and Rollins (2001), Lauri, Heidmets and Virkus (2016) identified three types of information culture characterised by their dominant components:

- Integrated information culture.
- Proactive information culture.
- Informal information culture.

Although Marchand, Kettinger and Rollins' (2001) study identified six components of information culture, Lauri, Heidmets and Virkus (2016), using the same components, only identified three components to be relevant in identifying information culture types in higher education institutions in Estonia. Not all the components of Marchand, Kettinger and Rollins' (2001) framework will apply in every study given the differing contexts.

Choo et al. (2008) adopted the six information culture types identified by Marchand, Kettinger and Rollins (2001) to profile the information culture of an organisation and these, as has previously been pointed out in Chapter 2, are information integrity, formality, control, sharing, transparency and proactiveness. The current study adopted this typology to profile information culture among the three parastatals in Botswana because its constructs are consistent with the Information Culture Conceptual Framework that was used.

The current review established that other types of information cultures do not relate to the Information Culture Conceptual Framework used in the study. However, they are discussed below to enrich the current review and show the diverse views that exist on information culture types.

Given that the limited number of available studies provide divergent views, it is not possible to characterise information culture as a specific and agreed-upon set of elements (Douglas 2010). This study, as has been pointed out, attempted to determine the characteristics of information culture within the context of records management. Studies that investigated records and information culture focused on public institutions (Wright 2013; Svärd 2014) whereas Oliver (2008) focused on the education sector. The current study focused on parastatals and while some may argue that parastatals are public sector organisations, there are important differences in terms of their governance which may have a significant influence on their information cultures.

Authors have suggested diverse information culture typologies. It is crucial to understand the perspective of the authors on information culture as this might have influenced their conclusions about the typologies of information culture they identified.

In an attempt to profile information culture, Choo (2013) identified four information culture types:

- Result-oriented culture.
- Rule-following culture.
- Relationship-based culture.
- Risk-taking culture.

In a result-oriented culture, the goal of information management is to enable the organisation to compete and succeed in its market or sector. However, in a rule-following culture, information is managed to control internal operations and reinforce rules and policies. In a relationship-based culture, information is managed to encourage communication, participation, and a sense of identity. Lastly, in the risk-taking culture, information is managed to encourage innovation, creativity, and the exploration of new ideas. It can be expected that most organisations will display to varying degrees, norms and behaviours from all four types of information culture and that the information culture profile of an organisation would be related to its effectiveness.

Davenport and Prusak (1997:84) defined information culture as "patterns of behaviour and attitudes that express an organisation's orientation towards information". The authors posited that information cultures could be:

- Open or closed.
- Factually oriented or rumour.
- Intuition-based.
- Controlling or empowering.
- Internally or externally focused (Davenport and Prusak 1997:84).

Douglas (2010:388) defined information culture as "an emerging complex system of values, attitudes, and behaviours that influence how information is used in an organization" and identified four information culture types:

- Functional culture: managers use information as a means of exercising influence or power over others;
- Sharing culture: managers and employees trust each other to use information (especially about problems and failures) to improve their performance;

- Inquiring culture: managers and employees search for information to better understand the future and ways of changing what they do to align themselves with future trends/directions; and
- Discovery culture: managers and employees are open to new insights about crises and radical changes and seek ways to create competitive discontinuities (Douglas 2010:48).

3.10 Information culture and the creation and capture of electronic records

This section addresses the question of how information culture affects the creation and capture of electronic records. It discusses the Records Continuum Model which was dealt with in Chapter 2. The Model associates the functions of records creators with all of its users, and forms the basis for standards concerning documents, records and archives (Flynn 2010:80). It allows records to be examined within the context of their creation and capture and considers all the different dimensions and axes when looking at factors influencing decisions on the creation and capture of records. The Records Continuum Model helps ensure that the discussion is focused on understanding how creating and capturing records shape an organisation's information culture.

Records are fundamental for good corporate governance; they document the decisions and activities of the organisation. Of equal importance, records strengthen the ability of the parastatals studied to be answerable to the government. Appiah, Amos, Bashiru, Drammeh and Tuffour (2017) concluded that there is a link between records creation, capture and good governance. This was further emphasised by Ngulube and Ngoepe (2013) and Mensah and Adams (2014) who asserted that records management is important for cooperative governance – it ensures better decision-making because information can be retrieved and made available. Electronic records creation and capture facilitate proper access and the right to information and other relevant legislation (Masuku 2012). There is a need to capture information with proper metadata that creates an easy flow of information and business processes. This will safeguard the integrity and authenticity of the records and ensure that records are maintained in the correct form throughout the continuum.

Culture in an organisation is a dominating mechanism that limits what is considered desirable, possible and practical to do. Karlsen and Gottschalk (2004:9) acknowledge that "shaping culture is central for an organisation's ability to manage its knowledge more effectively". In addition, the authors hold that organisational culture shapes assumptions about what knowledge is worth exchanging; defines the relationship between employee knowledge and organisational knowledge; establishes the context for social interaction that plays a key role in how knowledge will be shared; and shapes the processes by which new knowledge is created, validated and disseminated throughout the organisation (Karlsen and Gottschalk 2004). Records are created and captured in a particular

information culture context and it is, therefore, imperative to understand the culture that produces the records. Insofar as information behaviours are enacted by a social structure of roles, rules, and warrants, they are a manifestation of cultural norms and values (Alguliyev and Mahmudova 2015).

The stage of records creation and capture is the building block upon which the reliability and trustworthiness of electronic records are established. In the Records Continuum Model, the create dimension shows that different actors perform activities. However, the literature has failed to elucidate how the activities carried out in creating records are shaped by information culture.

Literature that addresses the creation and capture of records fails to address the influence of people in the processes. There is general agreement that the failure to create and capture records will render them inefficient because records management aims to ensure systematic control of an organisation's records from creation through to their final disposition (Australian National Audit Office 2012). Read and Ginn (2015) and Odeyemi, Issa and Saka (2011) have attributed a sound records management programme to the successful creation and capture of records including the controlled generation of records or copies not needed to operate a business. Furthermore Ma, Abie, Skramstad and Nygard (2009) state that the inability to control the creation and generation of records may result in the duplication of information, the lack of uniform procedures for information processing, the lack of control over the standard presentation of information and the increased cost of information processing.

Records capture is an action taken to secure a record into an effective records management system where it can be maintained and made accessible for as long as it is needed (Shepherd and Yeo 2003). The process of records capturing ensures that records are accessible, controlled and managed according to policy procedures, and are secured against tampering, unauthorised access and unlawful deletion (Yusof and Chell 2002; Henriksen and Andersen 2008). The records capturing process also consists of the application of appropriate metadata. The entire process may shape people's attitudes and behaviours towards records although this may not be the case as the issue has not been covered in the literature to any significant extent.

According to Keakopa et al. (2009), records systems are often introduced without vital processes and controls for capturing and long-term accessibility of the records being in place. The success of records creation and capture has been anchored on several records management system rules and processes. Davenport and Prusak (1997) and McDonald (2014) contend that technology itself is less important than the people who will use it and the business processes it will support. Implementing EDRM system software with the hope and expectation that technology

will change the organisational culture would be a mistake. How the culture is integrated into the creation and capture remains unknown to records practitioners and scholars hence the need for research that investigates this.

Studies such as those of Gunnlaugsdottir (2008), Lee and Lee (2009) and Baron and Thurston (2016) have expressed concern about the problems of capturing metadata (as some may be missing at the time of records creation) as well as identifying the right metadata. Capturing records' metadata has been problematic in some instances. However, there has not been a comprehensive inquiry to determine whether employees' views and the values they accord to records have any impact on their failure to capture records' metadata. Oliver and Foscarini (2014) claim that employee attitudes can be determined by how they treat records. Keakopa et al. (2009) advise that in a case where an organisation does not know what to file or capture such a situation requires policy or regulations. Similar sentiments are advanced by Chirwa (2013) who stated that in the public service of Zambia there were no clear guidelines on which records to capture or create. The author further underscores the importance of policy in serving as a guide on what business transactions or business applications and systems to capture. McDonald (2014), however, argues that despite the many guidelines, regulations/policies and software that have been developed over time, the problems associated with the creation and capture of records persist. The current study presents an alternative view in that other factors, such as "people issues", need to be considered with regard to their effect on the creation and capture of records. While it cannot be disputed that policies and other guidelines shape the culture of an organisation, people may nevertheless exhibit differences in the way they understand and respond to records management requirements (Oliver and Foscarini 2014).

3.10.1 Electronic records creation and capturing in Botswana

Parastatals create and capture records in their various formats. It is imperative for all records created and captured in these organisations to be full and accurate accounts of the activities to which they relate. The main purpose of creating records is to provide evidence of activities that have been carried out. The creation and capture of records are important to ensure records control. Ngulube (2006) points out that applying a control mechanism over the life of a record enables an organisation to establish its physical and intellectual control over the records that it creates and captures.

A study conducted by Thanye, Kalusopa and Bwalya (2015) revealed that there was no records keeping system managing the creation and capture of architectural records at the Gaborone City Council. The authors also reported a lack of policy on what records can be created and captured for sustaining the operations of the Council. The authors further revealed a lack of systematic records classification systems that hinder proper records

capturing. Similar sentiments were shared by Tshotlo and Mnjama (2010) who also pointed out the poor classification scheme used for records at the Gaborone City Council. The lack of (or poor) classification system is, however, not unique to the Council but appears to be a problem across all government ministries and departments in Botswana (Tshotlo and Mnjama 2010; Ramokate and Moatlhodi 2010; Mampe and Kalusopa 2012). The lack of classification schemes implies that records are created and captured on an ad hoc basis without being informed by an analysis of organisational functions or business processes.

The problem of the creation and capture of records thus seems to be rampant among government bodies. In 2010, the Botswana Government sought to implement the National Archives and Records Management System. One of its objectives was to ensure the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records through an electronic solution. Moatlhodi and Kalusopa (2016), in light of the System above, assessed electronic records' readiness at the Ministry of Labour and Home Affairs. The author's uncovered a lack of guidelines for the creation and capture of records and a lack of staff expertise and training. A similar situation prevailed in private companies. Moatshe (2014), for example, conducted a study on the Supreme Furniture business and discovered that it lacked policies for creating and capturing records. There was no indexing, description or classification of records thereby ensuring that their systematic organisation would be highly unlikely.

3.11 Information culture, attitudes and behaviours

The management of electronic records goes beyond employing good technologies. McLeod and Childs (2013) observed that there are challenges, namely, cultural, philosophical and technological factors that shape an organisation's information culture which, in turn, informs perceptions of how information or records are handled or viewed.

Information culture will dictate how information resources are perceived and shape employees' behaviours, values, beliefs and norms about information resources within an organisation. Oliver and Foscarini (2014) warn that the outlook of employees on the values they accord to records may reflect in the following behaviours and attitudes: use or non-use of the records management system, preparedness to buy into the records management policy, willingness to carry out records management procedures, readiness to set up personal systems to support their work-related information needs, and willingness to participate in records management training. Therefore, to design records/information programmes and systems that take people/employees into account, the

organisational information culture should be analysed to address attitudes and behaviours that may affect how information/records are managed.

There is a consensus among scholars such as Curry and Moore (2003), Oliver (2007) and Furness (2010) that values and attitudes accorded to information are indicators of information culture. A study by Oliver (2004) sought to determine the interaction of culture with information and its management. The main argument of the author was that the values accorded to information and the attitudes towards it demonstrate information culture. The author's perspective is that information exists in all organisations but an effective information culture requires effective communication flows across organisational partnerships, cooperative working practice as well as open access to relevant information. Whereas Oliver's (2004) study looked at information culture within the broader scope of organisational culture the current study narrowed its focus to information culture within records management. Isa, Ismail, Nordin and Sama (2015) observed that among shipping companies in Tanzania the behaviour of IT professionals towards records was non-use of the existing electronic records system as they felt it was meaningless. Implementation of electronic records has been seen as a way of introducing a new culture in an organisation and, as such, this requires a change in employees' attitudes and behaviours.

In Canada, Pan (2017) states that some users in the public sector were nervous and concerned as they disliked some of the electronic records system's functionality. They thus worked their way around the system which left some metadata not being captured. Maseh and Mutula (2016) postulate that the attitudes towards records are demonstrated by the extent to which top management supports records management through funding, capacity building and infrastructure development. The attitudes toward records keeping and the lack of commitment to follow laid down procedures as spelt out in the International Council on Archives (ICA) Code of Ethics are examples that hamper ERMSs (Nengomasha and Nyanga 2015). Wang (2006) revealed that the information cultures of Taiwan pharmaceutical manufacturers were hostile toward information management, as they were concerned with the financial investment required. Tough and Kemoni (2009) investigated the attitudes of financial institutions in Malaysia and found that most institutions regarded records management as a non-essential activity. It was regarded as a non-primary activity as it did not generate income for the business. This finding is contrary to the assertion that records contribute to the financial well-being of an organisation. Records capture the financial transactions, providing traces of how the organisational finances are spent. This ensures that the finances have been used for what they were budgeted for and that the organisation has achieved financial prudence.

3.12 Trustworthiness of the records keeping systems

This section attempts to address the fourth question in the current study which concerned how trustworthy the records keeping systems in the parastatals are. The section is informed by the Information Culture Assessment Framework. The dimension of trust is associated with more fundamental, value-based cultural characteristics. The Framework considers trust in terms of what people think about the systems. This includes whether employees trust the systems that have been established. This section begins by discussing trustworthiness from the archival perspective and presents how the digital preservation community has attempted to demonstrate issues of trust. It further discusses how the digital forensic concept adds to the debate on establishing trustworthiness. The various perspectives of the different authors are also presented. Finally, the trustworthiness of records keeping systems, as informed by the Information Culture Assessment Framework, will be discussed.

3.12.1 Overview of trust in records keeping

The digital preservation community holds that trustworthy digital repositories must ensure long-term storage and accessibility of information and that relationships with stakeholders are built. The Research Library Group (2002) developed a framework that established attributes and responsibilities for trusted digital repositories. It was followed by the German Network of Expertise in Long-term Storage of Digital Resources (NESTOR) (2003) which developed a catalogue of criteria to evaluate and certify trusted digital repositories. The Digital Repository Audit Method Based on Risk Assessment (DRAMBORA) was developed by the Digital Curation Conference (2008) and intended to facilitate internal audits by providing repository administrators with a means to assess trusted digital repositories' capabilities, identify their weaknesses, and recognise their strengths. Smith (2017) asserts that trusted digital repositories must accept long-term maintenance of digital resources, an organisational system that supports the long-term viability of the repository, methodologies for system evaluation, and policies that can be audited and measured.

Records' trustworthiness has been discussed from the archival perspective and is especially associated with the preservation of records. The effort aimed at establishing records' trustworthiness in preservation was led by the International Research on Permanent Authentic Records in Electronic System (InterPARES). In the period 1998 to 2006 (which comprised phases one and two), InterPARES mainly developed theories and methodologies for digital preservation. The InterPARES 3 between 2007 and 2012 sought to apply the theories and methodologies developed in the earlier phases towards the solution of existing problems, especially in institutions and organisations with few resources (Duranti 2013). InterPARES defines trustworthiness in terms of accuracy,

authenticity and reliability of a record. To further establish the trustworthiness of records, the concept of digital forensics has been introduced in the field of preservation. The concept offers archivists a way of conceptualising digital objects and assessing their integrity and authenticity to establish their trustworthiness (Duranti and Rogers 2012). The Information Culture Assessment Framework, used in the current study, defines trustworthiness in terms of people's trust in records keeping.

The concept of trustworthiness has been defined based on the structure or content of the record itself. Different views exist on determining the trustworthiness of records. Lemieux and Cenfetelli (2015) posit that determining trust is a matter of making a reasoned risk assessment and if the risk is low, it is possible to trust the object. Yeo (2011) and Dollar and Ashley (2015) argue that it all begins at the creation stage, how records are created and trust in records relies on knowledge about the creator. The context and processes by which records are created have also been attributed to giving a record its trustworthiness. ISO 15489: 2001 points out that records are likely to be reliable if they are created in the course of the transaction. Therefore, records systems must capture records within their business activities. Similar sentiments are expressed by Ma et al. (2009) who opine that trust in records is based on metadata details. Today organisations work in a networked environment that can be easily manipulated and this compounds the problem of records' trustworthiness.

A different perspective on trustworthiness holds that the following contexts, namely, governance, technology, records keeping, and archival need to be accepted as part of a corporate information strategy to establish records trustworthiness (Ismail and Jamaludin 2009). The *governance* context which takes into consideration legal and regulatory infrastructure, organisational policy, and organisational recording responsibility and accountability are important for good records practice. The *technological* context consists of the management of electronic records systems and electronic system security. Electronic systems security focuses on elements of information security control to safeguard organisational records and protect records infrastructure, records alteration, misinterpretations or loss as they are susceptible to cyber-attack. The *records keeping* context includes records management operations, records keeping functional requirements and records keeping metadata requirements. These provide the foundational guidelines and procedures for best practices in the current records management environment. The *archival* context consists of appraisal practice, retention of electronic records, preservation strategy and storage management. This context is important in maintaining records' trustworthiness for long-term accessibility.

When there is no regulatory framework, it is not mandatory for organisations to establish a records management programme. Without such a framework, organisations are under no obligation to incorporate a records management policy into their organisations' corporate strategies.

The concept of trust is linked more to how records originate and who creates them than to how they are maintained. This is emphasised by Duranti and Rogers (2012) who state that trust in records rests on four types of knowledge about the custodian, that is, reputation, performance, competence and confidence. The authors further state that international research projects on the nature of digital records systems have developed guidelines and solutions to managing the authenticity, accuracy and reliability of the systems. However, the solutions are expensive for many organisations. The efforts to establish records' trustworthiness have been firmly anchored on the systems that the organisations have employed, hence the high financial cost of the solutions.

3.12.2 Trust in records keeping and information culture

Despite the large international projects such as InterPARES, the issue of trust is unresolved and it appears that "people issues" have received little attention. There is a need to build positive relations with users to establish a relationship of trust so that employees are confident that the systems procured can be relied on and serve their work-related purposes (Lewellen 2015). It has to be recognised that the operations of systems are dependent on human action. People adopt and use a system based on their level of trust and their level of trust is, in turn, affected by their perception of the reliability of the system. Oliver and Foscarini (2014) argue that because the emphasis has been put on systems and technology, the complexity of "people issues" has not been fully recognised.

It should be noted that the concept of trust in this study is discussed in the context of Oliver and Foscarini's (2014) Information Culture Assessment Framework. Within the framework, trust in records keeping systems is viewed as part of IT governance. Alreemy, Chang, Walters and Wills (2016) opine that "IT governance is the processes that guide and control investments, decisions and practices relating to IT within the organisation to achieve the desired objectives". According to Calder (2009), IT governance needs to make sufficient provisions for meeting the electronic records' obligation of ensuring that records are archived and accessible. Organisations should look into records standards, and a combination of best practice guidance and legal advice should then be incorporated into IT governance.

IT governance ensures that processes for IT management are controlled in a way that makes it easier to attain expected benefits and support current business activities and the long-term success of the organisation. It is thus

concerned with providing business enabling support. Rubino, Vitolla and Garzoni (2017) state that there has to be control that shapes attitudes that are established by employees. According to Jansen and Duranti (2013), organisational culture influences the decision and implementation of IT governance. Organisational culture is present in organisational activities, and cultural factors are grounded on rules and patterns in the IT governance processes.

The trustworthiness being discussed here deals with people's trust in record-keeping systems and processes. The focus is on shared practices and perceptions of those practices and whether employees trust the systems that have been established within the organisation. Botswana has been implementing its e-government strategy since 2011 but faces the challenge of ensuring the trustworthiness of digital records produced by the various enterprise-wide systems procured and implemented in the public sector (Botswana Goverment 2011).

There is a need to build a positive relationship with users rather than only focus on the best implementation practice of the records management system (Duranti and Rogers 2012). The success of ERM in an organisation depends greatly on partnerships between the different key players in managing the records, namely, records managers, archivists, administrators and, most importantly, IT personnel. There is a need for all key players to understand the role of records management in the organisation. As Johare (2001:33) observed:

> Records management is about data and information management, IT is about data management. The process throughout the project clarified this and as such defined roles very clearly allowing the IT and Records Management groups to form a new, more productive working relationship.

It is crucial to establish trust so that employees are confident that the records management system is reliable and will serve their work-related purposes. If workers do not trust the electronic records systems, they will not be used. Therefore, there is a need to look at the IT governance of the entire organisation. Alzubi (2015) asserts that organisations that work to achieve trust in their electronic records will greatly influence corporate governance, regulatory compliance and efficient business processes. Iwhiwhu (2010) and Lowry (2013) posit that although ICTs were being used in government departments in Kenya, they were not deliberately targeted at records management activities. In a similar vein, Luyombya (2011) purports that in Uganda there was no evidence of establishing an ICT infrastructure that would provide the solution to digital records management problems. Other weaknesses related to gaps and poor linkages in the records and IT departments. Kalusopa, Mosweu and Bayane (2021) reported inadequate ICT infrastructure and internet network problems inhibiting the use of the DWMS. Moreover, Asogwa (2012) stated that the benefits of managing digital records in Africa can only be realised if the appropriate infrastructures, workable legislation and regulatory frameworks are available.

Wamukoya (2016) contended that ICT infrastructure must be given priority to protect official records as authentic. He further emphasised the need for infrastructure to be legally and professionally organised and to meet the technical and managerial requirements that ensure digital records are captured and preserved as authentic evidence. Surprisingly, most African countries appreciate ICT as part of governance enhancement, yet digital systems are implemented with no or little attention being paid to them. IT infrastructure is necessary to ensure the reliability and integrity of digital records.

In this study trust in records keeping was one of the objectives pursued. People will trust and use information sources that the organisation supports. The use of informal or formal sources of information depends on the culture that has been supported in that organisation. Employees are unlikely to use untrustworthy information. Holste and Fields (2010:134) point out that "trust influences the extent to which staff members are willing to share and use tacit knowledge". It is observable that the use of information depends on an internally built culture. Kelton, Fleischmann and Wallace (2008) succinctly describe trust as a key mediating variable between information quality and information usage, with important consequences for the organisation. Information used in the context of information culture brings out the behaviours that help identify how information/records are viewed in an organisation.

3.12.3 Trust in records keeping in Botswana

In Botswana, a survey was conducted by the InterPARES Trust between 2016 and 2018 in the public sector, the private sector and quasi-government institutions to investigate the implementation of enterprise-wide systems that manage trustworthy digital records. The InterPARES Trust (2018) acknowledges that legislation is important in the control of human activity and encourages trust in records management. The InterPARES survey found that there was an absence of skills in digital records management among employees of the surveyed institutions. The lack of untrained staff impedes maintaining authentic and reliable records and similar sentiments are shared by Ngoepe and Keakopa (2011). Compounding the problem of skills was the issue of staffing in the surveyed institutions. It was found that most institutions were not able to retain skilled manpower. Ramokate and Moatlhodi (2010) attest to the problem of staffing in Botswana.

The problem of policy as discussed above was in terms of general records management. However, with the InterPARES Project, the concern was on preservation policy and the establishment of trustworthy records. The Project reported a lack of preservation policy and this was also confirmed by Kalusopa (2011:209) who found that labour organisations in Botswana possessed no records management policies and that there was no national policy framework on digital preservation and thus few digital preservation policies in public bodies. The concern with the absence of a preservation policy is the problems that this absence can pose, such as poor climate control in the archives. The preservation policy is meant to ensure that authentic and reliable records are preserved for the longest time.

The literature available on the trustworthiness of electronic records was aligned with the findings of the InterPARES survey which examined the trustworthiness of records in terms of their accuracy, authenticity and reliability. The current study was concerned with people's trust in records keeping systems and processes. Unlike the InterPARES survey, the framework that guided the study is concerned with human behaviour towards records. Therefore, the study investigated the trustworthiness of records within the parameters of a framework that is concerned with human behaviour. This included discussing trustworthiness within the context of IT governance.

3.13 Electronic records characteristics

Electronic records are created and reside on different devices and their location is determined by how and where they were created. They may reside on personal computers, external hard drives, compact discs and many other electronic devices. Records are unique in the sense that they are evidence of transactions and actions which

support accountability. Moreover, records are related to processes, that is, information that is generated by and linked to work processes. Cox (2001) states that the evidential value of a record can only exist if the content, structure and context are preserved. According to Dollar and Ashley (2015), the following three characteristics distinguish records from any other document:

- Content entails text, data, images, sound, graphics and other information that make up the substance of the record. The value of content can be considered as original, ordered and analysed;
- Structure refers to a record's physical characteristics and internal organisation of the content; and
- Context arises from the connection and coherence between the records and their creation, as well as connecting transactions to other related records.

The application of electronic records in an organisation or government department provides a great opportunity to improve business activities in terms of efficiency and effectiveness of business transactions, hence adding value to the administration of governments and organisations (Mnjama and Wamukoya, 2006). However, several challenges concerning the management of electronic records have been identified by many scholars. The challenges include but are not limited to: technological obsolescence; risks to reliability and authenticity; loss of security and privacy; technological dependence; decentralisation of information; increased security risk of data and records in e-format; inadequacy of ERM specialists; increased costs; weak and out-dated legislative frameworks; and insufficient infrastructures and systems (Ngulube 2006; Keakopa 2007; Luyombya 2011; Abdulkadhim et al. 2015). Once they have been created, records need to be managed for authenticity, that is, the records can be proven to be what they purport to be. The International Council on Archives (2013) posit that after their creation, records should possess the following qualities:

- Reliability – the record can be trusted as a full and accurate representation of the transactions to which they attest, and can be depended on in the course of subsequent transactions;
- Integrity – the record is complete, unaltered, and protected against unauthorised alteration. This characteristic is also referred to as "inviolability"; and
- Usability – the record can be located, retrieved, preserved, and interpreted.

Although electronic records' characteristics discussed above were generalised, there are different records systems each with its own unique features. These are electronic document management systems (EDMS), ECMSs, electronic records management systems (ERMS) and electronic document and records management systems (EDRMS). Each of these records systems is discussed below.

3.13.1 Electronic document management systems (EDMS)

Document management products date from the late 1980s and early 1990s when software developers began introducing programs to create and maintain organised, searchable repositories of digital documents in text and image formats. McLeod, Childs and Hardiman (2011) argued that the core functionality of an EDMS is not records keeping but rather the focus on information access as it provides creation and management controls. These include the use of standard templates for different types of documents, audit trails of who created and who has used or changed the document, and version control. One of the major benefits of an EDMS is information management – providing timely and accurate information at the least cost possible. An EDMS saves both time and cost by improving the speed of records retrieval and removing the need to maintain separate content infrastructure. The second benefit of EDMS deployment is the reduction of data redundancy and duplication of information. Abdulkadhim et al. (2015) observed that most employees have the liberty of generating and maintaining the content on their own, which enables users of the information to gain quick, updated and accurate snapshots of the current activities of the organisation

Saffady (2009) states that document management products offer additional functionality to support the document preparation and approval processes. Electronic documents can be saved in a repository from within their originating applications at the time they are created. They can be retrieved, reviewed and edited by authorised persons within their originating applications. Document management products allow electronic documents to be marked and subject to multiple revisions. Although records in an EDMS are susceptible to change, the system still has capabilities to safeguard the security of records by imposing access controls to records and technical features like encryption (Franks 2013).

3.13.2 Enterprise content management systems (ECMSs)

An ECMS is used to control unstructured content so that the information can be put to use in daily operations. It is also designed to protect digital documents that are meant to be accurate and complete evidence of transactions (Franks 2013). Adam (2007) explains that an ECMS comprises a suite of applications that are primarily intended for content management, document management, records management, collaboration services, and workflow and web content management. The records are regulated and contained. According to Franks (2013:149), “they can perform the functions of capturing, managing, storing, preserving and delivering records”.

An ECMS may be employed to control the flow of information. Moreover, electronic records' functionality may be integrated into the system or be in-built. Initially, ECMSs were developed to produce records that provide evidence of a transaction. However, these systems can now manage information from social media and other collaborative platforms. An ECMS is much more focused on collaboration and sharing of information and is more people driven, unlike an EDMS or EDRMS that are process-driven. They are relevant to every business and there are a variety of ways in which they can be integrated with ERM functions (Franks, 2013). Unlike any other systems discussed here, an ECMS works with unstructured information in which users are allowed online publishing of content, editing content, deleting content, customisation of content presentation, search and retrieval and user interaction. These functions mean that an ECMS is an online-based system.

In the Botswana public sector, several ECMSs were identified through the InterPARES Project. The Project acknowledged the existence of enterprise-wide systems naming among them the Government Data Network (GDN), a platform for the rollout of e-government services.

3.13.3 Electronic records management systems (ERMSs)

Franks (2013:152) defines an ERMS as a "system consisting of software, hardware, policies and processes to automate the preparation, organisation, tracking and distribution of records regardless of media". An ERMS is purely dedicated to the management of documents classified as records and is intended for electronic records keeping, archiving, and storage. The system usually has in-built document management capabilities (Adam 2007). One of the qualities of an ERMS is fixity. Unlike an EDMS discussed above, an ERMS does not allow for alterations of documents once they have been captured. According to Ambira (2016), an ERMs ensures that the records remain fixed and any alterations or amendments generate another version of the record, which is also captured and stored as a different record. Smallwood (2013) states that it is also referred to as an electronic document and records management system (EDRMS) whereas Franks (2013) contends that it is often referred to as a records management application (RMA). An ERMS manages all electronic business records and documents regardless of their form. Documents can be traced in an ERMS. One important aspect of an ERMS is to enforce records retention and disposition policies according to established retention schedules (Smallwood 2013).

The ERMS selected to manage records usually depends on organisational needs and functionality provided by various products. An ERMS enhances retrieval as well as the disposition of the electronic records in its repository based on accepted principles. Moreover, some of the ERMSs in the market permit integration with workflow modules to provide the benefits of automated workflows (Ambira 2016). An ERMS also helps to categorise,

locate and identify records due for disposition. For any organisation to acquire an ERMS it must first identify what the ERM functional requirements are.

3.13.4 Electronic document and records management systems (EDRMSs)

An EDRMS refers to a system that is capable of handling both electronic documents and electronic records (Adam 2007:9). It can also store and track electronic documents. An EDRMS is the integration of an EDMS and an ERMS. The integration came as a result of the technical report ANSI/AIIM/ARMA TR48-2006 Revised Framework for Integration of Electronic Document Management Systems and Electronic Records Management Systems (Franks 2013). The integration framework suggested three models for implementing an EDMS. The first model is a stand-alone EDMS with a stand-alone ERMS. In the second model, one user interface is used to manage documents and records either in a single repository or server or in separate repositories/servers for the EDMS and ERMS. The second model thus provides the user with a single interface and a single repository or server. The third model integrates ERM functionality into an EDMS repository. From this attempt to integrate the functionality of an EDM and an ERM system, the term EDRMS emerged.

Smallwood (2013) advises that an EDRMS must have records management capabilities. An EDRMS allows knowledge workers to more easily find and share documents. It logically organises documents by using standardised terms in a corporate classification, thereby making them easy to search (Smallwood 2013). Documents stored directly within an EDRMS utilise consistent metadata. An EDRMS is specifically designed to manage the integrity of and provide desktop access to information using existing office applications such as email, collaborative work systems and other already installed applications. The principle of an EDRMS is such that when a document is still a work-in-progress, it is managed under the document management component of the system where it moves across the workflows until it reaches its final status where the transaction is concluded and the document becomes a record of evidence of that transaction.

3.14 Concept of information culture

Information culture can be studied from different perspectives. It has been used to describe processes and phenomena in an organisation and is usually linked to organisational culture. According to Kisilowska (2015) the idea of information culture comes from social, technological and economic changes, new products, values, norms, and lifestyles that are faced daily in society. Information culture in a societal context is linked to ICTs, information literacy, information activity within cultural norms, and the creation and transfer of information. It

also encompasses how human beings communicate in an organisation. Given the above, the concept has received divergent definitions. In the first instance, Curry and Moore (2003:77) state that an information culture is one:

> in which the value and utility of information in achieving operational and strategic success is recognized, where information forms the basis of organizational decision making and Information Technology is readily exploited as an enabler for effective Information Systems (Curry and Moore 2003:77).

Secondly:

> In an organizational context – Information culture is shaped by information processes within an organization and the people involved in them. It also positions information, and supports expected information behaviour and motivations (Kisilowska 2015:47).

The definitions point to information use, information's influence on users' behaviour and information being viewed as the driving force behind organisational communication. They highlight the critical nature of information in an organisation.

Douglas (2010) and Hansen and Widen (2017) agree that information culture has contextual dimensions explaining the values, attitudes, norms and practices of a specific environment. Hence information culture and organisational culture are said to be closely related. Information culture considers multiple layers of culture such as national, occupational and corporate without neglecting organisational contextual issues ensuring, however, that attention is directed to information (Oliver and Foscarini 2015). Information culture acknowledges that people working in organisations also bring their attitudes, values and behaviours influenced by their upbringing and/or professional training. Moreover, there are corporate values set by management that can be changed at any time to influence employees' behaviour towards information. These factors shape an organisation's information culture.

According to Curry and Moore (2003), information culture consists of the following components: communication flows, cross-organisational partnerships, internal environment (cooperativeness, openness and trust), information systems management, and processes and procedures. It is taken to be part of organisational culture and is the context where information is communicated and mirrors what kind of information and communication practices, what attitudes there are towards information as resources, and what kind of collaborative efforts, exist. The concept provided an overarching guide to the study. It guided the study on the behaviours to be studied, as one of the objectives was to examine the values employees accord to records.

Hansen and Widen (2017) assert that information culture affects how information is used and accessed in an organisation. Information culture defines the unwritten and tacit behaviour and fills in the gap between what has officially happened and what really happened. Information culture is also embedded in task performance and decision making and is affected by and affects information practices with regard to the management and use of information. Every organisation has a work culture that is based on assumptions, values, beliefs and norms. Sinha (2009) posits that organisations shape their employees' work culture by putting in place supportive systems, procedures and overall support by socialising employees to unlearn dysfunctional and learn functional work behaviour.

3.14.1 Information culture attributes

Information culture has distinguishable attributes. It has been observed by Choo et al. (2008) that information culture consists of socially shared norms, values, behavioural patterns and assumptions that people espouse in managing, creating and sharing information in an organisation. Curry and Moore (2003) reiterate that there are common attributes, namely values, assumptions and beliefs that tend to be an intrinsic part of information culture. Zheng (2005) points out that information norms concern the rules of behaviour applied to the allocation, evaluation, interpretation, and usage of information. Analytically, information norms fall into two categories: the first being informal behavioural patterns of individuals, related to cultural norms, values, and conventions; and the second to capturing formal institutional rules which could include laws, regulations, and hierarchical settings. Douglas (2010), using a qualitative method which interviewed 92 participants, identified four attributes of information culture, namely, values, attitudes, beliefs and behaviours

According to Marchand, Kettinger and Rollins (2001), organisations have an information orientation that comprises good IT practices, information management practices, and information behaviours and values. These values and behaviours are related to individuals in the organisation.

3.15 Nexus between records and information culture

Walters (1995) argues that the nexus between records and information came about in trying to apply information science to traditional records management practices. This gave rise to what is known as "information resources management". Furthermore, Walters (1995) claims that with the advent of computer-generated information the phrase "records management" has, in some quarters, evolved into information resources management. The author states that information resources management is a phrase that includes records management, However, with time

there was a preference for the term information resources management, a trend that became observable in contemporary society and the world of records keeping. In recent years the change of terminology can be observed with most records keeping organisations changing their names to accommodate the information aspect.

It is apparent that the term "information" has been interwoven with the term "records management". For example, Brooks (2019) purports that information governance is seen as an opportunity for records management to rebrand itself in that information governance bundles records and information together. Yeo (2018) observes that there was a rise in the use of the term "record" in the 1970s and 1980s; however, in the 1990s there was a decline in the use of the term. This was preceded by the use of the phrase "records and information management" over the same period. Yeo (2018) contends that today it seems like the term information has broader appeal than record. Using the term information is more about making records professionals more visible. It positions the records profession strategically in an era during which governments are emphasising the importance of information and approving its social and economic benefits. The emphasis on information is a way of bolstering the professional profile of records managers and enhancing their influence. The world is drifting to use the term information and this study follows the current trends. The benefit of using the term will position the study in good standing with other current studies.

According to Yeo (2018:66), the adoption of the term information within the records management profession cannot only be seen "as a response to the explosion of technology or notions of an emerging information society but also to the growth of what may be called a 'compliance agenda'". The need for compliance with laws and regulations has been an area where records management has contributed. However, Yeo (2018) notes that it has been brought together with other broader concerns and labelled "information governance".

Davenport and Prusak (1997:31) concede that defining information is difficult. Information has been bundled in three forms, namely, data, knowledge and information. However, Davenport and Prusak (1997) state that information is the umbrella term whereas Franks (2013:30) defines information as "data, ideas, thoughts, or memories irrespective of the medium" or "facts provided or learned about something or someone and that which is conveyed or represented or represented by a particular arrangement or sequence of things". Information sources are considered "non-records". They are useful but do not provide evidence. A widely held view is that records are a type of information. For example, Yeo (2018) characterises records as information that is generated and linked to work processes whereas Oliver and Foscarini (2014: 20) "view records as information as evidence". Yeo (2007) posits that a record is information deemed to have some enduring value and warrants special attention, concerning retention, accessibility and retrieval. All the authors (Davenport and Prusak 1997; Oliver and

Foscarini 2014; Yeo 2018) imply that a record is a type of information but provide divergent views of what distinguishes records from other types of information. There is no consensus on whether records are information that has not been published or whether records are information that is evidential, proprietary, processes bound, or of continuing value.

Records are viewed as a subset of information. Franks (2013:44) argues that "information is seen as either as a genus of which records are species or as a whole of which records are part". In recent times the terms information and records are used interchangeably. Yeo (2018) states that the rationale for making a distinction between records and information is steadily disappearing and only purists still want to distinguish records from other information. ISO 15489:1 (2016) advocates for the systematic management of information as a record regardless of its structure and form. Some see information as the content of business activities. The current study also used the terms interchangeably to accommodate the already existing precedents.

Yeo (2018) states that the British Government describes information as material from which records are made. Proponents of this view argue that information originates from outside media, it is acquired mentally but is then inscribed on a carrier so that it can be preserved and shared across time and space. Harries (2011:56) argues that records are artefacts containing information but users have to make sense of the information they contain. Information is open to interpretation and the user has to contribute something to its understanding. The information then is not what records are or what they contain but what we gain from using them. Yeo (2007) contends that information can be seen as an affordance of records; a capacity that records can supply to a user or benefit that can be derived from their use.

Oliver and Foscarini (2014) argue that information culture is intertwined with organisational culture. This is because the attitudes and norms that it constitutes are developed within an organisation. Based on the literature review, a good information culture encourages good information management practices and determines the management of records. Records management and information culture co-exist in organisations. The two are inseparable because as long as there is information, there are values and regulations that shape how people behave towards or handle information/records. People in organisations are socialised into a particular behaviour that influences how information is perceived, created and used.

3.16 Summary

This chapter reviewed both empirical and theoretical literature relevant to the study. The review was structured according to the themes derived from the research questions of this study. The broader issues relating to information culture and electronic records were discussed. The review uncovered almost similar challenges from both developed and developing countries pertaining to electronic records and records management, albeit with developed countries showing some advancement over developing countries. Most of the studies reviewed were inclined toward the general management of records and did not use the information culture concept in relation to records management. The review has revealed that the concept of information culture has been studied from different perspectives in terms of disciplines. However, the most common perspective studied is to understand how it influences business performance. The studies have demonstrated that there is a connection between a positive information culture and business performance (Ginman 1987; Grimshaw 1995; Widén-Wulff 2000; Choo et al. 2006). The few studies that were reviewed and focused on records management and information culture revealed a significant correlation between ERM and information culture (Oliver 2004; Svärd 2014). The literature reviewed underscored the absence of studies tackling records management and information culture, especially in developing countries, including Botswana. The review has demonstrated that most studies concentrate on electronic records in general, and with information culture the studies focused mostly on business performance. This shows a significant gap in knowledge about information culture and electronic records management in developed and developing countries. There need for such is attested by Sundqvist and Svärd (2016), who called for more studies to be carried out on information culture and records management. Therefore this study seeks to fill this knowledge gap.

