

Management of digital records in selected financial services parastatals in Zimbabwe

By

ALFRED CHIKOMBA

submitted in accordance with the requirements
for the degree of

MASTER OF INFORMATION SCIENCE

in the subject

ARCHIVAL SCIENCE

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF ADS RODRIGUES

CO-SUPERVISOR: PROF M NGOEPE

SEPTEMBER 2018

SUMMARY

Public sector institutions in Zimbabwe have embraced information communication technologies (ICTs) with an objective of promoting accountability, transparency and improve service delivery. This has increased the generation of digital records which are key in day-to-day business activities. However, the management of such records has been a challenge for most public sector institutions in most countries including Zimbabwe. Despite embracing ICTs, there have not been many changes to create a favourable environment for managing the resultant digital records. The study utilised the DCC curation lifecycle model to assess the management of digital records in selected financial services parastatals in Zimbabwe with a view of coming up with recommendations that would enhance their management. This multiple case study research adopted a qualitative research approach to collect data from four purposively selected financial services parastatals in Zimbabwe using interviews, document analysis and observation as data collection tools. Data were analysed and presented thematically in line with the objectives of the study. The findings of this study established that the general status of digital records management in the financial services parastatals is still in its infancy. This resulted in digital records being managed on an *ad hoc* basis. Parastatals under investigation still lack requisite tools for effective and efficient management of digital records. These include policies, guidelines and standards, adequate infrastructure and skilled manpower. Unless these issues are addressed, the management of digital records will not guarantee their long-term access and preservation. In addition, the National Archives of Zimbabwe (NAZ), which has the legal mandate of regulating records management, has not been involved much in the management of digital records due to the lack of a legal and professional framework. Among other recommendations, the study recommended the crafting of in-house policies and guidelines for managing their digital records, procurement of adequate infrastructure and the recruitment of skilled and experienced manpower in digital records management.

Key Words: Digital records, digital records management, information communication technologies, financial services parastatals, Zimbabwe.

ACKNOWLEDGEMENTS

Firstly, I would like to thank my supervisors Professor A.D.S Rodrigues and Professor M Ngoepe for their invaluable assistance throughout my research. Their knowledge and patience encouraged me to persevere until the completion of this study. I was fortunate to have them as my supervisors. I also wish to thank all the participants of this study. Had it not been for their input, this study would not have been a success. At the same time, my gratitude also extends to the heads of selected financial services parastatals under investigation for giving me permission to conduct my research. This journey would have been difficult without the help of my entire family. I would like to thank my parents, my wife and my children. At times, I was not there when they needed me the most. I really appreciate their encouragement and moral support. I would also like to thank the University of South Africa (UNISA) for funding my studies. Over and above everything, I want to thank the Almighty for giving me the strength and guidance. Without His help and guidance, I could not do anything.

PSALMS 121

DEDICATION

This work is dedicated to my late brother Artwell N Chikomba. I wish you were here to celebrate with me this achievement.

May his soul continue to rest in eternal peace!

DECLARATION

I declare that the research study, **management of digital records in selected financial services parastatals in Zimbabwe**, is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



SIGNATURE

Mr Alfred Chikomba

27 SEPTEMBER 2018

DATE

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ACRONYMS AND ABBREVIATIONS

BAZ	Broadcasting Authority of Zimbabwe
BNARS	Botswana National and Records Services
BSAC	British South Africa Company
CAAZ	Civil Aviation Authority of Zimbabwe
CCS	Central Computing Services
CVR	Central Vehicle Registry
DCC	Digital Curation Centre
DTF	Digital Transitional Framework
EDRMS	Electronic Document and Records Management System
EDMS	Electronic Document Management System
ERMS	Electronic Records Management System
E-government	Electronic Government
E-mail	Electronic Mail
ESARBICA	Eastern and Southern Africa Regional Branch of the International Council on Archives
GCAHUMC	General Commission on Archives and History of the United Methodist Church
GDP	Gross Domestic Product
ICTs	Information Communication Technologies
IRBM	Integrated Results-Based Management
ISO	International Standard Organisation
IT	Information Technology
IRMT	International Records Management Trust
NAZ	National Archives of Zimbabwe

NHC	National Historic Committee
NIST	National Institute of Standards and Technology
NSSA	National Social Security Authority
OERC	Ohio Electronic Records Committee
PFMS	Public Finance Management Systems
POTRAZ	Postal and Telecommunication Authority of Zimbabwe
PROVSP	Public Record Office Victoria Standards and Policy
RBZ	Reserve Bank of Zimbabwe
SAP	Systems Application Program
SAZ	Standard Association of Zimbabwe
SEDCO	Small Enterprises Development Corporation
SMEDCO	Small and Medium Enterprises Development Corporation
SERA	State Enterprises Restructuring Agency
STERP	Short Term Economic Recovery Programme
UNISA	University of South Africa
ZABG	Zimbabwe Aligned Banking Group
ZIA	Zimbabwe Investment Authority
ZimAsset	Zimbabwe Agenda for Sustainable Socio-Economic Transformation
ZIMRA	Zimbabwe Revenue Authority
ZINARA	Zimbabwe National Roads Authority
ZIPMAS	Zimbabwe Integrated Performance Management Solution
ZMC	Zimbabwe Media Commission

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

Most governments, including the Zimbabwean government, are moving towards using information communication technologies (ICTs) to promote accountability, transparency and improve service delivery. The embracing of ICTs in the conduct of official business has increased the generation of digital records. For instance, most government agencies are now using electronic mail (e-mail) replacing the traditional way of correspondence. Thus, the advent of ICTs has transformed ways in which records are created, used and stored. Therefore, it is imperative for both private and public organisations to put in place mechanisms that will strengthen their digital records management. In Zimbabwe, electronic government (e-government) initiatives have contributed to the widespread use of ICTs by various public sector institutions including financial services parastatals in their conduct of business. However, the use of ICTs within a weak policy or non-existent framework in most countries has compounded problems of storage, safety and access of the resultant digital records. Just like paper records, digital records play an important role in supporting daily business activities of any organisation and as such, they should be properly managed (Abuzawaydah, Yusof and Aziz 2013:346; IRMT 2009:1).

Johare (2006:541) mentions that digital transactions are in principle no different in nature from their paper counterparts as they need to be recorded, captured in a fixed form and, maintained and made accessible as records. This entails that digital records “should have the same degree of evidence of business activity and support the same level of accountability for the immediate and future needs of organisations, individuals and societies” (Johare2016:541). However, for quite a long time, many organisations in developing countries have largely operated in a paper-based environment. Already, organisations faced challenges in managing records in paper format. Therefore, the laborious and inconsistent change from paper to digital systems is bound to pose challenges. Ngoepe and Keakopa (2011) stress that the advent of digital records has presented further challenges to the management of records. This was also reiterated by Lemieux (2016:7) who mentions that there is mounting evidence to suggest that the widespread use of ICTs by government agencies has aggravated the management of records which was already weak in a paper environment.

Studies by Asogwa (2012), Ambira (2016), Matangira (2016) and Mutsagondo (2017), all bemoan the environment in which digital records were being managed in different public sector institutions. In most cases, as governments are putting effort in embracing ICTs through e-government, the same cannot be said with regards to creating a favourable environment to manage the resultant records. This is confirmed by Asogwa (2012:203) who observes that many African states are jumping into the ICT bandwagon without adequately incorporating good records keeping strategies. Some of the challenges cited include, non-existence of or non-adherence to records management standards, lack of adequate and proper infrastructure and skilled manpower. These issues have compromised the integrity, reliability, authenticity and usability of digital records. The studies have also indicated that national archives have not been very active with regards to advocating for an environment that would ensure the proper management of digital records in the public sector.

Asogwa (2012) further argues that successful records management depends on establishing strategies and procedures for ensuring that records are protected from any kind of threats. As mentioned by Milovan (2011:1), records management strategies ensure a systematic and planned approach to records management covering records from creation to disposal. In view of this, government agencies including ministries, departments, local authorities and parastatals need to put in place mechanisms that ensure proper management of digital records.

Although the same records management principles apply to records in either paper or digital format, care should be adjusted for digital records. This is because the nature of digital records is different from those in paper format. Digital records are fragile as they can be easily manipulated or altered without leaving any trace or digital footprints (Ngoepe and Van der Walt 2009). As such, both public and private organisations should ensure that digital records are well managed so that they remain in their original state as well as ensuring that they continue to serve the purpose they were created for. The IRMT (1999a:51) advises government agencies to manage digital records in a structured and comprehensive manner otherwise they might risk losing valuable records through unauthorised tampering. Failure to properly manage digital records might also result in unwanted repercussions such as cash embezzlement, fraud and delays in payments which derails the socio-economic growth of a country.

Parastatals are quasi-government companies established to raise revenue as well as to give affordable government services to the public (Zimbabwe Government Online 2016). In Zimbabwe, they are found in different sectors that include tourism, agriculture, transport, telecommunications, health and financial services to mention just a few. Among other services, financial services parastatals offer services such as revenue and pension funds collection as well as investment promotion. It is then imperative for such parastatals to ensure that there exists a strong digital records management environment lest records lose their integrity which compromises accountability and service delivery to the public.

Mutsagondo (2017) recommends that studies should also be conducted in other public sector institutions such as local authorities and parastatals in Zimbabwe. He further elaborated that studies in these institutions will help in giving an accurate and general reflection of digital records management in the public sector in Zimbabwe. This study was partly in response to this recommendation. The present study sought to assess the management of digital records in selected financial services parastatals in Zimbabwe with a view of coming up with recommendations that may enhance their effective management. Various financial services parastatals in Zimbabwe have adopted e-government so as to promote accountability and improve service delivery. Such objectives may be difficult to achieve in an environment that does not guarantee effective and efficient management of digital records.

Using the multi-case research design, this study was conducted in four financial services parastatals in Zimbabwe. The study is qualitative in nature and employed interviews, document review and observation as data collection instruments. Records personnel and key information technology (IT) personnel were purposively selected to participate in the study. The Digital Curation Centre (DCC) curation lifecycle model was used as the theoretical framework to assess the management of digital records in selected financial services parastatals in Zimbabwe.

1.2 Background to the study

The use of ICTs in Zimbabwe dates back to 1972 with the establishment of the Central Computing Services (CCS) which aimed at providing ICT services to the public service (Nengomasha 2012:96). During that time, CCS was under the Ministry of Finance and the use of ICTs was still at its infancy. Over the years, there have been notable developments in

embracing ICTs. For instance, in 2005 the first ICT policy was crafted to provide the framework that would increase the use of ICTs in the country. The policy had an objective of spearheading social change by reducing the social gap between ‘the haves and the have nots’, that is, the rich and poor. Again, in the same year, the Integrated Results-Based Management (IRBM) System was adopted (Nkala, Ngulube and Mangena 2012). The system is a tool used by the government to reform and modernise the public sector as it provides a framework for planning, implementing, monitoring and reporting on organisational performance and linking organisational performance to personnel performance (Zimbabwe Government 2016).

As the use of ICTs continued to increase, a stand-alone Ministry of Information, Communication and Technology was established in 2009. The ministry was mandated to promote ICTs usage especially in the public sector. The Ministry’s strategic plan of 2010-2014 mentions that the Ministry had a number of functions. These included, developing policies and strategies that enhance the provision of information and communication technological innovations; spearheading the development of appropriate frameworks that facilitate the promotion of ICT; as well as coordinating national ICT research and development of software, hardware and infrastructure.

This was followed by the launching of an e-government strategy in 2011. With the adoption of e-government, the government of Zimbabwe aimed at bringing citizens closer to the government. Moreover, the use of ICTs through e-government improves service delivery and promotes accountability (Ngulube 2007; Bwalya 2011; Nengomasha 2012). Great strides have been made by the government in promoting the use of ICTs as various e-government projects were introduced. These include, the Public Finance Management Systems (PFMS) a system used to process financial transactions within the government, and also the Zimbabwe Integrated Performance Management Solution (ZIPMAS) a system used for reporting, evaluating and processing staff appraisals in addition to financial transactions (Nkala, Ngulube and Mangena 2012:47).

Apart from all these initiatives, the Zimbabwe National Policy for ICT (2015:13) highlights the following as some of the factors that have contributed to the growth of ICTs in Zimbabwe’s public sector:

- The liberalisation of the telecommunications, postal and courier services sector.

- The establishment of regulatory bodies in the ICT sector. These are Postal and Telecommunication Authority of Zimbabwe (POTRAZ), Zimbabwe Media Commission (ZMC); and Broadcasting Authority of Zimbabwe (BAZ).
- Establishment of the Cabinet Committee on Scientific Research, Technology Development and Applications.
- Computerisation of government ministries in the main centres of the country.

However, as the government was embracing ICTs through the mentioned initiatives, little or nothing was done to create an enabling environment to effectively and efficiently manage the resultant digital records. This means that, the same environment in which paper records were managed in, did not change with the advent of ICTs. According to Nkala, Ngulube and Mangena (2012:110), the intended benefits of e-government will be compromised unless there is a conducive environment for managing records that will be created. Luyomba (2010:1) opines that increased usage of ICTs to conduct business and transmit information contributes to the need to manage the resultant records. Eastwood (cited in Lemieux 2016:7) denotes that “it is by means of records that there exists the capacity to render an account of the actions of public officials and the administrations they serve”. As such, digital records management should be prioritised if government agencies, especially financial services parastatals, are to benefit from the mentioned e-government projects. It is through a strong digital records management environment that the creation of valid and authentic records is guaranteed.

A general consensus among scholars is that digital records management can be strengthened by putting in place mechanisms like policies and legislations as they provide the framework in which digital records are to be managed (Keakopa 2007; Nengomasha 2009; Ngulube and Tafor 2006). A study by Matangira (2016) on the management of records in Zimbabwe’s public service revealed that since the adoption of e-government, a national policy to manage digital records was yet to be formulated. A number of documents that emphasize the need for harnessing ICTs have been crafted. These include, the Nziramasanga Education Commission Report (1999); Science and Technology Policy (2002); Zimbabwe National ICT Policy Framework (2007); and Short Term Economic Recovery Programme (STERP). All these documents are an indication that the government is committed to increasing the use of ICTs in the country.

However, there has been no policy to guide and direct the management of the resultant digital records as various public sector institutions are using ICT applications. Again, there have not been any legislative changes so as to support digital records management. Mutsagondo and Chaterera (2017:1) argue that the National Archives Act of 1986 which is the current legislation that regulates the management of records in Zimbabwe has been overtaken by technological changes and could not be used to manage digital records. The authors posit that the legislation lacks content with regards to digital records management functions such as creation, appraisal, disposition and transfer of records.

According to Nkala, Ngulube and Mangena (2012:112), national archives should be heavily involved in the management of records as a result of the widespread use of ICTs. The International Council on Archives (ICA) (2005:7) mentions that national archives should facilitate the establishment of policies, procedures, systems, standards and practices. It also mentions that national archives should be involved in the entire life-cycle of a record as this would help in identifying those of archival value. Thus, national archives should provide practical assistance to public institutions with regards to the management of digital records. A study by Chaterera (2013) revealed that guidelines and recommendations on the proper management of digital records were not provided by National Archives of Zimbabwe (NAZ) during records surveys. Despite the fact that digital records were created in the public service, NAZ could not assist government agencies in the effective and efficient management of digital records. As mentioned by Chaterera (2013), lack of expertise was one of the major reasons why NAZ could not provide advice on digital records management during records surveys.

It is against such a background that influenced the current study. The study sought to assess how digital records are being managed in the absence of strong national policy. ICTs brought new ways of communicating such as social media and e-mails which may have replaced traditional ways of doing business. Again, other platforms which have a direct impact on records management have also been developed. For instance, the introduction of the cloud storage has a huge bearing on the management of records. In support of e-government initiatives, various business systems have been adopted. Thus, government agencies need to respond to these changes so that records will continue to be managed in an efficient and effective manner.

Considering that effort has been put to promote the use of ICTs in Zimbabwe, the study focused on assessing how digital records were managed in the selected financial services parastatals in the absence of a national policy. The study assessed the efforts that have been done to create a records management environment that matches these developments. Special focus was on in-house policies and guidelines, standards, skills, infrastructure and the involvement of NAZ which are critical aspects in the management of digital records.

1.3 Statement of the problem

Although there has been a considerable growth in promoting the use of ICTs in parastatals, the same cannot be said with regards to creating a conducive environment for the management of the resultant digital records. Despite the fact that there has been an increase in the generation of digital records in Zimbabwe, the same environment in which organisations managed paper records still exists (Chaterera 2013; Matangira 2016; Mutsagondo 2017). The authors indicate that there have not been many changes to records management in the public sector in Zimbabwe since the adoption of e-government. For example, no legislative and policy changes regarding records management have been effected. Quite a number of authors have agreed that ICTs contribute to the increase in the generation of digital records and as such, organisations need to put in place mechanisms to ensure that such records are properly managed (Wamukoya and Mutula 2005; Moloji 2007; Keakopa 2007; Nengomasha 2009; Luyombya 2010). Asogwa (2012) mention that unlike paper records, the management of digital records has witnessed so many challenges such as absence of records management policies and guidelines, standards, proper and adequate infrastructure, technological obsolescence, and skilled personnel. Failure to overcome such challenges compromises the management of records which are critical for the day to day administration of any organisation. According to IRMT (2009:1), well managed records are a foundation for good governance as they provide trusted and accurate information to support decision making and accountability. Keorapetse and Keakopa (2012: 24), reiterate that records play an important role in fighting corruption; protecting citizens` rights; ensuring transparency, accountability and good governance. As such, government agencies should prioritise the management records despite their format to curb repercussions of financial irregularities. The management of digital records as indicated by Mnjama and Wamukoya (2007:279) must be supported by clear policies, procedures, guidelines and standards to retain their evidential values that are needed for accountable and transparent governance. Digital records management should also

be supported by the existence of proper and adequate infrastructure, skilled and experienced personnel. As government agencies have embraced ICTs, the overall management including the preservation of digital records should also be of much concern. Therefore, national archives have to be involved in the management of digital records.

1.4 Purpose and objectives of the study

The purpose of this study was to assess the management of digital records in selected financial services parastatals in Zimbabwe with an aim of coming up with recommendations that may enhance their effective management.

The specific objectives of the study were to:

1. Examine the current state of digital records management in Zimbabwe`s financial services parastatals.
2. Assess the infrastructure and resources for the management of digital records in the financial services parastatals in Zimbabwe.
3. Assess the level of skills possessed by personnel managing digital records in Zimbabwe`s financial services parastatals.
4. Ascertain the extent to which NAZ is involved in the management of digital records in financial services parastatals.
5. Make recommendations for management of digital records in Zimbabwe`s financial services parastatals.

Table 1. 1: Table showing objectives and research questions

NO	Research objective	Research question(s)
1	Examine the current state of digital records management in Zimbabwe`s financial services parastatals,	<ol style="list-style-type: none"> 1. What types of digital records are created/captured in the financial services parastatals in Zimbabwe? 2. What are the functions of the records and information unit in respect of digital records? 3. Which policies, guidelines and standards are used to manage digital records in the financial services

		<p>parastatals in Zimbabwe?</p> <p>4. To what extent are records and information personnel aware of NAZ Act?</p> <p>5. To what extent is top management supporting digital records management in the financial services parastatals in Zimbabwe?</p> <p>6. How are records management functions practised in the financial services parastatals in Zimbabwe?</p>
2	Assess the infrastructure and resources for the management of digital records	What infrastructure and resources are available for the management of digital records?
3	Assess the level of skills possessed by personnel managing digital records	What skills do personnel responsible for digital records management possess?
4	Ascertain the extent to which NAZ is involved in the management of digital records in Zimbabwe	To what extent is NAZ involved in the management of digital records?
5	Make recommendations for effective management of digital records	How can digital records management be enhanced in the financial services parastatals in Zimbabwe?

1.5 Theoretical framework

Tamene (2016:51) posits that a theoretical framework is an essential and central element of the research design that guides not only researchers to what is going on, but also on what has to be done and how. According to Miles and Huberman (1994:33), a theoretical framework is ‘the researcher’s map of the territory being investigated’. In the same line of thought, Ngulube (2018:1) states that theoretical framework serves as the glue that holds the components of the research as it gives focus and direction to empirical research. Various

scholars have indicated the roles of theoretical framework in improving the quality of a research. These are:

- Serving as the guide on which to build and support the study. This includes identifying the design as well as appropriate research methods (Grant and Osanloo 2014:12).
- Serving as the structure and support for the rationale for the study, the problem statement, the purpose, the significance and the research questions (Grant and Osanloo 2014:12).
- Leading the researcher to relevant literature (Smyth 2004).
- Helping the study to have coherence and focusing on what the researcher is trying to achieve (Green 2014).

Therefore, a theoretical framework provides a rationale to conduct a study as it helps to understand the perspectives of the researcher. The theoretical framework of this study was informed by concepts drawn from the Digital Curation Centre (DCC) Curation Lifecycle Model.

1.5.1 DCC curation lifecycle model

With the widespread use of ICTs in the day to day activities of both public and private organisations, digital curation can be considered as the viable way of keeping digital materials as authentic as possible. It was for this reason that the Digital Curation Centre proposed the DCC curation lifecycle model to help organisations to manage every stage required for the successful curation of digital materials. Pennock (2007:1) broadly interprets data curation as maintaining and adding value to a trusted body of digital information for both current and future use or the active management or appraisal of digital information over its entire lifecycle. Ball (2010) reiterates that, digital curation involves managing data from the point of creation, constant maintenance for current as well as re-use.

According to Higgins (2008:135), the DCC curation lifecycle model is a lifecycle approach to the management of digital materials. The author mentions that the lifecycle management of digital materials is necessary to ensure their continuity. The following are some of the reasons why the lifecycle approach is necessary as mentioned by Higgins (2008) and Pennock (2007):

- It ensures the continuity of digital materials. Digital records are fragile and susceptible to change from technological advances throughout their life cycle, that is, from creation onwards.
- Activities undertaken, or neglected, in different stages of their management, can influence the ability to look after them successfully at subsequent stages. The approach ensures that all stages that are required for successful curation and preservation of digital materials are identified, planned, and implemented.
- Reliable re-use of digital materials is only possible if materials are curated in such a way that their authenticity and integrity are retained.

According to Higgins (2008:137), “the DCC curation lifecycle model provides a graphical high level overview of the stages required for successful curation and preservation of data from initial conceptualisation or receipt”. The following is a graphical presentation of the model.

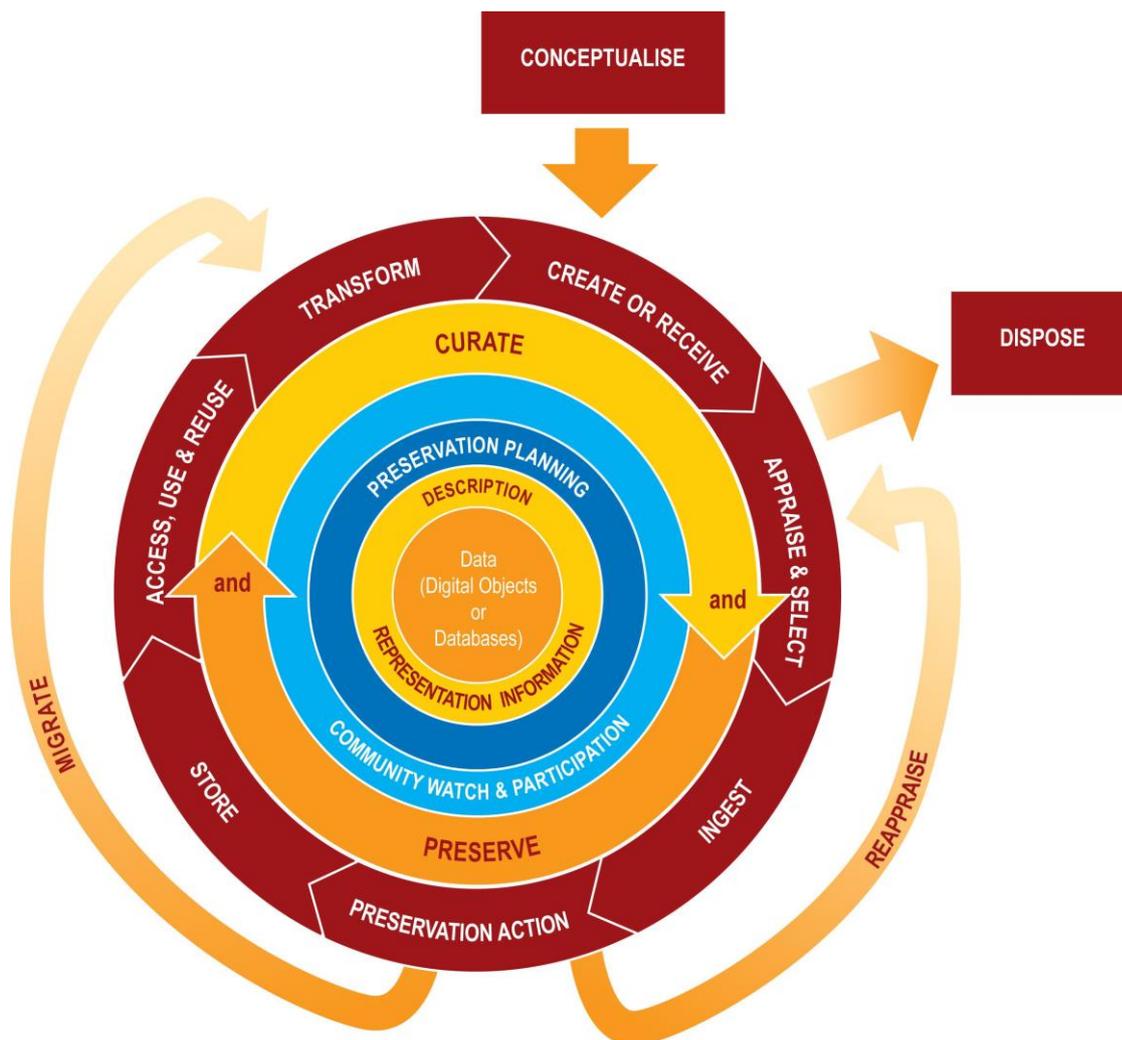


Figure 1.1: The DCC Curation Lifecycle Model (Source: Higgins 2008:137)

The model presents processes that are found in the curation of digital materials. That is, it includes critical stages that are required for effective planning, management and preservation of digital materials throughout their lifecycle. Higgins (2008:137) states that the model can be used in any organisation as a way of ensuring that all necessary stages are undertaken in their correct sequence. Although the model has been mainly used as a preservation model, it can be used in the management of digital records. This is because with digital records, preservation starts at creation. All the threats to paper records are also threats to digital records (such as theft, fires and floods) but in addition, digital records are threatened by hardware and software obsolescence, file format obsolescence, corruption, viruses and these must be managed from the point of creation. It is possible that a digital record that is still in active use can become ‘at risk’ of file format obsolescence, for example, and it may need to be migrated to a new format. Therefore, management of digital records from a lifecycle approach facilitates continuity Pennock (2007:2). The following is a graphic presentation of a life cycle approach in relation to the management of digital records.

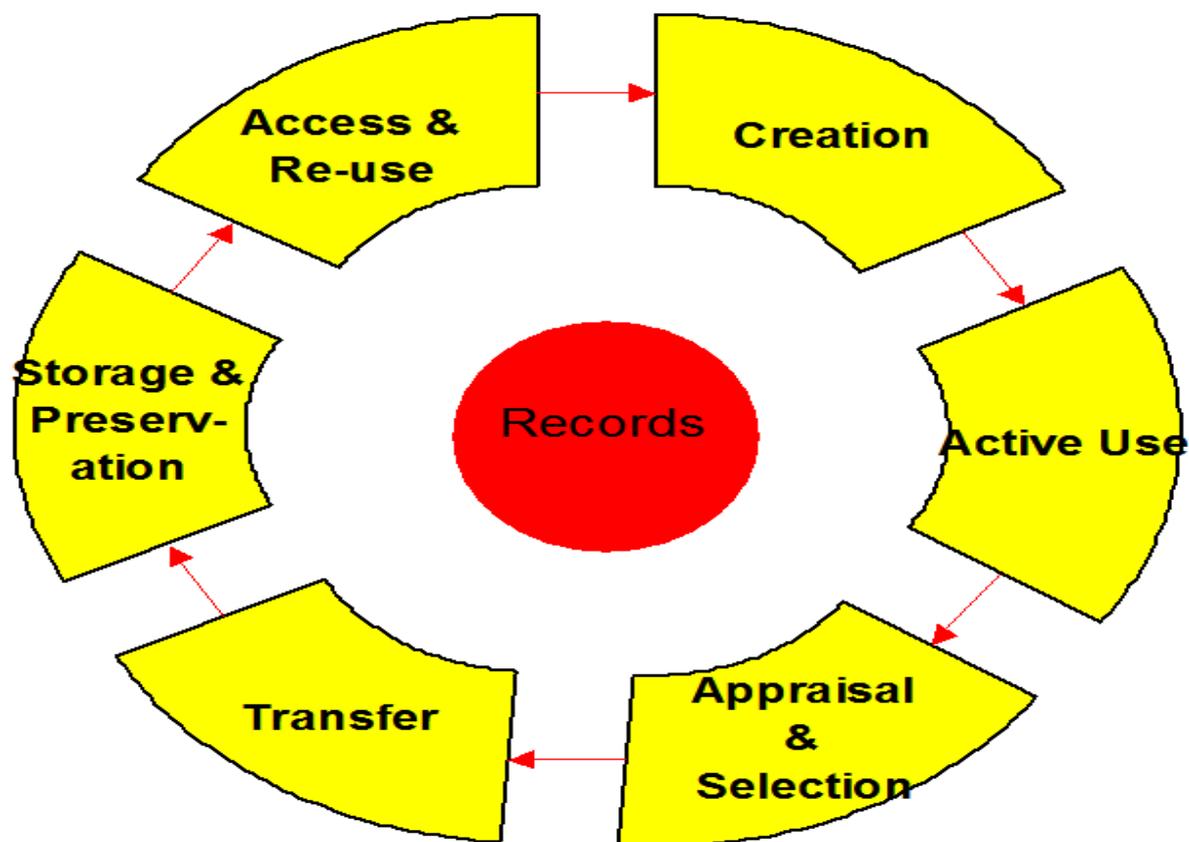


Figure 1.2: Sample Lifecycle model (Source: Pennock 2007:2)

Below are brief explanations of selected actions in the DCC curation lifecycle model that informed the current study:

- 1. Create and receive:** According to Ball (2010:11), the curation lifecycle proper begins with the creation or receive stage. This is when the digital record is produced. In the creation of digital records, it is important that administrative, descriptive, structural, technical and to some extent preservation metadata are assigned or included. According to Higgins (2008:138), the receipt of digital records should be done in accordance to the documented policies from the stakeholders.
- 2. Appraise and select:** During this stage, there is need to evaluate and select data that are needed for both short and long-term curation and preservation. Again, this should be done in accordance to the documented guidance, policies and legal requirements (Higgins 2008:138). In this case, there is therefore need to ensure that retention and disposal schedules are prepared.
- 3. Access, use and re-use:** This helps in identifying and retrieving information. That is, ensures that digital records are accessible to designated users and re-users on a day to day basis. There is also need to ensure that access controls are put in place so that only authorised individuals access the records.
- 4. Storage:** Digital records should be stored in a secure manner adhering to relevant standards.

The DCC curation lifecycle model was relevant to the current stage for the following reasons:

- Identifies the required stages necessary for the curation of digital records. As indicated by Halbert, Skinner and McMillan (2008:90), the model provides an overview of the stages for the curation and preservation of digital materials. Higgins (2008:135) reiterates that the DCC curation lifecycle model identifies curation activities applicable across the whole digital lifecycle. Thus, the model addresses all aspects required in the management and preservation of digital records.
- Emphasises on the need for policies, guidelines, standards and legislation in the curation of digital materials. The model encourages organisations to plan for curation and preservation activities through the introduction and implementation of a variety of policies and guidelines. In addition, Higgins (2008:135) mentions that the model complements a number of standards which provide frameworks for the management of digital materials such as ISO 15489.

- Encourages collaboration of different personnel in the management of digital records. Heidorn (2011) states that no one individual will have all of the required skills hence the need for collaboration among employees to complement each other. In this regard, records personnel, archivists and IT personnel should collaborate to ensure that a conducive environment for the management of digital records is created. In this regard, the study encourages the involvement of the NAZ in the management of digital records in the financial services parastatals.
- The model offers the framework for managing digital records. In the current study, it was also used to assess the existence of ICT infrastructure and the capacity of the personnel managing digital records in the financial services parastatals in Zimbabwe. These were considered as key aspects in creating a permitting environment for effective and efficient management of digital records.

1.6 Scope and delimitations of the study

The study focused on assessing the management of digital records in selected financial services parastatals Zimbabwe. The first issue addressed by the study was the state of digital records management in the selected financial services parastatals. In this regard, several issues were investigated. These include, types of digital records created/captured; functions of the records and information management unit; policies, guidelines, standards and legislation; records management functions and top management support. The study also investigated the availability of infrastructure and resources; the level of skills possessed by records personnel; the extent of NAZ's involvement in the management of digital records, as well as recommendations that may enhance the management of digital records.

The study was conducted in four financial services parastatals in Zimbabwe based in Harare. The list of financial services parastatals in Zimbabwe was extracted from the Government of Zimbabwe website (2016). According to the list, there were 13 financial services parastatals in Zimbabwe (See Appendix 1). However, by the time the study was conducted, one of the parastatal, that is, Zimbabwe Aligned Banking Group (ZABG) was no longer operational as it was closed by the order of the Reserve Bank of Zimbabwe (RBZ). Small Enterprises Development Corporation (SEDCO) had since been renamed to Small and Medium Enterprises Development Corporation (SMEDCO). Since there are stringent measures to collect data from banks, they were not part of the study. Permission was only granted in four financial services parastatal which were investigated. These were, National Social Security

Authority (NSSA), State Enterprises Restructuring Agency (SERA), Zimbabwe Revenue Authority (ZIMRA) and Zimbabwe Investment Authority (ZIA).

1.7 Justification of the study

The researcher acknowledges that a number of studies on digital records management have been conducted in different countries. One of the key issues raised by these studies is the absence of key components for effective management of digital records (Sejane 2004; Keakopa 2007; Nengomasha 2009; Luyomba 2010; Ambira 2016; Mutsagondo 2017). As already mentioned, Asogwa (2012:204) argues that “many African states are jumping into the technology bandwagon without adequately incorporating good records keeping strategies”. This means that, as government agencies embrace ICTs, they should also put measures to ensure that the resultant records are managed in a proper way. Failure to do so will present, for example, opportunities for fraudulent activities. This is confirmed by Asogwa (2012:204) who states that, “lack of proper management of financial records creates opportunities for fraud, loss of control of revenue and impedes fiscal planning”.

The studies have however, paid little attention on the management of digital records in financial services parastatals. Most financial services parastatals in Zimbabwe were established to raise revenue and to create a favourable environment for doing business. As the country is facing harsh economic challenges, financial accountability is therefore critical as it boosts investor confidence. Moreover, financial services parastatals are public institutions and are partly funded by the government thus, they are accountable to the citizens. In light of this, it was imperative to carry out the study so as to come up with recommendations that may be employed to manage digital records in financial services parastatals in Zimbabwe as this will help in eradicating vices associated with poor records management. Thus proper management of digital records is vital for the success of parastatals as it presents a strong environment for accountability and improved service delivery.

1.8 Significance of the study

The study comes at a time when there is an increase in the creation and use of digital records through e-government. It has been indicated in preceding sections of this study that at the moment there is no national framework to guide public sector organisations in Zimbabwe in the management of digital records. Therefore, a study of this sort is of importance as it identifies key aspects needed for proper care of digital records. The study also:

- 1) Establishes the status of digital records management in Zimbabwe.
- 2) Identifies resources needed for proper digital records management in Zimbabwe's financial services parastatals.
- 3) Provides recommendations for proper digital records management practices in Zimbabwe.
- 4) Add to the existing records management literature which helps records management students, records managers and archivists.