In Botswana, several studies have been conducted and these have identified the challenges affecting the management of electronic records. Most empirical studies in Botswana have tended to focus more on the management of electronic records in general. These studies were mostly conducted in government ministries and departments with few being conducted in parastatals. A comprehensive study of electronic records and information culture in Botswana parastatals has not been identified. The lack of a study of this kind cannot be taken as an indication of the irrelevance of information culture to records management. The review has established the absence of a study on electronic records management and information culture in Botswana. This provided the impetus for the current study to be carried out to fill the gap. The study was carried out to add to the body of knowledge, as the review has shown the insufficiency of this kind of studies even at a global level.

Chapter 4 follows and comprises the research methodology adopted for the study.

Chapter 4

Research methodology

4.0 Introduction

This chapter concerns the research methodology and methods used to investigate how records management is influenced by organisational information culture. The chapter presents the research paradigm, research approach, design of the study, population, sampling technique, data collection methods, and data analysis. The research instruments adopted for data collection were questionnaires and interviews. The validity and reliability of the data collection instruments are established in this chapter. The analysis of quantitative data was done using SPSS and qualitative data analysis through thematic content analysis. Ethical considerations are also discussed and the chapter ends with a summary.

The methodology is a framework associated with a particular set of paradigmatic assumptions that are used to conduct research (Leedy and Ormrod 2009). Cohen, Manion and Morrison (2007) claim that the methodology is the philosophical framework within which the research is conducted or the foundation upon which it is based. It is a systematic way to solve the problem and is the science of studying how research is to be carried out. It demonstrates the procedures by which researchers propose to describe, explain, and predict the phenomena (Leedy and Ormrod 2009). It has been observed by Cohen, Manion and Morrison (2007) that a methodology should meet certain criteria. It should be:

- The most appropriate to achieve the objectives of the research.
- Possible to replicate the methodology used in other research of the same nature.

Research methods are the procedures and schemes used in research. They are planned, scientific and value-neutral (Berg and Lune 2009). They include, amongst others, theoretical procedures, experimental studies, numerical schemes, and statistical approaches. Research methods help us collect samples, data and find a solution to a problem.

4.1 Research paradigm

A paradigm is a way of thinking about and conducting research. According to Cohen, Manion and Morrison (2007), it is a system of ideas or a systematic set of beliefs together with their accompanying methods that members of the scientific community share. A research paradigm is based on the assumptions, concepts, values, and practices held by a community of researchers (Bless, Higson-Smith and Kagee 2007; Mertens 2010). These concepts guide the researcher as to what literature will be reviewed, methodologies to follow, limitations and cautions to observe when interpreting the results, and the ethical issues to consider during the entire study (Bless, Higson-Smith and Kagee 2007; Cohen, Manion and Morrison 2007). A paradigm determines the type of legitimate questions that can be asked and in what context they will be interpreted.

The use of a paradigm in a mixed methods study has roused varied reactions among scholars. McChesney and Aldridge (2019) outline several paradigm stances relating to mixed methods, namely, the pragmatic stance, the dual or dialectical stance, and the single paradigm stance. The argument is that there are philosophical differences between quantitative and qualitative research. Furthermore, each of the two is situated within a particular paradigm. There may, therefore, be problems of incompatibility and justifying the choice and use of a specific paradigm in a mixed methods approach may be a daunting task.

A dual or dialectical thesis accommodates more than one paradigm tradition and mental model, with more than one methodology and type of method. McChesney and Aldridge (2019:11) observe that "it is possible to combine two (or even more) worldviews or paradigms within a single research project and that doing so may generate more comprehensive, insightful, and logical results than either paradigm could obtain alone". Studies using such a dialectical stance might include some research questions situated in each paradigm (for example, post-positivist and constructivist), thus reflecting the two different worldviews. However, there is still contestation on whether mixed methods research involving more than one paradigm is possible. Teddlie and Tashakkori (2009) argue that the idea of using a single, holistic paradigm for a mixed methods study seems to be the only thoughtful way of resolving methodological and paradigmatic issues. There have been arguments about the incompatibility or incommensurability of different paradigms. McChesney and Aldridge (2019) warn that mixed methods researchers wishing to use a dual-paradigm approach must carefully consider how the different paradigms they intend to use can be interrelated and how the research methods will preserve genuine multiplicity. The dual/dialectical stance, which revealed the incompatibility argument, has given rise to the pragmatic paradigm (McChesney and Aldridge 2019). The pragmatists hold that paradigms may be important for methodology but

should not be used to inform research processes. This stance ignores paradigm-related questions by focusing on "what works".

Single paradigm research holds that quantitative and qualitative approaches can be put under one paradigm. McChesney and Aldridge (2019:229) argue that "the single paradigm stance offers space for more varied and purposeful selection and integration of paradigms and methods in order to suit the aims of particular studies". As a result of the need to look for a paradigm that supports their methodological orientation, mixed methods scholars proposed pragmatism. However, Teddlie and Tashakkori (2009:99) point out that pragmatism is inadequate because it does not specify "which values" or "whose values". The current study located itself under the single paradigm thesis. To date, a large proportion of mixed methods research has been conducted with an overarching positivist or post-positivist stance (Teddlie and Tashakkori 2009).

According to Mertens (2010), the main research paradigms are positivism, post-positivism, constructivism, transformativism, and pragmatism. The major difference between paradigms lies in the nature of ethical behaviour (axiology), nature of reality (ontology), nature of knowledge (epistemology), and the approach to systematic inquiry (methodology) (Cohen, Manion and Morrison 2007; Mertens 2010; Creswell 2013). In other words, the difference is apparent in the relationship between the positions of the researcher and the subject, the concepts and research, research focus, scope and findings, and nature of data (Babbie 2013).

4.1.1 Pragmatism

Pragmatism is a philosophical movement in the USA. The philosophy was articulated first by Charles Sanders Peirce and William James and was later developed by John Dewey (Hartas 2015). Pragmatism seeks to debunk concepts such as "truth". In this regard, Hartas (2015:41) posits that in pragmatism, "truth is not absolute but relative to time, place and purpose of an inquiry and verifiable as discoveries are made". As such, Kaushik and Walsh (2019) point out that pragmatism holds that "there are singular and multiple realities that are open to empirical inquiry and pragmatism orients itself toward solving practical problems in the 'real world'". As a result, it allows the research to be free of mental and practical restrictions imposed by other paradigms. Pragmatism is the philosophical partner of mixed methods because it does not accept the either/or choice from the constructivism or positivism debate (Teddlie and Tashakkori 2009). The lack of acceptance of constructivism-positivism is one of its characteristics. The prominent feature of pragmatism is the search for practical answers to questions that interest the researcher.

Pragmatists thus attach importance to the practical use of knowledge. Knowledge is seen as an instrument that guides action and facilitates the adaptation of reality. This is further reiterated by Yvonne (2010:11), who contends that pragmatism holds an "antirepresentational view of knowledge arguing that research should no longer aim to most accurately represent reality, to provide an accurate account of how things are in themselves but to be useful, to aim at utility for us". In this paradigm, knowledge is viewed as theory and value-laden, and it can influence human values. Knowledge and ideas are seen as artefacts or activities that function as a platform for action and organisation of human behaviour (Hartas 2015).

Methodologically, pragmatism believes that one can use quantitative methods to measure some aspects of the phenomenon in question and qualitative methods for others. Pragmatists suggest that what works to answer research questions is the most helpful approach to investigation, be it a combination of experiments, case studies, surveys, or whatever, as such combinations enhance quality (Teddlie and Tashakkori 2009; Creswell and Plano Clark 2018). A pragmatic approach allows researchers to be flexible enough to adopt the most practical approach to address research questions, by allowing this flexibility, there will be singular and multiple realities derived from the quantitative and qualitative research (Creswell and Plano Clark, 2018).

The role of values in pragmatism is essential in interpreting the results. The researchers decide what they want to study based on what is vital within their personal value systems. The topic is explored in a way congruent with the value system of the researcher, including units, analysis and variables that they feel are likely to yield new responses. Teddlie and Tashakkori (2009:90) argue that "values and visions of human action and interaction precede a search for descriptions, theories explanations and narratives." Pragmatists believe that values play a significant role in conducting research.

Pragmatism was not used in this study because Hartas (2015) criticised the paradigm for being vague and methodologically unsatisfactory.

4.1.2 Constructivism

Constructivism has its roots in the philosophical traditions of hermeneutics and phenomenology. The German sociologist Max Weber is generally credited with being the central influence (Mertens 2010). Many labels have been used for this paradigm, such as "interpretive" and "naturalistic". This paradigm takes the label "constructivism" because it reflects one of its tenets, that is, reality is socially constructed (Cohen, Manion and Morrison 2007; Mertens 2010). Therefore, constructivism considers the cultural and social context that surrounds

people's lives. As such, McChesney and Aldridge (2019) postulate that interpretive research aims to understand the complex world of lived experience from those who live it.

The paradigm is useful for understanding society and constructing knowledge based on this understanding. Constructivists believe that reality is interpreted through human activity and that knowledge is a human product that is socially and culturally constructed. They appreciate that people make subjective meanings of their experiences as they interact with each other and the immediate environment. Hartas (2015:44) argues that in "becoming actively involved in meaning-making we assume the responsibility, whereas the acceptance of an objective-based on universal laws, removes responsibility from individuals."

Interpretivism (or constructivism) argues that value-free data cannot be obtained, since the enquirers use their pre-conceptions to guide the process of enquiry. Furthermore, the researcher interacts with the human subjects of the enquiry, changing the perceptions of both parties (Kivunja and Kuyini 2017). Chowdhury (2014) explains that interpretivist researchers look for the presence or absence of a causal relationship, the specific ways in which it is manifested, and the context in which it occurs. Thus, these researchers go beyond what has occurred to see how it has occurred.

It is believed that while external reality exists it cannot be objectively captured in research. Therefore, the knowledge that emanates from interpretivism is linked to participants and the context of the study. McChesney and Aldridge (2019) thus argue that the findings from interpretivist research cannot be universally applicable theories or laws but they provide rich contextual, situated understanding.

The constructivist paradigm on its own cannot be applied to this study because it relies on qualitative data collection strategies, and its ontology is more qualitative. A quantitative approach dominates this study; therefore, the paradigm's application to the study is not relevant. Moreover, Mertens (2010) argues that knowledge produced in using this paradigm might not be generalised to other settings, it is difficult to make quantitative decisions, and the researcher's biases more easily influence results. Therefore, it would have been challenging to employ the paradigm for the current study, which has questions the answers to which need to be quantified.

4.1.3 Transformative/Critical theory

The philosophical basis for this paradigm is quite diverse, as it reflects multiple positions. Despite its diversity, the transformative paradigm directly and explicitly addresses the politics in research by confronting social oppression at whatever level it occurs (Teddlie and Tashakkori 2009, Mertens 2010). It includes critical theorists, participatory action researchers, feminists, racial and ethnic minorities and persons with disabilities.

There are basic characteristics that make transformativism different from both post-positivism and constructivism. The transformative paradigm is different from other paradigms because it focuses on seeking human emancipation or liberating human beings from the condition that enslaves them. It is characterised by placing the main focus on the lives and experiences of marginalised groups. The broad and shared understanding of the tranformists is the improvement of lives and relationships between women and men – economically, socially, culturally, and personally. The researcher consciously analyses asymmetric power relationships and identifies factors that work against emancipation in society (Hartas, 2015). Transformative paradigm behaviour results from illegitimate, dominant, and repressive factors. Therefore, the transformative paradigm seeks to determine the illegitimate interests at work in a particular situation and interrogate the legitimacy of those interests (Cohen, Manion and Morrison 2007).

In this paradigm, objectivity means providing balanced views in a way that bias is not interjected because of a lack of understanding of critical viewpoints. There is also an emphasis on the researcher's presence in communities to obtain participants' subjective experiences. For transformativists, values are important as they guide the research function to enhance social justice rather than individual researcher interest. Transformative scholars also emphasise idiographic statements. The researchers attempt to link results from a specific study to broader social justice issues.

Although this paradigm emphasises qualitative methods, quantitative methods can be used, especially related to oppression. Hartas (2015) observes that transformativists challenge a single unifying theory of science and accept diversity by employing many theorists that capture different historical and political situations. The transformative paradigm did not apply to the current study because its ontology focused on human emancipation. The current study sought to investigate the social realities that parastatals face in the management of electronic records.

4.1.4 Positivism

Positivism assumes a straightforward relationship between the world and our perception of it. It separates the practice of observation from the observed and requires the demonstration of reality through an objective collection of data. Underlying assumptions of positivism include the belief that the social world can be studied in the same way as the natural world, and that there is a method for exploring the social world which is value-free (Fox 2008). Positivism emphasises that valid knowledge is obtained through the established scientific method. Positivists, therefore, hold that what cannot be observed cannot be said to exist, so scientific inquiry should be limited to the study of observable behaviour. While the focus on empirical, objective data is indeed appealing, it falls short when applied to human behaviour (feelings, thinking). As such, it can be argued that positivism has a narrow view and is limited (Cohen, Manion and Morrison 2007; Mertens 2010).

According to Fox (2008), positivism has been applied where observation is used to generate theories and models that can be generalised. It has been criticised for ruling out various sources of understanding of the world, including those emanating from human experiences. It ignores the context and attempts to establish generalities. Chilisa and Preece (2005) contend that setting is an important component of research and cannot be discounted and that claims of knowledge require full contextualisation. In understanding records, it is essential to understand the influences on how they are created and captured. Positivism for the current study thus fell short in this regard. Gamlen and McIntyre (2018) dismiss claims that positivism is synonymous with quantitative methods. The authors argue that positivists may rely on qualitative data. What defines positivism is not the form of observational data it depends on but rather its claim that the foundation of all knowledge is observation instead of inference. The paradigm could not be used in the current study because of its focus on the quantitative.

4.1.5 Post-positivism

The post-positivist worldview underpinned this study. Panhwar, Ansari and Shah Panhwar (2017:253) state that post-positivism is "a certain pluralism which balances both positivism and interpretive approaches". The post-positivist view of records embraces the record as a socially constructed and maintained entity (Trace 2002). Therefore, its application to the current study is appropriate for interpreting the social factors that influence organisational records creation and records keeping. Post-positivism emerged as a critique of positivism. Post-positivism claims that social realities need to be understood from the subject's perspective rather than that of the observer, and in totality rather than in isolation. Post-positivists are frequently interested in uncovering meaning from people about their multiple interpretations of reality; this differs from constructivism which settles for a single reality and subjective beliefs (Babbie 2013). The post-positivism paradigm allows the use of natural settings and contextual data and enables solutions to significant problems (Henderson 2011). Post-positivism

emphasises explanations for patterns of behaviour. Unlike positivists who maintain that the role of science is to observe regular physical and social behaviour patterns and not to establish why such patterns occur, post-positivists counter-argue that a previous reliable pattern may be coincidental, therefore vulnerable to change.

Post-positivists believe that no matter what paradigm researchers use, ethics (there should be respect for privacy, informed consent, minimum harm and equal opportunity) should be integral to the planning and implementation processes. While positivists believe that the researcher and participants are independent and that they would not influence each other, post-positivists believe that the researcher's hypothesis, theory, and background knowledge can strongly influence the study's outcomes (Mertens 2010). Researchers should try to remain neutral to protect other people's values and reduce biases.

Post-positivism holds that external reality does exist but can only be known probabilistically because of the limitation of human consciousness. Researchers can discover reality within a certain realm of probability (Babbie 2013). Post-positivism is pluralistic, as it balances both positivist and interpretivist approaches. Panhwar, Ansari and Shah Panhwar (2017:54) contend that "It is a flexible perspective which allows the researcher to use multiple methods to carry out the research according to the nature of the research questions". Therefore, to learn about these multiple perspectives in the current study, there was a need to quantify and get narratives around records management and information culture. As such, Perlesz and Lindsay (2003) posit that post-positivism is a useful paradigm for researchers interested in some aspects of positivism, such as quantification, yet also wishing to incorporate the interpretive aspects of the data.

The use of post-positivism in mixed methods is based on the view that research strategies should be driven not by a commitment to one epistemological doctrine, but by pragmatic concerns about effectiveness in generating knowledge or solving problems (Gamlen and McIntyre 2018). This is further buttressed by Mertens (2010:78), who maintains that an "epistemological position only determines how methods can be used, it does not prevent the use of particular methods." There have been debates regarding which paradigm is suitable for mixed methods. Pragmatism has been the preferred paradigm for mixed methods and has been identified as the most relevant because the researcher seeks to tap on the ability to combine the use of numeric and narrative data (Onwuegbuzie and Leech 2005; Morgan 2014). It has been argued by Gamlen and McIntyre (2018) that mixed methods research designs are well suited to projects informed by the post-positivist worldview because of the post-positivists' emphasis on explanation. Post-positivists call for descriptions of general patterns of social action made possible by quantitative methods and make sense of what such actions mean to the social actors involved.

The post-positivism research paradigm allows the application of appropriate methods of data collection and analysis (Ryan 2006). Many scholars equate it with mixed methods (Ryan 2006; Henderson 2011; Creswell and Clark 2018). Although the current study had a quantitative slant thus falling within the positivist paradigm it was post-positivist in terms of its attempt to determine meaning constructed around electronic records and information culture. The post-positivist worldview is thus compatible with both quantitative and qualitative methodologies. It prioritises quantitative data and strengthens its findings with the help of qualitative data. Although qualitative methods can be used within this paradigm, quantitative methods tend to be predominant in post-positivist research. This paradigm employs experimental, quasi-experimental, correlation, causal-comparative and quantitative randomised control trial methods (Cohen, Manion and Morrison 2007; Mertens 2010).

Post-positivism has been used in mixed methods research by other authors such as Lewellen (2015) whose study examined the impact of the perceived value of records in an electronic records keeping system. Lewellen's (2015) study is similar to the current study in its use of both qualitative and quantitative approaches. Both studies employed mixed methods and a post-positivism paradigm. Furthermore, in terms of content, each study attempted to understand the values ascribed to records. However, the studies differ in terms of statistical methods employed, in that Lewellen's (2015) study relied heavily on factor analysis whereas the current study relied on multiple hierarchical regression. The theoretical leaning of the two studies also differed. In the current study, the researcher used post-positivism because it had aspects of positivism leaning towards quantitative methods and the interpretive model which leant towards qualitative methods. The researcher sought quantification and desired to incorporate interpretive concerns, and post-positivism afforded him such an opportunity.

4.2 Qualitative and quantitative research approaches

The post-positivist worldview discussed above informed the research approaches used in the current study. As has been pointed out, it is compatible with both quantitative and qualitative methodologies (Gamlen and McIntyre 2018). It calls for solving problems by applying an appropriate range of available quantitative and qualitative research methods.

Qualitative and quantitative are popular and widely used research approaches in social science research as well as in library and information science research. As alluded to above, this study combined both qualitative and quantitative approaches. The argument of compatibility rested on the philosophy, methodology and assumptions underpinning these approaches. From the philosophical underpinnings emanate debates on whether qualitative and quantitative approaches can be combined or not because they present incompatible ways of viewing reality

(Chilisa and Preece 2005). However, Howe (1988) and Morgan (2014) reject the incompatibility thesis. According to Ngulube, Mokwatlo and Ndwandwe (2009:106), "The rise of mixed-method as a third research approach heralded the end of the artificial tensions induced by ontologists, epistemologists and methodologists and the fall of walls erected between the qualitative and quantitative approaches". Furthermore, the authors acknowledge that the concern about identity associated with qualitative and quantitative standpoints is gradually disappearing with the coming of mixed methods. There is a fit between the approaches, method, and philosophical stand adopted in the current study. The mixed methods approach allows for mixing qualitative and quantitative methods in the same study. The philosophy employed in the current study, post-positivism, enabled the study to utilise both the numeric aspects of quantitative research and the narrative aspects of qualitative research.

Quantitative research is informed by objectivist epistemology and seeks to develop universal explanatory laws of social behaviours. Quantitative research statistically measures what it assumes to be a static reality (Berg and Lune 2009). On methodological differences, quantitative research adopts a nomothetic methodology (tendency to generalise), while qualitative research adopts an idiographic methodology (tendency to individualise). Quantitative approaches tend to explain, that is, to verify if observed phenomena and their systematic relationship confirm the prediction made by a theory. They emphasise the measurement and analysis of causal relationships. The current study recognised that quantitative methods better describe correlations and the social actors' underlying behaviours. Therefore, the statistical data provided a quantitative means to detect human behaviour towards records. In contrast, qualitative research is based on a constructivist epistemology. It explores what it assumes to be a socially constructed dynamic reality through a value-laden, flexible, descriptive, holistic, and context-sensitive, that is, an in-depth description of the phenomenon, from the perspectives of the people involved (Berg and Lune 2009). Qualitative research attempts to understand how social experience is created and given meaning. Therefore, the current study, by using a qualitative approach, recognised that records are socially constructed and maintained entities. There is a need to understand the social and cultural factors, the standards and values, and the ideologies that infuse records creation.

Neuman (2014) posits that the quantitative approach endorses the view that psychological and social phenomena have an objective reality independent of the subjects being studied, that is, the knower or the researcher and the known or subjects are viewed as relatively separate and independent to eliminate the possibility of bias. From a qualitative perspective, reality or knowledge is socially and psychologically constructed. Unlike quantitative research, qualitative research views the relationship between the knower and the known as being inextricably connected. For the researcher to learn about the multiple realities, the researcher and the participant co-construct knowledge; hence knowledge is not seen as static, objective truth. Thus, the qualitative approach is often viewed

as value-laden and biased (Berg and Lune 2009). A qualitative approach was appropriate in this study because there was a need to understand participants' lived experiences or behaviours in their natural environment as they used/interacted with records. This would help the researcher make sense of the attitudes and behaviours of participants towards records. Qualitative studies usually use a small sample that is purposively chosen. The data collected using this approach is unstructured or semi-structured and is collected via in-depth interviews, group discussions and participant observation.

The quantitative approach falls within the positivist paradigm; therefore, the researcher aims for scientific independence and objectivity when they select the questions and participants for studies and carry out the data collection and analysis. The ontological assumption here is that phenomena can be measured and understood. The main interest in this approach is to generalise from individual groups to a large population. The quantitative assumption is that there is a single reality that is independent of the perceptions of people. The quantitative approach aligns with the positivist philosophy, which holds that claims about the world are only meaningful when they can be verified through observation.

The research topic lent itself to a mix of quantitative and qualitative approaches because it is multi-faceted, dealing with both the social and technical aspects of records. Combining the two approaches provided an array of data for the study that would offset the weaknesses of the two approaches. Combination offers the researcher a chance to collect data using more than one data collection instrument. According to Creswell (2013), it is argued that a quantitative approach is weak in understanding the context or settings in which people live as the voices of participants are not directly heard. A qualitative approach, it is argued, corrects this weakness. However, the qualitative approach is considered inadequate because of the emphasis placed on the researcher's interpretation which can create bias. It is argued that the quantitative approach resolves this weakness.

In Chapter 3 it was observed that every organisation has an information culture but the type of information cultures that exist in organisations has been scantily explained. It follows then that comprehending a records and information culture involves looking at how information culture affects records management. Doing so requires an in-depth inquiry into the context in which records are used.

This study adopted a quantitative approach as the dominant approach. This approach was used to measure variables such as attitudes and behaviours that would not have been easy to measure using only a qualitative approach.

4.3 Mixed methods approach

The mixed methods approach is compatible with the post-positivist worldview, the paradigm underpinning this study. Their compatibility stems from the mixed methods approach being able to support a paradigm that espouses multiple world views (Teddlie and Tashakkori 2009). The post-positivist emphasis on explanation calls for both descriptions of general patterns of social action, made possible by quantitative methods, and making sense of what such actions mean to the social actors involved, made possible through qualitative methods. Furthermore, Gamlen and McIntyre (2018) argue that post-positivism invites mixed methods approaches as post-positivists tend to reject what they see as a false dichotomy between the positivist-quantitative and interpretivist-qualitative research paradigms.

Thus, the paradigm wars in which one owes allegiance to either qualitative or quantitative methodologies have led to what is known as mixed methods. Mixed methods provide for a less confrontational approach to research paradigms. Scholars such as Teddlie and Tashakkori (2009) argue against the division of research into either qualitative or quantitative approaches and their respective subjectivity and objectivity pointing out that it is neither meaningful nor productive given that the two approaches are compatible. The current study adopted a mixed methods approach to derive the benefits of mixing as outlined by Denscombe (2008:272), who states that a mixed methods approach can do the following: Increase the accuracy of the data, Produce a complete picture by combining information from qualitative and quantitative data or sources. The advantage of the mixed methods in the current study was realised as the qualitative was used to enhance the quantitative as the dominant strand.

Manion and Morrison (2007) posit that mixed methods assume that the world is not exclusively qualitative or quantitative but mixed. It integrates both numeric and narrative data. A mixed methods approach is seen as providing more evidence for studying research problems than either quantitative or qualitative approaches alone. The approach enriched the current study because, as Creswell and Clark (2018) point out, it allows the researcher to use all data collection instruments, without having to focus only on the tools associated with a particular approach. The approach also helps in answering questions that cannot be answered by either qualitative or quantitative approaches alone. Furthermore, a mixed methods approach is seen as practical as the researcher is free to use all possible ways to address the research problem, and they can solve a problem using both numbers and words. The approach appreciates the similar and different philosophies and epistemologies that exist in qualitative and quantitative traditions. In fact, Cohen, Manion and Morrison (2007) note that there are far more similarities than differences between the two traditions. A mixed methods approach encourages one to use a

paradigm that encompasses quantitative and qualitative research, hence the use of post-positivism in the current study.

Bryman (2007) states that there are features that differentiate mixed methods research from just mere usage of quantitative and qualitative research. “A mixed-methods researcher must write in a way that quantitative and qualitative components of research are mutually illuminating” (Bryman 2007:24). The point on illumination emphasises the integration of mixed designs. The priority given to either quantitative or qualitative approaches should be clear. This has been elucidated by Ngulube, Mokwatlo and Ndwandwe (2009) as well as Ngulube (2010). The latter conducted a study on the use and prevalence of mixed methods in South Africa between 2001 and 2008 and in sub-Saharan Africa between 2004 and 2008 in library and information research. The authors revealed limited use of mixed methods, with most studies claiming to use mixed methods failing to adequately mix quantitative and qualitative tools within or across the research phase. The current study has avoided these pitfalls by explicitly detailing how the mixing will be done in the design section below.

Kalusopa (2011) warns that authorities have cautioned against vaguely combining quantitative and qualitative approaches and calling it mixed methods. It has been stated by Ngulube, Mokwatlo and Ndwandwe (2009) that in studies that claimed to use mixed methods, mixing was done only in data collection and not in analysis and inference. The current study considered itself mixed methods because it followed a quasi-mixed design. However, Teddlie and Tashakkori (2009:147) consider such designs as “not truly mixed” despite quasi-mixed designs being classified under mixed methods. These quasi-mixed designs are what Leech and Onwuegbuzie (2009) and Lowenthal and Leech (2010) term “partially mixed” designs. In the current study, the mixing was done at the interpretation stage.

4.4 Research design

According to Babbie and Mouton (2001:74), the research design is a plan or blueprint of how a researcher systematically collects and examines the data required to answer the research questions. It is the scheme, outline, or plan that is used to generate answers to research problems.

When designing a mixed methods study, three issues need consideration, namely, priority, implementation and integration (Creswell and Clark 2018). Priority refers to which method, either quantitative or qualitative, is given more emphasis in the study. Implementation refers to whether the quantitative and qualitative data collection and analysis come in sequence or chronological stages, that is, one following another or in parallel or concurrently. Integration refers to the phase in the research process where the mixing or connecting of quantitative and qualitative data occurs.

The research design in this study falls within what Teddlie and Tashakkori (2009) call "quasi-mixed" designs. This is because the study followed a dominant and a less dominant design. The quantitative strand in the study was the dominant strand. The dominant and less dominant designs are designs where two types of data are collected, namely, quantitative and qualitative, with little or no integration of the two types of data. Hence Teddlie and Tashakkori (2009:147) argue that "dominant and less dominant designs are quasi-mixed in nature rather than being genuinely mixed". The term quasi-mixed design helps the researcher distinguish technically mixed studies from studies that are truly mixed because the latter are able to meaningfully integrate quantitative and qualitative findings (Teddlie and Tashakkori 2009).

There are several designs in mixed methods research such as embedded, multi-level and sequential designs. The study adopted the partial concurrent dominant status design because it mixes the results only at the interpretation stage. Moreover, the concurrent design saved the researcher's time as the study phases occurred in a parallel manner. In this design, quantitative and qualitative data collection is done concurrently, with the quantitative strand being the dominant strand. The less dominant qualitative strand played a complementary role and corroborated the quantitative results with qualitative findings. Thus, data collection was conducted concurrently at the implementation stage, and integration of the results was done during the interpretation phase. A partially mixed methods design, therefore, involves conducting a study in which one mixes the quantitative and qualitative portions of the study at specific stages. Scholars such as Doyle, Brady and Byrne (2009), and Venkatesh, Brown and Sullivan (2016) hold that mixing occurs at the data interpretation stage in partially mixed designs.

To achieve integration, the study used the triangulation protocol. The quantitative and qualitative data were collected and analysed separately from each other to produce two data sets in the triangulation protocol. The purpose of the triangulation protocol is to describe corroborations between the two sets of findings. The process of triangulating findings from the two different methods occurred at the interpretation stage of the study when both data sets had been analysed separately. According to O'Cathain, Murphy and Nicholl (2010), the process of triangulation comprises several steps, namely, sorting, convergence coding, convergence assessment, completeness assessment, researcher comparison, and feedback. To implement the triangulation protocol in the current study, the researcher sorted the findings related to the research questions from each data set, that is, the survey and interviews. The researcher then reviewed the analysis to identify themes emerging from the data sets to create a unified list of themes to compare for presence, frequency, and meaning. According to O'Cathain, Murphy and Nicholl (2010), these themes form the rows of the convergence coding matrix used to summarise similarities and differences between the two sets of data. Finally, the researcher conducted convergence coding which involves comparing the data sets to understand the meaning and interpretation of themes, their frequency and their prominence. The researcher also assessed what Fetters, Curry and Creswell (2013) call the "fit" of data integration, which is the coherence of the quantitative and qualitative findings.

The nature of the study also warranted the use of the design because of the need to understand the multi-dimensional aspects of information culture and records management. The benefits of using a parallel design method include the efficiency of data collection.

4.4.1 Survey

A survey is one of the oldest research designs and the most regularly used design across disciplines (Babbie 2013). According to Leedy and Ormrod (2010:186), "survey research involves acquiring information about one or more groups of people about their characteristics, opinions, attitudes or previous experiences by asking those questions and tabulating their answers". Surveys are a popular data collection method for academic or marketing research in various fields. With the increase of internet penetration globally, internet-based data collection techniques such as online questionnaire surveys have become popular in recent years.

This study conducted an online survey. An online survey is similar to a paper version of the survey. However, the data collection strategies differ in that in an online survey, as its name indicates, questionnaires are distributed and the responses are received via the internet. Regmi, Waithaka, Paudyal, Simkhada and Teijlingen (2016) posit that data collection through an online survey appears to have the potential to efficiently collect large amounts

of data economically and within relatively short time frames. The online survey approach is also beneficial when collecting data from hard-to-reach populations. Moreover, the Covid-19 pandemic had minimised face-to-face human interaction and the online survey, in these circumstances, is very useful; hence its employment in the current study. The survey was managed using REDCap, a web application for conducting online surveys. A link to the questionnaire was sent via email to the study participants.

One of the characteristics of a survey that made it attractive to this study is that it describes trends and helps identify individuals' beliefs and attitudes. The researcher, via the survey, collected quantitative data and used statistical analysis to describe trends in the responses to the questions and to test research questions. The researcher adopted an online survey design because it is less expensive and can be conducted in a short time. Moreover, as alluded to above, it helped the researcher to adhere to the Covid-19 social distancing rules. The design was appropriate as it allowed for the description, classification and interpretation of the research questions posed. Importantly, Babbie (2013) asserts that a survey is suitable for measuring attitudes and orientations. The advantages of the method lies in the possibility of scanning a broad spectrum of issues, populations and programmes (Cohen, Manion and Morrison 2007). A survey uses a predetermined sampling plan, which determines how respondents are to be selected. Therefore, it is possible to estimate how accurately the sample represents the population. Unlike other designs such as observational or experimental studies, the sample in a survey tends to be larger. A survey is inexpensive, is thought to be more objective because of standardised measurements, and can cover a large sample (Neuman 2014).

Critics of surveys mostly focus on philosophical, technique-based and political reasons to reject them. According to De Vaus (2013:7), the philosophical reason for rejecting the survey is its inability to get meaningful social action aspects. Surveys only look at particular aspects of people's beliefs and actions without looking at the context in which they occur. Surveys seem to assume that human activities are determined by external forces and neglect the role of human consciousness (De Vaus 2013). A technique-based criticism of surveys is that they are restrictive, relying on a highly structured questionnaire. Political criticism is based on the survey being ideologically manipulative. In this regard, De Vaus (2013:123) points out that "it does not produce knowledge about reality but is an ideological reflection whose acceptance by the public furthers particular interests". Furthermore, Creswell (2014) points out that a survey cannot explain cause and effect as experimental research can do. It describes trends in data rather than offering explanations. The survey's focus is directed towards learning about the population and less on relating variables or predicting outcomes.

4.5 Population of the study

The target population is the entire group of objects relevant to the research project. Their relevancy lies in their having the information that the research project is designed to collect. It has been observed that several factors can influence the definition of the target population such as knowledge of the topic of interest, access to and availability of study participants, and time frame (Berg and Lune 2009).

There are 49 parastatals in Botswana (Botswana Goverment 2011). Of the 49 parastatals, three parastatals were selected using purposive sampling. The three were chosen because they have ERM systems in place and established records management units. The three parastatals selected are all located in Gaborone. Although these parastatals have branches across the country, the study was conducted in Gaborone, at the parastatals' headquarters. Due to limited time and resources, the researcher could not extend this study to the branches.

The current study's population comprised records officers, IT personnel, action officers and administrators. These were purposively chosen because they interact with the electronic records systems on a daily basis. Furthermore, their choice was premised on the expected ability to share their experience with the researcher. The targeted population of the study was 139 employees from the selected parastatals. Table 4.1 below reflects the distribution of the population across the three parastatals.

Table 4.1: Distribution of population across parastatals

	BQA	WUC	BURS
Records office	6	7	13
Information technology	10	9	11
Action officers/Administrators	28	29	26
Total	44	45	50

Source: Field data (2019)

4.6 Sampling procedure

A sample is a small subset, taken for measurement from a population (a group of people, objects or items). Sampling is the act, process, or technique of selecting a representative part/subset of the population to determine

the characteristics or parameters of the whole population (Neuman 2014). It should be representative of the population to ensure that the results can be generalised to the population as a whole. There are two types of sampling, namely probability and non-probability sampling. It is common for mixed research methods to use more than one kind of sample and also use samples of different sizes, scopes, and types within the same piece of research (Neuman 2014). As such, this study utilised both probability and non-probability sampling strategies.

The current study followed online sampling methods because at the time of data collection the country and world were going through the Covid-19 pandemic which limited face-to-face contact either through social distancing or through people having to work from home. Table 4.2 below shows the different online sampling methods for studies that are conducted online. The current study used list-based random sampling as a probability sampling technique. List-based sampling was chosen instead of intercept, pre-recruited panel survey or non-list based random sampling because it is straight forward to implement as only the contact information of the respondents is required. Unlike non-list random sampling, a sample can be selected without actually enumerating on the sampling frame. List based sampling is preferred in the current study because the sample frame can be determined, making it suitable for the scholarly set up.

Table 4.2: Online sampling typology

Probability sampling	Non-probability sampling
Surveys using a list-based sampling frame	Entertainment polls
Surveys using non-list-based random sampling	Unrestricted self-selected surveys
Intercept (pop-up) surveys	Surveys using "harvested" email lists (and data)
Mixed-mode surveys with internet-based option	Surveys using volunteer (opt-in) panels
Pre-recruited panel surveys	River sampling

Source: Fricker (2016)

Probability sampling, is a "method of selecting a sample wherein each element in the population has a known, non-zero chance of being included in the sample" (Neuman 2014:57). Probability sampling was used for the quantitative phase of the study, that is, the survey. It uses a random selection of units from the sampling frame to be included in the sample. The procedures in probability sampling are clearly defined (Hair, Wolfinbarger, Money, Samuel and Page 2015). One of the advantages of probability sampling is that sampling error can be

calculated. The use of probability sampling in online research has been met with scepticism (Vehovar, Toepoel and Steinmetz 2016). If the survey concerns the general population, significant biases can result from under coverage and non-response. Probability-based sampling methods/techniques begin with knowledge of a sampling frame. Although sampling for an internet-based survey can be difficult, most organisations have a fixed number of employees and maintain lists of their employees, thus making it feasible to draw a probability sample. In choosing the sample for the current study, Krejcie and Morgan's (1970) table for determining sample sizes was used (Table 4.3 below). The table indicates that for a population of 139 the sample size is 97. According to Fricker (2016), a list-based random sampling frame can be conducted just as one would for a traditional survey using a sampling frame.

To implement list-based random sampling requires contact information on each unit in the sampling frame. The researcher requested the 139 names of the target population. Each name was assigned a random number between 1-139 as an identifiers. Then researcher used an online random number generator available at https://www.calculator.net/random-number-generator.html to generate numbers. This was carried out to eliminate the researcher's bias. Every number that popped out, its corresponding name was set aside. After, the 97 names that comprise the research sample were reached, the researcher requested the emails of the selected employees from the human resource office of the studied parastatals. The survey link was sent via email to the randomly selected participants.

Table 4.3: Krejcie and Morgan's (1970) table for determining sample sizes

N-n	N-n	N-n	N-n	N-n
10-10	100-80	280-162	800-260	2800-338
15-14	110-86	290-165	850-265	3000-341
20-19	120-92	300-169	900-269	3500-346
25-24	130-97	320-175	950-274	4000-351
30-28	140-103	340-181	1000-278	4500-354
35-32	150-108	360-186	1100-285	5000-357
40-36	160-113	380-191	1200-291	6000-361
45-40	170-118	400-196	1300-297	7000-364
50-44	180-123	420-201	1400-302	8000-367
55-48	190-127	440-205	1500-306	9000-368

Source: Krejcie and Morgan (1970)

According to Bless, Higoson-Smith and Kagee (2006), non-probability sampling is defined as a sampling technique in which the researcher selects samples based on his or her subjective judgment rather than random selection. Thus, in non-probability sampling, samples are selected in a non-random manner, unlike probability sampling but the degree to which the sample differs from the population is unknown. Also, unlike with probability sampling, non-response error does not arise in non-probability sampling. Non-probability sampling is sometimes preferred because the procedures used to select units for the sample are much easier, quicker, and cheaper than probability sampling. However, Neuman (2014) noted some disadvantages of non-probability sampling. One of its disadvantages is that an unknown proportion of the entire population may not be included in the sample group or there may be a lack of representation of the entire population. Non-probability findings thus have lower levels of generalisation of research findings compared to probability sampling. Babbie (2013) notes that it may be difficult to estimate sampling variability and identify possible bias.

The type of non-probability sampling adopted for the qualitative phase of the study (the interviews) was purposive sampling. Bless, Higson-Smith and Kagee (2006) assert that the method is based on the judgment of the researcher regarding the characteristics of a representative sample. The sample is chosen based on what the researcher considers are typical units that best fit the study's criteria. The decision to include individuals who are to be part of the sample is carried out by the researcher. The decision is based on their particular specialist knowledge of the research issue as well as the individuals' capacity and willingness to participate in the research. Purposive sampling picks a small number of cases that yield the most information (Bless, Higson-Smith and Kagee 2006). The sample that is investigated is usually smaller when compared to those selected via probability sampling. Thus, in terms of the study, respondents from each parastatal were selected based on their knowledge of electronic records. The study targeted six purposively selected respondents, two from each organisation. The first of the two was the records managers in each organisation. They were the custodians of the records and responsible for their management. The other two respondents were appointed by the CEOs to represent them. Five of the six selected participants were interviewed. One CEO representative kept promising to grant the interview but failed to honour appointments.

4.7 Data collection procedures

The data collection procedures used in the study were guided by the theoretical frameworks used. The questions that were asked in the data collection were structured around the constructs of the theoretical frameworks. This was done by drawing the main constructs from the theoretical frameworks. Then the sub-questions were drawn around this main question/construct (see Appendix M and N). The study philosophy that informed the data

collection procedures was post-positivism, which emphasises the importance of multiple measures and observations. Various instruments can be used for collecting data and these include questionnaires, interviews, observations, document reviews, and visual media (Bless, Higson-Smith and Kagee 2007). Data collection is the central and indispensable part of any inquiry as "no data" equals no project (Mertens, 2010). It can be said that the purpose of data is to learn about people or objects; as such, the focus should be on particular attributes or qualities of the respondents or setting (Cohen, Manion and Morrison 2007).

The researcher needs to be cautious in selecting the data collection instruments for a study (Bless, Higson-Smith and Kagee 2007; Cohen, Manion and Morrison 2007). Since this study was situated within the post-positivist paradigm, qualitative and quantitative methods were utilised for data generation. The justification for using a quantitative method is the view that the quality of data can be enhanced if the research instruments are objective, reliable and valid. Further, Cohen, Manion and Morrison (2007), Mertens (2010) and Babbie (2013) agree that reliable tools can and should produce consistent results if the study is replicated. They also note that instruments should measure what they are intended to measure, that is, validity, and should not be open to the researcher's views. For instruments to be reliable in qualitative research, they should be dependable, credible and confirmable. In addition, bias caused by differences in gender, age, race, ethnicity, sexual orientation, religion, disability, or social class should be reduced (Mertens 2010). This study generated data through an online questionnaire-based survey and interviews conducted via video conferencing. The data collection instruments are discussed below.

Permission to conduct the study was sought and granted by the Office of the President (Appendix A). This request included the submission of the study proposal. Once permission was granted (Appendix H), similar letters were written to the participating parastatals (Appendices B, C and D) who responded positively (Appendices I, J and K). Ethical clearance was applied for in accordance with the University of KwaZulu-Natal's (UKZN) Research Ethics Policy and this was granted by the Humanities and Social Sciences Research Ethics Committee (Appendix O).

4.7.1 Questionnaire

A questionnaire is a document containing questions designed to solicit information appropriate for analysis and is usually expected to be completed personally by the respondent (Babbie 2013). The current study utilised an online questionnaire using the Research Electronic Data Capture (REDCap) platform. The platform is popularly used in the health sciences. REDCap is a secure web application for building and managing online surveys and databases (Ndlovu, Mauco, and Grover 2019). It is based on open-source software and offers a secure web-based

platform for both online and offline data capture for research and operational projects. REDCap also offers user authentication mechanisms, in-built data quality checks, and data logging and is well-suited for research. It allows for data capture and storage even when there is no internet connectivity, and can later synchronise when connectivity becomes available (Ndlovu, Mauco and Grover 2019).

The current study employed an online questionnaire (Appendix L) because of the prevailing Covid-19 pandemic, where social distancing was required. The questionnaire is a widely used and helpful instrument for collecting data. It typically provides for the collection of structured, often numerical data, which can be administered without the researcher's presence (as in the case of this study) and it is straightforward to analyse (Neuman 2014). In terms of the latter (data analysis) REDCap can export the collected data to statistical programmes and other data analysis software.

The consent form (by which respondents consented to participate in the study) was constructed within REDCap, and all respondents gave the necessary consent. The informed consent agreement stated that the survey was voluntary and that the participant could abandon the survey at any time without consequence. For three weeks (from 31st of March to 21st April 2021) after the initial email, reminders were automatically sent out by REDCap to those who had not completed the survey. The data were collected and stored by REDCap as the respondents completed the questionnaire. The third and final reminder was sent at the beginning of the third week (14th April 2021) and at the end of that week (21st April) the collected data were downloaded from REDCap and exported into SPSS for analysis.

The benefits of utilising an online questionnaire include:

- Low cost (saving time and money should there be hundreds or thousands of respondents);
- The inflow of data is quick (despite there being many respondents);
- Respondents can complete questionnaires at their own time and place (there is no bias because of the presence of the researcher);
- Closed questions are easily coded and analysed; and
- Respondent's anonymity can be assured (Bless, Higson-Smith and Kagee 2007).

REDCap allows the researcher to send a link to different emails. In addition, it allows the respondent to append the consent form. Given the nature of the survey, the questionnaire was in an online format and the questions were divided according to the study objectives, namely:

- Information culture

- Electronic records creation and capture
- Attitudes and values towards electronic records
- Trustworthiness of the electronic records keeping system.

The online questionnaire covered all the objectives of the study. The closed-ended questions were in a Likert scale format to measure the respondents' level of agreement or disagreement with various statements.

4.7.2 Interview

Research interviews are a two-way conversation initiated by the interviewer to obtain research-relevant information focused by him/her on specific content and objectives. When compared with questionnaires, interviews have a higher response rate than questionnaires because respondents become more involved and are motivated. There are various types of interviews, these include an informal conversation, an interview guide approach, standardised open-ended, and closed quantitative interviews. Thus, similar to questionnaires, interviews can be structured or unstructured.

Video conferencing is a relatively new phenomenon in qualitative data collection and those who have engaged in video conferencing have noted several advantages in doing so. The advantages of using video conferencing are that, unlike the telephone interview, it allows face-to-face viewing. Weller (2017) points out that, unlike in-person interviews, participants in a video conference interview can participate in their own convenient space but unlike a telephone interview, they feel personally connected with their interviewer. Furthermore, Gray, Wong-Wylie, Rempel and Cook (2020) posit that video conferencing provides accessibility to the participants. Furthermore, for interviewers, the advantages include time-saving, secure data generation and storage, personal safety, and cost-effectiveness without compromising a meaningful connection with the participants.

Sedgwick and Spiers (2009) point out that video conference-based conversations do not replicate face-to-face, in-person interactions. This is supported by Lobe, Morgan and Hoffman (2020) who argue that an online interview does not provide "body talk and communication efficiency". While video conferencing software allows the participant and interviewer to hear and see each other, they do not occupy the same physical space resulting in missed opportunities for the researcher to observe the participant's physical space and respond to body language and emotional cues (Marhefka, Lockhart and Turner 2020). However, Gray et al. (2020) and Deakin and Wakefield (2014) observe that researchers who compared face-to-face with online video conferencing interviews found the quality of the interviews did not differ from face-to-face interviews. The other disadvantages of using

video conferencing technology can include disturbance of the interview due to low bandwidth or even total internet disruption. When using any video conferencing platform, there may be financial costs involved and possible technical difficulties. Technical difficulties may arise in setting up and conducting the interviews and uploading or using the interview recording. Other challenges may be related to participants' electronic devices such as the slow speed of the devices (Upadhyay and Lipkovich 2020).

There are protocols that one has to observe when conducting an online interview. Marhefka, Lockhart and Turner (2020) posit that having protocols in place will simplify the process and help reduce unexpected challenges. An important requirement is for participants to be in a quiet place to ensure that there are no interruptions and disturbances from their surroundings (Lobe, Morgan and Hoffman 2020). Therefore, the researcher in the current study requested the interviewee to choose a space where there would be no disturbance during the interview.

With the surge of the Covid-19 pandemic, most organisations reverted to using video conferencing facilities to conduct meetings and conferences. The organisations participating in the current study were no exception in this regard. They had adopted Microsoft Teams as their mode of communication. Microsoft Teams was, therefore, employed in the study to conduct interviews as it was considered the official mode of communication.

The interview guides (Appendix M and N), together with the consent forms, were sent via email to the participants before the actual interviews took place. As with the questionnaire survey, the participants were informed about their right not to participate in the study and that they could withdraw from the interview should they so wish. They were also informed that the interview would be recorded and transcribed verbatim and that they would have the opportunity to review and, if necessary, correct the contents of the interview after it has been transcribed. To create a rapport with the interviewee, the researcher began by explaining the purpose of the interview. In video conferencing, Gray et al. (2020) note that the researcher's comfort level with technology may influence their ability to build rapport. To increase his comfort level the researcher attended Microsoft Team training at his workplace (University of Botswana). Furthermore, the pretesting of the instrument (see discussion below) helped the researcher develop confidence in the use of the platform.

As with the questionnaire, the interview protocols had four sections structured according to the study objectives, namely:

- Information culture
- Electronic records creation and capture
- Attitudes and values towards electronic records

- Trustworthiness of the electronic records keeping systems.

The interview data collection occurred concurrently with the online questionnaire per the research design in section 4.4. The purpose of the interview data collection was to complement the questionnaire.

4.8 Reliability, validity and credibility

This section presents a discussion of the reliability and validity of the questionnaire as well as the credibility of the qualitative findings.

4.8.1 Validity

Babbie (2013) defines validity as the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. It is concerned with what the instrument actually measures. In a nutshell, validity is about the effectiveness (or success) of an instrument in measuring the specific property which it intends to measure. The study employed content validity and pretesting to establish the validity of the instruments.

4.8.1.1 Content validity

According to Bless, Higson-Smith and Kagee (2007), content validity provides evidence about the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose. The study ensured that the instruments' items reflected the key research questions. As alluded to above the instruments were examined by experts in information science and one research methodologist from the University of Botswana. This helped assess whether the questions posed were relevant to the subjects they aimed to measure, whether they were a reasonable way to gain the needed information, and if the instruments were well-designed.

4.8.1.2 Pretesting

Pretesting is done before one can carry out the study because it allows the researcher to make useful adjustments to the data collection instruments. There is an emphasis in social research to conduct a pretest before proceeding to collect data. The recommended number for a pre-test is 15-35 people (Bless, Higson-Smith and Kagee 2007). Mertens (2010) advises researchers to pretest 50% or more of the sample. Hilton (2017), however, points out that

this advice assumes the availability of resources and that the advice is not always practically possible to implement. Although the value of pretesting has been recognised as critical to the valid measurement of phenomena by survey methodology, Alaimo, Olson and Frongillo (1999) and Hilton (2017) argue that there is a lack of pretesting protocols or guidelines. However, Ruane (2005:35) and Hilton (2017) do point out that respondents in the pretest can be asked to think out loud while completing the pretest questionnaire and/or the interviewer can introduce probe questions to check that the questions are understood and being interpreted as intended. Drennan (2003) and Hilton (2017) both agree that cognitive interviewing is best characterised as a combination of think-aloud and probing procedures. Cognitive interviewing involves the researcher asking survey respondents to think out loud as they go through a survey questionnaire and tell them everything they are thinking (Drennan 2003). This helps ensure understanding of the questionnaire from the respondents' perspectives rather than from that of the researcher. However, the procedures mentioned above were not possible to apply in the current study because of Covid-19 and the questionnaire was pretested online without the researcher being present.

Aspects that need to be checked when pretesting questionnaires should include instructions given to respondents, style and wording of the questions, formality and informality of the questions (tone and presentation), length of the questionnaire, sequence of questions, scales and format used, and quality of individual questions (objectivity) (Bless, Higson-Smith and Kagee 2007).

A pretest of the survey questionnaire was conducted on the 29th January 2021 at the University of Botswana's Records Management Unit which deals with administrative records. The University of Botswana is a parastatal and was not part of the study. Bless, Higson-Smith and Kagee (2007) emphasise that the pre-testing entity should not be part of the study. The survey link was sent via email to 20 records officers in the Records Management Unit to pre-test the questionnaire and 17 officers responded.

The questionnaire was also shared with and critiqued by graduate students for the course "Constructing Questionnaires and Surveys" at the University of Botswana (Appendix P). The class was chosen to review the instrument because at the time of constructing and refining the questionnaire, the class was also busy with a module on questionnaire review and as part of their class assignment, they asked the researcher to avail the questionnaire for reviewing. The feedback focused on the informed consent form and the main questions and was as follows:

Informed consent document:

It was pointed out that getting consent is a crucial step in the administration of questionnaires (or any other data collection tool) and how it is presented needs careful crafting.

- Salutation: *Questionnaires are ideal for surveys (finite populations) which means you know who is in your sample, so if possible, name them. This improves response rates.*
- *Suggest you do not bullet but rather describe in sentences. This is a letter so needs details.*
- *Do indicate when a response is expected.*
- *State benefits to responding. Let them know if there are any. (Note that these need not be monetary but communal or even just advancement of knowledge.)*
- *This letter should show affiliation (be on letterhead).*

Questionnaire:

Various suggestions were provided as follows:

- *Number sections for ease of reference, especially during analysis.*
- *Better use numbers for naming (coding), for example, Gender 1 = Male, 2 = Female (and not a and b).*
- *If possible, close the questions on designation, division and organisation as your sample is probably specific as to the kind of respondents you expect.*
- *Include transitional/introductory statements at the beginning of sections and not just to throw respondents into reading what is in the tables.*

All the suggestions were taken into consideration and implemented.

4.8.2 Reliability

Reliability is concerned with the consistency of measures. Bless, Higson-Smith and Kagee (2007:150) state that reliability of measurement is the degree to which an instrument produces equivalent results when the study for which it was used is repeated. Teddlie and Tashakkori (2009:211) opine that reliability is the degree to which the results of measurement consistently and accurately represent the exact magnitude or quality of a construct. The common understanding here is that if the use of the instrument is repeated over time, it should yield the same results for it to be considered reliable. For the measurements to be meaningful there should be variance in the scores among varying subjects

The data collected from the respondents participating in the pretest was exported from REDCap into SPSS, coded and labelled and once this was done a Cronbach's alpha was run. Cronbach's alpha is a statistic commonly used to demonstrate that tests and scales that have been constructed or adapted for research projects are fit for purpose. It is usually used to test reliability (internal consistency). Thus, the data collected were subjected to reliability analysis using Cronbach's alpha method to determine the measures and ensure dependable measurements among the different items in the instrument.

Table 4.4: Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.808	.818	58

Source: Field data (2021)

Running Cronbach's alpha on all the study variables yielded the desired coefficient. In terms of item-by-item analysis, Cronbach's alpha was between .793 and .800 which is generally considered good (Eisinga, Te Grotenhuis and Pelzer 2013). Thus, no item was removed as a threat to reliability and the instrument was considered reliable.

4.8.2.1 Credibility of qualitative findings

In qualitative research, the term reliability is similar to credibility, conformability, dependability, consistency and applicability. Credibility is defined as the extent to which the data and data analysis are believable and trustworthy (Cope 2014:89). The researcher ensured proper documentation of the methodology and this increased and ensured the reliability of the tests for the study. The study maintained the same meaning of every research question and research questions were framed in an easily understandable manner (Bless, Higson-Smith and Kagee 2007).

The study also employed member checking, also known as participant or respondent validation, to explore the credibility of the results. Creswell (2013:208) suggests that the researchers take "data, analyses, interpretations, and conclusions back to the participants so they can judge the accuracy and credibility of the account." The researcher sent narrative descriptions from the interviews to the study participants for member checking. Polit

and Beck (2004) purport that if researchers claim that their interpretations are good representations of participants' realities, then participants should be allowed to react to them. Polit and Beck (2004) advise that member checking with participants can be carried out both informally in an ongoing way as data are being collected, and more formally after data have been fully analysed. In the current study, the researcher carried out member checking as the data collection took place (ongoing). The researcher sent the interview transcripts to the interviewees to check the accuracy of the accounts once the transcriptions were complete. Furthermore, Birt, Scott, Cavers, Campbell and Walter (2016) argue that member checking enables the researcher to make claims about the transcription accuracy because it focuses on confirming, modifying, and verifying the interview transcript.

Peer debriefing is when the researcher shares the study with a few professionals from the research community who are interested in the study but not part of the study. Selected peers may question the research's methodology and theoretical framework used in the study (Saunders, Lewis and Thornhill 2009). In this regard, the researcher sought assistance from the lecturers at the University of Botswana's Department of Library and Information Studies to review and critique the data collection tools and their input helped improve the tools.

4.9 Data analysis

Data analysis refers to how data collected from the field is classified and interpreted. It helps in drawing conclusions and generalisations of findings to a problem statement. According to Polit and Beck (2004:586), "The purpose of both qualitative and quantitative data analysis is to organize, provide structure to and elicit meaning from research data." De Vos, Fouché and Venter (2002) define data analysis as the breaking down and ordering of the quantitative information gathered through research (or some other means of data gathering). It also involves searching for trends and patterns of associations and relationships among these data or groups of them (Marshal and Rossman 1995; Fain 2017). Thus, data analysis involves statistical applications and a thematic approach in presenting findings. Gay, Mills and Airasian (2006) and Ryan, Coughlan and Cronin (2007) point out that data analysis is meaningful in relation to research findings, helping to make sense of them and assisting the researcher in responding to the research questions.

Creswell and Clark (2018) state that analysis occurs in both qualitative and quantitative approaches in mixed methods research. The current study followed a systematic analysis of both the qualitative and quantitative data. The data sets were first coded before being analysed. Braun and Clarke (2014:9) define codes as "the building blocks for identifying patterns of meaning in the data, underpinned by a central organising concept." Coding helps break the data into pieces that will enable easier analysis and presentation (Peel 2020).

4.9.1 Quantitative data

Quantitative data are often associated with large-scale research. However, Cohen, Manion and Morrison (2007) assert that such data can also serve small-scale investigations. Quantitative data in the current study were analysed using statistical tools to reduce the data, summarise them, and make the most important facts and relationships apparent.

Before the statistical analysis of the quantitative survey results was done, data screening was conducted. This screening was based on a checklist (Tabachnick, Fidell and Osterlind 2001). The screening was done to check the accuracy of the data file (was the data entered correctly?), missing data (was the data missing randomly or was there a pattern?), and normality (was there a normal distribution?). As earlier noted, the data were exported from the REDCap platform to the SPSS. The latter is well known as a comprehensive, relatively easy-to-use statistical package for report writing, tabulation, and general-purpose data management (Creswell and Clark 2018). This was followed by data coding that involved assigning a label to each question and a value to each response category. The statistics were then analysed to provide a summary of numeric data in interpretable tables and graphs. The current study employed descriptive statistics to describe what the data showed, thus helping to simplify a large amount of data sensibly. Descriptive statistics include frequency counts and percentages presented in tables and pie charts to describe variables and their occurrences. The study also employed multiple hierarchical linear regression to establish whether information culture significantly affects records management.

4.9.2 Qualitative data

Cohen, Manion and Morrison (2007) acknowledge that there is no single or correct way to analyse and present qualitative data. Qualitative data analysis consists of organising, accounting for, and explaining the data. When analysing qualitative data, one has to make sense of the data, noting patterns, themes, categories, and irregularities. The analysis of the qualitative data in the current study was done using ATLAS.ti-9 software. In terms of data preparation, qualitative data, as discussed, were collected through interviews. The recorded interview data were prepared by way of verbatim transcriptions. The transcriptions were checked for accuracy by listening to the audio recordings and comparing them with the transcribed texts. The following 14 steps were taken in analysing the qualitative data:

1. After transcription of the interview, units of analysis were selected.
2. The interview transcriptions were uploaded into the ATLAS.ti-9 software.
3. Interview transcripts from the same parastatals were grouped together.
4. The researcher then re-read the transcripts to make sense of the data.
5. The researcher created quotations of relevant data segments.
6. The concepts and phrases that relate to research from the relevant quotations were identified.
7. The relevant texts were labelled using open coding.
8. The code list generated during the coding exercise was examined.
9. The concepts (codes) were compared to ascertain common categories of concepts (themes).
10. The codes were merged and split to reduce the redundancy of codes.
11. The concepts were categorised (into themes).
12. A data network was developed that synthesised various codes, quotations and their link to their original documents (see Appendix P).
13. The data network was queried to develop statements or make sense of the network.
14. Narratives were written for the statements.

4.10 Ethical considerations

Saunders, Lewis and Thornhill (2009:95) define research ethics as "the appropriateness of a researcher's behaviour in relation to the rights of those who become the subjects of the study or are affected by it." According to Cohen, Manion and Morrison (2007), ethics concerns right or wrong. Ethics serve as a guide and set what can be considered acceptable or even good. Ethical issues arise from the types of problems being investigated and methods used to obtain data. Therefore, research ethics concerns how we formulate and clarify our research topic,

design our research, gain access, collect data, process and store data, analyse data, and write up research findings doing so properly and responsibly. Procedural ethics are not enough in that the researcher must also take responsibility for and determine how the contents, purpose, methods, and reporting abide by ethical principles and practices. Cohen, Manion and Morrison (2007:75) state that "the researchers have to strike a balance between the demands placed on them to pursue the truth and their subject's rights and values that are threatened by research."

Bless, Higson-Smith and Kagee (2007) and Mertens (2010) identified five ethical principles in a research context:

- Non-maleficence: the principle that the participant will not be harmed by their participation in the research.
- Beneficence: the research would benefit those who participate in the study.
- Autonomy: those who participate in the research are informed of their autonomy, that is, their right to decide whether to participate in the study or not and to withdraw from the study at any time.
- Fidelity: the participants in the study are informed of the researcher's commitment to any agreement or promises entered into with them.
- Justice: the commitment to keep whatever is discussed and gathered confidential, as well as the use of the principle of anonymity – no names or details of the respondents are to be revealed under any circumstances.

The ethical issues to consider in an online interview are similar to those in a face-to-face interview (Lobe, Morgan et al. 2020). Some of the ethical issues in online video conferencing include the privacy of participants, the confidentiality of data, and data security. To overcome some of these issues, privacy during the video conference was ensured by participation being on an invitation basis, that is, the interviewee was required to sign in to Microsoft Teams alone to avoid intruders, and to ensure the confidentiality of the data and personal identifiers were not used. Thus, interviewees have not been named in the study. Furthermore, in terms of the online survey, the questionnaire used did not have any identifier and no questionnaire could be associated with a specific respondent. The current study sent consent forms to participants which they completed and emailed back to the researcher. The data security issue was dealt with as stipulated in the UKZN's Ethics Policy as stated below.

In light of the above ethical considerations, a series of protocols to guide and maintain ethical behaviour were used. The protocols were:

- The ethical requirements as set out by the above-mentioned UKZN Ethics Policy were strictly adhered to. As earlier noted, the researcher obtained ethical clearance to conduct the study from the UKZN's

Humanities and Social Sciences Research Ethics Committee in 2019. In 2020 the researcher re-applied for an amendment due to the Covid-19 pandemic and the amendment was granted.

- Also, as noted earlier, a research permit was sought from the President's Office in Botswana in line with a new law that required researchers to obtain permission from the Office before they can proceed with data collection. The necessary permission was granted. Furthermore, a letter was written to the participating parastatals in which permission was sought to conduct the study. Again, the necessary permission was granted.

- Following the UKZN Ethics Policy, the completed questionnaires, audio/video records, signed consent forms and data outputs from SPSS and ATLAS.ti-9 were to be handed to the supervisor after the completion of the study for safekeeping for five years.

- The works used in this study were duly cited according to the correct format and acknowledged. Therefore, the researcher's biases and personal opinions have been disclosed.

- Finally, codes were used to ensure the confidentiality and anonymity of participants in the questionnaire survey. Furthermore, the participating organisations were referred to by codes.

4.11 Summary

This chapter presented the methodologies used to gather data for the study. The chapter focused on the following: research methodology; research approach; research design; study population and sampling; data collection instruments; reliability and validity; data analysis; and ethical considerations.

The chapter began by discussing paradigms and the various types of paradigms that exist. It presented the worldview that underpinned the study and its relevance to the study. The quantitative and qualitative research approaches and their relevance were discussed. The mixed methods approach was deemed the most appropriate for the study as it allowed for the combined strengths of the qualitative and quantitative approaches. The study design, that is, a survey, was made explicit and how it was applied. The population of the study was described as well as the two sampling strategies used in selecting respondents, namely, random and non-random (purposive) sampling. The data collection instruments were presented and these comprised an online questionnaire and an interview reflecting the quantitative and qualitative dimensions of the study respectively. This was followed by a

discussion of reliability and validity, data analysis and the chapter ended with a review of the ethical considerations of the study and how they were dealt with.

Chapter 5 which follows, presents the results.

Chapter 5

Presentation of results

5.0 Introduction

This chapter presents the findings from the online survey administered via the REDCap platform and findings from the online interviews using the Microsoft Teams platform. The questionnaire used in the survey was answered by staff members from different departments in the participating parastatals who interact with the electronic records systems daily. The online interviews were conducted with records managers and representatives appointed on behalf of the CEOs in the participating parastatals.

5.1. General background

The main objective of the study was to investigate how information culture affects records management. The study was carried out in three parastatals in Botswana. In this chapter, the three parastatals will be referred to as "organisations A, B and C". Similarly, for interview respondents, the codes 001, 002, 003, 004 and 005 will be used instead of their names because of ethical considerations as outlined in the previous chapter.

The findings are organised around the research questions. The study sought to address the following research questions:

- What kind of information cultures exist in Botswana parastatals?
- How does information culture affect the creation, capture and management of electronic records?
- What values and attitudes are accorded to electronic records?
- How trustworthy are the records keeping systems in the parastatals?
- What recommendations can be drawn from the finding of the study?

The two primary data sources for the study were an online questionnaire and an online interview. The findings from both data sets are presented as narrative and graphic representations in the form of tables, bar charts and pie charts. All percentages are rounded off to one decimal place; therefore, some of the total percentages may be more than 100%.

5.2 Response rate

Response rates are calculated by dividing the number of the returned questionnaires by the total number of eligible respondents in the sample and expressing it as a percentage. Corrall, Kennan and Afzal (2013) and Maxfield (2015) affirm that a response rate of 50% is adequate for data analysis and presentation. According to Babbie and Mouton (2013), a 50% response rate is adequate for analysis, while 65 % is considered good and 70% is very good. The response rate for this study for the different instruments is presented in Table 5.1 below:

Table 5.1: Response rate

Respondents	Data collection tool	No. of instruments distributed; interviews scheduled	No. of instruments returned; interviews held	Percent
Administrative officers, records officers and IT personnel	Online questionnaire	139	101	73%
Records managers, representatives of chief executive officers	Interview	6	5	83%

Source: Field data (2021)

A total of 101 employees from the three parastatals participated from the 139 selected for the sample giving a response rate of 73%. In terms of Babbie and Mouton's (2013) categorisation, the response rate could thus be considered very good. A total of six interviews were supposed to be conducted; however, five interviews were completed giving a response rate of 83%.

5.3 Presentation of results

The findings from the quantitative and qualitative data are presented separately. To begin with, the survey respondents' demographic profiles are given and these are then followed by the quantitative findings organised

around the research questions. The qualitative findings from the interviews are then presented. As with the survey questionnaire, the demographic details of the interviewees are presented first and these are followed by the findings organised in terms of the research questions.

5.3.1 Demographics of respondents

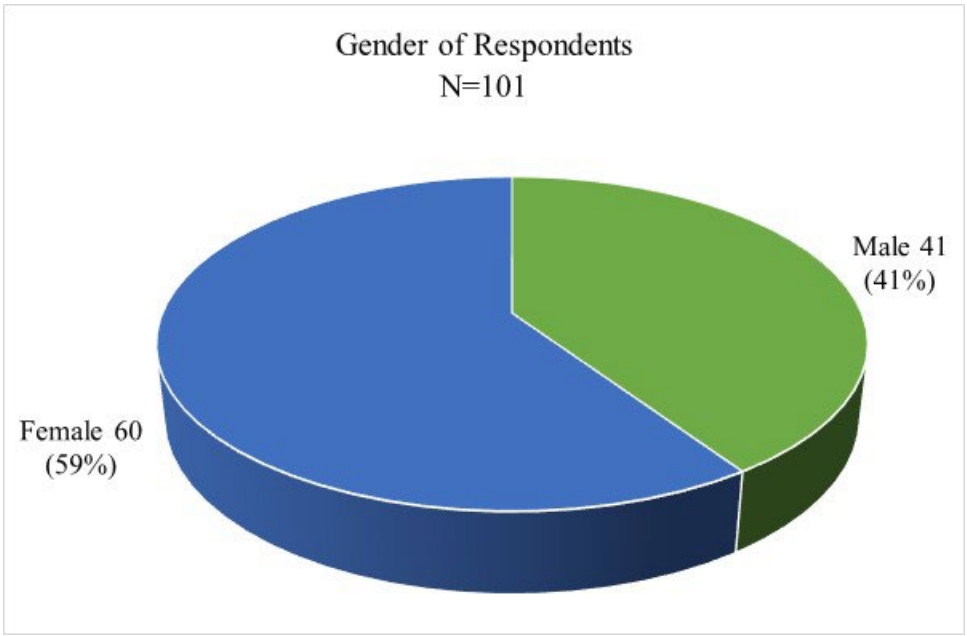
This section presents the demographic profile of respondents by age, gender, academic qualification and work experience. The findings are presented in pie and bar charts. While the respondents' gender and age did not meaningfully influence the study, they are outlined to show demographic trends and patterns within the study sample.

5.3.1.1 Gender

It was important to establish the gender of the respondents to determine the gender representation in the sample. The gender of respondents is reflected in Figure 5.1.

Figure 5.1: Gender of respondents

N=101



Source: Field data (2021)

Figure 5.1 above shows that the majority of the respondents were female, accounting for 60 (59%) of the total respondents. Male respondents were 41, representing 41% of the total respondents.

5.3.1.2 Age range of respondents

Figure 5.2 establishes the respondents' ages to appreciate the different age groups participating in the study.

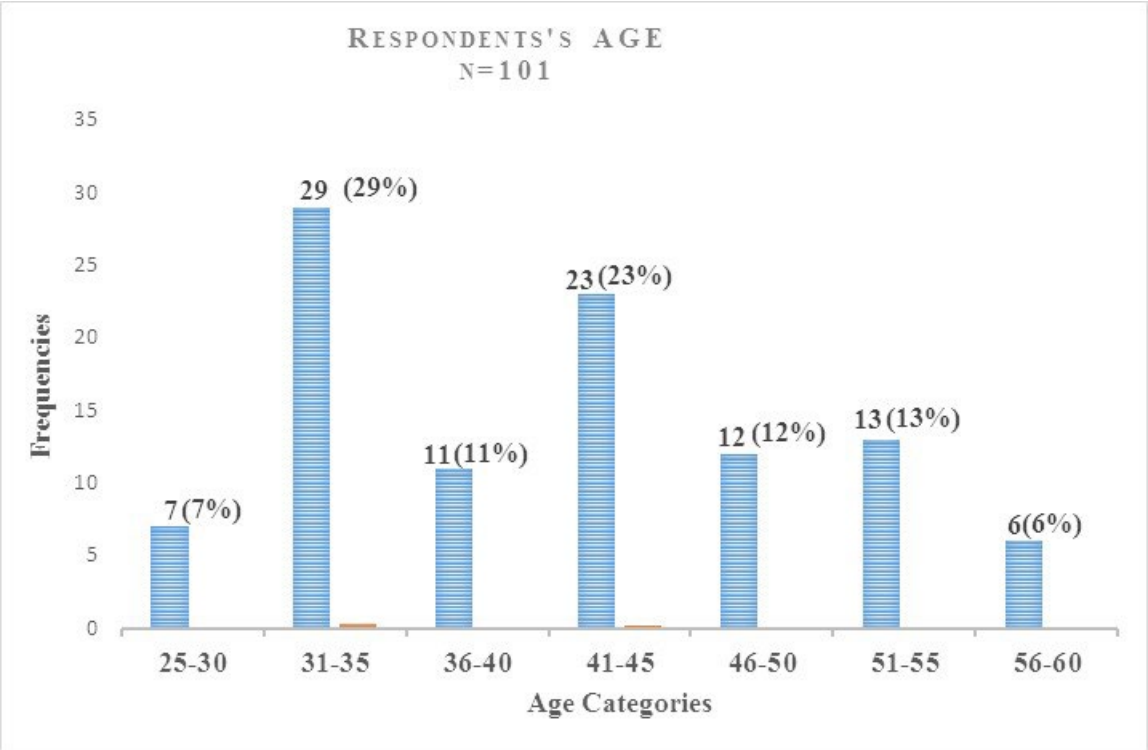


Figure 5.2: Age range of respondents

N=101

Source: Field data (2021)

Figure 5.2 shows that the highest number of respondents, 29 (29%), were between 31 to 35 years old. This is followed by those between 41-45 years, 23 (23%), and 51-55 years, 13 (13%). The 46-50 years old numbered 12 (12%), the 25-30 years old numbered seven (7%) and there were six (6%) respondents who were 56-60 years old.

5.3.1.3 Academic qualifications

The academic qualifications of the respondents were considered important in terms of showing the different academic groups that use or encounter records in their daily work. Figure 5.3 indicates the distribution of respondents based on their academic qualifications.

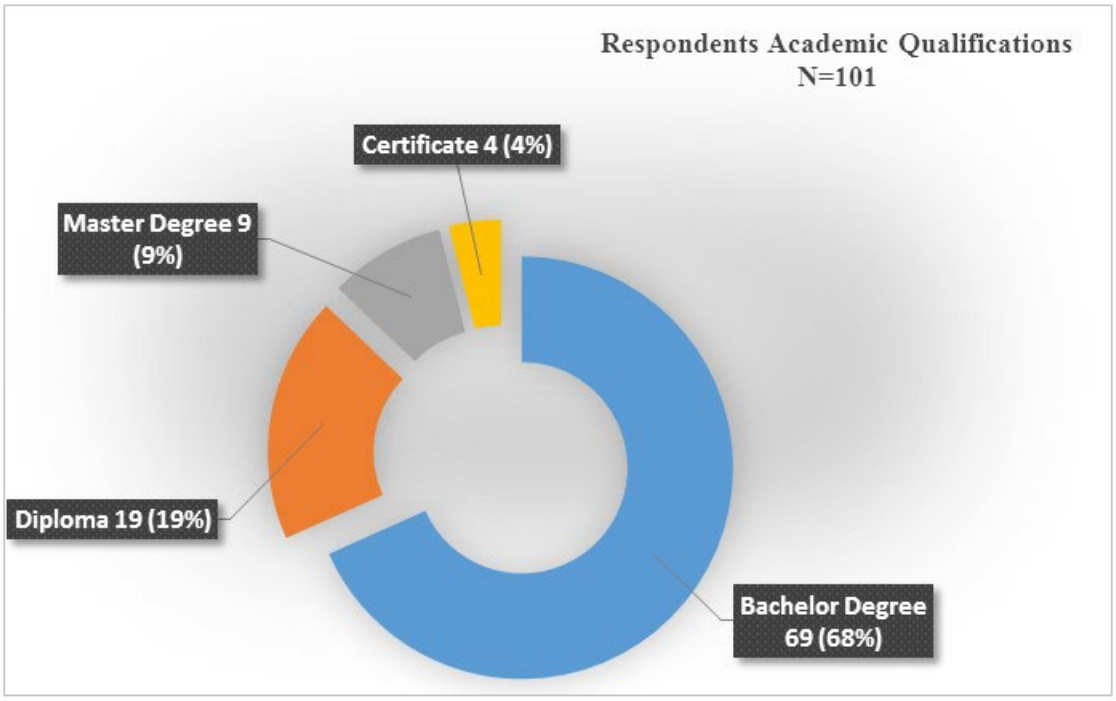


Figure 5.3: Academic qualifications of respondents

N=101

Source: Field data (2021)

Figure 5.3 shows that the majority of the respondents, 69 (68%) had a Bachelor's Degree as their highest educational qualification. This is followed by 19 (19%) Diploma holders and nine (9%) who had a Master's Degree. Finally, there were four (4%) respondents had a Certificate, the lowest of the qualifications held. It is evident that respondents were generally highly qualified in their respective areas within the parastatals.

5.3.1.4 Work experience

The study needed to establish the respondents' work experience as this would impact the credibility of their responses. The researcher contends that more experienced respondents are more likely to provide reliable and valid responses.

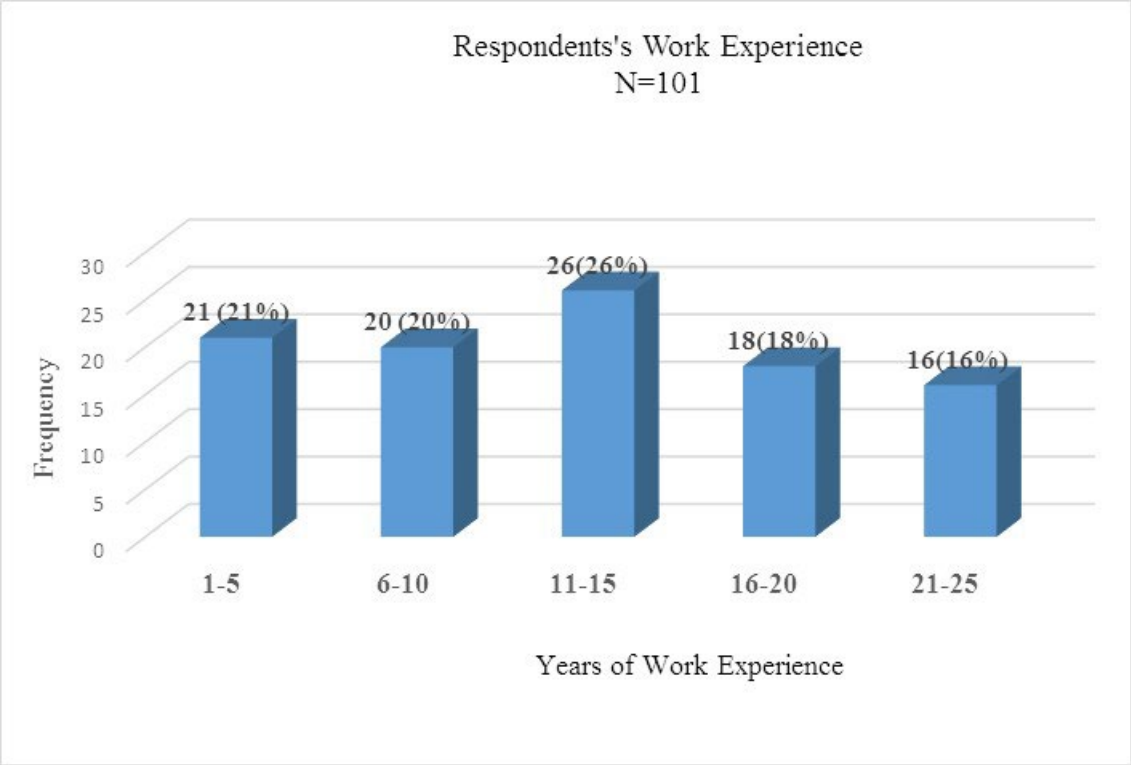


Figure 5.4: Work experience of the respondents

N=101

Source: Field data (2021)

Figure 5.4 indicates that the highest number of respondents, 26 (26%) had between 11 and 15 years of work experience. They were followed by those respondents who had between 1-5 and 6-10 years of experience numbering 21 (21%) and 20 (20%) respectively. Eighteen (18%) respondents had worked for 16-20 years and 16 (16%) for 21-25 years. Thus, the vast majority of respondents (80%) had work experience of six or more years indicating that they were well qualified in terms of experience to respond to the questions posed.

5.3.2 Questionnaire results based on research questions

The respondents were required to answer questions in the form of a Likert scale. A Likert scale assumes that attitudes can be measured and that the strength/intensity of an attitude is linear, that is, on a continuum from strongly agree to strongly disagree. Thus, the respondents selected answers ranging from strongly agree (SA), agree (A), neither agree nor disagree (NA/D), disagree (DA) and strongly disagree (SD) to reflect their attitudes and values accorded to records.

5.3.2.1 Values and attitudes accorded to electronic records management

Table 5.2 was set to solicit answers from the respondents on their attitudes to and values regarding records management. The objective presented in this section sought to answer the question on what values and attitudes are accorded to electronic records?

Table 5.2: Values and attitudes accord to records management

N=101

	Values and attitudes	SD		DA		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	Records management is part of my responsibility	0	0	6	6	4	4	47	47	44	44	0	0	101	101
2	I consider records management policies and standards when handling records	0	0	4	4	20	20	50	50	27	27	0	0	101	101
3	Records management is valuable	3	3	0	0	1	1	32	32	65	64	0	0	101	101
4	I make sure I file documents and emails appropriately	0	0	4	4	7	7	49	49	41	41	0	0	101	101
5	Records management is an essential part of my work	2	2	2	2	9	9	45	45	43	43	0	0	101	101
6	I prefer to search information (on the web, databases, reports) for decision making	0	0	9	9	21	21	53	53	18	18	0	0	101	101
7	Using the records management system is a good idea	0	0	0	0	2	2	39	39	60	59	0	0	101	101
8	Records management is a worthwhile activity	2	2	1	1	0	0	36	36	61	60	1	1	100	100
9	Records management is prioritised and integrated in business processes	2	2	4	4	27	27	42	42	25	25	1	1	101	101

10	Records management is everyone's responsibility	3	3	3	3	5	5	40	40	49	49	1	1	101	101
11	Records management requirements are a barrier to working efficiently	28	28	41	41	11	11	13	13	7	7	1	1	101	101
12	I always find a way of by-passing e-records system	21	21	36	36	32	32	8	8	2	2	2	1	100	100
13	I find it difficult to follow records procedures	22	22	51	51	13	13	14	14	0	0	1	1	101	101

Source: Field data (2021)

Forty-seven (47%) respondents agreed with the statement "Records management is part of my responsibility" while a similarly high number, 44 (44%) strongly agreed. Four respondents neither agreed nor disagreed, and six (6%) disagreed with the statement.