1.9 Definition of terms

This section is important as it clarifies key terms and concepts used in this study. The researcher acknowledges that, definition of terms may vary depending on the context, period or place in which they were compiled. This section provides the working definitions of key terms and concepts as they are used throughout this dissertation.

1.9.1 Digital record

The term may be used interchangeably with electronic record (e-record). The National Archives of Australia defines digital records as records created, communicated and maintained by means of computer technology. The General Commission on Archives and History of the United Methodist Church (GCAHUMC) (2013) suggested that digital records may be 'born digital' (created using computer technology) or they may have been converted into digital form from their original format (e.g. scans of paper documents). The working definition in the current study is a general consensus among scholars that digital records are records produced, used, maintained, accessed and stored by means of electronic equipment.

1.9.2 Digital records management

ISO standard (15489: 2016) defines digital records management (e-records management) as the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records. According to Kalusopa (2011:80), e-records management involves the planning, controlling, directing, organizing, training, promoting activities related to the creation, maintenance and use, and disposition of records in the ICT environment. Therefore digital records management can be regarded as all activities that ensure proper care of records in digital format.

1.9.3 Information communication and technologies (ICTs)

The current study adopts the definition by InterPARES Project 2 Glossary 2015, Luyomba (2010) which states that ICTs are instruments that facilitate communication, processing and transmission by electronic means. Though not exhaustive, these instruments include, internet, wide area networks and mobile computing.

1.10 Research methodology

This section briefly discusses the research methodology of this study. Research approach, design, instruments and various methodological issues are explained. However, this section only gives a brief discussion on the said issues and an extensive discussion is found in chapter three.

Creswell (2014:1) defines research approach as a plan or procedure detailing the collections methods, analysis and interpretation steps. The selection of a research approach depends on the nature of the research problem. Since this study is exploratory in nature, a qualitative research approach was adopted.

Research design refers to the conceptual structure within which research is conducted; constituting the blueprint for collection, measurement and analysis of data (Kothari 2004:31). The research design is a framework that outlines how the data will be collected, when it will be collected and where it will be collected. It outlines the steps taken in carrying out the research. The current study adopted the case study research design. Specifically, the multi case research design was adopted since it gives the opportunity to gather information from a number of sites on the management of digital data. It has also been suggested that, evidence from a multi case study is often regarded as more robust.

Kothari (2014:10) simplifies target population as all cases which the researcher is interested in studying. These may include individuals, groups of people, animals or organisations. For the current study, the population is financial services parastatals in Zimbabwe and NAZ. Data were collected from records personnel and IT officers in four financial services parastatals and two archivists at NAZ.

The term research instruments in the current study refer to techniques that were used to collect data. Data were collected through interviews, observation and document review. These instruments have been chosen because they give the opportunity to collect large amounts of data.

The aim of data analysis is to extract meaning out of the collected data. Creswell (2014:215) highlights that the purpose of data analysis is to make sense of the collected data. Thematic analysis was used to analyse collected data. This was achieved through transcripts from semi structured interviews, observation checklists and written material from financial services parastatals as well as NAZ. Data were mainly presented in descriptive narratives.

1.11 Ethical considerations

When conducting a study, a researcher is supposed to follow certain ethical issues to avoid violating participants` rights. In the current study, the researcher ensured that the study was conducted in line with the expected ethical guidelines. Before data was collected from respondents, consent was sought. This ensured that participation of participants was voluntary. Another critical factor in adhering to research ethics is to ensure participants` privacy. The researcher in this study respected the identity of respondents by not publicising them. The study also adhered to ethical guidelines prescribed by the University of South Africa`s Policy on Research Ethics (2007).

1.12 Structure of thesis

This study has six chapters as outlined below.

Chapter one- Introduction and background to study

This chapter introduces the topic by describing the background, aim and objectives, research questions, scope and justification of the study. The section focuses on what the study is all about and justifies the need for having such a research.

Chapter two- Literature review

The chapter focuses on identifying literature on related works. It identifies the literature, analyses it and tries to justify the gap that was filled by the study. In addition, the chapter discusses the conceptual framework adopted by the study. The chapter further explains issues that were raised in the introduction and background to the study sections.

Chapter three- Research methodology

In this section, the researcher talks about the research design and the approach that the researcher employed. Again the researcher highlights the data collection instruments used as well as data analysis strategy, target population and some ethical considerations. In this section, the researcher also gives the rationale of why the selected design, approach, instruments, population were suitable for the study.

Chapter four- Data analysis and presentation

The chapter presents data collected in tables and graphs. Data were presented in mainly narrative form and tables. Collected data are also analysed in this chapter.

Chapter five- Discussion and interpretation of findings

Chapter five discusses and interprets the research findings. The research questions are answered in this section. Thus the section highlights if the aim and objectives of the study have been fulfilled.

Chapter six- Summary conclusions and recommendations

The chapter summarises the study as well as concluding and giving recommendations. Areas of further research are also highlighted in this section.

1.13 Summary

This chapter introduced and gave a background to the study. It highlighted that government agencies have resorted to using ICTs in order to promote accountability and improve service delivery. However, little has been done to ensure that the resultant digital records are properly managed. The researcher saw it fit to carry out the study with an aim of providing recommendations that will enhance digital records management. It was necessary to conduct the study in financial services parastatals because they have been barely researched. Furthermore, they play an important role in the social economic growth of the country since they are responsible for revenue collection, promotion of fair trade and investment opportunities as well as pension funds administration. The DCC lifecycle model has been adopted as the theoretical framework because it identifies key activities and requirements for proper curation, management and preservation of digital records. The following chapter reveals the literature related to the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The previous chapter introduced and gave a background of the study. This chapter seeks to review literature related to the study. As indicated by Creswell (2003:29), literature review is important as it limits the scope of the inquiry and conveys the importance of studying the topic. In a later publication, the same author reveals that literature review purports to show knowledge of field before conducting the research (Creswell 2008). This helps to determine whether the topic is worth studying, providing ways in which the researcher can limit the scope to a needed area of inquiry (Creswell 2014:17). Using the acronym LEADS, Simon (2011:1) elaborates that a literature review has five functions within a study as listed below:

1. Lays the foundation for the study;
2. Elucidates the problem;
3. Analyses why the study is appropriate;
4. Describes why the study is capable of solving the problem; and
5. Shows similar studies.

It can be noted from the above citations that literature review places the study within the context of already conducted studies as well as identifying the appropriate research methodology. This section analyses works that have been done in the area of digital records management, focusing mainly on answering the research questions to achieve the desired objectives. A variety of sources were consulted and these include, masters` dissertations and doctoral theses; published books; journals; internet sources and conference papers. This literature review is divided according to the set objectives. The following are the topics covered in this chapter:

- Records management in Zimbabwe.
- Policies, guidelines, standards and legal framework.
- Records management practices.
- Infrastructure and resources.
- Skills and training.
- National archives and management of digital records.

2.2 Records management in Zimbabwe

The development of records management in Zimbabwe cannot be isolated from the country's political history. Zimbabwe was colonised in 1890 and was ruled by the British South Africa Company (BSAC). The NAZ website (2016) reports that when the BSAC rule was terminated in 1923, departmental records remained in the offices which had created them. Records that were still being used were distributed to departments which had taken over the functions of the Administrator. Those records that had no administrative value were sent to the BSAC's London office while those deemed to be of no importance were destroyed. According to Hiller (cited on NAZ website 2016), a historical exhibition which comprised books, pictures, private manuscripts and public records was organised in 1933 to commemorate the 40th anniversary of the settlers' conquest of Matabeleland. The exhibition aroused interest and resulted in the formation of the National Historic Committee (NHC), which was charged with bringing to the notice of the public, the importance of forming a permanent national historic collection and the establishment of national archives.

The National Archives was then established in September 1935 through an Act of Parliament that is the Archives Act of 1935. According to Kamba (1987) the National Archives was mandated to provide for the preservation, custody, control and disposal of public records of Southern Rhodesia (Zimbabwe's colonial name). The emphasis during this period was on the management of archives for historical benefits. In an attempt to expand services, a branch repository was opened in Bulawayo towards the end of 1966. Again, the Act was amended in 1964 and 1986 for efficient and effective records management by public organisations.

As argued by Ngulube (2012:26), the promulgation of the National Archives Act of 1986 gave the archives the mandate of instituting a comprehensive records and information management programme. The Act also contributed to the decentralisation of records management services to the provinces and ensured records were kept as close as possible to their place of origin (Ngulube 2012:25). Records centres were opened in different provinces of Zimbabwe, namely Harare (1986), Manicaland (1986), Masvingo (1987), Midlands (1988) and Mashonaland West (1999). The establishment of records centres sought to regulate the creation, maintenance and use of all records produced in the Zimbabwean public sector. However, four provinces namely Mashonaland East, Mashonaland Central, Matabeleland

South and Matebeleland North were yet to have their records centres. Nonetheless, the provinces got services from Harare and Bulawayo.

In Zimbabwe, records management in the public sector is governed by the NAZ Act of 1986. Section six and seven of the Act stipulates that the director of NAZ may inspect, examine and give advice on the management and preservation of records in the public sector, which includes government ministries, statutory bodies and/or parastatals as well as local authorities. Despite the existence of a legal framework, many organisations in Zimbabwe have been failing to properly manage records even those in paper format.

An article in the Herald on 2 June 2004, by Tsiko revealed that large sums of money might have been lost as a result of negligent recordkeeping. The author reported that there were cases of missing files dealing with pension, title deeds, birth registration, tax records, deceased estates, court and criminal records. Such a scenario according to Tsiko (2004:7), impeded the Comptroller and Auditor-General's office to carry out comprehensive and sound assessment of the activities by government departments. In this case, it becomes difficult for the responsible office to detect corrupt practices by government departments since records provide support for ongoing business, internal and public accountability and timely service to the citizens. In 2006, records pertaining to the registration of companies in the Deeds office in Harare were stored on floor and office corridors (The Herald 28 March 2006:3). By doing this, records were exposed to agents of deterioration such as dust, insects and moisture which shorten their lifespan.

Furthermore, studies conducted by Chaterera (2013), Matangira (2016) and Sibanda (2017) observed that, many public sector organisations were facing challenges with regards to the management of records, even those in the paper format. The studies have revealed that some government institutions were operating without putting in place necessary tools that would enhance the management of records. For example, Sibanda (2017) established that the majority of public sector registries in Mashonaland West province in Zimbabwe were operating without registry procedures manuals to assist them in systematically managing their records.

2.2.1 Management of digital records in Zimbabwe

Despite the challenges that the public sector institutions in Zimbabwe were facing in relation to records management, the government embraced ICTs through e-government. According to Lemieux (2016:5), the surge in the use of ICTs through e-government has a primary goal of making improvements in public service delivery and accountability. The government of Zimbabwe is on record for promoting e-government because of various benefits it offers. For instance, government agents are given an opportunity to network and integrate their services using ICTs thereby bringing citizens and various stakeholders closer to the government (Ngulube 2007). Ruhode, Owei and Maumbe (2008) also mention that e-government empowers citizens through access to information, better delivery of government services and more efficient government management. The authors further state that there will be less corruption, increased transparency, greater convenience, revenue growth and also cost reduction. Therefore, ICTs have brought a number of opportunities in various government agencies.

Chapter One of this study highlighted a number of initiatives to promote the use of ICTs that have been and continue to be set up by the government. These include the establishment of the Ministry of ICTs, adoption of the IRMS, launching of an e-government strategy and setting up systems such as PFMS and ZIPMAS. Through the economic blueprint of 2013-2018 named Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimAsset), the government projected to promote e-government through different projects such as automating government systems and establishment of a data centre. This is an indication of government's commitment to promoting ICTs usage in the public sector.

However, the same effort put by government in promoting the use of ICTs, cannot be compared to the effort put to manage the resultant records. The situation is not peculiar only to Zimbabwe. Various challenges mentioned in the previous section showed that, the world over, whether in paper or electronic environment, records management has not been receiving the attention it deserves. An earlier report by Millar (2004:9) pointed that:

It is widely acknowledged among the record keeping community that there is inadequate support in both the public and private sectors for quality records and archives management, not just in developing countries but world-wide. There is a

general lack of recognition of the importance of records as evidence, and senior officials often tend not to recognise the need for or value of effective records programmes. There is often limited financial and organisational support for records programmes, particularly for the care of current records and electronic records. The other challenge to the traditional view of records and archives is the growing use of information technologies. Governments everywhere are seeking to computerise their core functions and to use information technologies to streamline their operations. But rarely are they consulting with record keepers about how to ensure that the process of automation protects the essential evidence – the records – underlying the actions and transactions being documented.

As this quotation suggests, as ICTs are being promoted, records practitioners are usually not consulted. Therefore, if governments are to benefit from using ICTs, effort should be put to ensure that a favourable environment is created for proper management of digital records. Failure to formulate mechanisms for digital records management will jeopardise accountability and service delivery, which ICTs should promote. As mentioned by Bwalya (2011:28), ‘the huge benefits that come with e-government implementation become rhetoric in the absence of a robust implementation strategy’. In this case, embracing e-government without putting in place necessary requirements and attention for its success will contribute to its failure.

Since digital records are delicate and can be easily manipulated, many factors should be in place. Presenting a paper on digital records management and preservation at the 23rd ESARBICA conference in Zimbabwe, Lowry and Nduna (2015) mentioned that many components must be in place to create the right environment for the management of digital records. These include legislation, policies, procedures, standards, personnel and infrastructure. Different studies from different countries have shown that government agencies especially in developing countries, face an uphill task in managing digital records (Sejane 2004; Keakopa 2006; Moloji 2007; Moloji and Mutula 2007; Nengomasha 2009; Marutha 2011). Although not exhaustive, the management of digital records is usually compromised by:

- Absence of enabling legislation.

- Absence of standards, policies and procedures.
- Shortage of skilled personnel.
- Technological obsolescence.
- Absence of necessary infrastructure and resources.

The aforementioned challenges have since the early stages of e-government deterred government departments not only in Zimbabwe but also in Africa from creating a favourable digital records management environment. To mention just a few examples, a study by Akotia (2000) in the Ministry of Education in Uganda established that the management of digital records was compromised as the Ministry had neither skilled personnel nor the required resources. The study highlighted that although efforts have been made to promote the use of ICTs in government ministries, the management of digital records had not received the same efforts.

A survey by Mutiti (2001) found that governments in Sub Saharan Africa (SSA) including Zimbabwe were using ICTs, but only few institutions had set up programmes for managing digital records. This resulted in digital records management not getting the attention it deserves. The same sentiments were also echoed by Sejane (2004) who established that the management of digital records in Lesotho's public sector was poor due to the absence of a strong digital records management environment since there were no policies and procedures as well as proper infrastructure for managing such records. In this regard, Mnjama (2004) and, Ngulube and Tafor (2006:5) agree that the management of digital records has over the years been neglected since it has not been prioritised by many government agencies in the ESARBICA region which Zimbabwe is also a member. Therefore, countries are at risk of losing important records if mechanisms that ensure their effective management are not in place.

In Zimbabwe, a field study by Barata, Cain and Serumanga (2000) concluded that, the records management system that should support the goals of the accounting system in the Ministry of Finance was weak and government's fiscal accountability was vulnerable. One can therefore note that since the early stages of e-government, the management of digital

records has not been commendable and this has exposed government agencies to corruption and fraud which hinders accountability and satisfactory service delivery to citizens.

A study on records surveys and records management conducted by Chaterera (2013) revealed that digital records were not examined during surveys by NAZ despite the fact that these were created by different ministries. One of the reasons for not examining the management of digital records was lack of expertise and knowledge in Information Technology (IT) and digital records management by NAZ staff. Studies conducted by Matangira (2016) and Mutsagondo (2017) also revealed that the management of digital records in the public sector in Zimbabwe was weak. Lack of a national policy hindered government agencies in Zimbabwe to properly manage records as they were not aware of what was supposed to be done (Matangira 2016; Mutsagondo 2017).

In addition, legislation was cited as one of the factors that affected the proper management of digital records in Zimbabwe. Dube (2011); Mutsagondo and Chaterera (2016) and Ngulube and Tafor (2006), argue that it was difficult to manage digital records using the NAZ Act of 1986 because it has been overtaken by technological changes. The authors advocate for the crafting of a new Act that addresses the management of digital records in Zimbabwe's public sector. On the other hand, Matangira (2016) contends that digital records may still be managed using the same Act since records of any format are prescribed to be managed by the Act. She states that the definition of a record in the Act ('record means any medium in or on which information is recorded') technically include photographs, maps, videos, films and digital records other than paper. Therefore, government agencies have a legal responsibility of managing records they create regardless of media or format. They are mandated to set up a conducive environment for digital records management as this will go a long way in combating vices associated with poor records management.

Various policies such as IT policy have been crafted as a way of promoting government agencies to embrace ICTs. On the other hand, a national policy that would guide these organisations to manage the resultant records was not crafted. The implication in this case is that, the management of digital records depended on the discretion of the creating agencies since there were no guidelines from NAZ which has the legal mandate of overseeing the management of records in the country. As long as records management in the digital environment is not improved and promoted, government agencies risk losing vital records

which compromise accountability and service delivery. This is supported by Moloji and Mutula (2007:290) who indicate that e-government and sound digital records management collectively enhance transparency, accountability and good governance. Thus, for an e-government project to be successful, effort should be afforded to ensure the presence of a strong environment for managing digital records.

A look at the aforesaid studies shows that Zimbabwe like other African countries has been facing challenges to manage not only paper records but those in digital format as well. However, not many studies have concentrated on the management of digital records especially in financial services parastatals in Zimbabwe. This indicates that there is a deficiency of digital records management studies in Zimbabwe. A review of literature on the management of digital records in the ESARBICA region by Keakopa (2009) underscored the need to conduct more studies in developing countries as they are facing huge challenges in managing digital records. She further advocates for the formulation of strategies and practical tools to help in the designing, supporting and implementing of recordkeeping systems. This is because records management is a fundamental aspect of any organisation. Good records management is an indication of a properly governed organisation. Therefore, it should be prioritised and be well planned. This study therefore sought to investigate how financial services parastatals in Zimbabwe were managing digital records in the absence of a national policy and guidelines on digital records management.