Fifty (50%) respondents agreed that they consider policies and standards when handling records, 27 (27%) strongly agreed, 20 (20%) neither agreed nor disagreed and four (4%) disagreed with doing so.

The statement "Records management is valuable" elicited the following responses: 65 (64%) respondents strongly agreed with the statement, 32 (32%) agreed, one (1%) neither agreed nor disagreed and, surprisingly, three (3%) strongly disagreed.

Forty-nine (49%) respondents agreed that they file documents and emails appropriately and 41 (41%) strongly agreed that they did so. Seven (7%) neither agreed nor disagreed and four (4%) disagreed with the statement.

The statement "Records management is an essential part of my work" had 45 (45%) and 43 (43%) respondents agreeing and strongly agreeing respectively. Nine (9%) respondents neither agreed nor disagreed with the statement while two (2%) disagreed and a further two (2%) strongly disagreed.

Fifty-three (53%) respondents agreed that they prefer to search information (on the web, databases, reports) for decision making and 18 (18%) strongly agreed. Twenty-one (21%) respondents neither agreed nor disagreed while nine (9%) disagreed with the statement.

“Using the records system is a good idea” 60 (59%) respondents strongly agreed, 39 (39%) agreed and two (2%) neither agreed nor disagreed with the statement.

“Records management is a worthwhile activity” 61 (60%) respondents strongly agreed, 36 (36%) agree while one (1%) disagreed and two (2%) strongly disagreed with the statement.

“Records management is prioritised and integrated into business processes” 42 (42%) respondents agreed, 25 (25%) strongly agreed, two (2%) neither agreed nor disagreed, four (4%) disagreed and two (2%) strongly disagreed with the statement.

“Records management is everyone’s responsibility” – 49 (49%) respondents strongly agreed, 40 (40%) agreed, five (5%) neither agreed nor disagreed, three (3%) disagreed and a further three (3%) strongly disagreed with the statement.

“Records management requirements are a barrier to working efficiently” 41 (41%) respondents disagreed, 28 (28%) strongly disagreed, 11 (11%) neither agreed nor disagreed, 13 (13%) agreed and seven (7%) strongly agreed with the statement.

“I always find a way of bypassing the e-records system” 36 (36%) respondents disagreed, 21 (21%) strongly disagreed, 32 (32%) neither agreed nor disagreed, eight (8%) agreed and two (2%) strongly agreed with the statement.

“I find it difficult to follow records procedures” 51 (51%) respondents disagreed, 22 (22%) strongly disagreed, 13 (13%) neither agreed nor disagreed and 14 (14%) agreed with the statement.

5.3.2.2 Trustworthiness of records

The statements in Table 5.4 sought to elicit responses that would provide information on whether respondents' trust in records had any bearing on their records keeping. The respondents were presented with nine statements. The section investigated how trustworthy the records keeping systems in the parastatals are.

Table 5.3: Trustworthiness of electronic records

N=101

	Trustworthiness of records	SDA		DA		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	Management expressly demands that I handle records according to the laws	2	2	11	11	31	31	36	36	19	19	2	2	101	101
2	I trust the records system as reliable	8	8	10	10	25	25	44	44	14	14	0	0	101	101
3	I am aware of IT controls relating to records management	2	2	23	23	22	22	37	37	15	15	2	2	101	101
4	I fail to locate documents created over a year ago	15	16	32	34	27	28.	18	18	3	3	6	6	101	101
5	I am confident that the records I create will not be altered by anyone	4	4	21	21	32	32	30	30	13	13	1	0	101	101
6	I find it difficult to use the IT system provided	22	22	43	43	23	23	9	9	2	2	2	2	101	101
7	I find it difficult to follow the classification system	15	15	38	39	26	27	16	16	3	3	3	0	101	101
8	I don't use organisational records because I don't trust them	29	29	44	44	19	19	9	9	-	-	0	0	101	101
9	I always find missing information in our records	11	11	26	26	21	21	31	31	10	10	2	2	101	101

Source: Field data (2021)

Thirty-six (36%) respondents agreed that their management expressly demands that they handle records according to the laws while 19 (19%) strongly agreed. Thirty-one (31%) neither agreed nor disagreed, 11 (11%) disagreed and two (2%) strongly disagreed.

The statement "I trust the records system as reliable" elicited the following responses: Forty-four (44%) respondents agreed, 14 (14%) strongly agreed, 25 (25%) neither agreed nor disagreed, 10 (10%) disagreed and eight (8%) strongly disagreed with the statement.

On their awareness of IT controls relating to records management, 37 (37%) respondents agreed that they are aware and 15 (15%) strongly agreed. Twenty-two (22%) neither agreed nor disagreed, 23 (23%) disagreed and two (2%) strongly disagreed with their being aware of IT controls.

Thirty-two (34%) disagreed with the statement "I fail to locate documents created over a year ago" while 15 (15%) strongly disagreed. Twenty-seven (28%) neither agreed nor disagreed, 18 (18%) agreed and three (3%) strongly agreed with the statement. A comparatively high number of respondents, six (6%) did not respond.

Thirty (30%) respondents agreed that they felt confident that no one will alter the records they create while 13 (13%) strongly agreed. Thirty-two (32 %) neither agreed nor disagreed, 21 (21%) disagreed and four (4%) strongly disagreed with their feeling confident concerning the alteration of records.

"I find it difficult to use the IT system provided". Forty-three (43%) respondents disagreed, 22 (22%) strongly disagreed, 23 (23%) neither agreed nor disagreed, nine (9%) agreed and two (2%) strongly agreed with the statement.

On using organisational records when making decisions, 51 (50%) agreed, 21 (21%) strongly agreed, 18 (18%) neither agreed nor disagreed and 11 (11%) strongly disagreed with the statement.

Thirty-one (31%) respondents agreed that they always find missing information in their organisation's records, 10 (10%) strongly agreed, 21 (21%) neither agreed nor disagreed, 26 (26%) disagreed and 11 (11%) strongly disagreed with the statement.

5.3.3 Information culture

This section presents the findings on the information culture types investigated by the study. These information culture types comprised of information sharing, information transparency, information integrity and information proactiveness. The section sought to answer the questionnaire on the kind of information cultures in Botswana parastatals.

5.3.3.1 Information sharing

The series of statements under this variable sought to determine the respondents' information sharing behaviours. Five statements were provided and the findings relating to each statement are presented in Table 5.5 and further described beneath the table.

Table 5.4: Information sharing

N=101

	Statements	SD		DA		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	I often exchange information with the people with whom I work regularly	4	4	26	26	21	21	31	31	10	10	0	0	101	101
2	I often exchange information with people outside of my regular work unit but within my organisation	7	7	8	8	15	15	56	55	15	15	0	0	101	101
3	In my work unit, I am a person that people come to often for information	3	3	18	18	29	29	27	27	24	24	0	0	101	101
4	I often exchange information with citizens, customers, or clients outside my organisation.	5	5	27	27	23	23	39	39	7	7	0	0	101	101
5	I share information widely	1	1	6	6	26	26	43	43	25	25	0	0	101	101

Source: Field data (2021)

“I often exchange information with the people with whom I work regularly”
Thirty-one (31%) respondents agreed with the statement, 10 (10%) strongly agreed, 26 (26%) disagreed, four (4%) strongly disagreed and 21 (21%) neither agreed nor disagreed.

“I often exchange information with people outside of my regular work unit but within my organisation”
Fifty-six (56%) respondents agreed with the statement, 15 (15%) strongly agreed, eight (8%) disagreed, seven (7%) strongly disagreed and 15 (15%) neither agreed nor disagreed.

“In my work unit, I am a person that people come to often for information”
Twenty-seven (27%) respondents agreed with the statement, 24 (24%) strongly agreed, 18 (18%) disagreed, three (3%) strongly disagreed and the highest number of respondents, 29 (29%) neither agreed nor disagreed.

“I often exchange information with citizens, customers, or clients outside my organisation”
Thirty-nine (39%) respondents agreed with the statement, 27 (27%) disagreed, seven (7%) strongly disagreed and 23 (23%) neither agreed nor disagreed.

“I share information widely”
Forty-three (43%) respondents agreed with the statement, 25 (25%) strongly agreed, six (6%) disagreed, one (1%) strongly disagreed and 26 (26%) neither agreed nor disagreed.

5.3.3.2 Information transparency

Table 5.5 presents statements on whether employees showed “openness” in how information is handled and used in their organisations.

Table 5.5: Information transparency

N=101

	Statements	SD		DA		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	Supervisors of my work unit encourage openness	2	2	9	9	17	17	42	42	21	21	10	10	101	101
2	The people I work with regularly share information on errors or failures openly	4	4	15	15	27	27	43	43	12	12	0	0	101	101
3	The people I work with regularly use the information on failures and errors to address problems constructively	5	5	19	19	30	30	33	33	13	13	0	0	101	101

Source: Field data (2021)

"Supervisors of my work unit encourage openness"

Forty-two (42%) respondents agreed with the statement, 21 (21%) strongly agreed, nine (9%) disagreed, two (2%) strongly disagreed and 17 (17%) neither agreed nor disagreed. Ten (10%) respondents did not answer.

"The people I work with regularly share information on errors or failures openly"

Forty-three (43%) respondents agreed with the statement, 12 (12%) strongly agreed, 15 (15%) disagreed, four (4%) strongly disagreed and a high number of respondents 27 (27%) neither agreed nor disagreed.

"The people I work with regularly use the information on failures and errors to address problems constructively"

Thirty-three (33%) respondents agreed with the statement, 13 (13%) strongly agreed, 19 (19%) disagreed, five (5%) strongly disagreed and again a high number of respondents, 30 (30%) neither agreed nor disagreed.

5.3.3.3 Information integrity

The three statements under information integrity sought to determine whether the information is trustful and principled at the individual and organisational levels. Table 5.6 presents responses on information integrity.

Table 5.6: Information integrity

N=101

	Statements	SD		DA		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	Knowingly pass inaccurate information about the organisation's operations	16	16	40	40	24	24	17	17	4	4	0	0	101	101
2	Among the people I work with regularly, it is normal for individuals to keep information to themselves	15	15	28	28	23	23	26	26	9	9	0	0	101	101
3	Among the people I work with regularly, it is common to distribute information to justify a decision already made	6	6	16	16	16	16	40	40	6	6	0	0	101	101

Source: Field data (2021)

"Knowingly pass inaccurate information about the organisation's operations"

Fourteen (14%) respondents agreed with the statement, two (2%) strongly agreed, a high number, 40 (40%) disagreed, 16 (16%) strongly disagreed and 24 (24%) neither agreed nor disagreed.

"Among the people I work with regularly, it is normal for individuals to keep information to themselves"

Twenty-six (26%) respondents agreed with the statement, nine (9%) strongly agreed, 28 (28%) disagreed, 15 (15%) strongly disagreed and 23 (23%) neither agreed nor disagreed.

"Among the people I work with regularly, it is common to distribute information to justify a decision already made"

Forty (40%) respondents agreed with the statement, 6 (6%) strongly agreed, 16 (16%) disagreed, six (6%) strongly disagreed and 16 (16 %) neither agreed nor disagreed.

5.3.3.4 Information proactiveness

The three statements under this variable sought to solicit answers on whether employees can obtain new information to respond quickly to business changes and promote innovation in products and services. Table 5.7 presents results on information proactiveness.

Table 5.7: Information proactiveness

N=101

	Statements	SD		DA		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	I use the information to respond to changes and developments going on outside my organisation	2	2	15	15	34	34	41	41	9	9	0	0	101	101
2	I use the information to create or enhance organisation products services and processes	3	3	11	11	27	27	49	49	11	11	0	0	101	101
3	I seek relevant information on changes and trends outside my organisation	4	4	20	20	24	24	41	41	11	11	1	1	101	101

Source: Field data (2021)

"I use the information to respond to changes and developments going on outside my organisation"

Forty-one respondents (41%) agreed with the statement, nine (9%) strongly agreed, 15 (15%) disagreed, two (2%) strongly disagreed, and a high number of respondents, 34 (34%) neither agreed nor disagreed.

"I use the information to create or enhance organisation products services and processes"

Forty-nine (49%) respondents agreed with the statement, 11 (11%) strongly agreed, 11 (11%) disagreed, three (3%) strongly disagreed and 27 (27%) neither agreed nor disagreed.

"I seek relevant information on changes and trends outside my organisation"

Forty-one (41%) respondents agreed with the statement, 11 (11%) strongly agreed, 20 (20%) disagreed, four (4%) strongly disagreed and 24 (24%) neither agreed nor disagreed.

After identifying the information behaviours and values, it was necessary to establish whether information culture significantly affects records management. Multiple linear regression was performed to determine the significance of information culture on ERM.

5.3.4 Information culture, electronic records creation and capture

Table 5.8 reflects the findings relating to the information culture in the three organisations and how it affects the creation, capture and management of electronic records. The section first, presents findings on electronic records creation and capture. Lastly multiple hierarchical linear regression analysis is presented to test the relationship between information culture and electronic records management.

Table 5.8: Records creation and capture

N=101

Records creation and capture		SD		D		NA/D		A		SA		NR		Total	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%
1	I am guided by policies in creation/capture of records	5	5	16	16	18	18	39	39	22	22	1	1	100	100
2	I know the right metadata to capture for records	3	3	23	23	35	35	23	23	16	16	1	0	101	101
3	I am aware of the cost of my lack of adherence to proper records creation and capture	1	1	8	8	12	12	49	50	28	29	3	3	101	101
4	Official records I create are adequately captured	2	2	8	8	27	27	39	39	24	24	1	1	101	101

5	I send the records that I created to records management unit	3	3	15	15	23	23	33	33	27	27	0	0	101	101
6	I am aware of procedures for creating and capturing records	2	2	26	26	23	23	25	25	25	25	0	0	101	101
7	I am able to access records created by others	6	6	25	25	20	20	36	36	14	14	0	0	101	101
8	The organisation enforces proper records creation and capture	6	6	17	17	30	30	25	25	23	23	0	0	101	101
9	There are measures in place to control access to records	5	5	12	12	20	20	45	45	19	19	0	0	101	101

Source: Field data (2021)

Thirty-nine (39%) respondents agreed that policies guide them in creating and capturing records, while 22 (22%) strongly agreed with the statement. Eighteen (18%) neither agreed nor disagreed, 16 (16%) disagreed and five (5%) strongly disagreed.

Regarding knowing the right metadata to be captured for records, the highest number of respondents, 35 (35%) neither agreed nor disagreed, 23 (23%) agreed, 16 (16%) strongly agreed, 23 (23%) disagreed and three (3%) strongly disagreed.

Forty-nine (50%) of the respondents agreed that they were aware of the cost of their lack of adherence to proper records creation and capture and 28 (29%) strongly agreed. Twelve (12%) neither agreed nor disagreed, eight (8%) disagreed and one (1%) strongly disagreed.

Thirty-nine (39%) respondents agreed that the records they create are adequately captured while 24 (24%) strongly agreed with the statement. Twenty-seven (27%) neither agreed nor disagreed, eight (8%) disagreed and two (2%) strongly disagreed.

Thirty-three (33%) respondents agreed and 27 (27%) strongly agreed with the statement "I send the records that I created to the records management unit". Twenty-three (23%) neither agreed nor disagreed, 15 (15%) disagreed and three (3%) strongly disagreed with the statement.

Concerning awareness of procedures for creating and capturing records, 26 (26%) respondents disagreed, two (2%) strongly disagreed, 23 (23%) neither agreed nor disagreed, while 25 (25%) agreed and the same number (25) strongly agreed.

Thirty-six (36%) respondents agreed and 14 (14%) strongly agreed with the statement concerning being able to access records created by others. Twenty (20%) neither agreed nor disagreed, 25 (25%) disagreed and six (6%) strongly disagreed.

Thirty (30%) respondents neither agreed nor disagreed with the statement that the organisation enforces proper records creation and capturing. Twenty-five (25%) agreed, 23 (23%) strongly agreed, 17 (17%) disagreed and six (6%) strongly disagreed.

Regarding controlling access to records, 45 (45%) respondents agreed that there are measures in place to control access to records and 19 (19%) strongly agreed. Twenty (20%) neither agreed nor disagreed, 12 (12%) disagreed and five (5%) strongly disagreed with the statement.

5.3.4.1 Analysis of data using multiple hierarchical linear regression

In carrying out multiple hierarchical linear regression, the information culture types (information sharing, integrity, transparency and proactiveness) were computed in a four-level model as independent variables to predict ERM (dependent variable). These factors were constructed from items following the Information Culture Conceptual Framework (2013), which states that information behaviours and values have a bearing on how organisations handle information. For these factors (information sharing, integrity, transparency and proactiveness), scales were constructed and tested for reliability using Cronbach's alpha and they were found to be acceptable.

Before computing multiple hierarchical linear regression procedures to determine the significance of information culture types on ERM in the selected parastatals in Botswana, the assumptions of parametric statistics were assessed to ascertain the appropriateness of the test statistic in question. The first assumption that the researcher tested for was that of normality. It was important to check if the values were normally distributed across the dependent variable. This assumption was tested using a histogram and was met as the histogram was unimodal and had a bell-shaped curve (see Figure 5.5). A second assumption that was met was that of multicollinearity. According to Harts (2010), multicollinearity occurs when two or more independent variables are highly correlated. To test for multicollinearity, collinearity statistics from the coefficient table were analysed. The tolerance value has to be greater than zero, and the variance inflation factor (VIF) should be below 10 for the assumption to be met (Allen, Titsworth and Hunt 2008). From the coefficient table, the VIF values ranged from 1.000 – 1.487, thus far below 10. This, therefore, meant that there were no collinearity issues and hence the independent variables were not highly correlated. The tolerance values also showed that there were no collinearity problems as they ranged from .672 – 1.000. The third met assumption was independence, as the researcher ensured that the respondents completed the questionnaires independently, that is, the researcher did not interfere with respondents when they were completing the questionnaire. The assumptions of multivariate normality, homoscedasticity, and independence of errors were also met.

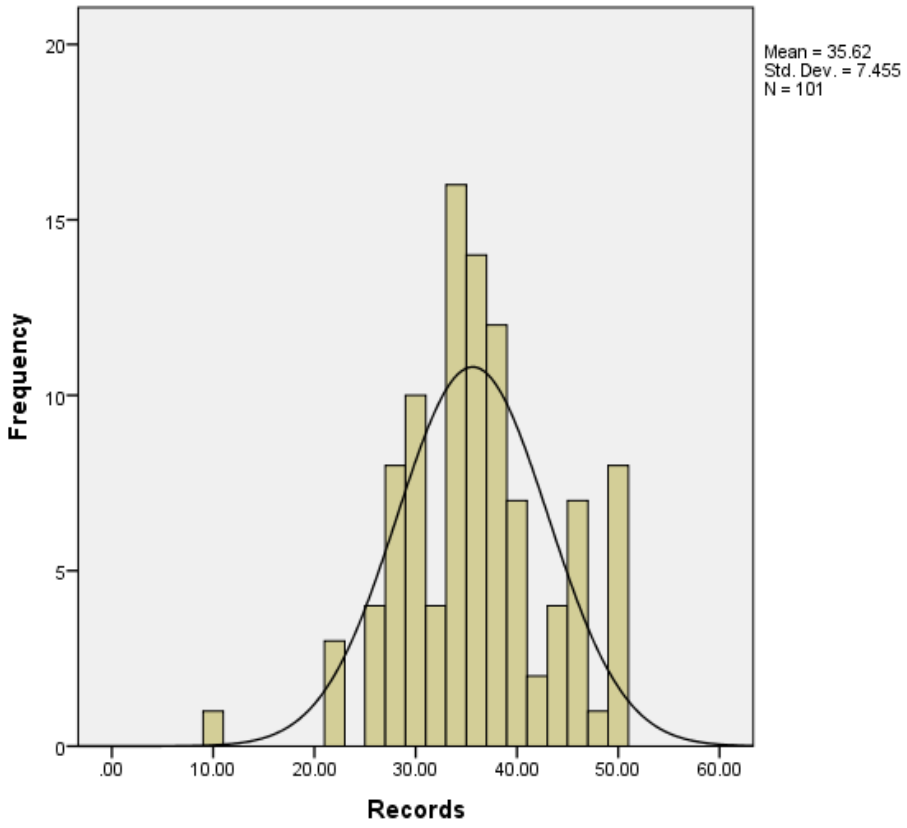


Figure 5.5: Histogram for the test of normality

N=101

Source: Field data (2021)

The histogram (Figure 5.5) shows the test of normality to determine if a data set is well-modelled by a normal distribution. The unimodal and bell-shaped curve indicates that the values were normally distributed across the dependent variable.

5.3.4.2 Regression analysis model

Multiple hierarchical linear techniques were computed to test whether information culture has significant effects on ERM. Having met all the assumptions of the test statistic in question, the model which was based on information culture theory, yielded statistically significant results, with only one non-significant predictor, namely, information integrity.

In Table 5.9 Step 1, with one predictor, information sharing, *F (1, 99) =16,499, p<.001, R^2=.143.* Step 2, with two predictors was significant*, F(1, 98)=22.63,p< .001, R^2=.304*. This model was better with an r of *.551.* Step

3, had three predictors and was non-significant, *F(1, 97)=1,804, p>.182, R²=.316*. This model, although not significant, was even better with an r of *.562.* In Step 4, Proactiveness slightly added to the regression equation, with a marginal change in R² from .295-.366. This change in R square was significant*, F (1, 96) =6.885, p<.010*.

Table 5.2: Hierarchical multiple regression analysis predicting information behaviours and values in the selected parastatals

Predictor	R	R²	ΔR²	ß	Sig
Step 1 Information sharing	.378[a]	.143	.143	.378	.001
Step 2 Information sharing transparency	.551[b]	*.304*	161	.429	.001
Step 3 Information sharing transparency integrity	.562[c]	.316	.013	.-128	.001
Step 4 Information sharing transparency proactiveness	.602[d]	.362	.046	.037	.010

Source: Field data (2021)

The results in Table 5.9 reveal that all predictors except one (information integrity) significantly predict ERM in Botswana. Information proactiveness with a variation of 36.2% was found to predict ERM better, over and above other predictors. All predictors had significant standardised regression weights (information sharing ß=.378, t=4.062, p<.001; information transparency ß=.429, t=4.78, p<.001; information integrity ß= -.128, t= -1.343,p>.182; information proactiveness ß=.037, t= 2.624, p<.010). Therefore, the significant standardised regression weights indicate that the information culture variables have greater significant effects on records management.

5.3.5 Summary of quantitative results

The findings indicate that the information culture types, that is, sharing, transparency and proactiveness revealed a positive and statistically significant relationship between information culture and records management in the three selected parastatals in Botswana with one factor (information integrity) yielding non-significant results.

There is a positive correlation between information sharing and records management. For example, information sharing accounts for 37.8% of the total variation in the dependent variable (records management) over and above other independent variables. Conclusively, information sharing plays a pivotal role in influencing records management. According to the study, information transparency also predicts records management with a total variation of 30.4%. Based on this finding, it is evident that information transparency is integral to records management. The findings also revealed that information integrity had a variance of 31.6% on the dependent variable. However, according to the study findings, this variable is not statistically significant hence not a major cause for concern for records management because it has negative standardised beta weights. The findings further indicate that information proactiveness had a variation of 36.2%. This finding indicates a positive relationship with records management and that it is, therefore, evident that records management in the selected parastatals in Botswana is significantly affected by information proactiveness.

In conclusion, it is observable that the regression equations are significant in that the set of the information culture types explain significant variation with the dependable variable (records management), although information integrity presents a non-significant correlation. Furthermore, the findings also show significant standardised regression weights. The regression outputs suggest that the set of information behaviours and values contribute significantly to influencing records management.

5.4 Qualitative data analysis

The findings presented below stem from the online interviews conducted via video conferencing with the records managers and representatives of the CEOs of the three selected parastatals. As done with the findings of the questionnaire survey above, the findings here also respond to the research questions underpinning the study. However, to begin with, the demographic profile of the respondents (interviewees) is given.

5.4.1 Demographic profile of respondents

Table 5.10 presents the demographic profile of the respondents. As noted, for anonymity and confidentiality the five respondents were assigned codes: 001, 002, 003, 004 and 005. Similarly, the organisations that participated were coded as A, B and C. Also as noted, the study sought to collect data from six respondents. However, only five of the six individuals participated.

Table 5.3: Demographic profile of respondents

Organisation	Gender	Code name	Designation	Educational qualification	Work experience
A	Female	001	Specialist Information Manager	Archives and Records Management BSc(Hons) Applied Business Computing AIIM Professional Member Certified Information Governance Specialist	10+ years
A	Male	002	Director - Shared Services	-	-
B	Male	003	Manager - Administration Records and information	MSc Information and Records Management	32 years
B	Male	004	General Manager - Research and reporting	Master of Economics	30 years
C	Male	005	Acting Manager Records (Records Management Officer)	Masters in Archives and Records Management (Ongoing) - Bachelor of Arts Humanities (Environmental Science and Archaeology) - Diploma in Archives and Records Management	13 years

Source: Field data (2021)

The demographic data collected comprised gender, designation, academic qualification and work experience of the respondents. In terms of gender, four of the respondents were male and one was female. The four respondents who provided their educational qualifications were all well qualified in their areas of specialisation. Respondent 002 did not give details on his qualifications and work experience. The most common qualification among the respondent was a Master's Degree with three respondents having attained this qualification. The fourth respondent had an Honours Degree as well as a professional certificate. The respondents all had 10 or more years of work experience with respondent 003 having the most experience with 32 years. The respondents' long spans of work experience coupled with their academic qualifications indicate that they could be relied upon to provide valid explanations and comments on records management as well as other issues relevant to the study.

5.4.2 Themes and sub-themes

As noted in the previous chapter, thematic analysis was carried out using ATLAS.ti-9. The researcher had to familiarise himself with the data by reading and re-reading transcripts and reflecting on the meaning of what had been said. Segments of the data in the form of words, phrases or paragraphs that were outstanding in terms of being informative and relevant were assigned certain labels referred to as codes. Thus, the coding stage commenced by identifying extracts of significance in the transcripts and by generating codes for each script. The codes were then grouped under the relevant predefined themes that were informed by the research questions. Percy, Kostere and Kostere (2015) argue that in a situation where there are predetermined themes, the researcher may use the predetermined themes in data analysis; however, the researcher should remain open to new themes emerging from thematic analysis. Indeed, one of the themes, "Challenges" emerged from the analysis.

The researcher explored the patterns and relationships of the identified codes using thematic network maps and word cloud in ATLAS.ti-9 to enhance understanding of the data. Related codes or the codes that conveyed similar messages whenever they appeared were developed into sub-themes. Since some of the sub-themes (people, system and finance) were related, they were in turn grouped to form the theme "Challenges" as noted above.

Table 5.11 reflects the themes and sub-themes that were identified when doing the thematic data analysis.

Table 5.4: Themes and sub-themes that were identified

Themes	Sub-themes

Records and creation	• Proper capturing of electronic records metadata • Remote electronic records capturing • Email capture • Records employees' assessment
Values and attitudes	• Organisation's value of records • Support given to records keeping • Position of records management in the organisation • Members of staff value records • Records are barriers • Circumventing records management processes • Records management is everybody's responsibility
Trustworthiness	• Trustworthiness of the records system • Satisfaction with records usage • Security measures • Records management units and other departments
Challenges	• System • Finance

Source: Field data (2021)

5.4.2.1 Information culture, records creation and capture of electronic records

This section presents results on records creation and capture as the study's main objective was to determine how organisational information culture affects the creation and capture of electronic records (records management). The section covered the following sub-themes proper capturing of electronic records metadata, remote electronic records capturing, email capture and records employees' assessment

5.4.2.1.1 Proper capturing of electronic records metadata

Proper records creation and capturing are vital for the records to be considered to be authentic and have integrity. The respondents shared that their organisations have policies that guided metadata capturing. Below are some of

the comments made by three of the respondents regarding what guides the creation and capture of records in their organisations.

Respondent 001 stated: *"We have processes and procedures that should be followed, we have also created mandatory fields to guide them and avoid situations where a person may skip other fields. Even though there were mandatory fields, there are situations where employees avoid mandatory fields and procedures".*
On a similar note, respondent 003 stated: *"Primarily, we have a corporate records mail policy, which stipulates the treatment of records in all its life".*
Respondent 005 pointed to there being *"a register which helps create uniformity in capturing the right metadata. The challenges come when they have to classify".*

5.4.2.1.2 Remote electronic records capturing

When asked what mechanisms are available to encourage employees to incorporate electronic records that they create in line of business to be part of the rest of the organisational records, respondents 001 and 005 indicated that their organisations can capture remotely created records. Respondent 001: *"Yes, we are currently upgrading our share-point or staff portal because these days everything that has to do with content is pushed to records, we are upgrading the share-point to cloud-based so you can access documents when you are outside the office or organisations network system, we have a space dedicated to records which we call document centre. It is records space where one can initiate a workflow from there, collaborate on a document, employ mandatory fields and review, authorise access to content".*
Respondent 005 also referred to remote access stating that their organisation *"now uses the virtual private network (VPN) to access records remotely, which has enhanced security measures; therefore, it allows staff members to access while they are home. It captures the details, such as IP address".*
Respondent 003 stated that "*We rely on the cloud to access electronic records."*

5.4.2.1.3 Email

As a record, emails should be captured and managed within the guidelines of the organisation's corporate records management policies and practices. Respondents were asked how they handle email in their organisations. Respondents 001 and 002 gave similar responses.
Respondent 001: "*we get a lot of documents moving in the organisation through the email, though the procedure says they should be sent through ECM it has not been done".*

Similarly, respondent 002 stated: *"We have asked employees who receive official emails to send them to the Records Management Unit".*

Respondents 003 and 004 also gave similar responses but they differed from 001 and 002.

Respondent 003: *"We encourage employees to print and file official email correspondence however, it has been difficult for employees to print and file documents".*

Similarly, respondent 004 stated: *"We do face challenges with email, we told them that where they fail to send the email to the records management officers at least they should print it since they fail to capture it electronically."*

In a similar vein, respondent 005 acknowledged that capturing emails "*... is difficult, members of staff do not upload email in the system or even file emails. Officer will receive an email and fail to come and file it and there comes a time when the officer leaves the organisation it becomes difficult to get or access that email, so it becomes a lost record".*

5.4.2.1.4 Assessment of employees' capabilities in electronic records creation and capture

Respondents were asked to assess their employees' capabilities in records creation and capture. All the respondents expressed that there are challenges in employees' ability to create and capture records. Some excerpts from the interviews are given below:

Respondent 001 stated: *"There are some challenges in adherence to procedures, processes and classification by employees on how records should be handled".*

Respondent 003 provided a different perspective: *"My overviews will touch all facets of records management beyond creation, there is a 50/50 chance of people wanting to do the right thing and we are concerned that there is no practice to follow records procedures".*

Similarly, respondent 005 stated: "*They [the employees] can create but the challenge may be issues of classification. We encourage them that when they write they can call the Records Management Unit to ensure that the right references/files are used".*

5.4.2.2 Values and attitudes accorded to records

This section presents findings on the question of values and attitudes accorded to records. The Information Culture Assessment Framework states that the core values accorded to records will be reflected in attitudes and behaviours. The section covered the following sub-themes; organisation's value of records, the support given to

records keeping, the position of records management in the organisation, members of staff value records, records are barriers circumventing records management processes, and records management is everybody's responsibility

5.4.2.2.1 Organisation's value of records

The respondents were asked if their organisations value records. All five respondents agreed that their organisations value records. In a follow-up question, the respondents were asked how their organisations demonstrate this value. What emerged from the responses is that their organisations value records because they:

- Employed qualified records staff.
- Segregated records keeping units dedicated to different record types have segregated locations for both paper and electronic records.
- Were prepared to buy into a records management policy and willing to carry out records management procedures.

5.4.2.2.2 Support given to records keeping

Respondents were asked whether management offers support for records keeping. In organisation A, the respondents stated that support is given in the form of providing the necessary technology and resources and having qualified staff. In organisation B, respondents pointed to reported dissatisfaction with the support received for the implementation of electronic records. The respondents indicated that there was a lack of commitment on the part of management. In organisation C, the respondent reported that their investment in records systems reflects the support from management. Some of the respondents' comments are given below:

Respondent 002: *"We support them through resourcing and technology, the technology component we have been using ECM"*.

Respondent 004: *"The support we get from our management is insufficient for example, our records staff is not enough. Even during the implementation of electronic records, we were not satisfied with the backing we got from management"*.

Respondent 005: *"We have put in place a system that can manage the records called Hewlett Packard Enterprise Content Management (HPECM)and enterprise content manager"*.

5.4.2.2.3 Position of records management in the organisation

Respondents were asked if they were satisfied with the position of records management in their organisation and various responses were received. In organisation A, the respondents said that they are satisfied with the position of records management although it is under information management. In organisation B, the respondents were not satisfied with the position of records management. In organisation C, the respondents seemed to be satisfied with the records management position albeit with reservations. Below are excerpts from the interviews:

Respondent 001: *"We all have different views on the position of records in the organisation, so people have different views on how it should be structured within the organisation. To me I think it is fine".*

Contrary to respondent 001, respondent 002 (who was in the same organisation) argued that: *"The function of records in the organisation is not properly set, in my view, it was set up as a structural requirement, with very little appreciation of the value process, past the structure".*

In a similar vein, respondent 003 stated: *"My organisation carried out an assessment to find where to place records. However, the assessment placed records in lower structures of the organisation and we are not happy with the placement".*

However, respondent 005 was more positive: *"Yes, it is ok, unlike in the past the highest-ranked person was the records officer. It affected us because we lacked representation in high-level meetings."*

5.4.2.2.4 Members of staff value records

The respondents were asked whether they thought members of staff value records. Three respondents gave similar answers as follows:

Respondent 001: *"They [staff] are able to adhere to records procedures and processes; classification and other processes that define how records should be handled. That alone demonstrates that the staff do value records or records".*

Respondent 003: *"Yes, they value the records because they are aware of the consequence that without records you suffer setback".*

Respondent 005: *"Staff also find value, in records, they continue to create records and file them even though I cannot say that is done 100%".*

5.4.2.2.5 Records are barriers to working efficiently

Respondents were asked if they agreed with the proposition that records are barriers to working efficiently. Perhaps unsurprisingly, none of the respondents agreed with the statement. Two of the responses given are provided below:

Respondent 004 made that point: *"If they are a barrier, they can be a barrier for somebody who does not know how to use information well".*

Respondent 002 stated: *"Not necessarily, it depends on the requirements they are, if records management is not the process but comes as a support process, they cannot be a barrier because records management is not the end but a means to an end".*

5.4.2.2.6 Circumvention of records management processes

Respondents were asked if they ever had a circumstance where members of staff circumvent the records management unit's processes. The respondents all agreed that some members of staff do circumvent records management processes. The responses of two of the respondents are provided below:

Respondent 002: *"We do have such cases though they are minimal where a person may try to bypass the system. Even if they do it all catches up with them because we have defined how we should process our records, so if they continue to circumvent, how are they going to submit or access what they are doing? There are such cases but we can deal with them, there are always those that will not conform".*

Just as respondent 002 admitted that employees do circumvent processes, respondent 005 argued that: *"It starts at the beginning when the records enter the organisation, we have set procedures that show how mail should be handled when it enters the organisation until the customer gets the response".*

5.4.2.2.7 Records management as everybody's responsibility

The Information Culture Conceptual Framework indicates that everyone has a role to play in ensuring that records are created and captured in the records keeping system, hence employees must recognise their responsibilities in this regard. Respondents were asked what they thought of the statement "Records management is everybody's responsibility". All the respondents affirmed that the statement is true.

The response from respondent 004 reflects what the other four respondents stated: *"Yes, its true records units are custodian units the rest are the users and creators".*

In addition, the respondents all agreed that because almost all employees have computers, the records management unit is more of a custodian while the rest of the employees are creators and users of records.

5.4.2.3 Trustworthiness of records

The main question in this section concerned the trustworthiness of the records keeping systems, explicitly answering the question of how trustworthy the records keeping systems are in the parastatals. The section

covered the following sub-themes; the trustworthiness of the records system, satisfaction with records usage, security measures and records management units and other departments.

It is evident from the responses given that trust in the records keeping systems in the three parastatals is not unequivocal. Respondents from organisation A stated that employees in their organisation do not have absolute trust in the records keeping system. In organisation B, the system was not trusted as employees sometimes encountered problems. In organisation C, as in organisation A, employees trusted the records but not a hundred per cent because sometimes the system fails to deliver the required work.

Thus, in the words of respondent 005: *"They [employees] do trust but not 100% when somebody has not received notification it brings doubt whether the system is ok, in the case for pending records, the employees blame the system, those issues where he/she was supposed to have closed in the system they bring doubt."*

One can argue that the trustworthiness of the records keeping system will depend on its reliability. Therefore, the responses will differ to some extent because of the differences in the technology employed and bad experiences encountered.

Usage is important to drive trust and, in this regard, the respondents were asked if they were satisfied with the usage of the records system in their organisations. In organisation A, the respondents were not satisfied with the usage, citing that the system was not properly deployed because it dictates to the business how the business should work. In organisation B, there was satisfaction with usage. In organisation C, while the respondent answered in the affirmative, he seemed to have some reservations as evident in his response below:

Respondent 005: *"Yes, but 50% because the system doesn't come cheap, you buy the system and then licenses and those licenses are billed on their own. So, it takes the organisation's financial capability to determine how many can be bought. The licenses are not enough for everybody to use the system. So those who are not using it rely on the physical records. So later, those who have access become lazy and resort to the physical records [which] causes drawbacks in encouraging people to use the system. So, it creates imbalance".*

5.4.2.3.1 Availability of information

To establish the foundation of the trust that did exist, the respondents were asked what guarantees the availability of information year after year. In organisation A, the respondents pointed out that there is a retention policy, scheduled back up and cloud-based storage. Respondents from organisations B and C stated that they have offsite storage provided by commercial entities.

5.4.2.3.2 Policies on records and information systems

Regulations or policies shape how people behave towards records and the respondents were asked about the availability of policies on records and information systems. All the respondents acknowledged that their organisations do not have electronic records policies specifically. Respondents from organisations A and B reported that they have a generic records policy. However, organisations B and C did have an email policy while organisation C also had a social media policy to cover records from social media as well as an internet policy.

5.4.2.3.3 Relationship between records management unit and other departments

A positive relationship between the records management unit and other departments, especially the IT unit, helps enforce trust for the rest of the organisation. In organisation A, the respondents stated that the Records Management Unit sits in the middle of the organisational structure which enables a positive synergy between it and the other departments in the organisation. Respondents in organisation B pointed to there being less cooperation between the Records Management Unit and the IT Unit. Respondent 005 from organisation C stated that there was a positive relationship between the Records Management Unit and the IT Unit due to all the employees from the units being trained when the electronic records system was introduced.

5.4.2.3.4 Security measures

The security measures employed by an organisation vis-à-vis records play a critical role in people trusting the records system. Hence, respondents were asked what measures were in place to ensure the security of their information/records systems. All respondents stated that there are certain levels of security in their organisations. The organisations have put in place access control, authorisation limits, authentication levels and audit trails as

measures to control access to records/information. In addition, virtual private networks (VPNs) are used to access remotely which has further enhanced security measures.

5.4.2.4 Challenges

The theme “challenges” was generated from the data analysis. More specifically, the sub-themes identified were challenges in terms of the system and finances.

5.5 Summary

This chapter presented the findings of the study. The data for the study were collected from two sources, namely, online questionnaires and online interviews. A total of 101 out of 133 employees from the participating parastatals whose work involved records, completed the questionnaire. The response rate easily met the adequacy level required for research of this kind. The quantitative data stemming from the questionnaires were analysed using SPSS. Findings relating to the questionnaire were presented in light of the research questions underpinning the study. To begin with, the demographic data (gender, age, academic qualification and work experience) of respondents were given. The presentation of the quantitative data was followed by the presentation of the findings stemming from the interviews held with five respondents that is the records officers in the three parastatals as well as representatives of the CEOs in two of the organisations. The qualitative data were analysed using ATLAS.ti-9 software and several sub-themes emerged from the themes or research questions.

The next chapter, Chapter 6, discusses the findings of the study.

Chapter 6

Interpretation and discussion of results

6.0 Introduction

This chapter presents the interpretation and discussion of the findings of the study presented in the previous chapter (Chapter 5). This chapter intends to give the meaning of and the differences and similarities between the data collected. Creswell and Clark (2018:190) argue that the most critical issue in discussing the results is "how the outcome compares and contrasts with other related studies and theories". Therefore, the findings are discussed and interpreted according to the existing empirical literature and theoretical frameworks that guided the study, the latter being the Information Culture Assessment Framework, the Records Continuum Model, and the Information Culture Conceptual Framework. Furthermore, Leedy and Ormrod (2009) opine that the discussion and interpretation of results cut across the aim, research problem, and questions raised in the research.

As presented in Chapter 1, section 1.3, the problem that the study investigated was based on the inadequacy of records management in parastatals in Botswana. The study explored this problem through the information culture lens, presenting the Information Culture Conceptual Framework in Chapter 2. It was considered important to establish how records management is influenced by information culture. This will assist an organisation in understanding the issues that lead to inadequacy in their records management practices, thus leading to the deployment of efficient and relevant interventions. Therefore, it was crucial to first establish the information cultures that exist in the selected parastatals. After establishing the existing information cultures, there was a need to determine whether the identified information cultures had statistical significance with regard to records management.

The study also identified behaviours and attitudes that employees displayed towards records management. Both negative and positive behavioural and attitudinal issues were identified in the parastatals. These attitudes and behaviours included the circumvention of records processes, the position of records in the organisations, management attitudes, and records as everyone's responsibility. The study further determined whether the records keeping systems in the parastatals were trustworthy in order to understand how this shapes their organisational information culture. The study found that the participating employees did not trust the records keeping systems and were not satisfied with their usage. It was also found that policies that can shape the behaviour and attitudes

of employees were absent. The relationships between records management and IT that foster trust differed from one organisation to another.

Lastly, the study identified challenges that were centred on people, the system and finance. The people challenges focused on their inability to follow procedures, system challenges emanated from the failure of the systems to perform while financial challenges included the purchase of adequate records management system licenses and having fully implemented records management systems. The research problem was addressed by asking the following questions:

- What kind of information cultures exist in Botswana parastatals?
- How does information culture affect the creation, capture and management of electronic records?
- What values are accorded to electronic records?
- How trustworthy are the records keeping systems in the parastatals?
- What recommendation can be drawn from the finding of the study?

The study followed a mixed methods approach. As indicated in Chapter 4, section 4.7, two data sets (qualitative and quantitative) were collected, analysed and presented separately. Chapter 5 section 5.3 presented the quantitative findings while the qualitative findings were presented in section 5.4. As outlined in Chapter 4 under research design (section 4.4), the integration of the findings takes place at the interpretation and discussion phase. To achieve integration, the triangulation protocol was employed within and across methods. The researcher established the "fit" of data integration, which is achieving coherence of the quantitative and qualitative findings. Therefore, the findings are mixed to ensure that the quantitative and qualitative research components are mutually illuminating.

6.1 Demographic characteristics of the respondents

The respondents' demographic profiles did not form part of the research questions; however, demographic information of the respondents, that is, age, gender, years of experience and academic qualification were asked for. These demographic characteristics of the respondents provide context for the collected survey data, allowing the researcher to better describe the participants and to better analyse the data collected. The demographic characteristics of the respondents are discussed in the sub-sections below.

6.1.1 Gender

Figure 5.1 in Chapter 5, indicated the gender of the respondents drawn from the participating parastatals. The findings show that were more females than males, that is 59 (58%) females as opposed to 40 (41%) males. This is contrary to the generally held view that women are less represented in the labour market. However, Siphambe and Motswapong (2010) and more recently Khanie (2019) observed a high entrance of women into the labour market in Botswana although the female numbers are still low when compared with their male counterparts. This trend of more women entering the labour market possibly accounts for the study having a higher number of women participants. Factors such as education have been attributed to the change in women entering the labour market. In the interviews, of the five respondents, four were male and one female. Matandare (2018) observed that males in Botswana have higher labour force participation than females and, as such, men are more likely than women to hold management posts.

6.1.2 Age category

The findings in Figure 5.2 showed that the highest number of respondents, 29 (29%) in the study were within the age range of 31-35 years. This age group is arguably the most economically active population and this aligns with Statistics Botswana (2019) multi-topic survey that found that the highest labour force participation rate was the age group 35-39 years at 82% and it also comprised the highest percentage of employed persons at 16.4%. The age group's prominence in this study may also be attributed to the study being conducted online as it is generally viewed that younger people are more inclined to participate in online activities than older people. This claim aligns with Gigliotti and Dietsch (2014), who pointed out that most researchers believe that older individuals do not respond to internet surveys to the same degree as younger individuals. The low number of respondents in the age group 56-60 years can also be attributed to that group's decline in labour force participation (Statistics Botswana 2019).

6.1.3 Academic qualifications

Figure 5.3 reflects that the majority of the respondents, 69 (68 %), had a Bachelor's Degree as their highest educational qualification and it is evident that the vast majority of respondents had either a degree or a diploma. The lowest qualification was a Certificate and accounted for only four (4%) respondents. The level of education

is essential in any study because it allows for independence when completing the questionnaire and, in the case of this study, indicates that the respondents were well-qualified academically.

6.1.4 Work experience

In terms of work experience (see Figure 5.4), the highest number of respondents, 26 (26%) had 11-15 years of work experience. This was followed by those who had between 1-5 and 6-10 years' experience, that is, 20 (20%) in each instance. In contrast, 18 (18%) respondents had worked for 16-20 years and 16 (16%) for 21-25 years. It is assumed that workers with more years of experience have interacted more with records. Therefore, the assumption is that they value electronic records and are likely to have positive attitudes towards electronic records. Mwangi (2017) points out that respondents with more experience claim that they make the right decisions when managing records.

6.2 Information culture in Botswana parastatals

In this section, the type of information cultures that exist in the three selected parastatals in Botswana are discussed. The study used the Information Culture Conceptual Framework to identify the information cultures in the three parastatals. The information culture types as defined in the Conceptual Framework are information sharing, information transparency, information integrity, and information proactiveness. When these information culture types were regressed as presented in Chapter 5, section 5.3.4, they showed a significant positive correlation with records management. It is also observable that collectively, the information culture types explained between 31-37% of the variance in the dependable variable. Furthermore, the findings also show significant standardised regression weights. The regression outputs suggest that three of the four information culture types, namely, information transparency, information sharing and information proactiveness contribute significantly to records management.

The key finding of this section was the emergence of an information sharing culture as the dominant culture. The importance of information sharing cannot be overemphasised. Information sharing leads to better communication and decision-making and also gives an organisation a competitive advantage. The Information Culture Conceptual Framework denotes that sharing occurs within teams, functional boundaries, customers and suppliers. The Framework indicates that where there is information sharing it is mainly inspired by a common language, shared meanings, the existence of a prior relationship between members of staff based on how much is known about them relative to their roles and positions in the organisation, and the perceived level of trust among people who

can share information (Marchand, Kettinger and Rollins 2001). The study findings reveal a strong culture of information sharing with 41 (41%) of the respondents agreeing or strongly agreeing that they share information with the people they work with regularly and 71 (70%) agreeing or strongly agreeing that they also share information outside their regular work unit but within the organisation. The information was shared within work units and then with the rest of the organisation. This kind of sharing behaviour has been observed by Omoregie and Popoola (2018) and the authors state that organisations, for their continued existence and success, should encourage information sharing within and between work groups. Twenty-nine (29%) respondents neither agreed nor disagreed that in their work unit people come to them for information. There was no certainty of information hoarding but there was a sharing of information in the parastatals. The findings, when interpreted through the Information Culture Conceptual Framework lens, suggest that in all the organisations there was a common language, shared meanings and the existence of relationships between members of staff that created a level of trust which in turn supported information sharing culture.

The interview respondents indicated that they share information through emails, intranet, ECMSs, and memos. In terms of external information sharing, 46 (46%) of respondents agreed or strongly agreed that they share information with customers or clients outside their organisation. The parastatals are service-oriented organisations hence the respondents' agreement. Choo et al. (2008) state that an organisation's mandate will influence the internal or external sharing of information. The distinctive feature of the information sharing cultures in the three parastatals is that they are more internally oriented. Although this is an important finding, the study could not establish the features of this internal information sharing and their associated attitudinal behaviours. However, while the study was unable to establish some of the information sharing features in the three parastatals, authors such as Oliver (2004) claim that the reasons for sharing are usually inspired by trust among colleagues. Oliver (2004) further states that where employees recognise organisational ownership of information/records they are likely to share. Therefore, it is important to ensure that employees are aware that the records they create and maintain belong to the organisation rather than themselves.

The findings imply that information sharing is key for the parastatals and their clientele. The sharing informs them of their services and goods. Information is regarded as an organisational asset not to be owned by individuals. Oliver (2008) argues that where information is viewed as a corporate asset, it is shared. It is evident from the findings that the parastatals encourage information sharing. The findings add further to our knowledge of information sharing and records management. Sharing was concentrated more internally hence indicating that the internal environment is an important consideration in understanding organisational sharing culture.

The study also identified information proactiveness as forming part of the parastatals' information cultures. In terms of the Information Culture Conceptual Framework, information proactiveness concerns obtaining and applying new information to respond quickly to business changes and to promote innovation in products and services (Marchand, Kettinger and Rollins 2001). The findings indicate that 52 (51%) respondents agreed or strongly agreed that they seek information on changes and trends outside their organisation. Information proactiveness is entrenched in the parastatals' corporate values under innovation. For example, organisation B states that "We strive to improve our work-always seeking to introduce new ideas, methods and ways to improve our levels of service to customers", while organisation A states that it seeks practical and contemporary solutions to service delivery. Information proactiveness is critical in aiding organisations to improve services. In this regard, 60 (59%) respondents agreed or strongly agreed that they use the information to create organisational products, services and processes. However, information proactiveness is not possible if the correct information is not aggregated, captured, and maintained within an IT system that supports good operations, managerial decisions and products or services. IT support encourages a proactive information culture by providing faster access to critical information.

The descriptive statistics indicate that under this information culture behaviour a majority of respondents (59%) agreed that they use the information to create or enhance organisational products, services and processes. The changing work environment requires new information to respond to changes. For example, during the Covid-19 pandemic, organisation C sought new information on ensuring proper records creation when employees began working at venues (usually home) other than their office. In organisation B, changes in the legal frameworks necessitated the Records Management Unit to seek new information on the functions and operations to support such changes.

There was a definite need by the parastatals to be information proactive to enhance operations and service processes. This is mainly because they are predominantly service-providing entities, hence their concern with the necessary information to improve services and processes. Unlike private companies that are more driven to increase sales and profits, parastatals are more service-oriented.

Information transparency is essential for open and honest communication in an organisation. It allows employees to know how decisions are made and to know about the organisation's operations, thus facilitating more engagement with each other and with management. Information transparency and openness also foster interpersonal trust between employees as they facilitate clear communication. An information transparent culture makes information more accessible and consequently, information and decision-making processes can easily be

made more open and available to employees**.** The study's findings reveal that the parastatals support information transparency as the majority of respondents, 63 (62%) agreed or strongly agreed that supervisors of their work units encouraged openness. This is achieved through established communication networks and the parastatals have shown that they have group emails, intranet and ECMSs, where memos are communicated and shared as is information about organisational decisions and operations. Openness is possible where information is available.

The parastatals have functional records management units that facilitate access to information which is necessary for openness. More than half of the respondents (55%) were of the view that people they worked with, openly and regularly shared information on failures or errors. It can be argued that the parastatals value openness that facilitates the transparent use of information. Information transparency created an environment where information can be shared (Marchand, Kettinger and Rollins 2001). The findings suggest that the participating parastatals value transparency when dealing with information and that there is open and honest communication among their employees resulting in the creation of trust. The organisations indicated that they have an ECMS and Hockman (2009) argues that collaboration is central to an ECMS and that an ECMS is about openness and knowledge sharing. According to the Information Culture Conceptual Framework, the findings mean that transparent behaviour is encouraged which can build trust in sharing information across the organisation. Furthermore, the sharing of trustworthy and formalised information among organisational members fosters the use of formal information sources.

The study also probed the information integrity of the participating parastatals. Information integrity entails using information in a trustful and conscientious manner. When carrying out multiple regressions, information integrity had a variance of 31.6 % on the dependent variable (records management). The findings indicate that this variable is not statistically significant and hence not a major cause for concern vis-a-vis records management as it has negative standardised beta weights, that is, ß= -.128, t= -1.343, p>.182. In terms of the descriptive statistics, information integrity was evident among the respondents. Thus, a majority of respondents, 56 (55%), either disagreed or strongly disagreed that they knowingly pass inaccurate information about their organisations' operations. This implies that respondents understand that false information is detrimental to the integrity of organisational decision-making. A substantial number of respondents, 43 (43%) also disagreed or strongly disagreed with the statement concerning their colleagues keeping information to themselves. This suggests that employees do not hoard information, understanding that doing so may compromise organisational transparency which is key to information integrity. It is surprising that while integrity is positively associated with records management, the findings of the study reveal that it is not statistically significant. Moreover, in all three

parastatals, integrity formed part of their core values. The negative standardised beta weights could be attributed to respondents not being candid when answering the questions.

Several studies that used the Information Culture Conceptual Framework such as Choo et al. (2008) and Lauri, Heidmets and Virkus (2016) were able to identify information cultures within organisations. However, their focus was on information use within the organisations. Comparing the current study with Choo et al. (2008) and Lauri, Heidmets and Virkus (2016) the findings differ regarding the dominate culture. Heidmets and Virkus (2016) state that the dominant culture was integrated, whereas Choo et al. (2008) state that each study organisation presented a different dominant culture. The current study found that information sharing culture was the dominating culture. The difference in the information culture can be attributed to different information cultural contexts. However, one variable, information proactiveness, cuts across all the findings of this studies. The similarities can be attributed to the fact that, as the information proactivess denotes, every organisation obtains and applies new information to respond to a change in their environment.

The current study used the Framework within records management thus adding to the body of knowledge on how it can assist in understanding records management. The study's findings show that the information cultures identified were information sharing, information proactiveness and information transparency. The findings provide valuable insights into the distinctive features of the information cultures of the service-providing organisations studied. The features of the information cultures in the studied parastatals were primarily influenced by internal environments or, in other words, were mostly tilted toward internal factors. The need to share information internally indicates that the organisations are more concerned with creating and capturing information to enhance service provision. The findings show a consistent concern for the internal use of information in the parastatals.

It is acknowledged that because the study was limited to three parastatals, its findings cannot be generalised to all the parastatals in Botswana. Moreover, several factors can shape an organisation's information culture and, above all, culture itself is heterogeneous. The study results are significant as they shed light on the existing information cultures in the participating organisations. Although the study did not establish whether the organisations consider their information culture in their programmes, by knowing their existing information cultures, organisations can adjust their planning and programmes.

6.3 How information culture affects the creation and capture of electronic records

This section discusses how the information culture types identified affect the creation and capture of electronic records. It focuses on the creation and capture of electronic records and discusses how the information cultures identified, namely, information transparency, information sharing and information proactiveness affect records creation and capture.

6.3.1 Creation and capture of electronic records metadata

In parastatal A, the respondents indicated that they have processes and procedures that should be followed. The respondents also indicated that the records system has mandatory fields to avoid the situation where employees may skip required records system fields and metadata. However, the respondents indicated there were instances where employees avoided completing the mandatory fields. In organisation C, the respondent said that the organisation has registers that guide and help create uniformity in capturing the right metadata. Nonetheless, the respondent acknowledged that employees face challenges when classifying records. The respondent indicated that even though they have advised employees to consult the Records Management Unit when they experience problems with classifying records, they did not do so.

Seventy (69%) of the survey respondents were uncertain of the right metadata to capture. This implies that the metadata were not systematically captured even though there were registers to guide records metadata capture. Abdullah, Mohammad and Mokhtar (2020) observed that in Malaysian military service, metadata entry and management are less emphasised, ill-implemented or neglected. Similarly, Porogo and Kalusopa (2021) also observed that employees in the Botswana Government lacked the skills to capture metadata. This suggests that records capturing in the parastatals were ineffective despite efforts made to ensure there is a systematic way to capture them. According to the IRMT (2009), improper metadata capturing may negatively affect access, retrieval, identification, authentication, tracking of documents and restricting unauthorised use.

6.3.1.1 Remote electronic records capturing

All respondents from the three parastatals indicated that measures are available to encourage employees to incorporate the electronic records they create with the rest of the organisational records. The respondents also stated that their parastatals can capture electronic records remotely. In parastatal A, the respondents indicated that they are upgrading from Share-point to the cloud so that employees can access records outside the office. Furthermore, the respondents pointed out that they have an online space called the Documents Centre. The Centre

allows employees to initiate the workflow and collaboration on a document, employ mandatory fields, and review and authorise access to content. In organisation C, the respondent indicated that employees use VPNs to capture and access records virtually and securely. The respondents from organisation B indicated that they rely on the cloud for employees to access records. Seventy-two (71%) of the survey respondents either agreed or strongly agreed that they can access records created by others.

The findings indicate that the parastatals have made efforts to ensure that the records that are created remotely are captured. The remote availability of electronic records has enabled employees to have access to these records and allows them to work remotely. Docusafe (2019) states that working remotely changes how employees work and collaborate, leading to new records. In addition, collaborating remotely will likely create an influx of emails, instant messages and videos from conference calls.

6.3.1.2 Email Capturing

In all three parastatals, the interview respondents acknowledged that capturing official emails is a challenge. In parastatal A, the interview respondents indicated that even though they appealed to employees to follow procedures and route the official emails they receive through an ECMS, they were not complying with the procedures. In organisation B, the respondents indicated that to capture official emails they have asked employees to print the emails and send them to the Records Management Unit as they have failed to capture them electronically. The findings are consistent with those of Mutsagondo, Ngulube and Minishi-Majanja (2021) who, in their study of government departments in Zimbabwe, found little compliance with email procedures and that emails were printed. In organisation C, the respondent claimed that employees do not upload official emails in the system or even file them and that this usually leads to the loss of email records. Sixty-six (65%) of the survey respondents either agreed or strongly agreed that they send the records they create to the Records Management Unit.

The study found that email was used for communication and the sharing of information. In a similar vein, Rakemane and Serema (2018) determined that email is predominantly used to communicate and share documents in one of the parastatals in Botswana. Given the above, it is evident that the parastatals in the current study are facing challenges when it comes to capturing email records. On the contrary, Capra, Khanova and Ramdeen (2013) aver that university employees studied were keeping and filing emails. Similarly, Kalman and Ravid (2015) observed among knowledge workers studied the tendency to file mail for a longer time. The study results show that employees in other countries could file and keep emails; in the current study, employees of the studied

parastatals were not exhibiting the same behaviour. The finding in the studied parastatals shows that employees were not following procedures, which led to non-filling emails.

6.3.1.3 Assessment of employees' capabilities in electronic records creation and capture

The respondents from all three parastatals pointed to some challenges in creating and capturing electronic records. Respondents in organisation A indicated that there are challenges in following and understanding records processes, procedures and classification. In organisation B, the interview respondents stated that there was no practice of following procedures in the organisation. The respondent from organisation C acknowledged that while employees can create records they do, however, encounter challenges when capturing records, particularly the classification of the records.

The findings show that 52 (51%) of respondents disagreed or strongly disagreed that they were aware of procedures for creating and capturing electronic records. Although this slight majority of employees were not aware of procedures for creating and capturing electronic records, a huge majority (99%) were aware of the cost of the lack of proper records creation and capture. Mosweu and Kenosi (2018) reported that there was a lack of awareness of records procedures and policies in magistrate courts in Botswana. Similar findings were reported by Bigirimana, Jagero and Chizema (2015) who found that there was no awareness of records procedures despite the procedures being available. The authors attributed this to poor supervision. The difference in response between the interview and survey can be attributed to the interviewees as records practitioners may be aware of laid down procedures and processes that the survey respondents from different sections of the parastatals may not be aware of. While in the case of Botswana, there were laid down procedures for creating and capturing electronic records as reported by the interviewees. In Zambia, Chirwa (2013) who observed that in the public service of Zambia, there were no clear guidelines on which records to capture or create records. However, the employees showed that there were knowledgeable about in records management practices. Chirwa (2013) argues that this may result from long time experience. In Botswana parastatals, there was a lack of awareness of the existing procedures as attested by survey respondents who were unaware of the procedures.

6.3.2 Information culture and records creation and capture

The section discusses the information cultures identified, namely, information transparency, information sharing and information proactiveness and how they affect records creation and capture. These information cultures

support the ideals of proper records keeping. The information cultures anchor on the need for the proper creation and capture of records to enable the effective use of information in the organisation.

6.3.2.1 Information transparency

The study indicated that an information transparency culture enables clear communication and ensures that employees know how decisions concerning an organisation's operations are made. The information transparency culture is supported by processes that guide the proper creation and capture of records. Multiple linear regression statistics indicate that information transparency also predicts records management with a total variation of 30.4%. Based on this finding, information transparency had significant standardised regression weights ß=.429, t=4.78, p<.001. It is evident that information transparency is integral to records management.

To some extent, there seemed to be communication on what is expected as 99% of respondents agreed or strongly agreed that they were aware of the cost of their lack of adherence to proper records creation and capture procedures. The communication of what is expected from the employees abated any detrimental behaviour towards electronic records. Information transparency hinges on openness and openness is facilitated by access to organisational information. The finding revealed that parastatals have put in place technology that allows employees access to information or organisational records. By employees knowing how decisions are taken and the processes involved in doing so, openness is encouraged in all the organisations. This assertion is to some extent supported in the current study as half (50%) of the respondents agreed or strongly agreed that they have access to records created by others. The assertion is in line with the Information Culture Conceptual Framework, which indicates that a transparent and trustworthy environment facilitates information sharing. It fosters sharing behaviour and permits senior managers to build trust by sharing information. The interview respondents indicated spaces like share points where employees can access and launch their work. It is observable that an ECMS allows the development of an information culture as it aggregates information into different spaces.

The findings imply that although there may be clear communication this does not necessarily result in employees following procedures. The study reveals that although the parastatals may put together procedures to support proper records creation and capture, and a particular information culture, people will be the determinants of whether this occurs or not by following or not following the laid-down procedures. Although records-keeping procedures could promote information transparency, the study found that they were not properly followed by all employees. While the parastatals indicated that openness supports transparency, it is apparent that the behaviour of employees could hinder openness ultimately resulting in information opaqueness rather than transparency.

6.3.2.2 Information sharing

An information sharing culture is the underlying culture for all other information cultures presented in the study. The study found that the parastatals have strong information sharing cultures. Information sharing plays a critical role in records management. As Yin (2014) attests, a good records sharing culture is crucial to the pre-implementation of electronic records. Similarly, Mosweu (2018) posits that electronic records are important tools because they enable more effective information sharing.

A multiple linear regression was carried out (see Chapter 5 section 5.3.4) to determine the significance of information culture on records management. Information sharing was regressed among other information culture types and it was found that there was a positive correlation between information sharing and records management. Information sharing accounted for 37.8% of the total variation in the dependent variable (records management) over and above other independent variables. The findings imply that information sharing plays a pivotal role in influencing records management. This resonates with Omoregie and Popoola (2018) who in their study also found that there was a significant positive relationship between perceptions of the records management system and information sharing among employees in Nigerian banks. The findings of the current study indicate that there is a significant positive relationship between information sharing and records management.

Hansen and Widen (2017) argue that it is important to have access to the collective knowledge aggregated within an organisation. Electronic records systems provide the capability to aggregate organisational information. The interview respondents in parastatals A and C indicated that they use ECMSs to share information and collaborate. Arshad et al., (2021) stated that ECMS implementation within organisations is underpinned by the idea and practice of information sharing in an organisation as it enhances knowledge capture and knowledge transfer. Furthermore, Sundqvist and Svärd (2016) posit that an ECMS is considered a strategy or initiative that organisations undertake to promote a culture of information sharing and collaboration.

For information to be shared in the organisation, there has to be proper records management to capture and maintain the information to be shared. The interview respondents in parastatals A indicated that they have SharePoint, intranet and email as modes of accessing and sharing information within the organisation. These modes assist the parastatals to facilitate information sharing. This finding aligns with Rakemane and Serema's (2018) study conducted in Botswana, which found that email is predominantly used to communicate and share

documents in organisations in that country. Similarly, the finding is consistent with Mutsagondo and Tsvuura (2017) who revealed that email was the preferred mode of sharing information in organisations in Zimbabwe. Svärd (2014) found that there was information sharing that took place in the two municipalities studied. The information sharing in these parastatals was facilitated by the availability of an electronic records system. Furthermore, the author also observed that integrating other systems with records management systems was pivotal in facilitating information sharing.

6.3.2.3 Information proactiveness

Information proactiveness can be facilitated by proper records creation and capture. Information proactiveness is based mainly on applying information, making decisions on business changes, and promoting innovation in products and services. It is encouraging to note that a majority, 71 (70%) of respondents agreed or strongly agreed that they prefer to search information (on the web, in databases, and in reports) for decision-making. This, therefore, suggests that the parastatals obtained new information from different sources. Lauri, Heidmets and Virkus (2016) point out that those organisations that subscribe to an information proactiveness culture search for information from a variety of different sources including social media.

The results of the multiple linear regression to determine the significance of information culture on records management (see Table 5.9), indicated that information proactiveness was the second-best predictor of records management. Information proactiveness had a variation of 36.2%. Information proactiveness indicated a positive relationship with records management. Information proactiveness had significant standardised regression weights ß=.037, t= 2.624, p<.010). The results show a strong correlation between information culture and records management.

The findings show parastatals have proper records or information systems (such as an ECMS) that can satisfy the need to acquire new information and use it to enhance or create new products and services. They also have measures in place to support the creation and capture of records. Records and an ECMS deployed in an organisation provide internal information essential for decision-making. Although the interview findings indicated that there were challenges with classifying records that could impede access, the parastatals have procedures that ensure that the records created can be accessed. Information for responding to organisational requirements and business decision-making can be located and retrieved timeously thus increasing organisational efficiency. This enables organisations to increase their competitive advantage by capitalising on information

assets and optimising costs (Omoregie and Popoola 2018). The flow of information/records for the dissemination of information is critical for the organisation to be informed of business trends. As noted, the parastatals have the means to share information on email, intranet and an ECMS thereby making information available and promoting information proactiveness.

The findings indicate that the creation and capture of electronic records provide the basic support for any information culture type. Each of the information cultures needs the information to be aggregated/captured. The confinement of the study to the records creation and capture dimensions and leaving out other records continuum dimensions may appear as a weakness. However, the study has shown that information culture affects records management. The findings, therefore, provide the basis for further studies examining the relationship between information culture and records management based on other records continuum dimensions.

In summation, the study as one of the first to test the Information Culture Conceptual Framework in a records management setting has shown that the Framework can establish the information culture and how it supports records management.

6.4 Values and attitudes towards electronic records

This section presents findings on the values and attitudes identified in the parastatals. It focuses on management support, records management position, records management responsibility, circumvention of records management, and records management as a barrier.

According to Oliver and Foscarini (2014) information culture is shaped by attitudes towards and values accorded to information. Attitudes and values may manifest in different behaviours. As information behaviours are enacted by a social structure of roles, rules and warrants, they manifest cultural norms and values. The current study determined the attitudes, behaviours and values of respondents towards records management. It focused on levels one and three of the Information Culture Assessment Framework. According to Oliver and Foscarini (2014:52) behaviours and values can present themselves in:

- Employment of specialist staff and management support.
- Existence of systems appropriate for the management of both electronic and paper records.
- Existence of organisation-wide records management policies and procedures/preparedness to buy into records management policy and willingness to carry out records management procedures.

As pointed out above, the Information Culture Assessment Framework indicates that employees' attitudes and behaviours are likely to manifest in the employment of specialist staff, the existence of organisation-wide policy and procedures, and the existence of systems appropriate for the management of both paper and electronic records. The overwhelming majority of respondents, 97 (96%) affirmed that they consider records management to be valuable. The respondents showed a positive outlook on records, with 97% of respondents considering records management as a worthwhile activity. In addition, 60% agreed or strongly agreed that they found using a records management system to be a good idea. Moreover, the highest percentage of respondents, 88%, agreed or strongly agreed that records management is an essential part of their work. The interview respondents indicated that their organisations value records because they have:

- Employed qualified records management staff. The Information Culture Assessment Framework emphasises that the employees should be "specialists, appropriate for the size and complexity of the organisation" (Oliver and Foscarini 2014:41). It was established that the parastatals employed qualified members of staff for records management with qualifications ranging from Diplomas to Master's Degrees. However, in terms of the appropriate number of staff, the interviewees indicated that they have a shortage of records management staff which means they are not able to meet the organisational demands for records/information. The study did not focus on IT staff who offer support to records management and so was unable to establish their qualifications, number and ability to deal with organisational complexity. In terms of the Information Culture Assessment Framework, the parastatals accord positive behaviours and values to records management.

- Segregated records keeping units dedicated to different record types with secured locations for both paper and electronic records. The Information Culture Assessment Framework states that there has to be "the existence of systems appropriate for the management of both electronic and paper records" (Oliver and Foscarini 2014:41). In all three parastatals, the paper records were segregated according to different categories, that is, as a core function or as administration. The records management units managed both these categories. In terms of electronic records, the interviewees indicated that their parastatals have an ECMS. The interviewees indicated that their parastatals have servers dedicated to records management and utilise cloud storage. In terms of the Information Culture Assessment Framework, the above reflects positive values being accorded to records and records management.

- Availability of policies that support proper records keeping. The Information Culture Assessment Framework indicates that values and behaviours can be reflected in the "existence of organisation-wide records management policies and procedures as well as preparedness to buy into records management

policy and willingness to carry out records management procedures" (Oliver and Foscarini 2014:41). The findings indicate that there was no organisation-wide ERM policy in any of the three parastatals. Therefore, the lack of policy made it difficult to determine the preparedness to buy into a records policy.

6.4.1 Management support

The Information Culture Assessment Framework recognises top management's role in ensuring that positive values and attitudes are accorded to records. Oliver and Foscarini (2014) argue that records management is successful when it is championed by somebody at the senior management level. Two parastatals indicated that they enjoy some level of support and buy-in from their management in terms of ERM. The parastatals received different kinds of support. For example, parastatals A and C reported having qualified staff and making significant levels of investment in terms of technology and other resources with the acquisition of ECMSs being illustrative of this. Organisation B, however, reported dissatisfaction with the backing received for the implementation of electronic records. The respondents in parastatals B were disappointed with how the issue of electronic records was handled and pointed to a lack of commitment on the part of management. Furthermore, the survey indicated that 31 (31%) respondents were uncertain as to whether management encouraged employees to uphold the rules that govern records management. Similarly, Karlos and Nengomasha (2018) and Abdullah, Yusof and Mokhtar (2019) in their studies also observed a lack of support from top management which hampered records management programmes.

The findings denote that two parastatals, namely, A and C purport to enjoy management support. As for parastatal B, the findings indicate a deficiency in support for records management from its management. Keakopa (2013) in her study had a similar finding concerning parastatal B. She found that there was a lack of management support and strategic direction in carrying out activities that would ensure the proper management of records in the parastatal.

The disposition of senior management towards records influences the attitudes and behaviours of the rest of the organisation. Douglas (2010) succinctly argues that leadership models the organisation's values and that these are translated into behaviours and attitudes of the organisation. Therefore, leaders build certain attributes of information culture. The current study revealed the different dispositions of senior management towards records management in the organisations studied. Similarly, Maseh and Mutula (2016) postulate that the attitudes towards records are demonstrated by the extent to which senior management supports records management through funding, capacity building and infrastructure development.

The findings suggest that management in parastatals A and C were influencing positive behaviours while in organisation B, management was creating negative attitudes and behaviours towards records. Throughout the study, organisation B is presented as lagging in terms of the development of records management attesting to the lack of management support.

6.4.2 Records management position in the organisation

The position of records management in an organisation's organogram is a matter of concern. According to Kautto and Henttonen (2020), rapid technological development has changed the status of records management professionals and put them in the background while other groups such as IT professionals have gained prominence. Furthermore, Balogun and Kalusopa (2021:11) state that "Africa generally places less value on archives due to lack of appreciation and understanding of the importance of records and archives". Given the above, there was a need to establish the position of records management in the participating parastatals. Respondents from organisation A expressed satisfaction with how records management is positioned in their organisation. However, they did point out that records management is under the ambit of information management which also includes IT. This is not unusual as Mukred, Yusof and Alotaibi (2019) state that records management is sometimes placed under the information service unit. Being thus placed, the authors believe that the value of the organisation is enhanced and it will achieve success. Thus, organisation A can be seen as following the current trend in which records management is subsumed under information management. Yeo (2018) states that the rationale for making the distinction between records and information is steadily disappearing and only purists still want to distinguish records management from information management.

Respondents from organisation B expressed dissatisfaction with the position of records management within their organisation's structure. They pointed to records management assessments the outcomes of which downgraded records management, placing it in the lower structures of the parastatal. The respondent from organisation C was satisfied with the position of records management in the organisation but did have reservations. The respondent felt that it would be better if records management was at the directorate level. Similar sentiments were expressed by Ngoepe and Van Der Walt (2009) who observed that records management is at the sub-directorate level instead of the directorate level in South African government departments. Indeed, Ngulube and Ngoepe (2013) reported that no governmental body had a records manager at the top-management level. Thus, the respondents from two of the parastatals were satisfied with the position of records management within their organisation while those from parastatal B were unhappy with the placement. It is evident that organisation B has shown disparity with the

other two organisations in several aspects of the study including management support as well as reflecting a general indifference towards records management.

The Information Culture Assessment Framework claims that "management may affect the priority accorded to managing information, resourcing of activities and information systems throughout the organisation which in turn impact on the success of information management initiatives" (Oliver and Foscarini 2014:51). Therefore, the position of records management in parastatals is determined by management.

The study's findings imply that the position of records management in the parastatals may be influenced by the support it receives from management. This is so because the respondents who expressed satisfaction with the position of records management were also satisfied with the support records management received from their organisations. Therefore, the current study's findings cast fresh light on arguments concerning the position of records management in organisations. However, this finding cannot be generalised to other settings because organisations differ in their structures.

6.4.3 Records as everybody's responsibility

There is a need to understand how people view their roles and responsibilities in the records management processes as their views shape their attitudes and behaviour towards electronic records. Furthermore, with the increasing use of IT, more and more records are being created in organisations. The Archives of Manitoba (2021) states that good records keeping is everyone's responsibility. As such the Information Culture Assessment Framework all employees have a duty to create full and accurate records of their actions and file or capture them in a formal records keeping system. Professional records managers have long maintained the discipline of records keeping. However, with the advent of technology, records keeping has moved from the records professionals to the creators and the end-users of the records (Joseph et al. 2012: ISO 15489). The vast majority of respondents in the current study, 89 (88%) either agreed or strongly agreed that records management is everybody's responsibility. Similar views were held by the interviewees who pointed to employees being the creators and users of records. Reinforcing this view, was the even higher level of agreement with the statement "Records management is part of my responsibility" with 91 (90%) respondents either agreeing or strongly agreeing. Svärd (2014) noted the assertion that records are understood as everybody's responsibility but cautioned that this does not mean that records management is fully understood. Oliver and Fosacarini (2014) advanced a similar but more elaborate argument positing that although employees have this satisfying understanding of records management being the responsibility of all, it cannot be assumed that this understanding is sophisticated enough to enable all

employees to manage information. This understanding could be suitable for electronic records keeping but it does not translate to employees understanding their responsibilities and their roles in the entire continuum of a record.

The study findings show that while employees had some sort of understanding of their responsibility towards records this understanding, as evident from the responses of the interviewees, was limited to them as creators and users. Their understanding of the maintenance or management of records was limited. The limited understanding is not helpful to parastatals in stimulating active participation in the usage of the records management system. The information culture assessment framework states that "employees with a very sophisticated understanding of why records are important may be active participants in the development of records system" (Oliver and Fosacarini 2014:40). Fully understanding records management as everybody's responsibility would result in a positive attitude towards records.

6.4.4 Circumvention of records management processes

The Information Culture Assessment Framework states that besides considering whether a records management system is appropriately used or not, one should still note that there will be other implicit motives, unofficial ways of working, and hidden procedures that, while unwritten, constitute actual organisational behaviour (Oliver and Foscarini 2014). Survey respondents were thus asked whether they agreed or disagreed with the statement "I always find a way of bypassing the e-records system" and a majority, 57 (56%) either disagreed or strongly disagreed. Interestingly 32 (32%) respondents did not commit themselves either way. Interview respondent 001, however, agreed that some staff members circumvent records management processes. Although such incidents were reported to be minimal, the respondent affirmed that there were those employees who do not conform to procedures but that *"they are able to deal with them as the system catches up with them"*. In other instances, employees avoided electronic processes and used manual files. These findings are consistent with the literature. Pan (2017), for example, observed that some employees in the public sector were nervous and concerned as they disliked some electronic records system's functionalities and worked their way around the system which resulted in metadata not being captured. Furthermore, attempts to circumvent procedures were observed in records capturing where employees avoided completing mandatory fields thus disregarding laid down procedures. The interview respondents indicated that circumvention begins when a record (correspondence) enters the organisation with employees flouting the laid down procedures to be followed until such time as the customer is replied to. Similar findings were reported by Abdullah, Mohammad and Mokhtar (2020) who observed that most employees at a military service in Malaysia developed their own ways and means of managing electronic records.

In the case where records procedures cannot be followed, it can be assumed that employees will be circumventing the laid down procedures. That employees can still circumvent procedures in an electronic setting is a concern. The study, however, did not establish what interventions were in place to curb this behaviour in the parastatals.

6.4.5 Records as a barrier to working efficiently

The trustworthiness of records is also based on being able to access records without any barriers. Asked if they agree with the statement "Records management requirements are a barrier to working efficiently", the majority of respondents, 69 (68%) disagreed with the statement. All the interview respondents from the three parastatals disagreed with the statement. In all the parastatals records were considered a means to an end and, therefore, could not be regarded as a barrier. Furthermore, 67 (66%) respondents agreed or strongly agreed with the statement "Records are prioritised and integrated into the business processes" a finding which indicates that records could not be considered a stumbling block for efficient work delivery. The above findings show a positive attitude towards records on the part of respondents and an understanding of the role of records in assisting them to deliver on the mandates of their jobs. Franks (2013) argues that records keeping must be considered integral to the activities that promote the organisation's core mission and not an add-on.

The research findings to the question "What values and attitudes are accorded to records?" allowed the study to contribute to advancing scholarship debates on issues of records management and its place in the organisational organogram, management support, and shaping organisational values and attitudes towards records. Furthermore, the need to probe and review suppositions such as "Records management is everybody's responsibility" has been pointed to. The study has added to the existing knowledge in the field of records management as it was able to identify attitudes and behaviours that affect records management in the three parastatals. The study identified both positive and negative aspects of these behaviours and attitudes. Through the study having identified these behaviours and attitudes (such as circumvention, management support and negligence) the parastatals will be in a better position to respond to them and, in doing so, improve employee attitudes and behaviours vis-a-vis records management.

6.5 Trustworthiness of records

This section discusses issues of trust in records keeping among the studied parastatals. The section focuses on satisfaction with the records keeping system, policies, assurance of availability of information, security measure and synergy of the records management units and IT.