Considering that the use of ICTs has been promoted and embraced by government agencies, the idea behind the study was to check on the progress made by financial services parastatals in Zimbabwe in creating an environment conducive for digital records management. This study desired to establish if these parastatals have managed to formulate in house policies and procedures and to assess the use and adherence to records management standards in managing digital records. The study went further to establish if parastatals were recruiting skilled and experienced human resource to manage digital records. Digital records management environment is further strengthened by the provision of proper and adequate infrastructure therefore, this study also investigated if parastatals have managed to provide the required resources.

2.3 Policies, guidelines, standards and legal framework

Effective management of records in whatever format requires organisations to put in place mechanisms that would guide personnel. These may come in the form of policies, guidelines, standards and legislation. The DCC curation lifecycle model which informs this study also encourages organisations to plan for the management of digital records through the introduction and implementation of policies and guidelines. In addition, the model prescribes that relevant legislation should be in place as this will provide a framework for managing of digital records.

2.3.1 Records management policies and guidelines

According to Mnjama and Wamukoya (2007:277), the generation of digital records in many public sector organisations in Africa has resulted in several challenges hitherto never experienced by archivists and records managers. They argue that the creation, use, maintenance and preservation of digital records pose special challenges which require new techniques and tools that are informed by traditional information management principles and goals. The authors further state that the level of commitment to managing digital records can be gauged by the existence or non-existence of records management policies and guidelines. The same sentiments were also echoed by Mokhtar and Yusof (2009:231) who suggest that digital records management should be driven and guided by clear, comprehensive, understandable policy, to direct the organisation and ascertain the effectiveness of functions implemented. Therefore, government agencies need to develop policies and guidelines that do not only address traditional aspects of managing paper records, but also new challenges posed by digital records. This implies that the existence of a records management policy that does not embrace all forms of records and particularly digital records is inadequate.

In records management, policies and guidelines are critical because they give the general framework for the creation, classification, use, storage and disposal of records. Makhura (2009:2) posits that a records management policy gives employees an opportunity to update or familiarise themselves with the normal operations of their organisation and as such its ignorance or absence may affect the competitive performance of any organisation. Moreover, policies and guidelines are important for directing and guiding records officers on better approaches to the management of digital records as well as ensuring that the appropriate records will be available for accountability processes (Keakopa 2007:200; Meijer 2001:260).

Highlighting the general overview of the contribution of policies and guidelines in records management, Sejane (2004), IRMT (2009b:5), Mokhtar and Yusof (2009:231), and Kabata (2012:130) suggest that they:

- Help in setting up records management standards.
- Help organisations to improve the quality and reliability of their electronic recordkeeping systems.
- Provide clear guidance on what records are and why they need to be managed effectively.
- Serve as a guideline to facilitate actions and decisions to be taken.
- Protect organisations against litigation over improper use of information systems for recordkeeping purposes.
- Set out general principles and policies relevant to the organisation on specific aspects of records management, which then form the basis for the implementation of new records management programmes.
- Identify statutory or other legal foundations for the organisational recordkeeping.
- Serve as evidence of management's support of and investment in a compliant records management program.

One can note that records management policies and guidelines give organisations the direction in which necessary measures for creating, maintaining, use and disposal of records in whatever format are initiated. Thus lack of digital records management policies and procedures negatively impact their management.

Despite the role played by policies and procedures in records management, government agencies continue to operate without formulating these important tools. It has been observed that in many governments and other agencies, policies and guidelines for managing either paper or digital records are often non-existent or if they exist, they are often weak or outdated. As will be indicated in subsequent sections of this chapter, absence of records management policies and guidelines in most ESARBICA member countries has negatively impacted on records management functions.

The above discussion elaborates the general consensus among scholars that the absence of well-developed and detailed policies and guidelines as well as the implementation strategies compromises the quality and reliability of digital records. On the other hand, Kalusopa (2011:110) argues that the mere existence of a policy or guidelines is not enough evidence that the organisation is committed to managing its digital records. He further explains that, when policies and procedures have been formulated, there is need to ensure that they are accessible and communicated clearly and consistently throughout an organisation. In this case, organisations that formulate records management policies and guidelines should also establish systems that ensure their full implementation. Non implementation of or compliance to policies and guidelines will derail the records management progress of any organisation.

If policies and guidelines are so important in digital records management, one tends to wonder how organisations operate in their absence. Studies by Mutiti (2002) and Nkala, Ngulube and Mangena (2012) indicated that Zimbabwe did not have an explicit national policy for managing digital records. Despite making great strides in promoting e-government through different initiatives, the government of Zimbabwe was yet to formulate a national digital records management policy by the time this study was conducted. Matangira (2016:218) investigated the status of records management in 24 government ministries in Zimbabwe and observed that there were no operational guidelines for the daily management of digital records throughout the record life-cycle. The same study also found that records procedures manuals found in the Ministries were conducive mostly in the manual system for managing paper records since there were no guidelines to inform staff on how to capture, appraise and dispose digital records generated or received.

It is against this background that this study sought to establish the mechanisms put in place by financial services parastatals in Zimbabwe for managing digital records including e-mail and social media records. The study also aimed at establishing in-house measures put in place by financial services parastatals in Zimbabwe to control and guide the management of digital records. The study went on to investigate measures put in place to ensure that all responsible employees are aware of these policies and procedures.

2.3.1.1 Policies and guidelines for managing e-mails

As indicated before, the proliferation of ICTs has contributed to the increase of digital records generated by different government agencies including financial services parastatals. Government organisations have been pressurised by the ICT uptake in the private sector. To match the competition, financial services parastatals in Zimbabwe have also resorted to using e-mails as a way to internally and externally communicate with different stakeholders. According to Meijer (2001:261), e-mail is widely regarded as a means for supporting internal coordination and improving communication with citizens. One of the main reasons for the increase in the usage of e-mails is its ability to save space by reducing the number of paper records. For many government agencies in Zimbabwe, including financial services parastatals, e-mails have become an integral part of the daily operations.

The fact that the ever-increasing reliance on e-mail for business activities makes it likely that most organisations including financial services parastatals will at some point need to access and deliver e-mail messages in the course of an audit, investigation, or other formal business proceeding (Franks 2004:1). Many at times e-mails are generated in large volumes such that without proper control measures, organisations might lose important records and keep those that may not be important. There is need to define mails to be temporarily managed and those that will be kept as evidence of official business. Therefore, it is imperative for organisations to put in place policies, guidelines and procedures to control e-mails. These tools may either govern the creation and capture of authentic e-mail records or address the organisation's approach to e-mails. Failure to manage e-mails can also be an indication of failure in records management in general.

Despite being one of the primary correspondence tools of communicating with internal and external stakeholders, government agencies tend to approach the management of e-mails on an *ad hoc* basis. The literature has indicated that different organisations in different countries have been facing challenges in managing e-mail records. One of the major hindrances of managing e-mails is the lack of organisational control. Meijer (2001:261) highlights that control over e-mail tends to be highly individual. A study by Matangira (2016) revealed that despite the fact that e-mails were being used for everyday official correspondence, their management and other technology-generated documents remained largely unaccounted for in all the 24 Ministries covered in her study. This was due to absence of rules and guidelines based on established standards directing the daily handling of such records. Likewise, there were no formal systems to manage e-mail records in six Zimbabwean universities as revealed

by Sigauke, Nengomasha and Chabikwa (2015). The same study also found a similar state in the Ministries of the Public Service of Zimbabwe.

Ngulube and Tafor (2006); Keakopa (2007); Asogwa (2012); and Nengomasha (2012) have also witnessed the absence of policies and guidelines to manage e-mails in other countries especially in the ESARBICA region. Keakopa (2007) concluded that in Namibia Public Service, e-mails were being generated but there were no guidelines to guide record creators on how to create and capture them. Similar findings were also obtained by Nengomasha (2009) who indicates that absence of e-mail controls compromised transparency and accountability in Namibia. Again Sejane (2004) and Kalusopa (2012) found similar findings in Lesotho and Botswana respectively. All these are indicators that as organisations use e-mails, there is need to properly provide tools that guide personnel in managing them.

2.3.1.2 Policies and guidelines for managing social media records

In addition to e-mails, public sector institutions have also been active on different social media platforms such as Facebook, Twitter, WhatsApp, Skype and Instagram to mention just a few. Just like e-mails, social media platforms promote interaction and communication between citizens and the government. Government agencies have been active on different social media platforms in a bid to bring the government closer to the citizens. The Ohio Electronic Records Committee (OERC) pointed out that the use of social media by governments is growing rapidly because it creates new opportunities and speeds up communication with clients (OERC 2012:1). The committee further elaborated that, “government agencies are increasing their use of social media to provide improved services, enable citizen interaction and increase overall transparency.” The use of social media platforms gives an opportunity for government information to be easily accessible thereby improving service delivery. Social media platforms consist of various categories that may have a variety of content in words, videos, audio and photographs and are used to facilitate the dialogue between people (Fourie 2015:4). According to Niekerk (2014), social media has also provoked different ways of doing business, and government agencies had to embrace it rapidly so as to stay abreast with contemporary trends.

The widespread use of social media warranted its discussion in the current study. Social media has become a source of official communication which increases also the importance of

effective management of information conveyed through these platforms. According to Thomson (2016:1), social media interactions leave valuable traces of human communication. Thus, data generated by social media users, is valuable resource as evidence of business transactions. On the other hand, interactions on social media may contribute to the creation and capture of a plethora of posts so if not well moderated there is potential loss of vital information and keeping invaluable information. Organisations wishing to benefit from using social media will need to have boundaries in the form of policies and guidelines so as to mitigate risks associated with the increased usage of social media (Duncan 2012:2).

OERC (2012:1) points that one of the challenges affecting government agencies is the capture of social media content. The committee states that retaining social media records can be difficult, especially those that are frequently updated. Thus some social media platforms have developed tools for assisting users to capture content for retention purposes. The committee further recommended that capture strategies must be crafted for particular circumstances and tools. In this regard, different organisations have crafted standards, strategies, policies and procedures to manage the creation and capture of social media records. For example the Public Record Office Victoria Standards and Policy (PROVSP) produced a recordkeeping policy on social media in the State of Victoria. PROVSP (2012:4) holds that the government should be held accountable, open to scrutiny and transparent. As such, social media records must be captured like any other records. Those posts created or received by a public office should be kept as close to the point of creation as possible. When formulating policies, guidelines and procedures, there is also need to ensure that these are in line with internationally, regionally or nationally recognised standards such as ISO 15489.

2.3.2 Records management standards

As indicated in prior paragraphs, effective records management is important for decision making and preservation of institutional memory. This should be guided by standards. Since governments are promoting e-government, the formulation or adherence to records management standards should not be overlooked. With standards, records are created and maintained to a level that is necessary to safeguard the interest of the organisation. Again, standards ensure that the integrity and authenticity of records are safeguarded. Standards apply equally to records in whatever format but other requirements may be added on digital records management. The responsibility to ensure that records adhere to set standards rests in

both creators and users. The current study sought to assess the level to which financial services parastatals in Zimbabwe use and adhere to the requirements of digital records management standards. Standards are usually set at national, regional and international level by different bodies such as Standard Association of Zimbabwe (SAZ), ESARBICA and ISO. The following subsections explain some of the standards crafted by ISO to assist in the management of records in either paper or digital records.

2.3.2.1 ISO 15489 Information and documentation — Records management

ISO is a worldwide body based in Geneva that oversees international standards (Healy 2010:96). The preparation of standards is usually done by the organisation's technical committees in which all interested member bodies have a right to be represented. ISO 15489 is one of key standards formulated by an international body for the management of records. The standard was first prepared in 2001 to guide the management of information and records using the Australian standard AS 4390. In 2016, the standard was then revised and cancelled the first edition.

The standard is regarded as a valuable resource in managing records. As such, organisations need to ensure that these are maintained when creating and managing records. As indicated by Tsabedze (2011:19), ISO 15489 provides a framework for records management through a level statement of principles and policy. The author further mentions that, the standard act as a benchmark used by organisations to assess their records management systems and practices. Adoption of records management concepts and principles described by ISO 15489 ensures that records are created/captured, used and stored in a proper and suitable environment.

ISO 15489 has been a success in managing records. McLeod and Childs (2005) assessed the impact of the standard in the management of records in the UK between 2003 and 2005. It was revealed that the standard provided much influence because of its international nature. Records practitioners were given greater confidence due to its weight and authority thus providing an underlying framework to inform records management practice. The standard which has two parts has helped many organisations in creating a conducive records management environment.

Part 1: Concepts and principles

The part gives a high level framework for records keeping and explains the benefits of good records management, the legal considerations and the importance of assigning with records management responsibilities. ISO 15489-1 identifies requirements for records management and addresses issues surrounding the design of recordkeeping systems, records management processes, auditing and training.

Part 2: Guidelines

This part of ISO 15489 guides in the implementation of mechanisms mentioned in Part 1. It gives specifications on the development of records management policy and responsibility statements. The part also suggests a process for developing recordkeeping systems as well as providing advice about developing records process and controls. ISO 15489-2 also provides specific advice about setting up monitoring, auditing and training programs.

2.3.2.2 ISO 23081 Information and documentation- records management processes-metadata for records

This standard focuses on the management of metadata. It consists of 2 parts:

Part 1: Principles:

The standard provides a framework for the creation, management and use of records management metadata and explains the principles that govern them. ISO 23081-1 addresses the importance of records management metadata in business process and the different roles and types of metadata that supports business and records management processes. Part 1 of ISO 23081 covers principles that underpin and govern records management metadata. According to ISO 23081-1 (2006:1), these principles apply through time to:

- Records and their metadata.
- All processes that affect them.
- Any system in which they reside.
- Any organisation that is responsible for their management.

The following are the themes covered by the standard:

- Perspectives and purposes of records management metadata.
- Roles and responsibilities.
- Records management metadata in relation to other metadata areas.

- Management of metadata.
- Types of metadata required to support ISO 15489-1.

Part 2: Conceptual and implementation issues.

This part provides a framework for defining elements for managing records and a generic statement of metadata elements, whether these are physical, analogue, or digital, consistent with the principles of part of the standard.

2.3.2.3 ISO 16175 Information and documentation – principles and functional requirements for records in electronic office environments

ISO 16175 provides principles and functional requirements for software used to create and manage digital records in office environments. ICA (2013:4) mentions that the standard was developed because there was need to have a “harmonised statement of requirements for digital recordkeeping software products that meet the needs of the international archival community and that inform the global software industry of such needs”. Furthermore, there was need to “address records management principles and issues as records are created, used and stored in business systems”. The standard is divided into three parts:

Part 1: Overview and Statement of Principles

Part 1 of ISO 16175 provides fundamental principles for the management of records in a digital environment. According to ICA (2013:5), this part gives background information and sets out the fundamental recordkeeping principles that are required in business systems. It establishes the principles of good practice, guiding principles, implementation guidelines, and it lists risks and mitigations for the purposes of enabling better management of records in both private and public sector organisations.

The following are some of the issues covered by part 1 of ISO 16175:

- Good practice: E-records and the role of software;
- Guiding principles; and
- Implementation guidelines.

Part 2: Guidelines and Functional Requirements for Digital Records Management Systems

Part 2 of ISO 16175 sets out the functional requirements for software systems that are designed to manage records. These requirements apply to records irrespective of the media in which they were created or stored. The standard does not seek to set requirements for records still in use and held within business systems. According to ISO 16175-2 (2011), digital objects created by e-mail, word processing, spreadsheet and imaging applications are managed within digital records management systems which meet the functional requirements established in ISO 16175-2.

Part 3: Guidelines and Functional Requirements for Records in Business Systems

This part of the standard sets out general requirements and guidelines for records management and provides guidelines for the appropriate identification and management of records of business activities. These guidelines assist in:

- Understanding processes and requirements for identifying and managing records in business systems.
- Develop requirements for functionality for records to be included in a design specification when building.
- Evaluating the records management capability of proposed customised business system software.
- Reviewing the functionality for records or assess compliance of existing business systems.

ISO 16175 also supports preservation by allowing the export of records to a system that is capable for long term preservation activities, or for the ongoing migration of records into new systems. However, it does not specify requirements for the long term preservation of digital records.

2.3.2.4 ISO 26122 Information and documentation – work process analysis for records

ISO 26122 provides guidance on work process analysis from the perspective of the creation, capture and control of records. Two types of analysis are identified and these are functional analysis (decomposition of functions into processes); and sequential analysis (investigation of the flow of transactions). Guidance provided in the form of lists of matters to be considered under each element of the analysis is also included. The standard describes a practical of the theory outlined in ISO 15489.

2.3.2.5 ISO 30300 Information and documentation – management systems for records – fundamentals and vocabulary

The following are issues addressed by the standard:

- Establishes the objectives for using a management system for records.
- Provides principles for a Management Systems for Records.
- Describes a process and specifies roles for top management.

2.3.3 Legal framework

As indicated in the previous chapter, records play a pivotal role in any organisation. It is through records that top management make informed decisions which also help in providing satisfactory services. Thus, the absence of an organised records management framework will compromise the quality of service rendered to citizens and clients. To avert crisis associated with poor records management, Okello-Obura (2011:3) suggests that there is need for effective legislative framework. This means that, all records management functions such as creation, use and maintenance are subject to legislation requirements. Therefore, personnel entrusted with the management of records in whatever format should be aware of legislation that govern their activities.

However, most studies have revealed that, as a result of weak legal frameworks, most countries are facing challenges with regards to digital records management. To support this, IRMT (2009:39) argues that, the absence of legislation and the existence of ineffective and outdated laws affect how records are managed. Various studies conducted in different public sector institutions have revealed that apart from weak or absence of a strong legislation, personnel were not aware of the legislation governing the management of digital records.

A study conducted by Mutsagondo (2017), in the Midlands Province of Zimbabwe revealed that, despite creating, receiving and managing digital records, the majority of personnel were not aware of the law that guided the management of records in Zimbabwe. Studies by Kalusopa (2011) and Marutha (2011) in Botswana and South Africa respectively also revealed the same results. The majority of the participants confirmed that they were not aware of the legal framework that governed records management in their respective

countries. As mentioned by Mutsagondo (2017), this meant that records were not managed in line with the dictates of the law, a situation that heavily compromised their management.

2.4 Records management practices

The introduction of ICTs has impacted on records management practices such as records creation/capture; storage; access and security; and retention and disposal. This study investigated how these records management practices were handled.

2.4.1 Records creation and capture

According to Ngoepe and Van der Walt (2009:117), proper records management result in good archives. Furthermore, failure to create authentic, reliable and usable records results in far reaching repercussions. A general literature research on ICTs, records management as well as obstacles faced by records practitioners in developing countries by Mnjama and Wamukoya (2007) indicates that using modern ICTs in creating digital records might make them inaccessible in the future. This has a negative bearing on accountability as well as service delivery. Moloï and Mutula (2007:291) point that records document the decisions and activities of governments and organisations, and serve as a benchmark by which future activities and decisions are measured. However, the authors argue that this might be difficult to achieve if there are no measures to guide and monitor the creation of reliable and authentic records. This implies that if records are not managed properly in the office of origin, the product transferred to the archives will also be poor. Therefore, records personnel need to capture detailed and relevant information at the point of record creation.

In Namibia, Nengomasha (2009) observed that there was no awareness that records need to be captured with a view of showing evidence of the transactions they document. In this light, it is essential that government agencies implement and maintain a systematic approach to managing records, guided by set standards and best practices from the point of creation to their ultimate disposition. ISO 15489 stipulates what an organisation needs to ensure for the creation and capture of authentic, reliable and useable records. According to the standard, “the creation of records should involve the creation of content and metadata that document the circumstances of their creation”. In addition, the DCC curation lifecycle model prescribes organisations to assign or include metadata when creating or capturing digital records.

2.4.1.1 Metadata

The volume in which digital records are being generated, used and stored is increasing. There is therefore, need to ensure that records remain accessible throughout their lifecycle. This can be accomplished by recording and managing metadata. Metadata is information about the content, context and structure of records (Franks and Kunde 2006:55; ISO 15489:2016). The IRMT (2009a:61) defines metadata as “data about data” or “information about information”. IRMT further suggests that metadata provide the context of data or information which helps the user to understand what it is, how and why it was created. The General Commission on Archives and History of the United Methodist Church (GCAHUMC) (2013) further describes metadata as data “describing the context, content and structure of records and their management overtime”.

On the other hand, Lavoie and Gartner (2005:4) argue that “the canonical definition of metadata – ‘data about data’ – is not particularly helpful in understanding what metadata is and how it is used”. Metadata is then defined as “structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource” (NISO 2004 cited in Lavoie and Gartner 2005). Though there might be a variety of definitions, the general agreement among scholars is that, it is through metadata that users are able to control, manage, locate, understand and preserve records over time.

As highlighted by the IRMT (2009a) and GCAHUMC (2013), information that constitute metadata include:

- Creator of the record.
- Title of the record.
- Date of creation.
- Subject.
- Format of the record.

Having said that, Frank and Kunde (2006) and ISO 23081-1 (2006:2) suggest that the purposes of metadata are to:

- Facilitate data sharing.
- Ensure authenticity.
- Facilitate implementation of retention and disposition.

- Identify and contextualise records.
- Protect records as evidence.
- Ensure their accessibility.
- Facilitate the ability to understand records.
- Helping to ensure the authenticity, reliability and integrity of records.
- Supporting and managing access, privacy and rights.

Metadata is a critical aspect when dealing with the creation and capture of digital records in any organisation. According to ISO 15489 (2016), records that do not possess metadata lack the characteristics of authoritative records. Sejane (2004:60) reiterated that without the metadata attached to a document, it cannot be considered a record. The World Bank and IRMT (2000:13) mention that unless the electronic system captures and preserves reliable information about who created the record; when, where, how and why; who used it, in relation to the functions, process or activity, digital records lose their value as reliable evidence. Thus, it is the availability of metadata that a record can be considered as complete. Consequently, failure to capture accurate and sufficient metadata hampers effort to carryout comprehensive and sound assessment of the activities by government departments and this undermines public service delivery and accountability.

There are different types of metadata which include recordkeeping metadata, systems operating metadata, administrative metadata, descriptive metadata and preservation metadata (Cantara 2005; IRMT 2009). However, this study does not go further in discussing details of each type of metadata. The study underscores the need to adhere to standards dealing with metadata to guarantee the creation of authentic and reliable records.

The widespread use of ICTs in the management of records by government agencies has contributed to the need to identify metadata requirements and standards. Keakopa (2007); Nengomasha (2009); Luyomba (2010) and Kalusopa (2012); have all indicated different projects conducted in especially UK, USA, Canada and Australia to find ways of standardising capturing of metadata. The purpose of establishing metadata standards by the aforementioned countries was to guide government institutions in managing digital records. These guidelines sought to ensure the creation of authentic, reliable and usable digital records.

Adherence to metadata standards ensures the systematic creation and capture of authentic, reliable and usable records. In ESARBICA region as observed by Kalusopa (2012:81), most of the standards and practices adopted in the management of digital records have had influence from Australia, UK, USA and Canada. The implication is that, countries in the ESARBICA region have not done much to develop metadata standards that fit in their context. At times the management of digital records is done without defined standards. For example, Kalusopa (2012:195) established that there were no defined standards to capture or tag metadata for authenticity in Botswana's labour organisations. The author further mentioned that although ICT system that could capture some minimum metadata existed, there were no clear procedures or standards that guided creation and capture of records. Also in Namibia's public sector, a study by Nengomasha (2009) established slight similar results. She observed that there were no metadata standards in place and in some cases, officers responsible for the systems did not know what metadata is.

2.4.2 Storage

As mentioned before, records are important for any organisation's efforts to achieving accountability, transparency and good governance. Therefore, records should be accessible whenever they are required by authorised officers. This implies that, records storage environment should be strengthened to ensure that whenever records are required they can be accessed.

Storage can be a challenge in the management of digital records. The World Bank and IRMT (2000:12) posit that the media upon which digital records are stored is fragile compared to other media forms such as paper and microfilm. Thus, digital records stored in poor environmental conditions can be subject to loss and destruction. In the management of paper records, weather can also threaten the lifespan of a record if not controlled. For instance high temperatures may cause paper records to be crispy. The same can also be said for digital records. Slight changes in humidity and temperature can disturb the magnetic properties of disks and tapes leading to the loss of some or all of the records (The World Bank and IRMT 2000:12). There is therefore, need for government agencies to ensure that records are properly stored so that they remain accessible throughout their lifespan.

With regards to records storage, ISO 15489 (2016) stipulates that, regardless of format and media, records should be “stored in a way that protects them from unauthorised access, change, loss or destruction, including theft and disaster”.

2.4.2.1 Cloud storage

The National Institute of Standards and Technology (NIST 2016) defines cloud computing as a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing services that can be rapidly provisioned and released with a minimal management effort or service provider interaction. Cloud computing depends on shared computer resources than personal devices handling applications. Again, organisations have to pay for resources when they use them. Thus, cloud computing provides reasonable benefits for government agencies using ICTs carrying out different functions.

Cloud computing is divided into four distinct divisions as indicated below.

- *Private Cloud.* Usually it is specifically for the organisation`s use. As indicated by Basset (2015:44), it can be located on the organisation`s premises or managed by a third party cloud provider.
- *Public Cloud.* The cloud infrastructure is provided by the service provider which also responsible for its maintenance.
- *Community Cloud.* It is shared by several organisations with shared concerns or interests such as mission or goal (NIST 2016). Organisations or cloud service provider may manage this cloud infrastructure.
- *Hybrid Cloud.* This cloud infrastructure is a combination of more than one cloud. According to Basset (2015:44), these clouds are linked together as a single at the same time retaining their individual albeit unique properties.

According to Katuu and Ngoepe (2015:135) recent technological developments have impacted how public records are created and managed such as mobile computing and cloud computing. These have raised a number of challenges to the traditional means of recordkeeping. Different organisations whether in the public or private sector, have adopted the use of cloud storage for short and long term storage and preservation of digital records. One major reason for the adoption of cloud storage was highlighted by Adu (2016:83) who revealed that for many organisations, the cloud presents an attractive model to deliver

efficient IT services in which data is stored online without having to run their own computing services. In records management, Basset (2015:15) reiterates that cloud computing could be used to help improve access to records, providing the ability to access stored records regardless of the users' location.

The adoption of cloud computing presents opportunities for managing digital records. According to Kabata (2012:124) "in a cloud environment, storage of records or information is outsourced to a third party provider and accessed by the organisation through a network connection. Thus, in cloud infrastructure information, applications and processing power are distributed across many servers which allows very flexible up and down scaling of resources". Therefore, with cloud storage, organisations' information centres no longer need to have server rooms or maintain storage arrays (Adu 2016:84). This is because the cloud service vendor will be responsible for the maintenance of the hardware. Kabata (2012:122) also pointed that the move to a hosted file management system provides an opportunity for organisations to be organised with respect to cluttered server folders, inconsistent record keeping and confused workflow procedures. The following is a selection of benefits of cloud storage as indicated by Kabata (2012:124):

- Access to records from any location.
- Reduction in capital expenditure.
- Enhanced reliability.
- Enhanced protection against data loss.

Nevertheless, Kabata (2012) has also indicated some of the challenges which organisations intending to or that have adopted cloud storage should be aware of if there are to benefit from using the service. These include:

- Unreliable nature of cloud services.
- Loss of governance.
- Compromised security of data.

Like any other company, the cloud storage providers may go out of business or cease to operate which will eventually lead to loss or inaccessibility of records (Adu 2016:83). Basing on Basset's (2015:81) argument, privacy and confidentiality may be affected with the adoption of cloud storage. Cloud storage is also susceptible to hacking.

Therefore, an organisation should ensure that there exist standards, policies and procedures for managing records stored on cloud so as to counter problems associated with the service. According to Kabata (2012:127) the records manager has a responsibility of ensuring that records stored in the cloud are managed according to the organisation's records management and compliance programmes in order to maintain their authenticity, reliability and integrity overtime. In this case they remain accessible and retrievable for legal and regulatory compliance.

2.4.3 Access and Security

The preceding sections of this chapter have elaborated that it is through the availability of records that accountability and improved service delivery can be achieved. Government agencies should therefore strengthen their digital records management environment since proper, effective and efficient records management enables them to perform their functions successfully and efficiently and in an accountable manner (Marutha 2011:22). Thus, records must be protected to ensure that they remain accessible whenever they are required. As stipulated by ISO 15489 (2016), there should be a set of rules to identify rights of access and the regime of permissions and restrictions applicable to records. In simple terms, controls must be in place to monitor and regulate access to records within the organisation. Failure to set up controls on records access may block efforts to promote accountability and improve service delivery. For instance, records may not be made available if and when needed for decision-making (Moloi and Mutula 2007:290). Tsiko (2004:7) assessed the management of records in different government departments and ministries in Zimbabwe. The results revealed that there were cases of deliberate illegal destruction, mutilation and vandalism of records to destroy evidence that implicate certain individuals under investigation for corrupt activities.

Organisations have different personnel who operate at different levels. If accountability is anything to be achieved by government agencies, there must be defined levels of access. The fact that digital records can be easily altered or manipulated without leaving any trace also requires strict security measures to ensure that only authorised personnel get access to the records. The World Bank and IRMT (2000:12) concede that unless strict security provisions are in place, digital records can be altered or deleted without the organisation's knowledge.

As such, access controls should be in place. These may restrict number or certain individuals who can access particular records. In an organisation where a records management systems has been employed, the system should then leave an audit trail for accessed records that is when they were accessed as well as who accessed them.

Organisations employ a wide range of security measures to control access to records. With regards to access and security of digital records, Mampe and Kalusopa (2012) established that passwords and usernames were used within the Department of Corporate Services in South Africa. The same measures were also employed in Namibia and Uganda Public Service as established by Nengomasha (2009) and Luyomba (2010) respectively. However, the use of passwords is not always regarded as an efficient way of securing digital records. As in the case of Namibia Public Service, passwords may be passed to colleagues who will allow unauthorised people to access records. In Uganda, information stored within the ICT systems was occasionally reported to have been altered or manipulated by users despite the existence of passwords to access records (Luyomba 2010:215). According to ISO 15489 (2016), the following have been recommended to control access to records:

- Using up to date access permissions and restrictions.
- Using passwords.
- Encryption.
- Regular refreshing of password.

With regards to this, the current study aimed at establishing how access and security issues are being addressed as this will go a long way in blocking illegal access and destruction of records.

2.4.4 Retention and disposal

In the course of carrying out various functions and communicating with different stakeholders, government agencies create a wide range of records. These records have different retention periods. Which records to keep and the extent they are kept vary from organisation to organisation. Just like paper records, digital records need to be retained in an orderly and controlled manner to ensure that the information they carry will remain viable, authentic and accessible whenever required. For whatever reason a record is created, there is a useful life of that record, that is, a period it is useful for the organisation (Howell and Cogar 2003:2). There is need to retain what is needed and eliminate what is not. In this case,

organisations should prepare retention periods for digital records created and/or captured by the organisation. Different aspects such as records` content, nature, value and purpose determine their retention periods. Thus, records retention schedules should be in place to ensure that records are kept and managed for as long as they are required. As stipulated by ISO 15489, records are not supposed to be destroyed before their retention periods expire.

Moreover, it is critical for organisations to craft retention policies and procedures to ensure that records retention and disposal is done in an orderly manner. Kabata (2012:129) argues that a sound and legally compliant records retention policy, including a records retention schedule is the foundation of a good records management program. However, among other aspects, Nengomasha (2009:116) observes that the management of especially e-records is highly challenged by the lack of records retention and disposal policies. This was confirmed by a survey conducted by Kalusopa in (2012). The survey revealed that there were no clear rules and procedures to authorise records retention and disposal of data held in ICT systems. As highlighted by Kalusopa (2012:199), the implication was that creators and users of records had the liberty to capture, manipulate and delete data without any conditions and restrictions. The author further observed that there was confusion about retention requirements and the need to retain records for accountability purposes since there were no agreements over how long various records could be retained.

As such, one can note that retention of digital records should be done in a well-controlled manner as this will go a long way in ensuring that records are available whenever they are needed. Therefore, there was need to establish the availability of records retention schedules and how these are adhered to in Zimbabwe`s financial services parastatals. ISO 15489 stipulates that, disposition authorities should be developed to regulate the disposition of records. These disposition authorities should be guided by the following factors:

- Responsibility for the development of disposition authorities should be identified by law, regulation or policy.
- Should identify groups or classes of records that share the retention periods and disposition actions.
- They are supposed to be authorised, dated, implemented and regularly reviewed.

2.5 Infrastructure and resources

One of the key factors for successful digital records management is the availability of proper and adequate infrastructure and resources. As indicated by Asogwa (2012:205), for digital records and archives management programme to be successful, financial and human resources have to be available. Luyomba (2010:56) says “technological implications such as fragility of media, file deterioration, media obsolescence and hardware and software pose special challenge to manage digital records”. Since digital records pose special challenges, the availability of proper and sufficient infrastructure and resources is key. This will ensure proper and efficient management of digital records even if the technology becomes obsolete. As indicated in the literature, most countries are having challenges in making available proper infrastructure and resources and this has threatened the management of digital records.

The World Bank and IRMT (2000:14) specified that the benefits of using ICTs can only be achieved if there is an appropriate infrastructure to support it. This includes adequate provisions such as hardware and software applications to manage and protect the records generated. Unfortunately, many government agencies are generating digital records in the absence of proper hardware and software applications and this has been a hindrance in strengthening the digital records management environment.

An investigation into the management of records in the public sector of Lesotho by Sejane (2004) revealed that most agencies lacked adequate IT infrastructure such as computers, microfiche readers and scanners among other requirements. It was also indicated that lack of IT infrastructure could potentially hamper registry offices from fully exploiting IT resources for recordkeeping. Ngulube and Tafor (2006) indicated that digital records have been a frustration and avoided in many countries due to the lack of resources, expertise and facilities to manage the electronic media. Elsewhere, Moloï and Mutula (2007:291) established that the management of digital records was being hampered because of lack of adequate power supply and reliable telecommunication systems.

The literature has also indicated funding as one of the main constrains in digital records management. Mnjama (2002:39) posits that many archives and records management programmes end up in failure due to inadequate funding. Thus, unless adequate funding and

proper infrastructure are put in place, proper digital records management will not be achieved.

It has been noted that various countries face almost the same challenges in managing digital records. However, the findings cannot be wholly generalised since digital records management differs from one country to another. Most of the above mentioned studies have been conducted in government ministries and departments leaving out parastatals. Though referring to Swaziland, the study conducted by Tsabedze (2012) recommended that digital records management researches should be extended to parastatals for harmonisation of records management in both private and public sector to enhance service delivery, accountability and transparency in the management of public affairs. As a response to the recommendation, the current study was conducted in financial services parastatals albeit in Zimbabwe so as to broaden the scope of digital records management. The study goes beyond traditional setting of many public sector studies.

2.6 Skills and training

Wamukoya and Mutula (2005:71) argue that effective e-records management has the potential to improve service delivery and enhance accountability in government but only if requisite skills needs are met. This implies that, even though government agencies manage to formulate policies and procedures, adhere to standards as well as putting in place the required infrastructure and resources for the management of e-records, it will be incomplete if personnel entrusted for managing the records lack requisite skills, knowledge and experience. Considering the nature of digital records, records personnel require special competencies and skills. These skills are at various levels including creation, classification, appraisal, disposal as well as preservation (Wamukoya and Mutula 2005:74). According to Chinyemba and Ngulube (2005), qualified records management personnel ensures that the organisation's records management work is carried out efficiently. Government agencies are therefore supposed to prioritise records management by employing qualified and skilled personnel that is, they need to professionalise records management.