The research question that this section is responding to is: "How trustworthy are the records keeping systems in the parastatals?" There were differing sentiments concerning trusting the records system. The survey indicates that 58 (57%) of the respondents agreed or strongly agreed that they trust the electronic records system as reliable. However, the interviewees gave differing perspectives. In parastatal A, the respondents were of the opinion that the parastatal employees do not have absolute trust in the records systems. In organisation C, the respondent also noted the lack of absolute trust pointing out that while the employees trust the records this is not absolute (100%) as the system sometimes fails to deliver the required work. As an example, the respondent referred to the miscommunication between the email system and the records system resulting in users complaining that they sometimes do not receive notifications as a result they miss correspondence assigned to them and for which they need to take action. Compounding the problem in organisation C is that the system is maintained by a technical team residing in Australia which created significant problems during the Covid-19 pandemic and the concomitant restriction of movement. In organisation B respondents reported that lack of trust was mainly due to the technological glitches experienced. In addition, the system's ability to retain documents for a long period of time was questioned. The information culture assessment framework state that where employees lack confidence the deployed records system will not be used.

Thus, parastatals B and C respondents reported a lack of absolute trust in the record keeping systems. Similar findings were revealed by Svärd (2014) where two of the studied municipalities had trust in the records system while one municipality did not. Lewellen (2015) argues that there is a need for records management officers and IT officers to build positive relations with electronic records users to establish a relationship of trust so that employees are confident that the systems procured can be relied on and serve their work-related purposes. According to the Information Culture Assessment Framework, where there are low levels of trust, one is likely to see low to no usage of the records system. Therefore, the findings of the study confirm the assertion of the Framework that where there is no or a low level of trust, records usage will be low.

As outlined above, the Information Culture Assessment Framework states that a lack of trust in the records system will manifest in the non-use of records. The interview respondents in organisation A stated that there was no satisfaction with usage mainly because the system was not deployed properly it dictated how the business should

work. For example, employees were moving documents from Microsoft Outlook into the system for distribution and in doing so they ended up using the Microsoft Office suite instead of the ECMS. Although they experienced technical glitches in organisation C, the expensive system license compounded the dissatisfaction with system usage. The parastatal could not afford to buy sufficient licenses for everybody to use the system. The respondents in organisation B indicated that they were not satisfied with the usage of the system because its ability to retain documents over a long period was questionable. Returning to the survey respondents, not using the system can also be exacerbated by information missing in the records. In this regard, 41 (41%) of the respondents agreed with the statement "I always find missing information in our records". According to Mukred, Yusof and Alotaibi (2019) an ERMS should assist the employee in task completion and offer benefits to them; they will then have positive views of the opportunities that can be reaped from the system.

Similar findings were reported in the study by Svärd (2014), who found that there was low usage of the records system in a municipality where employees did not trust the system. In contrast, the records systems were fully utilised in municipalities where employees expressed trust in the systems. Furthermore, Mooketsi and Leonard (2013) reported that Land Board employees in Botswana found the records system disappointing and frustrating and, as a result, there was low usage of the system. This meant that few records were captured into the system or not even captured at all. Karlos and Nengomasha (2018) point out that top management in the Namibian public sector do not trust the security of the records management system. As a result, they do not use it to create and capture secret or top-secret classified records, preferring paper records instead.

The key findings reported above are consistent with predictions of the Information Culture Assessment Framework. The findings denote that there is a low records system usage in parastatal where there is a low level of trust in the systems. The findings also suggest that the non-use of the records system has to do with the capability of the technologies deployed, employees' responses to the technology, and the parastatal capacity to purchase sufficient licenses for staff members. Although Franks (2013) argues that organisations should provide the necessary technology for records management, it was observed in the current study that parastatals are failing to maintain user-friendly systems. An interesting finding from the current study concerned records systems licenses – a lack of capacity on the part of the parastatal to purchase sufficient licenses appeared to negatively influence the usage of the system.

Although the findings show that the parastatal do not trust their records systems, the study did not establish what the management of the parastatals are doing to influence the perception of employees regarding the records management system.

6.5.1 Ensuring availability of electronic records

The study found that there are measures in place to guarantee the availability of records years after using them. According to Oliver and Foscarini (2014), there has to be a guarantee that records will be available years after their creation as this will help ensure the trustworthiness of the records-keeping system. All the interviewees acknowledged that there are measures in place to ensure that electronic records are available years after their use. Furthermore, most survey respondents, 66 (65%) disagreed or strongly disagreed that they failed to locate documents that were created over a year ago.

When interviewees were asked what measures are available to ensure that electronic records are available years after using them, all the parastatal respondents indicated that their organisations have retention policies, scheduled backups and cloud-based storage that ensure the availability of electronic records is guaranteed. The result imply that the parastatals have measures to ensure that electronic records are available for as long as they are needed. However, Information Culture Assessment Framework states that when there is a guarantee that records will be available for years after their creation, people are more inclined to trust the records-keeping system. This is not the case in the current study because the records-keeping system proved to be a challenge in terms of interoperability and lack of satisfaction with usage. The findings indicate that though these measures were available, employees did not trust the records-keeping system. The Information Culture Assessment Framework states that trust in records-keeping systems is based on shared practices and perceptions of employees. The perception that prevailed amongst the parastatals was dissatisfaction with the ability of the records-keeping system to deliver according to employees' expectations. The measures did not enforce trust.

Despite that, parastatals had made measures to ensure the availability of information as long they are needed or to the end of their scheduled retention period. Oliver and Foscarinin (2014) point out that people adopt and use a system based on their level of trust and their level of trust is, in turn, affected by their perception of the system's reliability. The parastatals, in this regard, focused on the systems. Oliver and Foscarini (2014) argue that because the emphasis has been on systems and technology, the complexity of “people issues” has not been fully recognised.

6.5.2 Security measures

The focus here is mainly on the processes and controls implemented to maintain the security of electronic records. Regarding security procedures and controls, all parastatals respondents indicated that information technology strategy was their reference point on security issues. Since the parastatals acknowledged that there was no electronic records policy, they relied on other policies such as email, internet and backup policies to enhance the security controls and procedures. The security controls employed by an organisation play a critical role in people trusting the records system. The Information Culture Assessment Framework states that there is a need to balance the need to protect information from unauthorised access and provide access and retrieval. The balance that parastatals seemed to have achieved is laying down procedures that guide and enable secure access to organisational electronic records and information. The parastatals indicated that they have security measures that give access levels, and the system allows for assigning roles e.g. whether a person is a reviewer or can edit documents or is allowed to act on documents. Parastatals A and C, have deployed a virtual private network (VPN) that allows remote employees to access company records securely. In parastatal A, the respondents indicated that the organisation has upgraded to Sharepoint, which is cloud-based, to enable the employees to access documents outside the office and a document centre, where one can initiate the workflow. It has mandatory fields and other access control features.

Muchaonyerwa and Khayundi (2014:65) view records security as an important task as it ensures the integrity of electronic records. The authors state that records in electronic form are more susceptible to alteration and deletion than records in paper form, making it essential to secure them. The study findings indicate that less than half (43%) of the survey respondents were confident that no one would alter their records. The plausible reason for this confidence may be because no security breaches incidents were reported. This perception was based on the security measures in place to ensure that the information/records created and captured were safe. All respondents stated that there are certain levels of security in their organisations. Organisations have put in place access control, authorisation limits, authentication levels, passwords, end to end encryption and audit trails as measures to control access to records/information. In addition, the interviewees indicated that even when employees work from home or remotely, electronic records security is guaranteed as their parastatals use VPNs to access electronic records remotely.

6.5.3 Records management and IT departments

The Information Culture Assessment Framework states that there is a need for records managers to collaborate with other information professionals. This can be possible when there is mutual trust and respect from all sides

(Oliver and Foscarini, 2014:144). Hawash et al. (2020) observed that for ERMS to function properly within an organisation, records managers and IT professionals must work together to integrate the ERMS with other information content applications. Records management professionals are responsible for the overall management of records including the development of policies and procedures for managing records in the organisation; whereas IT professionals assist with the ICT infrastructure required including the internet.

In organisation A, the interview respondents said that records management is at the centre of organisational operations and the records management function is integrated into other information systems. It was pointed out that organisation A was going through a restructuring process and thus it was not easy to establish relationships between the Records Management Unit and other units/departments such as IT. However, the respondents were hopeful that relationships would be re-established and improved. The IT department manages all information systems, and the records management staff have been moved to information management. The respondents were adamant that this will result in the alignment of the two units/departments (IT and records management). Because this was a new structure, the study could not establish whether the collaboration/relationship was impactful enough to shape perceptions of employees' trustworthiness in the records keeping system.

In organisation B, the interview respondents pointed to little cooperation between the Records Management Unit and the IT Unit because each unit saw itself as a separate entity. This is evidenced by the respondents' admission that they have two information strategies – one for the IT Unit and the other for the Records Management Unit. The findings suggest that there are information silos within the parastatal. Hawash et al. (2020) argued that this happens because of a lack of interoperability. The findings also suggest a lack of synergy between the two units negatively impacting on records keeping processes. Similar findings were presented by Svärd (2014) who stated that in the studied organisation there was no collaboration between IT staff and archivists which led to the exclusion of other experts in the management of records. Moreover, Ambira, Kemoni and Nulube (2019) established that a lack of collaboration between information technology departments and records management units hampered the development of e-government in Kenya. The findings concerning organisation B are corroborated by Oliver and Foscarini (2014) as they state that IT departments do not trust the capabilities and competencies of records managers and archivists to manage electronic records. However, they are more likely to trust them to know what to do with paper-based information (as opposed to digital information).

In organisation C, the interview respondent stated that a relationship between the Records Management Unit and the IT Unit does exist as they were all trained together when the electronic records system was introduced and, therefore, could speak the same language. There was consultation between the two units when making decisions

concerning the system. The relationship was such that employees' perceptions of the trustworthiness of the records keeping system were positive ones. The challenge in this relationship emerges when the IT officers leave the organisation and those who remain do not have the necessary skills. Oliver and Foscarini (2014) argue that records management professionals focus on the inequality of records management units compared to other organisational functions and departments but fail to turn the inequality into positive actions that can provide solutions.

The current study thus sheds new light on the factors that contribute to records keeping trustworthiness. The results are significant as they add new knowledge to the subject. For example, whereas a reason advanced for not trusting in records was files being destroyed before their time (Oliver 2011), in the current study employees did not trust the records system because the system dictated how the business should work, the issue of affordability of licenses, and the system experiencing glitches. Although the study identified the problem it did not establish what management in the parastatals were doing to influence employees' perceptions of the records management systems. The study has revealed a challenge with regard to trust in records keeping systems. It argues that there is a need for further research that can develop a "trust in records keeping framework" with the sole intention to encourage user trust and satisfaction with the records keeping systems. The constructs of the Framework should include trust, policies, information security behaviour and synergy between records management and other information system units or departments.

6.6 Challenges

Some challenges related to the records management systems were identified. In parastatals A and C, the records management system is integrated into Microsoft Outlook when sending a notification but sometimes it fails to communicate with the email programme. This lack of integration results in employees not trusting the system to do what they expect it to do. Employees complained that they miss tasks that are assigned to them when they are sent through the records management system. Wamukoya (2014) admits that the implementation of an ERMS comes at a hefty cost and that its affordability may be very burdensome to most organisations in Africa. Thus, parastatals also face financial challenges when it comes to implementing records management systems. As noted, it was reported that one of the parastatals could not afford to buy a user license that covers all employees in the organisation. The licenses are billed on their own separate from the records management system. Thus, it depends on the organisation's financial capability to determine how many licenses can be bought. There are not sufficient licenses for everybody to use the system and those unable to do so rely on the physical records. Eventually, those covered by the license become lazy and also resort to the physical records. The licensing issue discourages people from using the records keeping system.

6.8 Summary

This chapter interpreted and discussed the findings presented in Chapter 5. The interpretation and discussion of the results were carried out in light of the theoretical frameworks discussed in Chapter 2 and the literature presented in Chapter 3. The discussion was underpinned by the research questions as outlined in Chapter 1. The interpretation and discussion show that all the questions asked in the study were answered. The study was able to identify the information culture types that exist in the three parastatals in Botswana. The information cultures identified supported records management in the organisations. Furthermore, the behaviours and attitudes accorded to records were discussed as well as the factors that affect the trustworthiness of the records management systems. Challenges that impede records management were discussed and the chapter ended with an outline of the study's limitations.

Chapter 7, the concluding chapter, follows.

Chapter 7

Summary of findings, recommendations and conclusions

7.0 Introduction

The findings of the study were presented in Chapter 5 and discussed and interpreted in Chapter 6. This chapter presents a summary of the findings, draws conclusions and makes recommendations. Also provided are the contribution and originality of the study, the implications of the study for theory, practice and policy, and suggestions for further research. The main objective of the study as presented in Chapter 1 was to investigate how records management is influenced by information culture in three selected parastatals in Botswana. The summary

of the findings presented in this chapter is discussed and interpreted in the light of the Information Culture Assessment Framework, the Records Continuum Model and the Information Culture Conceptual Framework. In providing the summary, the research questions underpinning the study will be responded to. The questions were as follows:

- What kind of information cultures exist in Botswana parastatals?
- How does information culture affect the creation, capture and management of electronic records?
- What values and attitudes are accorded to electronic records?
- How trustworthy are the records keeping systems in the parastatals?

7.1 Summary of findings

The study's findings were drawn from questionnaires involving administrative staff and records officers and interviews with the records managers and representatives of the CEOs in each parastatal. The findings were analysed systematically using SPSS and ATLAS.ti-9 as reported in Chapter 5.

7.1.1 Information culture in Botswana parastatals

The study was able to identify the information cultures that exist in the three selected Botswana parastatals. Three information culture types were identified. A fourth culture type was identified but was declared insignificant. The findings indicate that three information culture types, namely, information sharing, information transparency and information proactiveness, revealed a positive and statistically significant relationship between information culture and records management in the three parastatals; however, as alluded to above, information integrity was statistically non-significant.

It was observed that collectively, the information culture types could explain between 31-37% of the variance in the dependent variable. Furthermore, the findings also showed significant standardised regression weights. The regression outputs suggest that the set of information culture types contribute significantly to records management. Further detail concerning each type is provided below:

- Information sharing was characterised by it taking place between people one works with daily as well as the wider organisational population. It was observed that the internal sharing of information was the major characteristic of the information culture. The main modes of communication were memos, email, intranet and ECMSs. External information sharing was also observed as the parastatals are service-oriented organisations.

- Most respondents agreed that they use the information to create or enhance organisational products, services and processes. There was a strong need to be information proactive to enhance operations and service processes. This was mainly because the parastatals are predominantly service-providing entities, hence their concern with having the necessary information to improve services and processes.

- The respondents pointed out that openness is encouraged in their work units. Having established communication networks help achieve information transparency and the respondents indicated that they have group emails, intranet and ECMSs through which memos are shared. Information about organisational decisions and operations is communicated via such platforms. Openness can only be possible where information is available and the respondents also indicated that they openly and regularly share information on failures or errors.

- Information integrity – this information culture type had a variance of 31.6 % on the dependent variable. Findings indicated that this variable was not statistically significant because it had negative standardised beta weights ß=-.128, t=-1.343, p>.182 and was thus not a major cause for concern with regard to records management. The descriptive statistics indicated some level of understanding of how information should be treated in the organisation to ensure integrity.

7.1.2 How information culture affects the creation, capture and management of electronic records

This section summarises the findings related to records creation and capture. The summary focuses on remote records capturing, email and the assessment of employees' capability to create and capture electronic records. Furthermore, the section presents a summary of how information culture affects the creation and capture of electronic records.

7.1.2.1 Creation and capture of electronic records

The parastatals have laid down procedures that should be followed with regard to the capture of electronic records. However, some challenges are being experienced. In organisation A, although the records system had mandatory fields, there were instances where employees tried to skip the required fields. In organisation C, the challenge in capturing records came at the records classification stage. Although the employees were asked to consult the

Records Management Unit, they never did so. In organisation B, although there is a mail policy, this was not being followed by employees. Thus, even though the parastatals had laid down procedures, the creation and capture of electronic records still present challenges. Findings from both the survey and the interviews established that it was a challenge to capture the metadata of electronic records in the studied parastatals. Similar findings were presented by Kalusopa and Ngulube (2012). The authors found that there were no well-defined or clear procedures or policies to guide the creation of records in most of the labour organisations in Botswana. Furthermore, Kalusopa, Mosweu and Bayane (2021) acknowledge that knowledge of the creation and capture of records at the Ministry of Land and Housing was low.

7.1.2.2 Remote electronic records capturing

Parastatals have measures in place to capture records created remotely or outside employees' workstations. In organisation A, the creation, capture and access to electronic records were made secure through the use of a VPN. In organisations B and C, a cloud-based facility was used to ensure that records created and captured are accessible through the cloud. A majority of survey respondents reported that they were not aware of procedures for creating and capturing electronic records. Despite their lack of awareness of records creation and capture procedures, the employees were aware of the consequences of the lack of proper records creation and capture.

7.1.2.3 Email

While email is used in the parastatals as a communication tool to share information, dealing with email records seemed to be problematic in all three. Furthermore, while the parastatals have developed procedures on how official email records should be handled, the findings revealed that employees were not uploading official emails to the records system. In addition, even though the employees were advised to print and submit the printed documents to the Records Management Unit, they failed to do so.

Email thus presents challenges to the parastatals. Similarly, Kalusopa and Ngulube (2012) reported that email was a challenge among labour organisations in Botswana. There were no policies and procedures on the management and use of email. Furthermore, emails and attachments were disposed of at the employee's discretion without reference to organisational procedures or standards. Although the use of email is common among the parastatals, the findings of the study suggest that email is not properly managed and can be lost.

7.1.2.4 Assessment of employees' capabilities in electronic records creation and capture

The findings revealed that employees have challenges concerning the creation and capture of electronic records. In all three parastatals employees were not following records processes, procedures and classification. Furthermore, the respondents also acknowledged that they were not aware of the procedures for creating and capturing electronic records but that they were aware of the cost of the lack of adherence to proper records management procedures.

7.1.2.5 Information culture and the creation and capture of electronic records

Findings summarised here concern information transparency, information sharing, and information proactiveness and their effect on records creation and capture.

7.1.2.5.1 Information transparency

Information transparency – the study found that information transparency was the second-best predictor with a total variation of 30.4% and showing positive standardised regression weights =.429, t=4.78, p<.001.The study established that information culture in ERM promotes transparency. There has to be communication with employees on what is expected regarding records. The respondents in the study were aware of the cost of their lack of adherence to proper records creation and capture procedures. Information transparency is facilitated by openness and openness is facilitated by access to organisational records. In this regard, respondents indicated that they have access to records created by others. Therefore, an information transparent culture affects the "openness" of how decisions regarding records are taken. Furthermore, information transparency enables information on the creation and capture of records to be shared. Finally, employees knowing how decisions are taken helps build their trust in the records systems.

7.1.2.5.2 Information sharing

Information sharing – the study found a positive correlation between information sharing and records management. Information sharing accounts for 37.8% of the total variation in the dependent variable (records management) over and above other independent variables. An information sharing culture was shown to be the underlying culture for all other information cultures presented in the study. The study found that the parastatals have strong information sharing cultures. An information sharing culture in the parastatals promoted the effective use of electronic records and information capture. The interview respondents indicated that electronic records

systems/ECMSs allowed for collaborative working and information sharing. The electronic records/information were exchanged or shared through an information sharing culture.

There has to be proper records management to capture and maintain the information to be shared. The information sharing culture promotes the maintenance of proper electronic records which allows for the exchange of information within the parastatals and with clients outside the parastatals. Records created and captured by the parastatals were maintained within the electronic records systems to allow the exchange or sharing of information. The interview respondents indicated that the parastatals have SharePoint, intranet and email through which information can be shared.

7.1.2.5.3 Information proactiveness

Information proactiveness – the study pointed out that information proactiveness had a variation of 36.2%. Moreover, information proactiveness had significant standardised regression weights ß=.037, t=2.624, p<.010. Information proactiveness indicated a positive relationship with records management. An information proactive culture was identified in the parastatals. Such a culture supports the creation and capture of electronic records/information because it thrives where there is properly maintained or aggregated information. As noted above, the parastatals have ECMSs that allow for the aggregation of information. Information proactiveness is facilitated when there is proper records creation and capture because it is based on applying information, making decisions on business changes, and promoting innovation on products and services.

An information proactive culture supports the effective use of the created and captured electronic records/information. The culture thrives when employees search for information/records to enhance or create new products and services. The respondents indicated that they search for information widely including the use of the ECMS.

Although the interview findings indicated that there were challenges with classifying records that could impede access, the parastatals have procedures that ensure that the records created can be accessed. Information for responding to organisational requirements and business decision-making can be located and retrieved timeously thus increasing organisational efficiency. This enables organisations to increase their competitive advantage by capitalising on information

7.1.3 Values and attitudes accorded to electronic records

The survey respondents indicated that the parastatals have a positive outlook regarding records. The respondents described records keeping as a good idea and considered records to be an essential part of their work. The interview respondents indicated that their organisations value records because they have:

- Employed qualified records staff. It was established that the parastatals employed qualified members of staff for records management with qualifications ranging from Diplomas to Master's Degrees. However, in terms of the appropriate number of records management staff, the interviewees indicated that they have a shortage of such staff which means they are not able to meet the organisational demand for records/information. Generally, parastatals met the requirements to show that they value their records.

- Segregated records keeping units dedicated to different record types. In all three parastatals, the paper records were segregated according to different categories, that is, either as core function or as administration. The records management units managed both these categories. In terms of electronic records, the interviewees indicated that their organisations have an electronic system. Interview respondents indicated that their organisations have servers dedicated to electronic records and utilise cloud storage. It is observable that the segregation of records keeping units ensured that records are managed according to their type. The parastatals have sufficiently met this criterion to show that they value the records.

- Preparedness to buy into records management policy. There were no organisation-wide ERM policies in the three parastatals. Therefore, it can be stated that there was a preparedness to buy into the records management policy.

7.1.3.1 Records management position in the organisation

The records management unit or section in the organisational organogram is a reflection of the extent to which the organisations value records management. The researcher contends that the position of records management in the organisation can influence the behaviour and attitudes of employees towards records. Interview respondents in organisations A and C expressed satisfaction with the position of records management in their organisation whereas in organisation B the respondents were not satisfied.

7.1.3.2 Management support

In light of the importance of management support noted above, it was essential to determine whether management in the parastatals supported records management. The interview respondents expressed different sentiments on whether records management enjoyed support from senior management. The findings show that organisations A and C enjoyed support from their senior management to a certain extent. In both organisations the respondents cited the following as an indication of support from senior management:

- Provision of an ERM system (ECMS).
- Resourcing in terms of the tools needed to execute records management programmes (software, storage).
- Qualified staff for records management.

Senior management in the two organisations showed commitment by investing in ERM systems and the provision of required resources to enable an environment for records management to support the business of the parastatals. However, interview respondents from organisation B expressed dissatisfaction with the kind of support they got from their senior management. Both respondents stated that there was a lack of commitment from management when it came to implementing ERM. The lack of commitment was evident in the inadequate budget allocated to records management. It is apparent that the two organisations that received support from their senior management had more technological development when compared with organisation B, with its inadequate budget.

7.1.3.3 Records as everybody's responsibility

The findings of the study indicate that the survey respondents had some understanding of their responsibilities regarding records management with the majority indicating that records management was everybody's responsibility. However, the understanding was limited to them as creators and users of records. Their limited understanding of records management is reflected in their inability to follow records management procedures and their lack of certainty concerning capturing records metadata.

7.1.3.4 Circumvention of electronic records management processes

The study revealed that when it comes to circumventing records management processes different answers were provided by the survey and interview respondents. A majority of the survey respondents indicated that they did not circumvent ERM processes. However, the interview respondents reported that there were instances where employees circumvent such processes. The circumvention manifested in employees:

- Avoiding electronic processes.
- Skipping mandatory fields.
- Disregarding laid down procedures and using manual files.

The circumventions reflect negative behaviours towards records and are thus detrimental to good records management practice.

7.1.3.5 Records as a barrier to working efficiently

The majority of respondents did not consider records management requirements as a barrier to working efficiently; rather, they viewed records as a means by which they could enhance their efficiency. The finding thus indicates a positive attitude towards records on the part of the respondents as well as their understanding of the role of records in assisting them to deliver on the mandates of their jobs. In addition, the respondents felt that electronic records were not a barrier as they were prioritised and integrated into the business processes.

7.1.4 Records trustworthiness

The purpose of this section was to address the question of the trustworthiness of the records keeping systems in the parastatals. The survey respondents indicated that they trust the reliability of the electronic records systems. However, the findings from the interview respondents show that they did not trust the systems in their organisations. The reasons given for the lack of trust in the records keeping systems were as follows:

- Technological glitches experienced.
- System errors occur during processing activities.
- Systems not communicating with each other.
- System failures to deliver as required.

All the interview respondents reported dissatisfaction with the level of usage of the records keeping systems in their parastatals. Reasons given for the low usage were:

- The expensive licenses meant that there were insufficient to enable all staff to use the system.
- The system did not retain documents for a long time.
- The system dictated to the parastatal how the business should work.

In addition, the study revealed that a substantial minority of respondents (41%) reported they always found missing information in their records thus compounding the problem of trustworthiness and usage of the records systems. The respondents were not satisfied with the usage of electronic records. These findings are consistent with predictions of the Information Culture Assessment Framework, that is, where there is no trust in the system there will be low usage of the system.

7.1.4.1 Ensuring availability of electronic records

According to Oliver and Foscarini (2014), there has to be a guarantee that records will be available years after their creation which will ensure the trustworthiness of the records keeping system. The findings indicate that the parastatals have measures in place to ensure that records are available for as long as they are needed. The measures include frequent system back-ups, retention policy and cloud-based storage. This enhances employees' trust in the records systems. The findings are consistent with the Information Culture Assessment Framework which states that when there is a guarantee that records will be available years after creating them, people are inclined to trust the records keeping system.

7.1.4.2 Security measures

The security of electronic records must be guaranteed for them to be trusted. The findings indicate that respondents were not certain about the security of their records. There was no certainty that the records created in the system could not be altered. However, the interview respondents from all three parastatals indicated that there were security measures in place.

The finding shows that the parastatals have put in some security measures to control access to records/information. These are access control, authorisation limits, authentication levels, passwords and audit trails. These measures are meant to ensure that records are only accessed by those authorised to do so. The parastatals have also provided encrypted security using VPNs. A VPN ensures that the records accessed remotely are protected thus further bolstering trust in the records system.

7.1.4.3 Records management and IT departments

The synergy between records management and IT varied from one parastatal to another. In organisations A and C, the respondents indicated that there was is a synergy between records management and IT. They pointed out that there was a linkage between records management systems and other IT systems. Both respondents in organisation B indicated that there was no synergy as records management and IT considered themselves as separate entities even though they had technology in common that should have brought them together.

7.2 Contribution and originality of the study

The study investigated the relationship between electronic records and information culture in three parastatals in Botswana and, as such, is the first of its kind in the country. The literature review showed that two studies were carried out in parastatals B and C by Mothasedi (2012) and Keakopa (2013) but their focus was on general records management and did not include information culture. Furthermore, the literature reviewed revealed that most of the studies conducted in Botswana focused on issues affecting electronic records, electronic records readiness and e-government implementation concerns in government departments (Keakopa 2007; Moloi 2009; Motsaathebe and Mnjama 2009; Bwalya, Zulu and Sebina 2015; Mosweu, Bwalya and Mutshewa 2016; Moatlhodi and Kalusopa 2017). The current study is the first of its kind to provide baseline data on information culture and electronic records for future studies to follow in Botswana and Southern Africa generally.

The distinctive contribution of the study was the application of the Information Culture Conceptual Framework to determine the type of information cultures that exist in the selected Botswana parastatals. Previous studies (Choo et al.; Bergeron et al. 2008; Lauri, Heidmets and Virkus 2016) that used the Information Culture Conceptual Framework investigated information culture and information use. The previous studies that investigated records management and information culture (Svärd 2014; Oliver and Foscarini 2014) used the Information Culture Assessment Framework and Records Continuum Model. The current study thus differed from previous ones on methodological orientation.

The study established three information cultures from the six information cultures presented by Marchand and Kettinger (2011) and found that internal factors were the main influencers of the information culture. It was also found that some of the information culture values were already crafted into the parastatals' value statements. The current study used the Information Culture Conceptual Framework within ERM thus adding to the body of knowledge on how the Framework assists in understanding ERM.

The study further revealed behaviours and attitudes that impact records management. It noted that the position of the records management unit within the parastatal does not matter as long as there is management support. The study uncovered challenges that could shape the parastatals' information culture including, among others, behavioural, system-related, and financial challenges. This is the crucial information the study has added to the body of knowledge in the field of records management.

7.3 Implications for theory, practice and policy

The principal objective of the current study was not to build theory but to investigate records management and information culture. Although the study did not build a theory, theoretical frameworks played a pivotal role in shaping the direction of and the conclusions drawn from the study. The study used the Information Culture Conceptual Framework to identify the type of information cultures that exist in the three Botswana parastatals. The applicability of the Framework to the study was discussed in Chapter 2 and the findings of the study were integrated with the Framework, interpreted and discussed in Chapter 6. The Framework aided the study in identifying and describing the three information culture types that exist in the selected parastatals.

The Information Assessment Framework Culture has not received much engagement among scholars. However, the current study confirmed that the framework was able to tease out employees' different behaviours and attitudes according to records management and the trustworthiness of the records keeping systems. The significant finding reveals that trust in records varies with organisational context. Furthermore, the study teased out some types of attitudes and behaviours using the framework e.g. circumventing records management processes, barrier to working efficiently and records management was everybody's responsibility. Therefore the current study implies that Information Assessment Framework Culture can be used to explain and understand information culture within electronic records management.

The current findings of the study show that the records continuum model was able to identify human activities exerted on the records creation and capture phase. The findings show that records, procedures and processes are significant variables that direct people's behaviour. The finding is significant as they confirm that the records Continuum Model can enhance our understanding of the culture relating to records as information resources. Therefore the findings imply that the Records Continuum is suitable for uncovering human behaviour in electronic records.

The study suggests that three information culture, information proactiveness, transparency and sharing correlate with electronic records. However, Information sharing culture emerged the dominant culture compared to other information culture types identified. The current study findings are significant as they confirm that the Information Culture Conceptual Framework is applicable in identifying information sharing as one variable that can identify types of information in an organisation. The Information Culture Conceptual Framework variables were used in other studies Choo et al. (2008) and Lauri, Heidmets and Virkus (2016) to identify information culture types and its impact on information use. The current study findings imply that the conceptual framework explains and understands electronic records. The finding implies that more records management studies can be done using the Information Culture Conceptual Framework.

Implications for practice are that the results are crucial for records practitioners and management. The study calls for records practitioners to not focus only on the electronic system side while seeking solutions to electronic records but consider user perception, behaviour and attitude concerning the deployed electronic records system. Furthermore, the study calls for records practitioners to consider their organisation's information culture to tailor solutions to their context. This can provide a foundation upon which properly targeted actions and strategies can be formulated. Therefore the results imply that records practice needs to change to consider human behaviour even when planning and implementing records systems.

The study calls for records practitioners to align their processes and procedures to be embedded within the system. Therefore this requires that records managers take part as early as the procurement stage of the records management software and drawing of reference. There is a need for this because the study finding reveals that processes and procedures permeate across the study, therefore, records manager must ensure they are infused in the system such that they do not look as if they are imposed in the work of other employees.

Policy implications show the finding of the study can serve as a policy basis. The study has established that there are no records management policies in parastatals. As a result, the current study will inform the promulgation of policy in parastatals. Findings on creation and capture have indicated that processes and procedures on electronic records are integral to shaping how people behave towards records. These findings on creation and capture will guide policy crafting on proper procedures and processes for electronic records. Furthermore, the findings provide policy content that can bring synergy between information technology and records management. The intersection between information technology and records manager that is lacking in most parastatals can be brought by policy.

7.4 Recommendations

This section presents the recommendations emanating from the findings of the study. The following recommendations are made:

- As short-term intervention on lack of adherence to records management processes and procedures, parastatals can carry out workshops and short-term training for the rest of the employees assigned responsibilities and authority in the electronic records system. Furthermore, parastatals should come up with strategies to encourage adherence to procedures laid down.

- Also, as a short-term intervention, it has been observed by Oliver and Foscarini (2014) that it has been proven that developing tasks unrelated to core business of employee activities is usually unsuccessful. Therefore, call for parastatals to re-evaluate their records management procedure. As a mitigation strategy, the study recommends that parastatals embed their procedure within the core task or activities of employees instead of the records procedures to be viewed as extra work by employees.

- In the medium term, a training programme can be developed through their records management unit focusing on electronic records management. ISO 15489:11 states that "programmes for training in requirements for records management should encompass the roles and responsibilities of, and be addressed to, all members of management and employees". The long-term programme can target records management employees, both old and new ones. The old employees will need training as new changes are added to the software and new employees will need more training on the system used in the organisation. The rest of the employees with user rights in the system need to be trained as new developments in the system are adopted.

- Parastatals should engage in what Oliver and Foscarini (2014) call reflective practice, this involves seeking a connection with users and learning from them. Oliver and Foscarini (2014) argue that "the question is not how trustworthy the records system are, rather what users think about them". The study uncovered that there was a lack of trust in records keeping in the parastatals. The lack of trust came with complains on the system itself. Reflective practice in this case will consider this complains and learn from them to remedy the situation. Therefore in the medium term, management needs to periodically assess

employees' perceptions on the records management systems by, for example conducting surveys. The assessments will assist management to make necessary changes to the systems and respond to user needs.

- The findings revealed the absence of electronic records policies. Policies are vital for shaping the behaviour and attitudes of employees. The behaviour of employees towards records is largely influenced by regulatory instruments and the absence of policies can mean that records are managed on an ad-hoc basis. It is recommended that the parastatals, as a matter of urgency, promulgate electronic records policies to shape employees' behaviours and attitudes concerning records. In the short term, the parastatals can create records management committees that promulgate electronic records policies.

- There is a need to bring IT departments and records management units together ensure synergy. This will bolster confidence in their operations and ultimately build trust among employees in the records systems. In the short term, parastatals can conduct awareness workshops and how the two are related and the need to work together. In the long term, there is a need to work on organisational structure to bring this together and align the duties and job profiles.

7.5 Suggestions for further research

In the discussion chapter (Chapter 6) various areas suitable for further research were identified. These were areas that the current study was not able to investigate and which have not been dealt with or adequately dealt with in the literature. These suggestions for further research are outlined below:

- There is a need to establish whether organisations (including parastatals) consider information culture in their programmes. Being aware of the culture that is in operation in their organisations can assist those organisations to create programmes and interventions that can rectify records/information challenges they experience.

- The current study confined itself to the records creation and capture stage of the Records Continuum Model. There is a need for further research to examine the relationship between information culture and records management based on other Continuum dimensions.

- Although the study identified challenges relating to employees' behaviour and attitudes as well as trust in records keeping, it did not establish what the management in the organisations was doing to influence the

perceptions of employees regarding the records management systems. Therefore, it is recommended that further research investigate the role of management in shaping the information cultures that exist in their organisations.

- The study focused on investigating information culture and records management in three parastatals in Botswana. Further research, of a similar nature, needs to be carried out in other parastatals and other government departments and ministries. The research can also be extended to the private sector in Botswana.

- The current study focused on identifying types of information cultures and values and attitudes of employees. Further research can be dedicated to determining how information culture and records management improve organisational performance. This can help paint a broader (and better) picture of information culture and records management in Botswana.

- Organisations have crafted value and mission statements that shape their organisational culture. It will thus be useful to understand how value and mission statements influence the information culture and records management practices of organisations.

7.6 Conclusion

The study set out to investigate the relationship between information culture and electronic records management in Botswana. It identified three information culture types that can be found in the selected Botswana parastatals. Using the Information Culture Conceptual Framework, the three cultures identified were information transparency, information sharing, and information proactiveness. The information cultures identified have a significant effect on the management of electronic records. These findings provide insight into organisational information culture and how employees behave towards records in an organisation. The study also investigated the values and attitudes accorded to ERM. The findings indicate that the parastatals value electronic records and that there were different attitudes towards ERM. Finally, the study sought to determine how trustworthy the records keeping systems were. It was found that respondents did not fully trust the electronic records systems. The reasons for the lack of trust were attributed to the records systems' functionality. Moreover, because there was no trust in the systems, the study found that there was no satisfaction with the usage of the electronic records systems.

These findings contribute to the body of knowledge. The study aligns with previous research that indicates that values and attitudes manifest in different ways. Furthermore, the findings align with the Information Culture Assessment Framework which indicates that where there is no trust in the electronic records system, usage of the records system will be low. The values and attitudes established in the study have a bearing on how employees view ERM. Trust in electronic records cannot be fostered when the records system does not function well. In light of the findings, records practitioners should consider information culture types when creating programmes for the creation and capture of electronic records. Furthermore, practitioners should develop strategies to mitigate the negative attitudes presented in parastatals.

References

Abdulkadhim, H., Bahari, M., Bakri, A., & Hashim, H. (2015). Exploring the common factors influencing electronic document management system(EDMS) implementation in government. *ARPN Journal of Engineering and Applied Sciences, 10*(23). Retrieved June 10, 2019, from http://www.arpnjournals.org/jeas/research_papers/rp_2015/jeas_1215_3255.pdf

Abdullah, A. L., Yusof, Z. M., & Mokhtar, U. A. (2019). Factors influencing the implementation of electronic records and information management: A case study in military service in Malaysia. *Records Management Journal, 20*(1), 81-89.

Abdullah, A. L., Mohammad Yusof, Z., & Mokhtar, U. A. (2020). Factors influencing the implementation of electronic records and information management: a case study in military service in Malaysia. *Records Management Journal*, *30*(1), 81-99.

Adam, A. (2007). *Implementing Electronic Document and Record Management Systems*. New York: CRC Press.

Adamu, H. (2016). Management of electronic records in federal universities in North Western States of Nigeria. doi:http://dx.doi.org/10.2139/ssrn.2940967.

Alaimo, K., Olson, C. M., & Frongillo, E. A. (1999). Importance of cognitive testing for survey items: an example from food security questionnaires. *Journal of Nutrition Education*, *31*(5), 269-275.

Alguliyev, R. M., & Mahmudova, R. S. (2015). Information culture formation as the most promising direction of individuals general culture*. International Journal of Modern Education and Computer Science. 7*(3), 54-61.

Alillerie, K., Cordier, A., & Lehmans, A. (2017). *Information literacy, transliteracy and information culture development in France: What the teacher-librarian can change.* In S. Kurbanoglu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi & L. Roy(Eds.), *Information literacy in the workplace.* 5th European Conference, ECIL 2017, Saint-Malo, France, September 18-21, 2017, Revised Selected Papers.

Allen, M., Titsworth, S., & Hunt, S. K. (2008). *Quantitative research in communication*. Thousand Oaks: Sage Publications.

Allwood, C. M. (2012). The distinction between qualitative and quantitative research methods is problematic. *Quality & quantity, 46*(5), 1417-1429.

Alreemy, Z., Chang, V., Walters, R., & Wills, G. (2016). Critical success factors (CSFs) for information technology governance (ITG). *International Journal of Information Management, 36*(6), 907-916.

Alshibly, H., Chiong, R., & Bao, Y. (2016). Investigating the critical success factors for implementing electronic document management systems in governments: evidence from Jordan. *Information Systems Management, 33*(4), 287-301.

Alzubi, K. (2015). Implementing electronic documentation management system. *Journal of Theoretical & Applied Information Technology, 77*(1), 306-317.

Ambira, C. M. (2016). A framework for management of electronic records in support of e-government in Kenya. *(Doctoral dissertation*, University of South Africa). Retrieved May 10, 2018, from https://core.ac.uk/download/pdf/83637262.pdf.

Ambira, C. M., Kemoni, H. N., & Ngulube, P. (2019). A framework for electronic records management in support of e-government in Kenya. *Records Management Journal*. 29 (3), 303-319.

An, X. (2003). An integrated approach to records management: the records continuum model's purpose-oriented approach to records management changes the role of recordkeeping from reactive to proactive. *Information Management Journal, 37*(4), 24-31.

Appiah, K. O., Amos, K.-N. M., Bashiru, J., Drammeh, P. H., & Tuffour, S. (2017). Corporate governance and records management in private and public hospitals in Ghana. *Records Management Journal, 27*(1), 42-56.

Archives of Manitoba. (2021). Who is responsible? Retrieved December 20, 2021 from https://www.gov.mb.ca/chc/archives/gro/recordkeeping/about_records.html.

Arshad, N. I., Bosua, R., Milton, S., Mahmood, A. K., Zainal-Abidin, A. I., Ariffin, M. M., & Aszemi, N. M. (2021). A sustainable enterprise content management technologies use framework supporting agile business processes. *Knowledge Management Research & Practice*, 20(1), 123-140.