However, records management can be regarded as one of the least of organisation's priority with regards to human resources provision. In most cases, organisations do not professionalise records management by employing competent personnel ignoring the fact that

it is through the availability of records that any decision is made. As indicated by Barata, Kutzner and Wamukoya (2001:38), records personnel in public organisations are recruited from the lowest ranks of civil service and usually have limited knowledge on e-records management.

The surge of ICTs in many countries has undoubtedly increased knowledge levels of technology but on the other hand, it has brought with it challenges in the management of records. Marutha (2011:47) argues that a lot of staff managing records in the Sub-Saharan countries are not capable of managing digital records professionally. As cited by Chaterera (2015:12), the omission of e-records during records surveys in Zimbabwe, was in agreement with Mutiti (2001) who revealed that IT personnel were left with the responsibility of managing e-records since records managers and archivists lacked required skills to manage such records. Thus, besides just employing qualified personnel, there is need for regular training in records management since the ever changing technology requires records personnel to be equipped with new skills and competencies through training or retraining to be able to effectively operate in an electronic environment (Millar 2004:12; Wamukoya and Mutula 2005:73). In this case, having a qualification alone does not guarantee a successful e-records management programme. So, training personnel responsible for the creation, use, classification, retention, storage and disposal of records among other functions, is important as it imparts new and relevant skills to effectively and efficiently manage digital records in accordance to organisational, national or international set standards.

Studies in most Sub-Saharan countries have showed that records management personnel lack requisite training especially in managing records in an electronic environment. Mampe and Kalusopa (2012) investigated the management of records in public service delivery in the Ministry of Health Headquarters in Botswana. Their study revealed that most records managers were inadequately skilled despite the fact that they had professional qualification whether a college certificate, diploma, degree or masters. There was lack of formal and practical training.

On the other hand, although other organisations train records personnel, there still exist challenges in managing records. This scenario might be as a result of different issues. As highlighted by Marutha (2011:47), in Zimbabwe the registry personnel are offered two weeks' compulsory training covering registry procedures, mail management, records

classification systems and supervisory skills. Nevertheless, the course does not include the records life-cycle process as well as new trends of records management. Ngulube (2000:164) further highlighted that at the end of the course there is no continuous in-house training. This section attempted to answer the research question “Do records personnel in financial services parastatals have relevant skills to manage e-records?” The purpose was to identify training needs for individuals managing records in Zimbabwe`s financial services parastatals.

2.7 NAZ and management of digital records

The DCC lifecycle model encourages collaboration of different professionals to create a favourable environment for managing digital records. In this regard, archivist should be directly involved in the whole lifecycle. According to Kemoni and Ngulube (2007:121), in many countries, archival institutions are mandated through legislation to ensure proper management of records in the public sector. In some countries, this mandate is extended to private sector. The fact that records management is essential for any organisation means that there is need for an institution that would supervise their management. National Archives offer various services to public sector institutions with a view of creating a sound records management environment. Some of the roles played by National Archives include:

- Advising government agencies on records management best practices.
- Helping in the development of legislations, standards, policies and guidelines for records management.
- Providing records and archives management training.
- Preserving the national memory through archives.

However, these roles have been performed better in a paper based environment. As organisations have transitioned to digital communications, national archives should also adapt to such changes. Hoffman (2012) states that; national archives should take an advising role, that is, they should help agencies to properly manage digital records as a result of the penetration of ICTs. Archival institutions should no longer have to wait for the records to be transferred, but rather should be involved in the planning stage. This will ensure that adequate controls and measures are taken and put in place. Hoffman (2012) further argues that archival functions in the e-government era should be redesigned and the National Archives should be leading in managing the records generated.

A study by Nkala et al (2012) found that NAZ was not performing an active role in the management of digital records in Zimbabwe. They further argue that, since there were no laid down strategies, government agencies managed digital records according to the systems which best suit them and this may not render adequate preservation standards. Similarly, Chaterera (2013) found out that NAZ carryout surveys in government ministries and departments but however, digital records were omitted during surveys.

The researcher acknowledges the work done by the said researchers in revealing the state of the involvement of NAZ in the management of digital records in Zimbabwe. The present study which has extended the scope of previous studies further looked on the obstacles hindering NAZ to be active in the management of digital records. The study also looked on what NAZ was doing with regards to the management of digital records.

2.8 Summary

This chapter provided the review of literature on various issues surrounding the management of digital records. Firstly, a background of records management in Zimbabwe was provided. It was indicated that policies and procedures are important tools in managing digital records as they give direction on why and how records are managed. It was regrettably observed from literature review that most organisations operate without crafting these important tools. This study was therefore conducted to establish how digital records are being managed in Zimbabwe`s financial services parastatals in the absence of a national policy. The chapter also looked on the issue of standards and records management practices to establish if they are being adhered to by parastatals in Zimbabwe since they act as benchmarks and also as reference points. The chapter further discussed the provision of infrastructure and other resources by especially government agencies. It was observed that records management was not prioritised with enough resources. Usually records management operate with a meagre budget. The chapter further discussed skills of personnel with the responsibility of managing digital records. It was observed from previous researches that people with the responsibility of managing digital records often lack requisite skills which have negatively impacted on records management in various countries. The purpose was to identify training needs of various personnel. The following chapter provides a discussion of the research methodology adopted by this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The preceding chapter discussed the literature related to the objectives of this study. Chapter One of the study discussed briefly the research methodology. This chapter discusses the research methodology adopted in this study in depth. Kothari (2004:8) defines research methodology as a way of systematically solving the research problem including various steps generally adopted by a researcher in studying a research problem. According to Collis and Hussey (2003:55), research methodology refers to the overall approaches and perspectives to the research process as a whole. Thus, a research methodology chapter is essential in a study as it identifies and defines the framework used to conduct the study. As mentioned by Chu (2015:36), it is imperative for the researcher to develop a research methodology as it enables the collection and analysis of data that addresses the problem under investigation.

However, according to Ngulube (2015:3), research methodology can be a complex issue because different scholars and/or authors may use research methodology-related terms loosely, contradictorily and inconsistently. Therefore, authors are advised to be consistent throughout the study with regards to the use of research methodology-related terms. Among other issues, this chapter covers the following areas:

- The research approach adopted by the study.
- The research design this study subscribes to.
- The population and sample considered for the study.
- The research instruments used to collect data.
- Data presentation and analysis.
- Ethical guidelines.

3.2 Research approach

For one's study to be credible, there is a need to identify the adopted research approach. A research approach is a plan or procedure detailing data collection methods, analysis and interpretation steps (Creswell 2014:1). Generally, there are two approaches to research

namely quantitative and qualitative. The third dimension of research approach is known as mixed method research and this involves the integration of both quantitative and qualitative approaches.

The following table shows the differences between qualitative and quantitative research approaches and these differences informed the researcher to adopt a suitable approach for the current study.

Table 3. 1: Table showing differences between qualitative and quantitative research approaches

Criteria	Qualitative	Quantitative
Purpose	Seek to explore phenomena To understand & interpret social interactions.	Seek to confirm hypotheses about phenomena To test hypotheses, look at cause & effect, & make predictions
Type of data collected	Words or Textual (obtained from audiotapes, videotapes, and field notes)	Numerical (obtained by assigning numerical values to responses)
Instruments	Usually open-ended Instruments use more flexible, iterative style of eliciting and categorizing responses to questions Use semi-structured methods such as in-depth interviews, focus groups, and participant observation	Usually closed-ended Instruments use more rigid style of eliciting and categorizing responses to questions Use highly structured methods such as questionnaires, surveys, and structured observation
Data analysis	Identify patterns, features, themes.	Identify statistical

		relationships.
Objectivity and subjectivity	Subjectivity is expected	Objectivity is critical.
Common research objectives	Explore, discover, & construct.	Describe, explain, & predict.
Final report	Narrative report with contextual description & direct quotations from research participants.	Statistical report with correlations, comparisons of means, & statistical significance of findings.

Sources: Creswell (2003; Mack; Woodsong; Macqueen; Guest;& Namey 2005).

The current study adopted the qualitative research approach. Creswell (2014:1) indicates that the selection of a research approach is based on the nature of the research problem as well as the issue being addressed. The following reasons informed the adoption of the approach.

- Qualitative approach has the ability to explore a wide array of dimensions of the social world including institutions (Mason 2002:1). This means qualitative approach fits well for an assessment. Likewise, the current study sought to assess strategies for managing digital records with a view of coming up with guidelines for effective digital records management in different financial services parastatals in Zimbabwe.
- Qualitative research is also suitable for populations that are usually under represented or that have been barely researched (Curry, Nembhard and Bradley 2009). Most public sector studies on either paper or digital records management especially in Zimbabwe have been conducted in government ministries, departments and to limited extent local authorities. The current study sought to investigate the management of digital records in financial services parastatals which have been barely researched, thus, a qualitative approach was considered to be suitable. As indicated in chapter one, parastatals are important as they can raise huge sums of money and improve the economy of the country. Therefore, the present study sought to expand the scope of records management in the public sector in Zimbabwe and so a qualitative approach was adopted.
- Mack, Woodsong, Macqueen, Guest and Namey (2005), explain that in qualitative research approach, the researcher has the ability to provide complex textual

descriptions of how people experience a given research issue. According to Jackson (2011:101), a qualitative research focuses on a phenomenon which occurs in natural settings. Therefore, the approach was adopted in the current study since it made it possible to collect data on the experiences of digital records management in its natural setting. It presented the opportunity to collect information from participants who had records management knowledge in their respective organizations. Considering that Zimbabwe did not have a national policy for managing digital records, it was essential to establish how organisations were managing digital records. The main focus was to establish the existence of mechanisms that facilitate the proper management of digital records. These mechanisms include existence of policies and procedures; skilled manpower, proper and adequate infrastructure and adherence standards. Such issues could only be known if people involved in the management of digital records share their experiences, hence the adoption of a qualitative research approach.

- Qualitative research approach allows the use of multiple research instruments. According to Creswell (2014:204), qualitative researchers employ multiple sources of such as interviews, observations, and documents rather than rely on a single data source. These were also used by the researcher to gather information about digital records management in Zimbabwe`s financial services parastatals. The use of multiple sources of data also plays an important role in ensuring the credibility and trustworthiness of the study.
- Studies by Matangira (2016), Mutsagondo (2017) and Nengomasha (2009), in Namibia and Zimbabwe adopted qualitative approach and yielded satisfactory results, an indication that the approach can be useful in studies focusing in records and archives management. Thus, the approach was adopted for the current study.

However, this approach has its own shortcomings. Kothari (2004:5) argues that this form of approach is concerned with subjective assessment of attitudes, opinions and behavior and thus results are not subjected to rigorous quantitative analysis. This means that the results can be biased as they rely on researcher`s personal opinions. Scholars like Choy (2014), Patton and Cochran (2002), and Rajendran (2001) have reiterated that objectivity is difficult to achieve in a qualitative research. Therefore, to avoid bias, the researcher did not overlook

important issues raised by participants with regards to the management of digital records. Again, triangulation was employed to avoid bias.

3.3 Research design

Denzin and Lincoln (2011) have indicated that every study whether qualitative, quantitative or mixed method research contains a research design. This was also in agreement with Yin`s (2009) assertion that every type of especially empirical research has an implicit, if not explicit research design. In some cases, scholars like Saunders, Lewis and Thornhill (2009) have another alternative term such as research strategy.

Research design refers to the conceptual structure within which research is conducted; constituting the blueprint for collection, measurement and analysis of data (Kothari 2004:31). Bryman and Bell (2003:31) describe a research design as a framework for generating evidence suited both to a certain set of criteria and to research question in which the investigator is interested. Parahoo (1997:142) further describes a research design as a plan that describes, how, when and where data are to be collected. Therefore, a research design can then be regarded as a general plan of how the research is conducted, that is, general steps followed by the researcher from start to end of the study. It is a research plan that indicates strategies that are applied to obtain relevant research data. The current study followed the following steps to gather data:

- Formulation of the research problem;
- Identification and selection of research participants;
- Selection of research instruments;
- Seeking permission from section heads to carry out the research;
- Pilot study;
- Data collection from approved parastatals;
- Presentation of collected data; and
- Data analysis and discussion.

A number of research designs namely: case study, field survey, experimental research, ethnography and ground theory have been forwarded by various scholars such as Bhattacharjee (2012), Creswell (2014), Punch (2006) and Yin (2009). This study adopted the case study research design. Yin (2003:12) defines a case study design as an “empirical

research method used to investigate a contemporary phenomenon, focusing on the dynamics of the case within its real life context". Bhattacharjee (2012:93) reiterates that, a case study research design studies a phenomenon within its natural setting. As indicated in section 3.2 of this chapter, the current study subscribes to qualitative approach hence the case study research design presented the opportunity to have an in depth understanding of the management of digital records within their context.

Case study research design can be single where only one case will be under investigation or multi-case where more than one case study will be under investigation. Specifically, the multi case study research design was adopted in this study. Audet and d'Amboise (cited by Nengomasha 2009) pointed that a multi case (also known as multi-site) research design aims to gain an in-depth knowledge of an organisational phenomenon that had barely been researched. They also highlighted that the design involves an analysis of several sites using cross case comparisons.

The study which is exploratory in nature desired to gather in depth data on the management of digital records in financial services parastatals in Zimbabwe. As such, multi case design offers such opportunity. The researcher acknowledges that although digital records management studies have been conducted in public sector, a few have been done in parastatals whose role in the affairs of citizens cannot be underrated. Much focus of public sector records in most African nations and especially in Zimbabwe have been conducted in government ministries, departments and to a certain extent local authorities. Parastatals have been barely researched. The case study design was considered to be suitable for the current study.

Furthermore, Herriot and Firestone (cited by Yin 2009:53), highlighted that, evidence from multiple-case study is often considered more compelling, and the overall study is therefore regarded as being more robust. Some scholars have argued that, the case study design may not produce satisfactory results since one cannot generalise from a single case (McLeod 2008; Rose, Spinks and Canhoto 2015). The argument is that, what happens in another organisation cannot entirely explain the same situation in other institutions. Thus, the adoption of the multi case study was to collect much data from different institutions which may make the findings credible. A multi-case study research design was also successfully

used by Nengomasha (2009) and Matangira (2016) which proves that it is a design that can be used in records and archives management studies.

3.4 Population and sample

With qualitative research, it is usually not practical or possible to study the entire population. Therefore, a population and sample of any study should be identified to gather comprehensive and dependable data.

3.4.1 Population

One of the critical components of any study is the population. Population can be regarded as all cases which the researcher is interested in studying (Kothari 2004:10). The same sentiments were also echoed by Kumar (2000), who suggested that the population is a set of all objects that have common set of predetermined characteristics with respect to some research problems. In this case, a population can be regarded as all subjects with common characteristics which the researcher investigates. A population therefore, may be individuals, group of people, animals or organisations to mention just a few.

The population of this study were financial services parastatals in Zimbabwe and NAZ. A list of such parastatals was extracted from the Government of Zimbabwe online website (2016). The website had listed 13 parastatals under the financial services sector. However, one of the institutions was no longer functioning as it was closed by the order of RBZ by the time the study was conducted. The list included three functioning banks. Permission to conduct the study in these banks was not granted. In addition, other parastatals did not grant the researcher permission to conduct the study in their respective institutions. Therefore, the study was conducted in four financial services parastatals. These were NSSA, ZIMRA, SERA and ZIA. The study was also conducted at NAZ since it has the legal mandate to oversee the management of records in the public sector in Zimbabwe. A total number of 12 participants gave insights of issues under investigation.

3.4.2 Sample

O'Leary (2004:104) opines that a qualitative researcher usually aims to collect rich understanding that may come from the few, rather than many subjects. Therefore, a sample may be selected. According to Pandey and Pandey (2015:43), a sample is a small proportion of a population selected. The authors further mention that, a sample is a collection consisting

of a part or sub-set of the objects or individuals of population selected for the express purpose of representing the population. The researcher should be well informed when selecting the sample since the accuracy of research findings depends heavily on the sample selected.

There are two main sampling techniques and these are defined below:

- Random/probability sampling: Relies on unplanned selection, or the process by which each element has equal chance of selection (O`Leary 2004:106). Examples of random or probability sampling include, simple random sampling; systematic sampling; stratified random sampling and cluster sampling.
- Non-random/non probability sampling: It is a planned selection, that is, participants are known prior selection. Examples of non-random or non-probability include, quota sampling; purposive sampling; expert sampling and snowball sampling.

The researcher employed purposive sampling technique to select participants. Purposive or judgmental sampling as explained by Plano Clark and Creswell (2008) is deliberate handpicking of individuals that best represent the issue being studied. Babbie (2010:193) reiterates that purposive or judgmental sampling is a non-probability sampling in which participants are selected on the basis of the researcher`s judgment about which units will be most useful. In addition, Kumar (2011) mentions that, the primary objective in purposive sampling is determining who can provide the best information in order to achieve the objectives of the study. Therefore, one can note that in purposive sampling the researcher selects individuals or cases that generate most useful information thereby expanding his/her understanding of the problem. The implication is that the selected sample is likely to produce valuable data.

According to Pandey and Pandey (2015:45) the following are characteristics of a good sample:

- True representative of the population.
- Is objective, that is, subjective elements should be eliminated.
- Maintains accuracy.
- It is comprehensive.
- Has the practicability for research.

Participants in this study from all the selected financial services parastatals were four records personnel, two accounts officers and four IT officers. One of the selected parastatals as shall be highlighted in Chapter Four of this study, did not have records personnel, hence, accounts officers were assigned the duties of managing records. The selection of the mentioned participants was based on the assumption that these were directly involved in the creation, use and maintenance of digital records. Therefore, they could provide useful and relevant insights with regards to their management which helps in answering the research questions. In addition, two archivists at the NAZ section on records management were also selected to participate in the study. NAZ has a legal obligation to supervise the management of records; hence information from archivists was vital for the study. Therefore, the total number of all participants in this study was 12.