Asma'Mokhtar, U., & Yusof, Z. M. (2009). Electronic records management in the Malaysian public sector: the existence of policy. *Records Management Journal, 19*(3), 231-244. doi:10.1108/09565690910999201

Asogwa, B. E. (2012). The challenge of managing electronic records in developing countries: Implications for records managers in sub-Saharan Africa. *Records Management Journal, 22*(3), 198-211.

Association for Intelligent Information Management. (2009). Records Management Who is taking responsibility? Retrieved March 23, 2020, from https://www.aiim.org/pdfdocuments/37767.pdf

Atherton, J. (1985). From life cycle to continuum: some thoughts on the records management–archives. *Archivaria*, 43-42.

Australian National Audit Office. (2012). Records Management in the Australian Public Service. Retrieved May 10, 2018, from https://www.anao.gov.au/work/performance-audit/records-management-australian-public-service

Babbie, E., & Mouton, J. (2001). *The practice of social research: South African edition*. Cape Town: Oxford University Press Southern Africa.

Babbie, E. R. (2013). *The practice of social research*. Wadsworth:Cengage Learning.

Baker, J. D. (2016). The purpose, process, and methods of writing a literature review. *AORN Journal, 103*(3), 265-269.

Balogun, T., & Kalusopa, T. (2021). A framework for digital preservation of Indigenous knowledge system (IKS) in repositories in South Africa. *Records Management Journal*. 31(2),176-196.

Barnes, N. D. (2016). ISO 15489 Revised and redesigned for 2016. Retrieved June 12, 2018, from http://imm.arma.org/publication/?i=336859&article_id=2607058&view=articleBrowser&ver=html5.

Baron, J. R., & Thurston, A. (2016). What lessons can be learned from the US archivist's digital mandate for 2019 and is there potential for applying them in lower resource countries? *Records Management Journal, 26*(2), 206-217.

Battley, B. (2013). Finding aids in context: using Records Continuum and Diffusion of Innovations models to interpret descriptive choices. *Archives and Manuscripts, 41*(2), 129-145.

Bearman, D. A. (2007). Moments of risk: identifying threats to electronic records. *Archivaria, 62(4)*, 15-46.

Benson, J., & Hagtvet, K. (1996). The interplay among design, data analysis, and theory in the measurement of coping. In M. Zeidner & N. Endler, S (Eds.), *Handbook of Coping: Theory, Research, Applications*. New York: John Wiley.

Berg, B. L., & Lune, H. (2009). *Qualitative research methods for the social sciences*. Boston: Pearson.

Bergeron, P., Heaton, L., Choo, C. W., Detlor, B., Bouchard, D., & Paquette, S. Knowledge and information management practices in knowledge-intensive organizations: A case study of a Québec public organization. [Paper presentetion] Proceedings of the Annual Conference of CAIS/Actes du congrès annuel de l'ACSI. Edmonton, Alberta,Canada, 24-30 October 2013. Retrieved July 30, 2019, from https://doi.org/10.29173/cais200

Bigirimana, S., Jagero, N., & Chizema, P. (2015). An assessment of the effectiveness of electronic records management at Africa University, Mutare, Zimbabwe. *Journal of Economics, Management and Trade*. 10 (1), 1-10

Blackie, T. (2018) Records management as a risk mitigation strategy at Water Utilities Corporation. (MA Dissertation, University of Botswana) Retrieved March 9, 2023 from https://linyanti.ub.bw/search~S9?/XTH*+EDUCATION&SORT

Bless, C., Higson-Smith, C., & Kagee, A. (2007). *Fundamentals of social research methods: An African perspective.* Cape town: Juta and Company Ltd.

Botswana Government. (2011). E-government strategy stakeholders final report. Retrieved June 12, 2019, from http://www.gov.bw/globalassets/portal-team/egovt-stakeholders-conference-proceedings_final-report-without-annexes.pdf

Brogan, M., & Roberts, D. (2009). RMAA Technology Survey 2008: From mainstream to bleeding edge technology in the RIM workspace. *IQ: The RIM Quarterly, 25*(2), 40-55 .

Brooks, J. (2019). Perspectives on the relationship between records management and information governance. *Records Management Journal*, *29*(1/2), 5-17.

Brothman, B. (2006). Archives, life cycles, and death wishes: a helical model of record formation. *Archivaria, 61*, 235-269.

Brumm, E. K. (1992). Graduate education in records management: The University of Texas model. *Journal of Education for Library and Information Science, 33*(4), 333-337.

Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of mixed methods research,* 1(1), 8-22.

Buckland, M. (1994). On the nature of records management theory. *The American Archivist, 57*(2), 346-351.

Bwalya, K. J., Zulu, S. F., & Sebina, P. M. (2015). Knowledge Management and Electronic Records Management in the Realm of E-Government: Case of Botswana. In K. J. Bwalya & S. Mutula (Eds.), *Digital Solutions for Contemporary Democracy and Government* (pp. 166-188). London: IGI Global.

Cain, P., Doig, A., Flanary, R., & Barata, K. (2001). Filing for corruption: Transparency, openness and record-keeping. *Crime, Law and Social Change,* 36(4), 409-425.

Calder, A. (2009). *IT Governance Implementing Frameworks and Standards for the Corporate Governance of IT*: New York: IT Governance Publishing.

Chachage, B., & Ngulube, P. (2006). Management of business records in Tanzania: an exploratory case study of selected companies. *South African Journal of Information Management, 8*(3), 4-18

Chadwick, B., Bahr, H., & Albrecht, C. (1984). Survey research: questionnaire studies. *Social Science Research Methods.* Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Chikomba, A., Rodrigues, A., & Ngoepe, M. (2021). Management of digital records in selected financial services parastatals in Zimbabwe. *Information Development, 37*(2), 245-257.

Chilisa, B., & Preece, J. (2005). *Research methods for adult educators in Africa*: Cape Town: Pearson.

Chilunjika, A., & Mutizwa, B. (2019). Exploring factors militating against the performance of parastatals in Zimbabwe: the case of the national railways of Zimbabwe from 2008 to 2016. *Journal of Public Administration and Development Alternatives (JPADA), 4*(1-1), 41-60.

Chirwa, J, F (2013). An investigation of the knowledge levels and practices of the records management staff in the Ministry of Education, Science and Vocational Training and Early Education Headquarters. (MA Dissertation, University of Zambia) Retrieved March 9, 2023 from http://dspace.unza.zm/handle/123456789/4089

Chitiga-Mabugu, M., Henseler, M., Mabugu, R. E., & Maisonnave, H. (2021). The implications of deteriorating state-owned enterprise performance on the South African economy. *Annals of Public and Cooperative Economics*, 1-24. DOI: 10.1111/apce.12339.

Choo, C. W. (2013). Information culture and organizational effectiveness. *International Journal of Information Management, 33*(5), 775-779.

Choo, C. W., Bergeron, P., Detlor, B., & Heaton, L. (2008). Information culture and information use: An exploratory study of three organizations. *Journal of the American Society for Information Science and Technology, 59*(5), 792-804.

Choo, C. W., Furness, C., Paquette, S., Van Den Berg, H., Detlor, B., Bergeron, P., & Heaton, L. (2006). Working with information: information management and culture in a professional services organization. *Journal of Information Science, 32*(6), 491-510.

Chowdhury, M. F. (2014). Interpretivism in aiding our understanding of the contemporary social world. *Open Journal of Philosophy.* 4, 432-438.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London: Routledge.

Convery, N. (2016). There is a new version of the international standard for records management (ISO 15489-1:2016). https://infrastructure.jiscinvolve.org/wp/2016/06/27/there-is-a-new-version-of-the-international-standard-for-records-management-iso-15489-12016/.

Cook, T. (1994). Electronic records, paper minds: the revolution in information management and archives in the post/custodial and post/modernist era.[Based on a presentation delivered by the author during his November 1993 Australian tour.]. *Archives and Manuscripts, 22*(2), 300-325.

Corrall, S., Kennan, M. A., & Afzal, W. (2013). Bibliometrics and research data management services: Emerging trends in library support for research. *Library Trends, 61*(3), 636-674.

Cox, R. J. (2005). *Archives and archivists in the information age*. New York: Neal-Schuman.

Cox, R. J., & Duff, W. (1997). Warrant and the definition of electronic records: questions arising from the Pittsburgh project. *Archives and Museum Informatics, 11*(3-4), 223-231.

Crawford, J., & Irving, C. (2009). Information literacy in the workplace: a qualitative exploratory study. *Journal of librarianship and information science, 41*(1), 29-38.

Creswell, J. W. (2013). *A framework for design. Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage Publication.

Creswell, J. W. (2014). *A concise introduction to mixed methods research.* London: Sage publications.

Creswell, J. W., & Clark, V. L. P. (2018). *Designing and conducting mixed methods research*. London: Sage Publication.

Crisp, B. R., Anderson, M. R., Orme, J., & Green Lister, P. (2006). Assessment frameworks: A critical reflection. *British Journal of Social Work, 37*(6), 1059-1077.

Cumming, K. (2010). Ways of seeing: contextualising the continuum. *Records Management Journal, 20*(1), 41-52.

Curry, A., & Moore, C. (2003). Assessing information culture—an exploratory model. *International Journal of Information Management, 23*(2), 91-110.

Davenport, T. H., & Prusak, L. (1997). *Information ecology: Mastering the information and knowledge environment*. Oxford University Press.

Deakin, H., & Wakefield, K. (2014). Skype interviewing: Reflections of two PhD researchers. *Qualitative research*, *14*(5), 603-616.

De Haes, S., Huygh, T., & Joshi, A. (2017). Exploring the Contemporary State of Information Technology Governance Transparency in Belgian Firms. *Information Systems Management, 34*(1), 20-37. doi:10.1080/10580530.2017.1254444

Demirtel, H., & Bayram, Ö. G. (2014). Efficiency of electronic records management systems: Turkey and example of Ministry of Development. *Procedia-Social and Behavioral Sciences, 147*, 189-196.

Denscombe, M. (2008). Communities of practice: A research paradigm for the mixed methods approach. *Journal of mixed methods research, 2*(3), 270-283.

De Vaus, D. (2013). *Surveys in social research*. London:Routledge.

Diraditsile, K., & Ontetse, M. A. (2017). Lived experiences and consequences of unemployment on women: An empirical study of unemployed young women in Mahalapye, Botswana. *Journal of International Women's Studies, 18*(4), 131-143.

Docusafe. (2019). *Discover Secure Remote Access Technology*. Retrieved September 12, 2018, from https://www.docusafe.com/our-software-remote-access/

Dollar, C. M., & Ashley, L. J. (2015). Ensuring long-term availability, usability, and trustworthiness of digital information. *Sedona Conference Journal,* 16, 175.

Douglas, J. (2010). The identification, development and application of information culture in the western Australian public sector. (Doctoral dissertation, Edith Cowan University). Retrieved February 9, 2019, from https://ro.ecu.edu.au/theses/1882

Doyle, L., Brady, A.-M., & Byrne, G. (2009). An overview of mixed methods research. *Journal of research in nursing, 14*(2), 175-185.

Duffus, K. T. (2016). The role of Records Management education in Jamaica's development initiative. (Doctoral dissertation. University College London). Retrieved March 20, 2019, from http://discovery.ucl.ac.uk/1536240/1/Kaydene%20Duffus%20Thesis.pdf.

Duranti, L. (2010). Concepts and principles for the management of electronic records, or records management theory is archival diplomatics. *Records Management Journal, 20*(1), 78-95.

Duranti, L., & Rogers, C. (2012). Trust in digital records: An increasingly cloudy legal area. *Computer Law & Security Review*, *28*(5), 522-531.

Duranti, L. (2013). *The major findings of the InterPARES Project.* Retrieved February 9, 2019 https://repository.kulib.kyoto-u.ac.jp/dspace/bitstream/2433/173414/1/kua11_15.pdf

Eagleton, T. (2008). *Literary theory: an introduction*. United States of America: Minnesota University Press.

Elgohary, E., & Abdelazyz, R. (2020). The impact of employees' resistance to change on implementing e-government systems: An empirical study in Egypt. *The Electronic Journal of Information Systems in Developing Countries, 86*(6), e12139.

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs—principles and practices. *Health services research*, *48*(6), 2134-2156.

Fiebelkorn, G. E. (2012). Why Does It Take So Long? Implementing Electronic Records Programs at Universities. (Masters dissertation, University of Manitoba) Retrieved August 10, 2019, from https://pdfs.semanticscholar.org/3d3d/df8fc44ab108ea904ce43b3d0702421d4bfe.pdf.

Flynn, S. J. (2001). The records continuum model in context and its implications for archival practice. *Journal of the Society of Archivists, 22*(1), 79-93.

Franks, P. C. (2013). *Records and information management.* Chicago: American Library Association.

Fresko, M. (2010). MoReq What do we do now? Retrieved February 9, 2019 from, www.intellectuk.org.

Fricker, R. D. (2016). Sampling methods for online surveys. *The Sage handbook of online research methods.* London: Sage Publication.

Furness, C. D. (2010). *Group information behavioural norms and the effective use of a collaborative information system: a case study.* Toronto: University of Toronto.

Gamlen, A., & McIntyre, C. (2018). Mixing methods to explain emigration policies: A post-positivist perspective. *Journal of mixed methods research, 12*(4), 374-393.

Getuno, P. M., & Awino, Z. B. (2014). Public Procurement and Disposal Regulations,(2006) Implementation and Performance of Kenyan State Corporations. *Academic Journal of Social Sciences and Education, 2*(4), 113-130.

Gigliotti, L., & Dietsch, A. (2014). Does age matter? The influence of age on response rates in a mixed-mode survey. *Human Dimensions of Wildlife, 19*(3), 280-287.

Ginman, M. (1987). Information culture and business performance. Retrieved February 9, 2019, from https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1198&context=iatul

Ginzburg, J. (2005). Abstraction and ontology: Questions as propositional abstracts in type theory with records. *Journal of Logic and Computation, 15*(2), 113-130.

Gray, L. M., Wong-Wylie, G., Rempel, G. R., & Cook, K. (2020). Expanding qualitative research interviewing strategies: Zoom video communications. *The qualitative report, 25*(5), 1292-1301.

Gregory, K. (2005). Implementing an electronic records management system: a public sector case study. *Record s Management Journal, 15*(2), 80-85.

Grimshaw, A. (1995). *Information culture and business performance.* Hertfordshire: University of Hertfordshire Press.

Gunnlaugsdottir, J. (2008). Registering and searching for records in electronic records management systems. *International Journal of Information Management, 28*(4), 293-304.

Hair Jr, J. F., Wolfinbarger, M., Money, A. H., Samouel, P., & Page, M. J. (2015). *Essentials of business research methods.* New York: Routledge.

Hansen, P., & Widen, G. (2017). The embeddedness of collaborative information seeking in information culture. *Journal of Information Science 43*(4), 554-566.

Harries, S. (2011). *Records management and knowledge mobilisation: a handbook for regulation, innovation and transformation*. Oxford: Chandos Publishing.

Hartas, D. (2015). *Educational research and inquiry: Qualitative and quantitative approaches*. London: Bloomsbury Publishing.

Hawash, B., Asma'Mokhtar, U., Yusof, Z. M., & Mukred, M. (2020). The adoption of electronic records management system (ERMS) in the Yemeni oil and gas sector: Influencing factors. *Records Management Journal*.9 (5) 6959-6971

Hay-Gibson, N. (2011). Risk and records management: investigating risk and risk management in the context of records and information management in the electronic environment. (Doctoral dissertation, Northumbria University).

Hockman, H. (2009). Change management: Ensuring ECM success by preparing end-users for automation. *ECM Connection.* Retrieved July 9, 2019, from http://www.docfinity.com/change-management-ensuring-ecm-success-by-preparing-end-users-for-automation

Hoglund, L. (1998). A Case Study of Information Culture and Organizational Climates. *Swedish Library Research., 3-4*, 73-86.

Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. *Journal of knowledge management*, *14*(1), 128-140.

Hurley, C. (1998). From Dust Bins to Disk-Drives and now to dispersal: the State Records Act 1998 (New South Wales).[Review article.]. *Archives and Manuscripts, 26*(2), 390-411.

Information and Image Management. (2009). Electronic Records Management-still playing catch-up with paper. Retrieved April 9, 2019, from https://www.aiim.org/pdfdocuments/37388.pdf.

International Records Management Trust. (1999). Managing electronic records. Retrieved July 20, 2019, from https://static1.squarespace.com/.../5b6cb4b2352f53305eeed82a/.../IRMT_electronic_recs.

InterPARES Trust Project. (2017). Investigating the management of digital records in enterprise-wide systems: Botswana. Retrieved April 9, 2019, from https://interparestrust.org/assets/public/dissemination/AF04_FinalReport_July2018.pdf

ISO15489-1:2016(E). (2016). Information and documentation-Records management-Part 1:Concepts and principles. Retrieved July 9, 2019, from https://static1.squarespace.com/static/5a1c710fbce17620f861bf47/t/5a45d41353450a6f05e9b138/1514525716795/ISO%2B15489-1-2016.pdf

Isa, A. M., Ismail, W. M. H. W., Nordin, N. M., & Saman, W. S. W. M. (2015). Information Seeking Behavior Among IT Professionals in Using Electronic Records Management System. *Advanced Science Letters, 21*(6), 2105-2108.

Ismail, A., & Jamaludin, A. (2009). Towards establishing a framework for managing trusted records in the electronic environment. *Records Management Journal*, *19*(2), 135-146.

Issa, M., & Wamukoya, J. (2018). The Role of Electronic Records Management in Promoting the Delivery of Justice in Tanzania: Perspectives from Dar es Salaam Commercial Court. *Information and Knowledge Management*. 8(2), 30-35.

Iwhiwhu, E. B. (2010). "Electronic records management in Africa: problems and prospects. In E. sharenana & E. Adomi (Eds.), *Handbook of Research on Information Communication Technology Policy: Trends, Issues and Advancements*. New York: IGI Global.

Jacobs, L. (2012). The importance of the quality of electronic records management in enhancing accountability in the South African public service: A case study of a national department. *Mousaion, 30*(2), 33-51.

Jefferis, K., & Sejoe, S. (2017). Economic review Retrieved July 9, 2019, from https://www.bifm.co.bw/sites/default/files/Econsult%20Review%20Q3%202021.pdf.

Johnson, T. P., & Wislar, J. S. (2012). Response rates and nonresponse errors in surveys. *Jama, 307*(17), 1805-1806.

Johare, R. (2001). Electronic records management in Malaysia: the need for an organisational and legal framework. *Records Management Journal*, *11*(2), 97-109.

Joseph, P., Debowski, S., & Goldschmidt, P. (2012). Paradigm shifts in recordkeeping responsibilities: implications for ISO 15489's implementation. *Records Management Journal, 22*(1), 57-75.

Kalusopa, T., Mosweu, T., & Bayane, S. (2021). Implementation of enterprise-wide systems to manage trustworthy digital records in Botswana's public sector. *New Review of Information Networking, 26*(1-2), 50-69.

Kalusopa, T. (2011). Developing and e-records readiness framework for labour organisations in Botswana. (Doctoral dissertation, University of South Africa) Retrieved February 9, 2020 from http://hdl.handle.net/10500/5690

Kalusopa, T., & Ngulube, P. (2012). Developing an e-records readiness framework for labour organizations in Botswana. *Information Development, 28*(3), 199-215.

Kandur, H. (2017). The role of institutional competencies for the long-term preservation of electronic records: The Experience of the Turkish Public Sector. *Qualitative and Quantitative Methods in Libraries, 5*(2), 527-533.

Karlos, A. N., & Nengomasha, C. T. (2018). Change management: A critical factor for successful implementation of an electronic document and records management system (EDRMS): A Namibian case study. *Journal for Studies in Humanities and Social Sciences*, 085-105.

Karlsen, J. T., & Gottschalk, P. (2004). Factors affecting knowledge transfer in IT projects. *Engineering management journal, 16*(1), 3-11.

Katuu, S., & Ngoepe, M. (2015, October 23-22). *Managing digital records within South Africa's legislative and regulatory framework.* [Paper presentation] 3rd International Conference on Cloud Security and Management ICCSM-2015, University of Washington-Tacoma. Retrieved December 8, 2017 from https://sajim.co.za/index.php/sajim/article/view/686/898

Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. *Social sciences, 8*(9), 255-277.

Kautto, T., & Henttonen, P. (2020). Records management as invisible work: A study of Finnish municipalities. *Government Information Quarterly, 37*(4), 101460.

Keakopa, S., Millar, L., O'Shea, G., Nordland, L. P., Suderman, J., Ardern, C., . Tale, S. (2009). Understanding the Context of Electronic Records Management. *Training in Electronic Records Management.* London: International Records Management Trust.

Keakopa, S. M. (2007). Management of electronic records in Botswana, Namibia and South Africa: opportunities and challenges. (Doctoral dissertation.University College London).

Keakopa, S. M. (2013). Implementation of a records management strategy at the Botswana Unified Revenue Service. *Journal of the South African Society of Archivists, 46*, 37-45.

Kelton, K., Fleischmann, K. R., & Wallace, W. A. (2008). Trust in digital information. *Journal of the American Society for Information Science and Technology, 59*(3), 363-374.

Kemoni, H., & Ngulube, P. (2008). Relationship between records management, public service delivery and the attainment of the United Nations Millennium Development Goals in Kenya. *Information Development, 24*(4), 296-306.

Kemoni, H. N. (2008). Theoretical framework and literature review in graduate records management research. *African Journal of Library, Archives and Information Science, 18*(2), 103-117.

Kenosi, L., & Moathodi, T. (2012). The determination of value in archival science and the ever evolving theories of records selection. *Eastern Librarian, 23*(1), 24-36.

Khanie, G. (2019). Education and labor market activity of women: The case of Botswana. *Journal of Labor and Society, 22*(4), 791-805.

Kisilowska, M. (2015). Information culture as a new perspective for information science. Retrieved December 8, 2017 from https://www.researchgate.net/publication/280878545_Information_culture_as_a_new_perspective_for_information_science.

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, *6*(5), 26-41.

Klareld, A.-S. (2018). Recordkeeping in an outsourcing public agency. *Records Management Journal, 28*(1), 99-114.

Kothari, C., R. (2004). *Research methodology: methods and techniques.* New Delhi: New Age International (PTY) Ltd Publisher.

Külcü, Ö., & Çakmak, T. (2010). Evaluation of the ERM application in Turkey within the framework of the InterPARES Project. *International Journal of Information Management, 30*(3), 199-211.

Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners*. Los Angeles: Sage Publications.

Kwatsha, N. (2010). Factors affecting the implementation of an electronic document and records management system. (Masters dissertation, University of Stellenbosch, South Africa).

Lauri, L., Heidmets, M., & Virkus, S. (2015). *Information literacy and information culture in higher education institutions in Estonia.* Paper presented at the European Conference on Information Literacy. In S. Kurbanoglu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi & L. Roy(Eds.), *Information Literacy: Moving Toward Sustainability Third European Conference,* ECIL October 19-22, 2015, Revised Selected Papers. pp 509–516

Lauri, L., Heidmets, M., & Virkus, S. (2016). The Information Culture of Higher Education Institutions: The Estonian Case. *Information Research: An International Electronic Journal, 21*(3), 1-26

Lee, K. R., & Lee, K.-S. (2009). The Korean government's electronic record management reform: The promise and perils of digital democratization. *Government Information Quarterly, 26*(3), 525-535.

Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Quality & quantity, 43*(2), 265-275.

Leedy, P. D., & Ormrod, J. E. (2009). *Qualitative research methodologies*. Boston: Pearson Education.

Lemieux, V., & Cenfetelli, R. (2015). *What's In It For Me? The Role Of People in Developing and Implementing a Recordkeeping System*. Retrieved December 8, 2017 from http://www.interpares.org/canada_dissemination_post_goh_slais-research-day-2011.pdf

Lepik, K., & Kannukene, K. (2017). Information Culture of Students in the Academic Environment–Finding One's Way through Studies. In S. Kurbanoglu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi & L. Roy(Eds.), *Information literacy in the workplace.* 5th European Conference, ECIL 2017, Saint-Malo, France, September 18-21, 2017, Revised Selected Papers

Leshem, S., & Trafford, V. (2007). Overlooking the conceptual framework. *Innovations in Education and Teaching International, 44*(1), 93-105.

Lewellen, M. J. (2015). The impact of the perceived value of records on the Use of electronic recordkeeping systems. *(* Doctoral dissertation, University of Wellington). Retrieved October 11, 2017 from http://hdl.handle.net/10063/4144

Lobe, B., Morgan, D., & Hoffman, K. A. (2020). Qualitative data collection in an era of social distancing. *International Journal of Qualitative Methods, 19*, 1-8

Lobres, D., Paduhilao, J., Rodelas, M., De Ocampo, L. G., Sausa, L., Lopez, G., & Tanalas, L. (2020). Knowledge, Attitude, and Practices on Records Management among Bank Professionals. *Human Behavior, Development and Society, 21*(1), 56-67.

Lowenthal, P. R., & Leech, N. L. (2010). Mixed research and online learning: Strategies for improvement. In T. T. Kidd (Ed.), *Online education and adult learning: New frontiers for teaching practices*. New York: IGI Global.

Lowry, J. (2013). Correlations between ICT and records policy integration and court case management system functionality: East African case studies. *Records Management Journal, 23*(1), 51-60.

Luyombya, D. (2011). ICT and digital records management in the Ugandan public service. *Records Management Journal, 21*(2), 135-144.

Ma, J., Abie, H., Skramstad, T., & Nygard, M. (2009 October, 12-15). Requirements for evidential value for the assessment of the trustworthiness of digital records over time. [Paper presentation] IEEE 6th International Conference on Mobile Adhoc and Sensor Systems. Macau, China. Retrieved October 11, 2017 from DOI:10.1109/MOBHOC.2009.5336917

Magang, T. I., & Kube, K. B. (2018). Compliance with Best Practice Governance Principles by State Owned Enterprises in Botswana. *International Journal of Business and Management, 13*(2), 149.

Malgas, M. (2021). Transformation of Governance in State-Owned Companies: The Case of South Africa as a Developing Country. *Archives of Business Research, 9*(7), 162-176.

Mampe, G., & Kalusopa, T. (2012). Records management and service delivery: the case of Department of Corporate Services in the Ministry of Health in Botswana. *Journal of the South African Society of Archivists, 45*, 2-23.

Matandare, M. (2018). Botswana unemployment rate trends by gender: Relative analysis with upper middle income Southern African countries (2000-2016). *Dutch Journal of Finance and Management*, *2*(2), 04.

Marchand, D. A., Kettinger, W. J., & Rollins, J. D. (2001). *Information orientation: The link to business performance*. England: John Wiley & Sons Ltd.

Marhefka, S., Lockhart, E., & Turner, D. (2020). Achieve research continuity during social distancing by rapidly implementing individual and group videoconferencing with participants: key considerations, best practices, and protocols. *AIDS and Behavior, 24*, 1983–1989.

Martínez-Rocha, R. F., Lau, J., & Díaz, E. R. (2017). *Information Culture and CETYS University WASC Accreditation: The Library as Stakeholder.* In S. Kurbanoglu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrachi & L. Roy(Eds.), *Information literacy in the workplace.* 5th European Conference, ECIL 2017, Saint-Malo, France, September 18-21, 2017, Revised Selected Papers.

Maseh, E., & Mutula, S. (2016). Records management readiness for open government in the Kenyan judiciary. *Mousaion, 34*(3), 146-166.

Maseh, E. J. (2015). Records management readiness for open government in the Kenyan judiciary. (Doctoral dissertation*,* University of KwaZulu-Natal) Retrieved March 11, 2018 from http://researchspace.ukzn.ac.za/handle/10413/12067.

Masuku, M. (2012). Archives, accountability, human rights and good governance: where is the nexus? *Mousaion, 30*(2), 187-200.

Maxfield, M. G. (2015). *Basics of research methods for criminal justice and criminology*: London: Cengage Learning.

Maxwell, J. A. (2012). *Qualitative Research Design: An Interactive Approach*. London: Sage Publications.

Mazikana, A. T. (2019). Corporate governance as a strategy for business viability in parastatal organizations in Harare. *SSRN 3476540*. Retrieved August 11, 2018 from http://dx.doi.org/10.2139/ssrn.3476540.

Mbekomize, C. J., & Wally-Dima, L. (2013). Social and environmental disclosure by parastatals and companies listed on the Botswana stock exchange. *Journal of Management and Sustainability, 3*(3), 66.

McChesney, K., & Aldridge, J. (2019). Weaving an interpretivist stance throughout mixed methods research. *International Journal of Research & Method in Education, 42*(3), 225-238.

McDonald, J. (2014). Enhancing Record-keeping capacity in developing countries: building the bridges. In J. Lowry and J. Wamukoya (Eds.), *Integrity in Government Through Records Management: Essays in Honour of Anne Thurston* (pp. 237-245). England: Ashgate Publishing Limited.

McKemmish, S. (2001). Placing records continuum theory and practice. *Archival science, 1*(4), 333-359.

McKemmish, S., Acland, G., & Reed, B. (1999). Towards a framework for standardising recordkeeping metadata: the Australian recordkeeping metadata schema. *Records Management Journal, 9*(3), 173-198.

McKemmish, S., Upward, F. H., & Reed, B. (2010). Records continuum model. *Encyclopedia of Library and Information Sciences, 3*, 4447-4459.

McLeod, J., Childs, S., & Hardiman, R. (2011). Accelerating positive change in electronic records management: headline findings from a major research project. *Archives and Manuscripts, 39*(2), 66-94.

McLeod, J., & Hare, C. (2006). *How to Manage Records in the e-environment*. Routledge.

Mensah, M., & Adams, M. (2014). The nexus between corporate governance and records management in private and public hospitals in Ghana. *Records Management Journal, 24*(1), 32-55.

Mertens, D. M. (2010). *Research and evaluation in education and psychology : integrating diversity with quantitative, qualitative, and mixed methods*. Los Angeles: Sage publication.

Miles, M., B , & Huberman, M., A, . (1994). *Qualitative data analysis.* London: Sage Publications.

Mintah, C., Gabir, M., Aloo, F., & Ofori, E. K. (2022). Do business records management affect business growth? *Plos One, 17*(3),1-22

Moatlhodi, T. M., & Kalusopa, T. (2017). An assessment of e-records readiness at the Ministry of Labour and Home Affairs, Gaborone, Botswana. *Mousaion, 34*(3), 1-22.

Moatshe, B. (2014). Management of business records at Botswana Supreme Furniture. (Master's dissertation, University of Botswana).

Mokhtar, U., A, & Yusof, Z. (2009). Electronic records management in the Malaysian public sector: the existence of policy. *Records Management Journal, 19*(3), 231-244.

Molai, P., Kyobe, M., & Salie, T. (2009). Investigating electronic records management and compliance with regulatory requirements in a South African university. *South African Journal of Information Management,* 11(1), 1-16.

Moloi, J. (2009). E-records readiness in the public sector in Botswana. *ESARBICA Journal, 28*(1),1-17.

Moloi, J., & Mutula, S. (2007). E-records management in an e-government setting in Botswana. *Information Development, 23*(4), 290-306.

Mooketsi, B., & Leonard, M. (2013). Factors Influencing The Usage Of The Tribal Land Information Management System For Land Management And Administration: The Case Of Mogoditshane Subordinate Land-Board. *The Electronic Journal of Information Systems in Developing Countries, 59*(1), 1-17.

Morse, J. M., & Niehaus, L. (2016). *Mixed method design: Principles and procedures*. London: Routledge.

Mosweu, O., & Rakemane, D. (2020). The role of records management in ensuring good governance in Africa. *Journal of the South African Society of Archivists, 53*, 103-123.

Mosweu, T. L., & Kenosi, L. (2018). Implementation of the Court Records Management System in the delivery of justice at the Gaborone Magisterial District, Botswana. *Records Management Journal, 28*(3), 234-251.

Mothasedi, N. (2012). *Management of e-records at Botswana Training Authority. (*Master's dissertation, University of Botswana).

Motsaathebe, L., & Mnjama, N. (2009). The management of High Court records in Botswana. *Records Management Journal, 19*(3), 173-189.

Muchaonyerwa, N., & Khayundi, F. (2014). The Management of Digital Records in the Office of the Premier of the Eastern Cape Province, South Africa. *African Journal of Library, Archives & Information Science, 24*(1), 41-52. Retrieved October 11, 2018 from http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=95740570&site=eds-live

Mujere, N. (2016). Sampling in Research In M. L. Baran & J. E. Jones (Eds.), *Mixed methods research for improved scientific study* (pp. pp. 106-121). IGI Global.

Mukred, M., & Yusof, Z. M. (2015). The Role of Electronic Records Management (ERM) for Supporting Decision Making Process in Yemeni Higher Professional Education (HPE): A Preliminary Review. *Journal of Technology (Sciences and Engineering), 73*(2), 117-122. Retrieved September 11, 2018 from https://www.researchgate.net/profile/Zawiyah_Yusof/publication/275222291_The_Role/links/5669517a08ae193b5fa26e60.pdf.

Mukred, M., Yusof, Z. M., & Alotaibi, F. M. (2019). Ensuring the productivity of higher learning institutions through electronic records management system (ERMS). *IEEE Access, 7*, *97343-97364*. Retrieved August 16, 2018 from DOI:10.1109/ACCESS.2019.2927614

Mutimba, C. J. (2014). Implementation of electronic document and records management system in the public sector: a case study of the Ministry of Higher Education Science and Technology. (Masters dissertation, University of Nairobi). Retrieved October 11, 2018 from

http://erepository.uonbi.ac.ke/bitstream/handle/11295/76120/Mutimba_Implementation%20of%20electronic

Mutiti, N. (2002). Computerisation of archives and records in the ESARBICA region. *ESARBICA Journal, 21*, 114-119.

Mutsagondo, S., & Chaterera, F. (2016). Mirroring the National Archives of Zimbabwe Act in the context of electronic records: Lessons for ESARBICA member states. *Information Development, 32*(3), 254-259.

Mutsagondo, S., & Tsvuura, G. (2017). Dilemma in disposing electronic mail records in public departments: the Zimbabwean scenario. *Paradigms, 11*(2), 190-196.

Mutula, S. M., & van Brakel, P. (2006). E-readiness of SMEs in the ICT sector in Botswana with respect to information access. *The electronic library, 24*(3), 402-417.

Mwangi, W. G. (2017). An Examination of Records Management Practices for Improved Service Delivery in Laikipia County Government, (Masters dissertation, Kisii University).

Mzerah, N. (2013). The role of records management in promoting business efficiency and service delivery at Kenya Ports Authority (KPA). *ESARBICA Journal, 32*, 80-90.

Nengomasha, C. T., & Nyanga, E. H. (2015). Access to archives at the national archives of Namibia. *ESARBICA Journal*, *34*, 88.

Neuman, W. L. (2014). *Basics of social research: Qualitative and quantitative approaches*. Edinburgh: Pearson Education.

Ndenje-Sichalwe, E. (2010). The significance of records management in fostering accountability in the public service reform programme of Tanzania. (Doctoral dissertation, University of Kwa-Zulu Natal).

Ndlovu, K., Mauco, K., & Grover, S. (2019). *Evaluation of REDCap as an alternative data management and quality improvement tool for cutaneous lymphoma care in Botswana*. In N. Mostert and U. Kemloh (ed) *From evidence to practice: The implementation of digital health interventions in Africa for achievement of universal health coverage.* Paper presented at the 12th Health Informatics in Africa Conference, Gaborone. October 18-21, 2019.

Ngoepe, M., & Keakopa, M., S. (2011). An assessment of the state of national archival and records systems in the ESARBICA region: a South Africa-Botswana comparison. *Records Management Journal, 21*(2), 145-160.

Ngoepe, M., & Saurombe, A. (2016). Provisions for managing and preserving records created in networked environments in the archival legislative frameworks of selected member states of the Southern African Development Community. *Archives and Manuscripts, 44*(1), 24-41.

Ngoepe, M., & Van Der Walt, T. (2009). An Exploration of Records Management Trends in the South African Public Sector. *Mousaion, 27*(1).

Ngulube, P. (2010). Mapping mixed methods research in library and information science journals in Sub-Saharan Africa 2004–2008. *The International Information & Library Review, 42*(4), 252-261.

Ngulube, P., Mokwatlo, K., & Ndwandwe, S. (2009). Utilisation and prevalence of mixed methods research in library and information research in South Africa 2002-2008. *South African Journal of Libraries and Information Science, 75*(2), 105-116.

Ngulube, P., & Ngoepe, M. (2013). An exploration of the role of records management in corporate governance in South Africa. *South African Journal of Information Management, 15*(2), 1-8.

Nguyen, L. T., Swatman, P., & Fraunholz, B. (2008). *Australian public sector adoption of EDRMS: a preliminary survey.* Paper presented at the ACIS2008: Creating the future: transforming research into practice: Proceedings of the 19th Australasian Conference on Information Systems.

Nkala, G. S., & Ngulube, P. (2012). E-records readiness at the National Archives of Zimbabwe. *Mousaion, 30*(2), 108-116.

Nsibirwa, Z., B. (2012). Preservation of, and access to, legal deposit materials in South Africa. (Doctoral dissertation, University of KwaZulu-Natal).

O'Cathain, A., Murphy, E., & Nicholl, J. (2010). Three techniques for integrating data in mixed methods studies. *BMJ,* 155(3), 341

Odeyemi, S. T., Issa, A. O., & Saka, H. T. (2011). Management of Records in the Judiciary of South-Western States of Nigeria. *Information Manager, 11*(1-2), 45-55.

Oliver, G. (2004). Investigating information culture: a comparative case study research design and methods. *Archival science, 4*(3-4), 287-314.

Oliver, G. (2011). *Organisational Culture for Information Managers*. Oxford: Chandos Publishing.

Oliver, G. (2017). Understanding information culture: conceptual and implementation issues. *Journal of information science theory and practice, 5*(1), 6-14.

Oliver, G., & Foscarini, F. (2014). *Records management and information culture: Tackling the people problem*. Facet Publishing.

Omoregie, G., & Popoola, S. (2018). Organizational culture, information sharing and perception of records management system as factors affecting organizational effectiveness in the banking industry in Nigeria. *Research Journal of Library and Information Science, 2*(3), 53-73.

Osanloo, A., & Grant, C. (2016). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative issues journal: connecting education, practice, and research, 4*(2), 7.

Owens, I., Wilson, T., & Abell, A. (1997). Information and business performance: a study of information systems and services in high-performing companies. *Journal of librarianship and information science, 29*(1), 19-28.

Pan, W. (2017). The implementation of electronic recordkeeping systems: An exploratory study of socio-technical issues. *Records Management Journal, 27*(1), 84-98.

Panhwar, A. H., Ansari, S., & Shah, A. A. (2017). Post-positivism: an effective paradigm for social and educational research. *International Research Journal of Arts & Humanities (IRJAH), 45*(45).

Penn, I. A., & Pennix, G. B. (2017). *Records management handbook*. London:Routledge.

Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The qualitative report, 20*(2), 76-85.

Pereira, R. A. (2017). Assessing the state of implementation of the National Archives and Records Management act at Eduardo Mondlane University in Mozambique. (Doctoral dissertation, University of South Africa).

Pew Research Centre. (2020). Collecting survey data. Retrieved October 11, 2018 from https://www.pewresearch.org/methods/u-s-survey-research/collecting-survey-data/ .

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods*. New York: Lippincott Williams & Wilkins.

Porogo, K. M., & Kalusopa, T. (2021). A strategic framework for digital preservation in the context of e-government in Botswana public service. *Journal of the South African Society of Archivists, 54*, 83-101.

Qadir, S., & Quadri, S. (2016). Information availability: An insight into the most important attribute of information security. *Journal of Information Security, 7*(3), 185-194.

Rakemane, D., & Serema, B. C. (2018). Electronic records management practices at the Companies and Intellectual Property Authority in Gaborone, Botswana. *Journal of the South African Society of Archivists, 51*, 148-169.

Ramokate, K., & Moatlhodi, T. (2010). Battling the appraisal backlog: A challenging professional obligation for Botswana National Archives and Records Services (BNARS). *ESARBICA Journal, 29*, 67-86.