3.5 Research instruments

In any study, data collection is critical as it gives the opportunity to collect the information needed to answer the research question(s). According to Elmusharaf (2012:3), data collection should be systematic since it will be difficult to answer the research question if data is collected haphazardly. This may be achieved by using research instruments. These are devices used to obtain data from participants or respondents. Other alternative terms as indicated by Ngulube (2015:4), include data collection tools, research tools and research methods. Research instruments are important in any study as they allow the systematic and accurate collection of data. In addition, the validity and reliability which are key in any study depend on the suitability of the instruments used. Thus, researchers should identify the appropriate instruments depending on the nature of the study and the data to be collected.

Considering that the issue of digital records management is currently dominating in records management theory and practice, there was need for exhaustive data collection instruments to collect specific information that deepen the understanding of the phenomenon. The researcher employed interviews, observations and document review to have a clear understanding of digital records management in Zimbabwe`s financial services parastatals.

3.5.1 Interviews

Interviews are arguably the most used research instruments in qualitative research. These are data collection techniques involving the oral questioning of respondents (Elmusharaf 2012:19). In a qualitative research, interviews may be done face to face, through the

telephone or focus groups with about six to eight respondents in each group (Creswell 2014:209). In this regard interviews may be structured, semi structured, and unstructured or in depth.

When conducting an interview, Wilkinson and Birmingham (2003:47) advised researchers to prepare a list of key questions to be covered so that important issues are not overlooked. Moreover, a list of key questions ensures that the interview follows a logical progression. With this in mind, the researcher in this study made use of semi structured interviews which had predetermined set of questions (see Appendix F, G and H). This allowed the researcher to shape the flow of the conversation and ensured that only issues relating to the objectives of the study were covered.

Interviews were the main source of data and were chosen because they provide an opportunity to collect large amount of relevant information about experiences of others by directly talking to people. In the present study, the following steps were adopted as indicated by Brown and Hale (2014:148):

- Identification of potential participants.
- Decision on the level of structure to be used.
- Development of interview documents.
- Piloting of the process and instruments.
- Scheduling interview times.
- Conducting the interview.
- Review of the interview.
- Analysing data.

According to Wilkinson and Birmingham (2003:43), interviews provide detailed information about a subject or topic, that is, they give more of an insight into the meaning of what is happening as compared to other research instruments that focus on the surface elements. This is because, with interviews a researcher gets the opportunity to interact with individuals who are directly involved in the subject under investigation. In the present study, the researcher desired to have an understanding on issues surrounding the management of digital records and this could only be achieved if practitioners share their experiences in carrying out their duties.

Interviews are also popular in qualitative research because there is room for further probing if one does not understand some aspects. This will enable the researcher to gather enough data for analysis. As indicated by Alshenqeeti (2014:40), the fact that interviews are interactive gives interviewers to press for complete, clear answers and can probe into any emerging topics. Therefore, the interview is expected to broaden the scope of understanding the research problem. The researcher was able to gather detailed contextual information with regards to digital records management as a result of further probing.

Furthermore, interviews provide immediate answers or responses as compared to questionnaires. In simple terms, interviews have a better return rate. When one distributes questionnaires, sometimes quite a number of them are not returned or may be returned with some questions unanswered. If a questionnaire is unanswered, it might be difficult for the researcher to know why it was not answered. With interviews, there is immediate response and the researcher quickly knows the reasons why participants could not answer certain questions.

Despite being very useful in data collection, interviews have their fair share of disadvantages if not well conducted. As indicated by Boyce and Neale (2006:3) and, McDonald and Headlam (2011), interviews are prone to bias since one might face a challenge of balancing the responsibility to the interviewee and needs of the investigation. In this regard if not well planned, the interview may not lead to the objective under study. To avoid bias, the researcher structured the questions well before the interviews so that questions asked were in line with the demands of the research. A pilot study also helped the researcher to note and address some of the challenges that may be encountered during an interview. Probing was also done within the stipulated area of investigation.

3.5.2 Observation

To augment data from interviews, observation was also employed in the current study. According to Elmusharaf (2012:9), observation involves systematically selecting, watching and recording behaviour and characteristics of living beings, objects and phenomena. Creswell (2014:209) also echoed the same sentiments suggesting that with observation, the researcher takes field notes on the behaviour and activities of individuals at the research site.

Wilkinson and Birmingham (2003:116) argue that merely asking about people`s activities is important but if one wants to understand fully what these activities mean or they themselves perceive them, it is necessary to see those people in action. The authors further explain that observation allows researchers to understand much more about what goes around in the complex real world situation because in interviews and questionnaires, respondents may sometimes be reluctant to share everything they know for one reason or other.

Two types of observation namely participant and non-participant are popular in most studies. In participant observation, the researcher is actively involved in the activities done by the study population. In this case, the researcher becomes the member of the group being investigated (Kawulich 2005:2). This is contrary to non-participant observation where the researcher is not actively involved in the activities being performed by the members of the group under study. In this case, the researcher does not become a member of the group.

In her study, Matangira (2016) made use of direct observation to know about the physical setting especially on resources, facilities and tools for recordkeeping activities in the registry of every ministry under study. The same was adopted in the current study. Direct observation which is a form of non-participatory observation was used to have an insight on the availability of infrastructure for the management of digital records. As indicated in previous chapters, effective management of digital records requires appropriate and adequate infrastructure and resources. Thus, observation was adopted to establish how supported digital records management was in terms of resource allocation. Some of the observed items include computers and servers.

3.5.3 Document review

Document review is one of the research instruments used in qualitative studies. Other alternative terms for document review such as document search or document analysis may be used. According to Schwandt (2007), document review involves procedures used to analyse and interpret data generated from various documents and records. In a similar vein, Wagner, Kawulich (2012) pointed that document search involves procedures and techniques for locating, identifying, retrieving and analysing documents for their relevance, significance and meaning. According to O`Leary (2004:177), document review refers to the “collection, interrogation and analysis of various forms of text as a primary source of research data.” The

author further mentions that in document review, the documents are pre-produced texts that have not been generated by the researcher. Thus in document review, one seeks to examine, assess or analyse various documents to have a better understanding of the activities of an organisation. Moreover, document review helps to give an insight of what is taking place within an organisation.

According to O`Leary (2014), there are three types of documents a researcher can use. These are:

1. Public records: These are official, ongoing records of an organisation`s activities. For example, mission statements, annual report and policy manuals.
2. Personal records: These are accounts of an individual`s actions, experience and beliefs. Examples of such documents include; e-mails, blogs and scrapbooks.
3. Physical evidence: These are physical objects found within the study setting. They are often called artifacts.

In this study, document review was used to complement information collected from interviews and observation. Public records were mainly used (See Appendix I). Document review was used to have an insight on the availability of policies and the content of existing policies that are relevant to the management of digital records. Again, the instrument was used to investigate the level to which the parastatals adhere to various standards in managing digital records. In addition, document review was used to assess the involvement of NAZ with regards to the management of digital records.

The researcher followed the following steps as suggested by O`Leary (2004:178):

1. Plan: This stage involved doing preliminary groundwork of identifying records the researcher wanted to explore. These documents include the mission statement of NAZ, the annual reports at NAZ from 2005-2016 and the records survey schedule used by NAZ staff when conducting a records survey.
2. Gather: During this stage, the researcher gathered all the identified documents. There were some documents that were not allowed to leave their original offices therefore, the researcher sought permission to make copies and then analysed them later when he had time.

3. Review: The researcher explored the documents to check if they could help in answering the research question. O`Leary (2004), advised researchers to assess if the documents are authentic and credible as well as looking for any biases during this stage.
4. Interrogate: During this stage, the researcher explored the content of the documents. It was during this stage that the researcher examined the contents of the documents with a view to answer the research questions.
5. Reflect: Generally, the stage required the researcher to reflect on the process of document review.
6. Analysis. The researcher was required to draw relevant conclusions during this stage.

The above mentioned steps were followed so that data were collected in a systematic manner. According to Ellison (2010:397), document review has the following advantages:

- Flexibility. The instrument can be applied to most forms of data;
- The study can be easily replicable if the research is conducted properly; and
- Can be used with any data.

3.6 Establishing rigour of the study

The quality of any qualitative research is dependent on trustworthiness. Broadly speaking, trustworthiness is about how much trust can be placed in a research output. On the other hand, Shenton (2004:63) indicates that, the trustworthiness of qualitative research generally is often questioned by quantitative researchers who usually adopt a positivist`s paradigm probably because their concepts of validity and reliability cannot be addressed in the same way in qualitative researches.

The concept of trustworthiness in qualitative research was first raised by Guba (1981). The author mentions that in any study, the researcher must address four issues despite one`s paradigm. These issues are:

1. Credibility: This issue deals with truthfulness of the study. The researcher should establish confidence in his or her findings. In other words, how do people know that the findings are genuine? According to Billups (2014:1), when dealing with credibility of the study, one should ensure that findings capture a holistic

representation of the phenomenon under exploitation. That is, the study should measure what it intended to measure. Lincoln and Guba (1985) and, Miles and Huberman (1984), indicate that three questions can be used to scrutinise research results. These are:

- a) Do the conclusions make sense?
 - b) Do the conclusions adequately describe research participants` perspectives?
 - c) Do conclusions authentically represent the phenomena under study?
2. Dependability: Research findings should remain consistent over time. In this, regard if the same research methods, in the same context, and same participants are to be used again, will they yield the same results?
 3. Transferability: In this regard, the researcher should question himself or herself if the findings are applicable to other settings.
 4. Confirmability: This concept deals with the issue of neutrality. A researcher should ensure that the findings are accurate and were not influenced by his or her preferences. That is, the findings should reflect the perspectives of participants. According to Shenton (2004:72), when addressing the concept of confirmability, the researcher should employ measures that ensure that the research findings are the result of the experiences and ideas raised by participants. This translates that the researcher should be objective and avoids bias.

To address the issue of trustworthiness in the current study, the researcher employed the triangulation method as well as conducting a pilot study.

3.6.1 Triangulation

Triangulation entails the use of various methods in research. Four types of triangulation have been identified by different scholars such as Shenton (2004) and Guion, Diehl and McDonald (2011). These include:

1. Methodological triangulation: Refers to the use of a variety of research instruments to collect data.
2. Data or source triangulation: Involves the use of a wide range of data sources in terms of people or participants.

3. Investigator triangulation: Involves the use of more than one researcher that is, multiple researchers are employed to investigate a problem.
4. Theoretical triangulation: Usually the research is approached with varied perspectives and hypothesis.

Specifically, the current study adopted the methodological and data/source triangulation. In adopting the former, which is perhaps the most popular type of triangulation in most studies, the researcher used different research instruments such as interviews, observation and document review. On the latter, different participants namely records personnel, archivists and IT experts were used as informants.

One of the benefits of triangulation is that, the use of different research instruments compensate for their individual limitations and exploits their respective strengths (Shenton 2004:65). For example, during an interview, participants may say things that may be contrary to what really is on the ground and this will be verified by other research instruments. In the present study, some participants at NAZ indicated that the institution was heavily involved in the management of digital records management in the financial services parastatals. This was however, contrary to data gathered through document review. Therefore, one may note that triangulation contributes to the achievement of valid and credible findings.

3.6.2 Pilot study

A pilot study was conducted in addition to triangulation. This refers to trial run conducted when a researcher is preparing for a full scale or complete study. A pilot study is usually done to pretest research instruments including interviews. A pilot study was conducted so that interview questions could be edited well before a complete study was conducted. A pilot study reveals weaknesses of research instruments which may be detected and fixed before the full scale study. A pilot study was conducted also to test the relevance of the research instruments and this was done in two financial services parastatals. The interview guide was also sent to six colleagues in the field of records and archives management for their input. The objective was to check if the instruments captured information that is relevant to the study as well as ensuring that there was no ambiguity. By doing this, the researcher aimed at collecting data that was credible and trustworthy. The following issues were raised:

- Questions that would require “yes” or “no” as answers needed to be avoided.

- Long questions had to be shortened.
- Questions on policies and guidelines needed to be expanded to cover issues of laws and regulations that cover digital records.
- Some questions had grammatical errors hence needed to be corrected.
- There were many questions and there was need to trim them to avoid monotony.

3.7 Data analysis

According to Attride-Stirling (2001:367), if qualitative research is to yield meaningful and useful results, data under scrutiny should be analysed in a methodical manner. Flick (2014:3) also argues that, data analysis is the central step in qualitative research since it forms the outcomes of the research in a decisive way. Thus, it is through analysing data that research questions are answered.

Bassey (1995:59) defines data analysis as a process of sifting the collected data to find patterns and condensing it into manageable proportions. This involves procedures followed to present, analyse and interpret findings (Creswell 2009:59). Therefore, data analysis aims at extracting the meaning of the collected data through a thorough examination of the gathered data and this helps the researcher to obtain usable and useful information. Generally, as indicated by Creswell (2014:215), the purpose of data analysis is to make sense out of the collected data.

Thematic analysis is one of numerous ways for analysing qualitative data and was applied in the study. Braun and Clarke (2006:77) define thematic analysis as “a method for identifying, analysing, and reporting patterns (themes) within data”. The following steps of thematic analysis as stipulated by the authors were followed:

1. Data familiarisation.
2. Generation of initial codes.
3. Search for themes.
4. Review of themes.
5. Defining and naming themes.
6. Producing the report.

Data from interview transcripts, observation checklist and document review were organised in accordance with the themes under investigation in the study.

3.8 Ethical considerations

Section 1.10 of Chapter One of this study discussed ethical considerations in brief. This section, sought to discuss issues surrounding ethics when conducting the research in depth. Conducting an empirical study involves collecting data from people. When dealing with human beings, there is therefore need to consider certain ethical principles since failure to consider them might end up violating peoples` rights. As such, there are a number of ethical issues a researcher should consider when collecting data. This is because, participants have rights, needs, values and desires that should be respected by the researcher (Creswell 2014:227). Ethics are broadly defined by Resnik (2013) as norms of conduct that distinguish between acceptable and unacceptable behaviour. In simple terms, ethics are moral principles governing the conduct of individuals. Saunders et al (2009:185); DiCicco-Bloom and Crabtree (2006:319) have identified some of key ethical issues which researchers should consider whenever they are conducting a research. Although not exhaustive these are:

- Consent of participants.
- Anonymity of participants.
- Participants` voluntary participation in the research.
- Reducing the exploitation of participants

Participation of any individual in a research should and must be voluntary. The researcher must not force people to participate in a study as this will ensure that the research is done in an honest manner. To achieve this, the researcher sought permission from the various heads of departments to conduct the research in their respective departments (see appendix C). Further permission was also sought from participants so that their participation was voluntary. At any given time, participants were advised to withdraw from the study if they felt that it was necessary to do so.

The researcher employed observation as a research instrument and as such he adhered to Priest`s (1996:42-43) warning to researchers not to engage in observations of individuals and write notes on their behaviour without permission as this would violate their privacy, respect

and integrity. Before the research, the researcher notified the participants his intention to observe if the existence, adequacy and appropriateness of physical resources dedicated for digital records management. This was done in writing to the head of the institutions under study to seek permission to carryout observation as well as interviews. As soon as permission was granted, the researcher informed the participants the reasons behind using these research instruments.

The University of South Africa (UNISA) Policy on Research Ethics (2007) calls for the following as key factors of ensuring that the study is conducted in an ethical manner:

- Respect and protection of participation rights.
- Promotion of beneficence.
- Risk minimisation.
- Upholding justice.
- Obtaining informed and non-coerced.
- Commitment to research.

Therefore, the current study was conducted in adherence to the guidelines prescribed by the policy. This is an academic research and, as such, data collected from participants was only used for academic purposes and nothing more.

3.9 Evaluation of research methodology

According to Bryman (2008:602), every research methodology has both strengths and weaknesses. This section evaluates the research methodology adopted by this present study. Evaluation is important as it helps to determine if the research methodology was successful in achieving the objectives of the study.

The study adopted a qualitative approach. The approach helped the researcher to explore a wide range of issues with regards to the management of digital records. It has been indicated that with a case study research design, generalisation of research findings is difficult and this promotes bias. Therefore, a multi case research design adopted by the study gave an opportunity to generalise research findings in a simple manner. Data were collected through a variety of research instruments. Interviews, observations and document review were used to collect data from purposively selected participants. These instruments were relevant since the

study adopted a qualitative research approach and a multi case research design which allows the collection of rich non statistical data. The collected data was mainly presented in descriptive narratives and analysed thematically.

3.10 Summary

The chapter focused on the research methodology of the study. It was highlighted in the chapter that research methodology terms are usually loosely used or terms are used interchangeably. The chapter discussed issues such as research design and approach and indicated that the adoption of any design and approach depends on the research question. The researcher used research instruments such as interviews, observations and document review with a view to gather in depth data. The instruments used helped in collecting rich data with regards to the management of digital records in the financial services parastatals in Zimbabwe. In collecting data, the researcher put into consideration ethical issues such as informed consent to ensure that the rights of participants were not violated. The next chapter presents data collected in different forms.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The previous chapter discussed the methodology adopted by the current study. This chapter analyses and presents the research findings. The data analysis chapter is important as it gives the collected data meaning. Data were obtained from interviews, observations and document review from four financial services parastatals and NAZ. Data collected from these research instruments were integrated and discussed under the same heading. Interviewees included key records and IT personnel from the mentioned institutions. In a case where a dedicated or a centralised records management office was absent an accountant and an accounts clerk were targeted. At NAZ, data were collected from two archivists in records management section since they are responsible for regulating records management in government bodies. Names of participants and institutions have been withheld to maintain confidentiality. This encouraged full participation of the participants. As such, the following symbols were used to distinguish the parastatals:

- Parastatal 1-P1
- Parastatal 2-P2
- Parastatal 3-P3
- Parastatal 4-P4

Since the study adopted a qualitative research approach, data were thematically analysed and presented mainly in descriptive narratives. Results are presented according to research objectives which aimed at investigating the following:

- The current state of DRM in Zimbabwe`s financial services parastatals;
- The infrastructure and resources for managing digital records;
- The skills levels of records management personnel; and
- The involvement of NAZ in the management of digital records

4.2 Profile of research participants

The participants were drawn from four financial services parastatals in Zimbabwe and NAZ. Below are the details of participants from each parastatal under investigation.