Rathapo, S. B. Information sources and services available to parastatal public utility organisations in Botswana : The case Botswana Power Corporation, (BPC) and Water Utilities corporation (WUC). Retrieved December 11, 2018 from https://search.ebscohost.com/login.aspx?direct=true&db=cat00836a&AN=med.b1594771&site=eds-live

Read, J., & Ginn, M. L. (2015). *Records management*. New York: Cengage Learning.

Redish, E. F. (2004). A theoretical framework for physics education research: Modeling student thinking. *arXiv preprint physics/0411149*. Retrieved December 11, 2018 https://arxiv.org/ftp/physics/papers/0411/0411149.pdf

Reed, B. (2005). Reading the records continuum: interpretations and explorations. *Archives and Manuscripts, 33*(1), 18.

Regmi, P. R., Waithaka, E., Paudyal, A., Simkhada, P., & van Teijlingen, E. (2016). Guide to the design and application of online questionnaire surveys. *Nepal journal of epidemiology, 6*(4), 640.

Remler, D. K., & Van Ryzin, G. G. (2011). *Research Methods in Practice: Strategies for Description and Causation: Strategies for Description and Causation*. London: Sage Publications.

Ruane, J. M. (2005). *Essentials of research methods*. Australia: Blackwell Publishing Ltd.

Rubino, M., Vitolla, F., & Garzoni, A. (2017). The impact of an IT governance framework on the internal control environment. *Records Management Journal, 27*(1), 19.

Ryan, A. B. (2006). Post-positivist approaches to research. In M. Antonesa (Ed.), *Researching and Writing your Thesis: a guide for postgraduate students*. Mace: Maynooth Adult and Community Education.

Saffady, W. (2009). *Managing electronic records*. New York: ARMA International.

Sataslåtten, O. H. (2014). The Prerequisites for Electronic Records Management in the Developing World: Lessons from Yemen and Kenya. In J Lowry and J. Wamukoya (Ed.), *Integrity in Government Through Records Management: Essays in Honour of Anne Thurston* (pp. 183-195). England: Ashgate Publishing Limited.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. London: Prentice Hall.

Schellnack-Kelly, I. (2014). The role of records management in governance-based evidence, service delivery and development in South African communities by postgraduate students in the School of Arts, Department of Information Science at the University of South Africa. (Doctoral dissertation, University of South Africa) .

Sedgwick, M., & Spiers, J. (2009). The use of videoconferencing as a medium for the qualitative interview. *International Journal of Qualitative Methods, 8*(1), 1-11.

Shepherd, E., & Yeo, G. (2003). *Managing records: a handbook of principles and practice*. London:Facet publishing.

Sigauke, D. T., Nengomasha, C. T., & Chabikwa, S. (2016). Management of email as electronic records in state universities in Zimbabwe: findings and implications for the National Archives of Zimbabwe. *ESARBICA Journal, 35*, 14.

Simukonda, P. H. (2002). The role and performance of the parastatals. In K. R. Hope (Ed.), *From crisis to renewal: development policy and management in Africa*. Boston: Leiden.

Sinha, J. B. (2009). *Culture and organizational behaviour*. London: Sage Publications.

Siphambe, H., & Motswapong, M. (2010). Female participation in the labour market of Botswana: Results from the 2005/06 labour force survey data. *Botswana Journal of Economics, 7*(11), 65-78.

Smallwood, R. F. (2013). *Managing electronic records: Methods, best practices, and technologies.* Canada: John Wiley & Sons.

Smith, K. (2017). *Public sector records management: a practical guide*. London: Routledge.

Smith, P., Siller, J., Poynton, T., & Exon, M. (1995). *Introduction to records management*. Australia: Macmillan Education.

Smyth, R. (2004). Exploring the usefulness of a conceptual framework as a research tool: a researcher's reflections. *Issues in Educational Research, 14*(2), 167.

Soyka, H. (2015). Records as force multiplier: understanding the records continuum as a framework for examining the role of records in a community. (Doctoral dissertation, University of Pittsburgh).

Statistics Botswana. (2019). Quarterly Multi-Topic Survey: labour force module report 3. Retrieved December 11, 2018 https://www.statsbots.org.bw/sites/default/files/publications/Quarterly%20Multi%20Topic%20Survey%20Labour%20Force%20Module%20Report-%20Q3%202019_0.pdf.

Sundqvist, A. (2016). Information culture and records management. *International Journal Information Management, 36*(1), 9-15.

Sundqvist, A., & Svärd, P. (2016). Information culture and records management: a suitable match? Conceptualizations of information culture and their application to records management. *International Journal of Information Management, 36*(1), 9-15. Retrieved November 11, 2018 http://ac.els-cdn.com/S0268401215000870/1-s2.0-S0268401215000870-main.pdf

Svärd, P. (2014). Information and records management systems and the impact of information culture on the management of public information. (Doctoral dissertation, University of Amsterdam). Retrieved November 11, 2018 https://pure.uva.nl/ws/files/1706587/140664_12.pdf

Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). *Using multivariate statistics*. New York: Pearson Education.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. London:Sage.

Thanye, K. G., Kalusopa, T., & Bwalya, K. J. (2015). Assessment of the appraisal practices of architectural records at the Gaborone City council in Botswana. *ESARBICA Journal, 34*, 45.

Thurmond, V. A. (2001). The point of triangulation. *Journal of nursing scholarship, 33*(3), 253-258.

Tough, A., & Kemoni, H. N. (2009). Management of electronic records: Review of empirical studies from the Eastern, Southern Africa Regional Branch of the International Council on Archives (ESARBICA) region. *Records Management Journal, 19*(3), 190-203.

Travica, B. (2005). Information Politics and Information Culture: A Case Study. *Informing Science, 8*:1-34.

Tsabedze, V., & Kalusopa, T. (2018). Towards a framework for e-records readiness in support of e-government in eSwatini. *ESARBICA Journal: Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives, 37*, 39-68.

Tshirado, N. M. (2013). Information Orientation of a public organisation: a qualitative case study of the Information Orientation in the Department of International Relations and Cooperation. (Doctoral dissertation, Stellenbosch University).

Tshotlo, K., & Mnjama, N. (2010). Records management audit: the case of Gaborone City Council. *ESARBICA Journal, 29*,5-35.

Ukata, P. F., & Wechie, N. (2019). Electronic Records Management and National Development: A Case of Nigeria. *International Journal of Social Sciences and Management Research, 5*(2), 35-57.

United Nations Development Programme. (2015). Sustainable development goals. Retrieved February 9, 2019, from https://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf

Upadhyay, U. D., & Lipkovich, H. (2020). Using online technologies to improve diversity and inclusion in cognitive interviews with young people. *BMC medical research methodology, 20*(1), 1-10.

Upward, F. (1996). Structuring the records continuum Part 1: post custodial principles and properties. *Archives and Manuscripts, 24*(2), 268.

Upward, F. (1997). Structuring the records continuum (Series of two parts) Part 2: post custodial principles and properties. *Archives and Manuscripts, 24*(2), 268.

Upward, F. (2000). Modelling the continuum as paradigm shift in recordkeeping and archiving processes, and beyond Ö a personal reflection. *Records Management Journal, 10*(3), 115-139.

Upward, F., Reed, B., Oliver, G., & Evans, J. (2013). Recordkeeping informatics: re-figuring a discipline in crisis with a single-minded approach. *Records Management Journal, 23*(1), 37-50.

Uutoni, W., Yule, W., & Nengomasha, C. T. (2011). Electronic governance and hybrid libraries in Namibia. *IFLA Journal, 37*(2), 118-125.

Vehovar, V., Toepoel, V., Steinmetz, S., Wolf, C., Joye, D., Smith, T., & Fu, Y. (2016). The Sage handbook of survey methodology. London: Sage.

Venkatesh, V., Brown, S. A., & Sullivan, Y. W. (2016). Guidelines for conducting mixed-methods research: An extension and illustration. *Journal of the Association for Information Systems, 17*(7), 2.

Venson, S. L. (2008). *E-records Management: A Comparative Study of Botswana Technology Centre (BOTEC), and Rural Industries Promotions Company Botswana (RIPCO)*. (Master's dissertation, University of Botswana).

Vick, T. E., Nagano, M. S., & Popadiuk, S. (2015). Information culture and its influences in knowledge creation: Evidence from university teams engaged in collaborative innovation projects. *International Journal of Information Management, 35*(3), 292-298.

Victoria, L. (2016). Trusting Records: Is Blockchain Technology the Answer? *Records Management Journal, 26*(2).

Walters, T. O. (1995). Rediscovering the theoretical base of records management and its implications for graduate education: searching for the new School of Information Studies. *Journal of Education for Library and Information Science*, 36(2), 139-154.

Weller, S. (2017). Using internet video calls in qualitative (longitudinal) interviews: Some implications for rapport. *International Journal of Social Research Methodology*, *20*(6), 613-625.

Wamukoya, J. (2014). Records Management and Governance in Africa in the Digital Age. In J. Lowry and J. Wamukoya (Eds.), *Integrity in Government Through Records Management: Essays in Honour of Anne Thurston* (pp. 183-195). England: Ashgate Publishing Limited.

Wamukoya, J. (2016). Records Management and Governance in Africa in the Digital Age. In J. Lowry & J. Wamukoya (Eds.), *Integrity in Government Through Records Management: Essays in Honour of Anne Thurston* (pp. 173-178).

Wamukoya, J., & Mutula, S. M. (2005). Capacity-building requirements for e-records management: the case in east and southern Africa. *Records Management Journal, 15*(2), 71-79.

Wang, M.-Y. (2006). The impact of information culture on managing knowledge A double case study of pharmaceutical manufacturers in Taiwan. *Library Review, 55*(3), 209-221.

Wato, R. (2006). E-records readiness in the ESARBICA region: challenges and the way forward. *ESARBICA Journal, 25*, 69-83.

Widén-Wulff, G. (2000). Business information culture: a qualitative study of the information culture in the Finnish insurance industry. *Information Research, 5*(3), 5-3.

Wilkins, L., & Swatman, P. M. (2008). Innovative Records Management Solutions: a Best Practice Exemplar from Local Government. *ICEG-2008 4th International Conference on e-Government*. Melbourne, Australia October 23-24. Retrieved February 9, 2019, from https://d1wqtxts1xzle7.cloudfront.net/41767136/Innovative_Records_Management

Wright, T. (2013). Information culture in a government organization: examining records management training and self-perceived competencies in compliance with a records management program. *Records Management Journal, 23*(1), 14-36.

Xie, S. L. (2013). National strategy for digital records: Comparing the approaches of Canada and China. *International Journal of Information Management, 33*(4), 697-701.

Yaacob, R. A., & Mapong-Sabai, R. (2011). *Electronic Records Management in Malaysia: A case study in one government agency*. Paper presented at the Asia Pacific Conference Library & Information Education & Practice, Putrajaya, Malaysia. June 22-24. Retrieved September 23, 2019, from https://www.project-consult.de/files/RM_Malaysia_SP_ERM11_420.pdf

Yeo, G. (2007). Concepts of record (1): evidence, information, and persistent representations. *The American Archivist, 70*(2), 315-343.

Yeo, G. (2011). Rising to the level of a record? Some thoughts on records and documents. *Records Management Journal, 21*(1), 8-27.

Yeo, G. (2018). *Records information and data; Exploring the role of records keeping in an information culture* United Kingdom: Facet publishing.

Yin, B. (2014). An analysis of the issues and benefits in EDRMS Implementation-A case study in a New Zealand public sector organisation. (Master dissertation, University of Wellington).

Yusof, Z. M., Abuzawayda, I. Y., & Aziz, M. J. A. (2015). Electronic Records Management in Institutions of Higher Learning in Libya: Adoption oF DIRKS Model. *Journal of Theoretical and Applied Information Technology, 53*(3).

Yusof, Z. M., & Chell, R. W. (2002). Towards a theoretical construct for records management. *Records Management Journal, 12*(2), 55-64.

Yvonne, F. M. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of mixed methods research, 4*(1), 6-16.

Zheng, Y. (2005 January,3-6). *Information culture and development: Chinese experience of e-health.* [Paper presentation] Proceedings of the 38th Annual Hawaii International Conference on System Sciences Hawaii, USA. Retrieved September 23, 2019, from https://www.computer.org/csdl/proceedings-article/hicss

Zinner, H., Helle, & Viborg, A., Kim. (2008). Electronic records management systems implementation in the Pakistani local government. *Records Management Journal, 18*(1), 40-52.

Appendices

Introductory letters

Appendix A: Letter to Office of the President

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

Office of the President
Attn: J. Ramsay
P O BOX 001
Gaborone
Botswana

03 August 2017

Dear Sir/Madam

RE: Introducing Mr Mogogi Thabakgolo PhD Student at University of KwaZulu Natal

This letter serves to introduce and confirm that Mr Thabakgolo is a duly registered PhD (Information Studies) candidate at the University of KwaZulu-Natal (UKZN). The title of his PhD research is **'Electronic Records Management and information Culture in Botswana's Parastatals'.**

The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. As part of the requirements for the award of a PhD degree he is expected to undertake original research in an environment and place of his choice. The UKZN ethical compliance regulations require him to provide proof that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Mr Thabakgolo permission to carry out research in your organisation(s). Should you need any further clarification, do not hesitate to contact me.

Thank you in advance for your understanding

ZGNsibirwa
Dr Zawedde Nsibirwa
Supervisor and Lecturer
Information Studies Programme
University of KwaZulu-Natal
Private Bag X01 Scottsville 3209
Pietermaritzburg

Appendix B: Letter to Water Utilities Corporation

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

The Chief Executive Officer
Water Utilities Corporation
Private Bag 00276
Gaborone
Botswana

03 August 2017

Dear Sir/Madam

RE: Introducing Mr Mogogi Thabakgolo PhD Student at University of KwaZulu Natal

This letter serves to introduce and confirm that Mr Thabakgolo is a duly registered PhD (Information Studies) candidate at the University of KwaZulu-Natal (UKZN). The title of his PhD research is **'Electronic Records Management and information Culture in Botswana's Parastatals'.**

The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. As part of the requirements for the award of a PhD degree he is expected to undertake original research in an environment and place of his choice. The UKZN ethical compliance regulations require him to provide proof that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Mr Thabakgolo permission to carry out research in your organisation(s). Should you need any further clarification, do not hesitate to contact me.

Thank you in advance for your understanding

ZGNsibirwa
Dr Zawedde Nsibirwa
Supervisor and Lecturer
Information Studies Programme
University of KwaZulu-Natal
Private Bag X01 Scottsville 3209
Pietermaritzburg

Appendix C: Letter to Botswana Qualification Authority

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

The Chief Executive Officer
Attn: Gabothuse Bornwell-Ogaketse
Botswana Qualification Authority
Private Bag BO 340
Gaborone
Botswana

03 August 2017

Dear Sir/Madam

RE: Introducing Mr Mogogi Thabakgolo PhD Student at University of KwaZulu Natal

This letter serves to introduce and confirm that Mr Thabakgolo is a duly registered PhD (Information Studies) candidate at the University of KwaZulu-Natal (UKZN). The title of his PhD research is **'Electronic Records Management and information Culture in Botswana's Parastatals'.**

The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. As part of the requirements for the award of a PhD degree he is expected to undertake original research in an environment and place of his choice. The UKZN ethical compliance regulations require him to provide proof that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Mr Thabakgolo permission to carry out research in your organisation(s). Should you need any further clarification, do not hesitate to contact me.

Thank you in advance for your understanding

ZNsibirwa
Dr Zawedde Nsibirwa
Supervisor and Lecturer
Information Studies Programme
University of KwaZulu-Natal
Private Bag X01 Scottsville 3209
Pietermaritzburg

Appendix D: Letter to Botswana Unified Revenue Services

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

The Commissioner
Attn: G. Mane
Botswana Unified Revenue Services
Private Bag 0013
Gaborone
Botswana

03 August 2017

Dear Sir/Madam

RE: Introducing Mr Mogogi Thabakgolo PhD Student at University of KwaZulu Natal

This letter serves to introduce and confirm that Mr Thabakgolo is a duly registered PhD (Information Studies) candidate at the University of KwaZulu-Natal (UKZN). The title of his PhD research is **'Electronic Records Management and information Culture in Botswana's Parastatals'.**

The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. As part of the requirements for the award of a PhD degree he is expected to undertake original research in an environment and place of his choice. The UKZN ethical compliance regulations require him to provide proof that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Mr Thabakgolo permission to carry out research in your organisation(s). Should you need any further clarification, do not hesitate to contact me.

Thank you in advance for your understanding

Z Nsibirwa
Dr Zawedde Nsibirwa
Supervisor and Lecturer
Information Studies Programme
University of KwaZulu-Natal
Private Bag X01 Scottsville 3209
Pietermaritzburg

Appendix E: Letter to Water Utilities Corporation

P O BOX 1446 AAD
Gaborone

07 January 2020

The Chief Executive Officer
Water Utilities Corporation
Private Bag 00276
Gaborone

Dear Sir/Madam

REF: Permit renewal

Following my request for permission to conduct a study in your organization, which you acceded to in 2017 (referenced WUC 3/3/1). I write to inform you that I was not able to conduct the study due to unforeseen circumstances pertaining to my studies. I humbly request your esteemed office to consider renewing the permit. As I would like to start collecting data from your organization in February 2020.

Find attached copies of renewed permit from office of the president and the previous letter from your organization.

Thank you in advance for your positive consideration of this request.

Yours Faithfully

Mogogi Thabakgolo
3555180/72740288
thabakgolom@ub.ac.bw

Appendix F: Letter to Botswana Qualification Authority

P O BOX 1446 AAD
Gaborone

07 January 2020

The Chief Executive Officer
Botswana Qualification Authority
Private Bag BO 340
Gaborone

Dear Sir/Madam

REF: Permit renewal

Following my request for permission to conduct a study in your organization, which you acceded to in 2017 (referenced BQA 6/4/1 III (4). I write to inform you that I was not able to conduct the study due to unforeseen circumstances pertaining to my studies. I humbly request your esteemed office to consider renewing the permit. As I would like to start collecting data from your organization in February 2020.

Find attached copies of renewed permit from office of the president.

Thank you in advance for your positive consideration of this request.

Yours Faithfully

Mogogi Thabakgolo
3555180/72740288
thabakgolom@ub.ac.bw

Appendix G: Letter to Botswana Unified Revenue Services

P O BOX 1446 AAD
Gaborone

07 January 2020

The Commissioner
Botswana Unified Revenue Services
Private Bag 0013
Gaborone

Dear Sir/Madam

REF: Permit renewal

Following my request for permission to conduct a study in your organization, which you acceded to in 2017 (referenced BURS/ORG/PLA 2 I). I write to inform you that I was not able to conduct the study due to unforeseen circumstances pertaining to my studies. I humbly request your esteemed office to consider renewing the permit. As I would like to start collecting data from your organization in February 2020.

Find attached copies of renewed permit from office of the president and the previous letter from your organization.

Thank you in advance for your positive consideration of this request.

Yours Faithfully

Mogogi Thabakgolo
3555180/72740288
thabakgolom@ub.ac.bw

Appendix H: Response from Office of the President

TELEGRAMS: PULA
TELEPHONE: 3950800
TELEX: 2655 BD

REPUBLIC OF BOTSWANA

MINSTRY OF PRESIDENTIAL
AFFAIRS, GOVERNANCE AND
PUBLIC ADMINISTRATION
PRIVATE BAG 001
GABORONE

REF: OP 5/59/8 XVI (15)

24th July, 2019

Mr Mogogi Thabakgolo
P O Box 1446 AAD
Gaborone

Dear Sir/Madam

APPLICATION FOR RESEARCH PERMIT

Reference is made to the above subject matter.

You are hereby granted permission for research permit to conduct a study titled: **"Electronic Records Management and Information Culture in Botswana's Parastatals".**

The permit is valid for 1 year, from July 2019 to June 2020.

i. Copies of any report/papers written as a result of the study are directly deposited with the Office of the President.

ii. The permit does not give authority to enter any premises, private establishment or protected area. Permission for such entry should be negotiated with those concerned.

iii. You conduct the project according to the particulars furnished in the approved application taking into account the above conditions.

iv. Failure to comply with any of the above stipulated conditions will result in the immediate cancellation of the permit.

Thank you.

Yours faithfully

J.T. Dipowe
For/PERMANENT SECRETARY
MINISTRY FOR PRESIDENTIAL AFFAIRS, GOVERNANCE AND PUBLIC ADMINISTRATION

Appendix I: Response from Botswana Qualification Authority

BOTSWANA
Qualifications Authority

Our Ref: BQA 6/4/1 XV (26)

Date: 03/02/2021

Mr. Mogogi Thabakgolo
P O Box 1446 AAD
Gaborone

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH AT BOTSWANA QUALIFICATIONS AUTHORITY-Mr. Mogogi Thabakgolo

Management has acceded to your request to conduct research on Electronic Records Management and Information Culture in Botswana Qualifications Authority (BQA). To commence the study, please clarify on the following ethics aspects:

- How long will data collection from BQA take?
- How many members of staff are required to participate in the Study (Staff and Management)?
- Apart from fulfilling requirements for graduation, what is the information going to be further used for?
- How will the data collected from BQA be handled?
- How long will the information be stored?
- In the event the information is submitted to a third party, how will BQA be engaged?
- Is BQA going to have access to the final report?

Ethical requirements are critical to achieve the desired output and to support values for collaborative work. The above information is required to build mutual respect and fairness for this collaborative research work. Should you have any questions about the survey, please contact Thapelo Kenosi at research@bqa.org.bw or 3657 200/66/71.

Thank you.

Botsalano Mosimakoko (PhD)
Chief Executive Officer

BLOCK 7, PLOT 66450 PRIVATE BAG BO 340, GABORONE BOTSWANA | TEL. +267 365 7200 FAX: +267 395 2301 e-mail: customercare@bqa.org.bw website: www.bqa.org.bw
Toll Free Line 0800 600 934 sms line: (+267) 7289 3313 twitter @BQA_BWUpdates facebook: BotswanaQualificationAuthority

"Building a Seamless Education and Training System"

Appendix J: Response from Water Utilities Corporation

We keep it flowing, *for you.*

PRIVATE BAG 00276,
Gaborone, Botswana
Te: (0267) 360 4400
Fax: (0267) 397 3852
Email: metsi@wuc.bw

GABORONE HEAD OFFICE
Sedibeng House,
Lot 17530 Luthuli Road

Our Ref: WUC 3/3/1 **11 October 2017**

Mogogi Thabakgolo
P O Box 1446 AAD
Gaborone

Attention: Mogogi Thabakgolo
Mogogi.thabakgolo@mopipi.ub.bw
Contact: 3555180/72740288

RE: PERMISSION TO CONDUCT A STUDY TITLED ELECTRONIC RECORDS MANAGEMENT AND INFORMATION CULTURE IN BOTSWANA PARASTATALS

Your request on the above subject matter on 08 of September 2017 is referenced.

The Corporation is pleased to grant you provisional permission to conduct study on Electronic Records Management and Information Culture in Botswana Parastatals starting 12th – 20th of October 2017 in Records Department, Head Office. The Corporation has assigned Acting Records Manager, Mr Odirile Rebobonye and his department to assist you. The permission is granted with the proviso that you strictly adhere to the following conditions;

1. **You shall provide the Corporation with the results of the study and further discussion in relation to the overall study**
2. **You shall conduct your activities in a manner that complies with the Corporation's ethics, regulations and standards,**
3. **WUC shall not be held liable for any safety or security related matters that may arise during the execution of your activities,**
4. **You shall produce this letter to the Security and Acting Records Manager to gain access.**

You are also informed that WUC shall from time to time monitor your activities for compliance with regulations.

In case of any clarifications on this matter please contact the Communications Office at Tel: 3604500/4513

Yours faithfully,

Pp Malabe

Khumo Mugibelo
ACTING CORPORATE COMMUNICATION MANAGER

Appendix K: Response from Botswana Unified Revenue Service

burs
botswana unified revenue service

head office

private bag 0013, plot 53976, kudumatse road, gaborone, botswana
tel: (+267) 363 8000, fax: (+267) 363 9999

Ref: BURS/ORG/PLA2 I

29th August 2017

Mogogi Thabakgolo
P. O. Box 1446 AAD
Gaborone

Dear Sir,

RE: REQUEST TO UNDERTAKE RESEARCH STUDY

Reference is made to your letter dated 7th August 2017 requesting for permission to conduct a study titled "Electronic Records Management and Information Culture in Botswana's Parastatals" using BURS as a case study. We are pleased to inform you that your request has been granted, on the condition that information obtained from this organisation shall not, in any way, be used for any other purposes other than the intended use (i.e. educational purposes), as stipulated in your letter.

Your cooperation, in this regard will be highly appreciated. We wish you all the best in carrying out your study.

Thank you.

Yours faithfully,

G. Mane
For/COMMISSIONER GENERAL

Appendix L: Informed Consent Document

Dear Respondent,

I am seeking your help in a survey on Information Culture and Electronic Records Management. I am interested in understanding how Information Culture influences the management of records. The outcome of the study is expected to inform theory and Records Management practices.

I kindly ask for your time to complete the following questionnaire and return it at your earliest convenience. Your free and frank feedback will be taken as an important contribution to the present research work. The results of this questionnaire are essential to the completion of my PhD (Information Studies) degree. I assure you that the information you provide will be accorded the highest confidentiality and used solely for this study. Your invaluable effort in completing this survey is greatly appreciated.

Please note that:

- The information that you provide will be used for scholarly research only.
- Your participation is entirely voluntary. You have a choice to participate, not to participate or stop participating in the research. You will not be penalized for taking such an action.
- Your views will be presented anonymously. Neither your name nor identity will be disclosed in any form in the study.
- The records as well as other items associated with the questionnaire will be held in a password-protected file accessible only to myself and my supervisors. After a period of 5 years, in line with the rules of the university, it will be disposed by shredding and burning.
- If you agree to participate, please sign the declaration attached to this statement (a separate sheet will be provided for signatures)

I can be contacted at: School of Social Sciences, University of KwaZulu-Natal, Pietermaritzburg Campus, Scottsville, Pietermaritzburg. Email: gogimountainpeak@gmail.com; mailto:213571311@stu.ukzn.ac.za Cell: +267 72740288

My supervisor is Zawedde Nsibirwa who is located at the School of Social Sciences, Pietermaritzburg Campus of the University of KwaZulu-Natal. Contact details: email Nsibirwaz@ukzn.ac.za Phone number: +2733 2605685

The College of Humanities Research Ethics Office, University of KwaZulu-Natal. Contact details: email: HssrecHumanities@ukzn.ac.za Phone number +27312605685.

DECLARATION

I…… *(full names of participant*) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire. I understand the intention of the research. I hereby agree to participate.

I consent / do not consent to have this interview recorded (if applicable)

SIGNATURE OF PARTICIPANT _____ DATE _____

Appendix M: Questionnaire

Questionnaire
Electronic Records and Information Culture

Instructions for filling the questionnaire

- Please tick [√] the applicable answer(s).
- Fill in the demographic details as applicable.

Demographic information

Gender: (1) Male [ ] (2) Female [ ]

Occupational details:

Designation_____ Division/unit_____

Organisation_____ Academic qualification: [ ] Certificate [ ] Diploma [ ] Degree [ ] Masters [ ] Doctoral degree.

Years of Experience: [ ] 1-5years [ ] 6-10years [ ] 11-15years [ ] 16-20years [ ] 21-25years [ ] 25years and above.

Value accorded to electronic records

In the table below you agree or disagree with each statement. Please tick the appropriate answer.

1. Strongly disagree 2. Disagree 3. Neither Agree Nor Disgrace 4. Agree 5. Strongly Agree

	Strongly Disagree	Disagree	Neither Agree Nor Disgrace	Agree	Strongly Agree
	1	2	3	4	5
1 Electronic Records management is part of my responsibilities.					
2. I consider electronic records management policies and standards when handling records?					
3. Electronic records management is valuable to my work and organisation?					
4. I make sure I file documents and e-mails appropriately.					
5. Electronic Records Management is an essential part of my work					
6. I prefer to search information(on web, databases, reports) for decision making					
7. I share information widely within the organisation.					

Attitudes towards electronic records

In the table below you agree or disagree with each statement. Please tick the appropriate answer.

1. Strongly disagree 2. Disagree 3. Neither Agree Nor Disgrace 4. Agree 5. Strongly Agree

	Strongly Disagree	Disagree	Neither Agree Nor Disgrace	Agree	Strongly Agree
	1	2	3	4	5
1. Using the records management system is a good idea.					

2. Electronic records management is worthwhile activity.					
3. Electronic records management is prioritized and integrated in the business processes.					
4. Electronic records management is everyone's responsibility.					
5. Electronic records management requirements are barrier to working efficiently.					
6. I always find a way of by-passing e-records system.					
7. I find it difficult to follow records management procedures.					

Electronic records creation and capture

In the table below you agree or disagree with each statement. Please tick the appropriate answer.

1. Strongly disagree 2. Disagree 3. Neither Agree Nor Disgrace 4. Agree 5. Strongly Agree

	Strongly Disagree	Disagree	Neither Agree Nor Disgrace	Agree	Strongly Agree
	1	2	3	4	5
1. I am guided by policies and standards in creation/capture of electronic records.					
2. I know the right metadata to capture in records					
3. I am aware of the cost of my lack of adherence to proper records creation and capture					
4. Official records i create are adequately captured					
5. I send the electronic records i create to records management the Records Management Unit.					
6. The organization enforces proper electronic records creation and capture.					
7. I am aware of procedures of creating and capturing electronic records.					
8. I am able to access records created by others					
9. There are measures in place to control access to electronic records.					

Trust in electronic Records keeping system

In the table below you agree or disagree with each statement. Please tick the appropriate answer.

1. Strongly disagree 2. Disagree 3. Neither Agree Nor Disgrace 4. Agree 5. Strongly Agree

	Strongly Disagree	Disagree	Neither Agree Nor Disgrac e	Agree	Strongly Agree
	1	2	3	4	5
1. Management expressly demands that i handle records according to the laws governing it?					
2. I trust the records management system as it is reliable					
3. I am aware of policies and internal controls (rules and regulation) relating to records.					
4. I fail locate documents created over a year ago in the system.					
5. I have confident that the electronic records I create will not be altered by anyone.					
6. I find it difficult to follow the filling system					
7. I find it difficult to follow the classification system					
8. I use organisation records because I trust them					
9. I always find missing/gaps in information in our records					

Information culture

In the table below you agree or disagree with each statement. Please tick the appropriate answer.

1. Strongly disagree 2. Disagree 3. Neither Agree Nor Disgrace 4. Agree 5. Strongly Agree

	Strongly Disagre e	Disagre e	Neither Agree Nor Disgrace	Agree	Strongly Agree
	1	2	3	4	5
1. I often exchange information with the people with whom I work with regularly					
2. I often exchange information with people outside of my regular work unit but within my organization					
3. In my work unit, I am a person that people come to often for information.					
4. I often exchange information with citizens, customers, or clients outside my organization.					
5. Supervisors of my work unit encourage openness.					
6 The people I work with regularly share information on errors or failures openly.					

7. The people I work with regularly use the information on failures or errors to address problems constructively.					
8. Among the people I work with regularly, it is normal to leverage information for personal advantage					
9. Among the people I work with regularly, it is common to distribute information to justify decisions already made.					
10. Among the people I work with regularly, it is common to knowingly pass on inaccurate information about the organisational operations.					
11. Among the people I work with regularly, it is normal for individuals to keep information to themselves					
12. I use informal information sources (e.g., colleagues) to verify and improve the quality of formal information sources (e.g., memos, reports).					
13. I use informal information sources(e.g.colleagues) extensively even though formal sources (e.g., memos, reports) exist and are credible					
14. I trust informal information sources (e.g., colleagues) more than I trust formal sources (e.g., memos, reports).					
15. I actively seek out relevant information on changes and trends going on outside my organisation					
16. I use the information to respond to changes and developments going on outside my organization.					
17. I use the information to create or enhance my organization's products, services, and processes.					

Appendix N: Records manager's interview guide

Interview Guide

The purpose of this interview guide is to solicit responses on the different study major questions concerning records management and information culture.

Level 1: The value of electronic records and attitudes

1. Do you think the organisation notices the value of records? If yes how so?
2. Do you think members of staff consider records to be a valuable part of the organisation?
3. Have you noticed any negligence of lack of interest when it comes to records among members of staff?
4. Are you satisfied with the position of records management unit (RMU) in the organizational structure?
5. Are satisfied with the support RMU gets from management?
6. What is your assessment of employee's ability to adhere to records procedures and proper records up keeping?
7. Do you have circumstances where members of staff circumvent RMU processes?
8. Do you think members of staff consider records management as essential part of their work?

Level 2: Skills, knowledge and experience related to records management, which can be acquired and/or extended in the workplace.

1. How do you infuse/inculcate records keeping culture in your organization?
2. What is being done in the organization to ensure that all employees are proactive in recordkeeping?
3. What programmes are in place to impact records keeping skills to employees?
4. What records keeping training is available in the organization?
5. How do you cope with the demands of emails?
6. What other challenges do you encounter in working with information in your organisation?

Creation and capture and use of electronic records

1. What guides proper capturing of records metadata in your organisation?
2. What mechanism are available to encourage employees to incorporate records that they create in line of business to be part of rest of organizational records?
3. How are records created by individual employees captured in the organizational records system?
4. What checks and balances are available to ensure proper records creation and capturing?
5. What is your assessment of employee's capability in records creation and capture?
6. What do you think of employee's attitudes towards records creation and capture?
7. Are you satisfied with the turnaround for records retrieval?
8. Is there a wider organizational classification system that covers all departments in the organisation?
9. What measures are laid down to ensure that employees adhere to records best practice? If there are measures, is there any punitive measures that are meted out for lack of compliance/adherence?
10. How is records creation and capture controlled?

Information governance

1. What guarantees the availability of information years after using it?
2. Are you aware of any instruments that govern the organisational information systems/ records system?
3. Do employees ever complain about the function of the information system or records system?
4. How does the organisation ensure synergy between the Records Management and other Departments?
5. Do you think people in the organisation trust the information system team to deliver? If yes justify.
6. Are you satisfied with level of usage of information system/ records system?
7. Do you think the information system has ability to keep records as long as they are needed?
8. What user concerns do have with regard to information systems electronic records? has any challenge been reported to you.
9. What measures are in place to ensure security of information/records systems?

Should you have any questions regarding this study/ the interviews or wish to report any problems you have experienced related to the study, please contact Chair: Research Ethics Office at the University of KwaZulu-Natal, Private Bag x54001, Durban, 4000, E-mail: HssrecHumanities@ukzn.ac.za, Telephone: (031) 260 3587.

Appendix O: Chief executive officer's interview guide

Interview Guide

The purpose of this interview guide is to solicit responses on the different study major questions concerning records management and information culture.

The value of electronic records and attitudes

1. Do you think there is any value in keeping electronic records?
2. Would you agree with the proposition "electronic records management requirements are a barrier to working efficiently" Why or why not?
3. What do you think of the following statement "electronic records management is everybody's responsibility"?
4. What support measures do you give to records management in the organisation?
5. Are you satisfied with the position of records management unit in the organizational structure?
6. What do you think of the following statement "records management is everybody's responsibility"?
7. Do you consider records as a prime activity/ function in the organisation?
8. Do you think members of staff consider records management as essential part of their work?
9. Have you observed any negligence or lack of interest when it comes to records among members of staff?

Skills, knowledge and experience related to electronic records management, which can be acquired and/or extended in the workplace.

1. How do you inculcate records keeping culture in your organization?
2. What is being done in the organization to ensure that all employees are proactive in recordkeeping?
3. What programmes are in place to impact records keeping skills to employees?
4. What records keeping training is available in the organization?
5. Do you offer any induction to new members of staff?
6. Are there any records training programme for records management staff?
7. Is training in records management considered important by management?

Electronic records creation and capture

1. What checks and balances are available to ensure proper electronic records creation and capturing?
2. What is being done to ensure that employees adhere to records best practice?
3. Is there documented instruction on records creation and capture?
4. How does the organisation deal with email as a record? What measures are in place to accommodate email as a record?
5. What do you refer to when you make decisions regarding business operations?
6. How is information shared in the organisation and is sharing encouraged?

Information governance

1. What guarantees the availability of information years after using it?
2. Are you aware of any instruments that govern the records management system?
3. Do employees ever complain about the function of the records system?
4. How does the organisation ensure synergy between the Records Management and other Departments?
5. Do you think people in the organisation trust the records system? If yes justify.
6. Are you satisfied with level of usage of the records system?
7. Do you think the records system has ability to keep records as long as they are needed?
8. What user concerns do have about electronic records? Has any challenge been reported to you?
9. What measures are in place to ensure the security of records systems?

Appendix P: Ethical clearance approval letter

12 October 2020

Mr Mogogi Thabakgolo (215081990)
School of Social Science Pietermaritzburg Campus

Dear Mr Thabakgolo,

Protocol reference number: HSS/1925/018D

Project title: Electronic Records Management and Information Culture in Botswana's Parastatals

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 26 August 2020 has now been approved as follows:

- Change in data collection method and instrument

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

Best wishes for the successful completion of your research protocol.

Yours faithfully

……
Professor Dipane Hlalele (Chair)

/dd

Cc Supervisor: Dr Zawedde Nsibirwa
cc Academic Leader Research: Professor Maheshvari Naiducc School Administrator: Ms Nancy Naidu

---

Humanities & Social Sciences Research Ethics Committee
UKZN Research Ethics Office Westville Campus, Govan Mbeki BuildingPostal Address: Private Bag X54001, Durban 4000
Website: http://research.ukzn.ac.za/Research-Ethics/

Appendix Q: Questionnaire review response

Mr Thabakgolo,

I had a chance to critique your instrument (questionnaire part) with my class enrolled in a graduate course, EFR741, Constructing Questionnaires and Surveys. The following is feedback from the class discussion. Note that this is based on an assumption that you will be administering a questionnaire to a specified sample:

- **Informed Consent Document**: Getting consent is a crucial step in administration of questionnaires(or any other data collection tool) and how it is presented needs careful crafting.
    - *The title* of this can be improved to read' Consent Letter' and the last part where you want a potential participant to consent, will be your 'consent form'. The letter gives all information and the form gets consent to participate.
    - *Salutation:* Questionnaires are ideal for surveys(finite populations)which means you know who is in your sample, so if possible name them. This improves response rates.
    - *Though we didn't have the benefit to read your methodology, in the first paragraph you talk of this being an interview. We didn't critique the second part which is for interview but this first part sounds more like you will be administering a questionnaire (self administration?). Suggestion is to revise this part especially that the interview part has an appropriate introduction.*
    - *Suggest you do not bullet but rather describe in sentences the issues . This is a letter so needs details.*
    - *Do indicate when response is expected*
    - *State benefits to responding. Let them know if there are any.(note that these need not be monetory but communal or even just advancement of knowledge)*
    - *This letter should show affiliation (be on letterhead)*

- **Main Questionnaire: Suggestions:**
    - Number sections for ease of reference especially during analysis.
    - Better use numbers for naming(coding) e.g. Gender 1 Male , 2 Female not a and b.
    - If possible close the questions on designation, division and organization as your sample is probably specific as to the kind of respondents you expect.
    - Include transitional/introductory statements at the beginning of sections and not just to throw respondents into reading what is in tables.
    - Generally some of the questions are not specific so will make it difficult to respond to. Please find specific comments marked in red in the attached questionnaire.

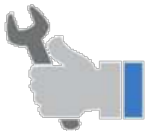
Otherwise, it is a commendable effort. Note that even with these suggestions, the instrument will have to be trial tested through a pilot study. The pilot sample should be large enough for you to run a reliability on it (about 30). Pilot sample is not included in main data collection.

Should you have any questions, please do not hesitate to contact me.

G.N.Tsheko (PhD)

Appendix R: Proof of editing letter

Athol Leach (Proofreading and Editing)



31 Park Rd
Fisherhaven
Hermanus 7200
Email: atholleach@gmail.com Cell: 0846667799

24 August 2022

To Whom It May Concern

This letter serves to confirm that I have edited the following PhD dissertation:

"Electronic Records Management and information Culture in Botswana's Parastatals" by Mogogi Thabakgolo

The dissertation was edited in terms of grammar, spelling, punctuation and overall style. In doing so use was made of MS Word's "Track changes" facility thus providing the student with the opportunity to reject or accept each change.

Please note that while I have checked the format consistency of the in-text references, I have not done so with those in the List of References.

The tracked document is on file.

Sincerely

Athol Leach

(MIS, Natal)