1. P1: The agency had only one information and records officer; and one IT officer. These were both interviewed.
2. P2: This organisation did not have a records management unit but had a functional IT section. Therefore, two personnel; an accountant and an accounts clerk were interviewed to give insights with regards to the management of records. One IT officer was also interviewed to shed more light on the management of digital records.
3. P3: The organisation did not have a central registry hence two registry supervisors from different sections were selected to participate in the research. An IT intern was provided by the management to stand in for the IT officer. Although the provided intern did not possess the required professional qualifications and experience, he was found suitable to be a participant because he went through a rigorous induction process and was now versed with the functions of the IT officer. Moreover, most of the duties performed by the IT officer were assigned to the intern.
4. P4: Even though there were a number of registries, one registry supervisor and one IT officer participated in the study. Records personnel from other registries did not consent to participate in the study for personal reasons.
5. NAZ: The institution has four sections with different functions. These are records centre, public archives and research, library and technical. The records centre offers records management services and has a mandate of overseeing and regulating records management in the public sector. As such, two archivists from the section were interviewed to give insights on the involvement of NAZ in the management of digital records in the selected financial services parastatals in Zimbabwe.

Therefore, the total number of participants was 12. The following table shows the symbols allocated to the participants.

Table 4.1 Table showing symbols of participants

Institution	Designation of participant	Symbol of participant
P1	Information and records officer	A

	IT officer	B
P2	Accountant	C
	Accounts clerk	D
	IT officer	E
P3	Registry supervisor	F
	Registry supervisor	G
	IT intern	H
P4	Registry supervisor	I
	IT officer	J
NAZ	Archivist- Records management services	K
	Archivist- Records management services	L

Data collected through observation and document review were also integrated and presented in accordance with the research objectives.

4.3 State of DRM in financial services parastatals in Zimbabwe

The first objective of the study sought to assess the state of digital records management. To meet this objective, findings are presented according to the following sub-themes:

- Records management unit in financial services parastatals.
- Types of records created/captured.
- Policies and guidelines.
- Standards for managing digital records.
- Knowledge of legal framework.
- Top management support.
- Creation/capture of records.
- Access and security.
- Retention and disposal.
- Storage of digital records.

4.3.1 Records management unit in financial services parastatals

Records as discussed earlier, are key for any organisation as they provide evidence of transactions. In Zimbabwe, public sector organisations are required to establish a records management unit so that records are managed in an efficient and effective way. It was for this reason that the researcher investigated the general set up of records management in the financial services parastatals. Precisely, the researcher investigated the existence of a dedicated records management unit, the duties of the records personnel as well as formats of records managed. This helped in establishing the general set up of records management in the selected parastatals.

In all the parastatals under investigation, that is, P1, P2, P3 and P4, participants interviewed indicated that they had a hybrid records management system where both paper and digital records were created, used and maintained. P1 had a records management unit in the form of a registry. The main function of the registry was to facilitate the movement and storage of records only in paper format. Both participants, that is, A and B concurred in their responses that, two separate copies were created, one in the paper format and another one in electronic or digital format. The management of records in electronic form or “soft copies” as mentioned by participants was the sole responsibility of the IT department. Participant B mentioned that, “Some records may be found in electronic format under the custody of IT but not in the registry”.

P3 and P4 had a slightly similar set up. P3 had a central registry which facilitated proper management of the organisation`s records. However, different sections were also responsible for managing records they created or captured. However, participant F and G bemoaned the lack of cooperation from action officers. The both agreed that many at times the procedures were not followed. The situation has been worsened by the coming of ICTs. According to participant G, “records personnel were no longer involved in the whole process of records management. For example, an e-mail may be sent directly to the recipient whereas it was supposed to pass through the registry. This means that the records officers will not be held accountable for such records if they get lost”.

P4 also had a central registry specifically for records that deal with the core functions of the organisation. Various sections such as human resources and audit also had the mandate of managing their own records. The registry supervisor (Participant I) stated that some records were found in the departments but not in the central registry. The participant commented “Of

course we have a registry here, but its use is very minimum. Sometimes records are found in other offices but absent in the register. An officer can reply a letter but a file copy is not even sent to the registry”. Asked about whether records personnel had control over digital records, the participant replied “The IT department has full mandate of managing records in electronic format. As records officers, we have minimum control over electronic records”.

The situation was different in P2. The parastatal did not have a records management unit neither was there records management personnel. As mentioned by participants C, D and E, various sections of the parastatal managed their own records. On the other hand, the parastatal had a functioning IT department which was responsible for handling all technology related issues including records in digital format.

4.3.2 Types of digital records created/captured

The previous chapters of this study explained that the introduction of ICTs through the adoption of e-government has contributed to an increase of different formats of digital records. Some records are “born digital” and others are converted from paper to digital format through scanning. In this regard, the researcher investigated the types of records that were created or captured by parastatals under investigation to have a better understanding of their management.

Participants A, I and G found it difficult to respond to the question “What types of digital records do you create/capture in this organisation?” Participants C, D and H mentioned that they do not even know what really digital records are. It was after the researcher had explained what really digital records are that they had a clear picture of what was being asked.

The following is a list of the types of digital records created/captured by different financial services parastatals as mentioned by participants:

Table 4.2 Table showing types of digital records created/captured

Type of digital records	Parastatals that created them
E-mails	P1, P2, P3 and P4

Minutes	P1, P2, P3 and P4
Reports	P1, P2, P3 and P4
Fiscal records (Quotations, invoices, budgets);	P1, P2, P3 and P4
Social media posts (Facebook, Twitter, YouTube);	P1, P3 and P4
Website content	P1, P2, P3 and P4
Instructions	P3
Tax and custom records	P3
Pension files (personal files);	P4
Statistics	P1, P2, P3 and P4
Presentations	P1, and P3
Investment projects	P1
Memos	P1, P2, P3 and P4

All the participants excluding those from NAZ (K and L) indicated that they were using e-mails for internal and external communications. In addition, other forms of digital records such as reports, minutes were usually sent or received as e-mail attachments. Eventually such records were either printed or stored in the servers. Those that would have been printed were filed and stored in metal cabinets. Participants also commented that these records were found in both proprietary and non-proprietary file formats. Word processed records contributed the bulk of those being created/received by financial services parastatals in Zimbabwe. However, most of these records were not regarded as official records. For example, minutes were eventually printed and signed to be used for the conduct of business as they were not signed in digital format.

4.3.3 Policies and guidelines

As highlighted in Chapter Two of the current study, the rate at which government agencies are embracing ICTs demands a well-defined approach to managing the resultant records. This can be achieved through the formulation of policies and guidelines that spell out an organisation's approach to digital records management. Policies and guidelines help government agencies in implementing sound and commendable records management

practices. Policies and guidelines are also an indication of an organisation`s total commitment to effective and efficient management of records. As mentioned in previous chapters of this present study, a national policy for the management of digital records in the public sector in Zimbabwe was yet to be crafted by the time this study was conducted.

Again, the DCC curation lifecycle model emphasises on the need for policies and guidelines in managing digital records. The model encourages organisations to plan for all activities as this will improve the quality of digital records management. Therefore, the study sought to find how digital records were managed in the absence of a national policy. The study sought to find whether financial services parastatals had formulated in-house policies and guidelines for the creation/capture, use, maintenance and disposal of digital records. In addition, the study sought to establish measures that were put in place to ensure compliance to these policies and guidelines.

When asked whether there were in-house policies or guidelines for managing records, participants gave varying responses. The following table shows selected verbatim comments made by records personnel in their respective parastatals.

Table 4.3: Table showing responses by records personnel on the existence of in-house policies and guidelines

Parastatal	Participant	Response
P1	A	We have some guidelines that guide us in doing records management work in this organisation. With regards to digital records, I am not sure because, as a section we do not have much control over such records as this is mainly done by the IT section.
P2	D	As an institution, we do not have any documentation to guide in managing records. We just use and keep records and as you can see, they are not even in order. We do not have the expertise for managing records let alone crafting policies and guidelines. First, we need to have the right people for the job and these, I think, will craft such guidelines.
P3	F	What we have here are instructions that are shared on

		SharePoint. With these we are guided as to how we should manage our records.
P4	I	We have procedures manual we use as guidelines for managing records. Basically they inform us on handling incoming and outgoing mails.

Responding to a follow up question on whether said instructions and procedures in P1, P3 and P4 were adequate and relevant for managing digital records, participants mentioned that there is need for a review as they have been overtaken by technological changes. The general assertion as given by participant A was that the policies and guidelines need to fully “cover the broad spectrum of digital world requirements.” The researcher went through some of the mentioned guidelines and confirmed that these were suitable for paper records and needed to be reviewed so that they incorporate digital records. Although, the procedures manual stipulated that the mails should pass through the registry, this was not completely adhered to in all the said parastatals.

In P2, the researcher asked how records were managed in the absence of any documentation to guide them. Participant C indicated that, they were “guided by regulations from the Ministry of Finance through an Act of Parliament that is the Public Finance Management Act”. Apart from this, no other policies or guidelines have been formulated to manage records. The same question on whether there were in-house policies and guidelines was also asked to IT personnel. This question was influenced by the responses by records personnel who mentioned that, IT personnel had control over digital records. An IT officer in P1 said:

We have guidelines and policies formulated at institutional level and we also take instructions from the government since we are a state owned enterprise. We are guided by best practices and guidelines from parent ministry and ministry of ICT and courier services.

However, it was discovered through document review that the said documents did not cover the management of digital records. Participants E, H and J mentioned that they did not have in-house policies and guidelines to manage digital records. Thus, no parastatal under

investigation had formulated any documentation for the effective management of digital records.

As mentioned before, all participants mentioned that they were using e-mails and social media to communicate with different stakeholders hence the researcher also investigated the existence of policies and guidelines for managing e-mails and social media records.

4.3.3.1 Policies and guidelines for managing e-mails

The wide spread use of e-mails as one of the major communication tools in many organisations means that e-mail records should be managed properly so that they provide evidence of transactions they relate to. Organisations are vulnerable if e-mail records are not properly managed. Thus, there should be policies and guidelines that direct and guide records management personnel to properly manage such records. Participants were asked about the existence of e-mail policies and guidelines in their respective organisations.

All participants from investigated financial services parastatals confirmed that they were generating e-mails for both internal and external communications. However, none had specific policies or guidelines for managing e-mail records. According to interviewed records personnel, if e-mails were to be considered as official records, they were supposed to be printed and placed in a file. It was established that in all the parastatals investigated, the IT department was given the sole responsibility to manage e-mails. Records personnel had no control over e-mails. Confirming this are the following comments made by participants B, H and J respectively:

- “IT handles the back up of emails but individuals manage their own emails”.
- “Records managers do not have control over emails. Email is controlled by ICT section. However, important e-mails are filed”.
- “E-mails are used in this organisation but are controlled and monitored by the I.T section”

It was also established that some employees could not even use the official e-mails and opted for private addresses. Thus, some official communications were never accounted for. In addition, officers used their own discretion on which e-mails to keep and destroy. They were

not guided by any guidelines. It was as a result of this set up that some records were found in some sections or with individuals but missing in the registry.

4.3.3.2 Policies and guidelines for managing social media records

Just like e-mails, organisations have also embraced social media to get closer to citizens and other stakeholders. Social media posts contain communications that are important for the day to day business of organisations, thus, controls should be in place that ensure the proper management of such records.

It was noted that no controls were in place for managing or controlling such records. Most participants mentioned that, social media records were regarded as ephemeral; therefore, they were quickly deleted once they had served their purpose. P1 and P2 had managed to formulate social media related policies but however, these were to control what should be posted on social media platforms. For example, posts were only for administrative purposes and should only address the core functions of the organisation.

4.3.4 Standards for managing digital records

Literature has indicated that adherence to records management standards goes a long way in creating a conducive environment for effective records management. Quite a number of standards that can be used in managing digital records have been explained in Chapter Two. Participants were asked to state any standards adopted for managing records by their respective organisations. It is sad to note that most organisations had not implemented any standard.

The DCC curation lifecycle stipulates that digital records management activities should adhere to set standards. The following were some of the comments made by both records and IT personnel when asked about standards they have implemented to manage records in their respective organisations:

- Participant C. “We have not implemented any standard to manage records in this organisation. We are still a small organisation and looking ahead to developing a strong records management programme once we have set up a records office”.

- Participant F. “I know that there is a records management standard called ISO 15489. It is very unfortunate that it has not been adopted here because a lot is required to implement it”.
- Participant B. “At the moment we are using best practices that we are crafting into a policy in house, but we will be moving to adopt the approved ISO standards for records management”.
- Participant I. “At the moment, we have not adopted any standard but we hope to do so in the near future”.
- Participant J. “I did not even know that there exist records management standards. Now that you mentioned it, will look into it then see if we can adopt some”.

In P3 however, a registry supervisor stated that although they have not yet implemented a records management standard, they have adopted ISO 9001:2008 as an organisation. This is because they aspire to improve the quality of their service to their clients. The participant stated that the adoption of the said standard will motivate the institution to adopt other ISO related standards related to records management.

4.3.5 Legal framework

Proper and effective management of records in whatever format, require personnel to be well versed with the guiding legislation(s). Legislation helps personnel to know their legal mandate and the parameters in which they should operate within. As such, personnel entrusted with the management of records should have knowledge of the legal framework so that they execute their duties within the confines of the law. In this regard, the study sought to establish if records personnel were aware of the guiding legislations in managing digital records.

The legal framework for the management of records in the public sector in Zimbabwe is the NAZ Act Chapter 25:06 of 1986. Interviews with participants established that most of them were not aware of the guiding legislations. The following table shows the comments made by participants when asked on whether they were aware of the legislation that guided them in the management of records:

Table 4.4: Table showing responses on knowledge of legislation

Parastatal	Participant	Response
P1	B	We are guided by government legislations that are crafted by the Ministry of ICT.
P2	C	As an accounts officer, I know what is stipulated in the Public Funds Management Act. Again, I know that there is an Archives Act but have never read it. I just know that we are supposed to transfer our records to National Archives but as to how we should manage them, I am not sure. Like I said before, we do not have a records office here, so I do not know most of these records management issues since it is not my job.
P3	F	We are supposed to be guided by the National Archives Act, but to be honest with you, I have not gone through it to know what really should be done. We always work well with National Archives but I don't really know about their Act.
P4	I	We are guided by the National Archives Act and other Acts that govern our operation as an organisation.

Participants were also asked, what could be the reasons for lack of archival and records management legislation knowledge among records management staff. The bulk of the interviewees mentioned that, there has not been much effort to raise awareness from NAZ. Participant E mentioned that, “I am unaware of the stipulations of the legislation because I did not know that there exists a legislation that regulates records management in Zimbabwe”. Participant I said, “The Act was silent on the issues of digital records management thus; there were confusions over how they are supposed to be managed”. The participant further said, “The Act is very clear on the management of paper records but need to be amended so that issues regarding the management of digital records are addressed by the Act”.

4.3.6 Top management support

Top management support is regarded as an important factor if government agencies are to improve the management of digital records. The fact that government agencies are embracing

ICTs through e-government means senior management is required to ensure a smooth transition from paper to digital records management. This section analyses and presents data on the support offered by top management in the management of digital records.

Participants were asked to comment on the support offered by top management. A registry supervisor in P3 remarked:

They support by providing resources, approving crafted procedures and aligning procedures with organisational policies. They are encouraging the management of digital records by reviewing procedures and organisational policies and providing solutions to challenges such as space and shelving. For paper records, they are also providing essential resources like gloves and face masks in order to curb health challenges to staff. They also provide scanners and printers.

An IT officer in P1 said, “Top management is supporting digital records management well since they are working hard to get the real time records management with the real-time back up to safe guard our information and guarantee the business continuity”. However, the participant mentioned that there is still need for improvements. Top management were still hesitant to support a disaster management project that the officer has been proposing for a while.

Again in P4, an IT officer mentioned that, “Although they have not fully digitised, the top management seems to be supporting digital records management by providing funds to procure the necessary resources such as scanners and computers. The participant mentioned that records management is key in their organisation since without records, clients may be deprived of their pensions”. Therefore, the top management supports records management so that service delivery will not be compromised. A registry supervisor in the same parastatal also confirmed that “Top management was supporting the management of records by ensuring that staff members adhere to the procedures”. However, this was not fully enforced as there were many cases mentioned by the respondents to be ignored by action officers.

The situation was different in P2. One of the participants bemoaned the lack of top management`s support in his organisation. The respondent stated that:

We do not have a records office because top management has not been heeding to our calls to establish an office specifically for records management. This is not our own request, but it is a government regulation that a records office should be created. Maybe they do not see its importance here. So it is better if you finish your research and recommend the creation of that office, maybe our bosses will act.

Although the top management seems to be supporting records management, they still need to increase participation. According to a registry supervisor in P4, records management is no longer as it used to be especially with the coming of ICTs. Action officers including senior managers should adhere to set procedures and this can be enforced by top management. If senior managers are not fully involved, it will be difficult for correct procedures to be fully complied to.

4.3.7 Creation and capture of records

The proliferation of ICTs as indicated in Chapter Two has contributed to the increased generation of digital records. Record creation/capture is the first phase in the life-cycle of a record. A record is either created by internal employees or received from external sources. In previous years, the creation and capture of records was controlled by a single office. With ICTs, almost every employee has become a record creator and the traditional duties of the registry personnel have been compromised. It is therefore important that the creation and capture of records be controlled and well defined. The study investigated how financial services parastatals in Zimbabwe were creating and capturing various digital records.

Parastatals under investigation created digital records using various business systems such as PFMS and SAP which have been adopted across government agencies. Microsoft packages such as Word, Excel and PowerPoint were also used in the creation of digital records. An online service in P3 allowed clients to enter data in registering for various services offered by the parastatal. The entered data were verified and correctly captured by records personnel thus creating digital records. The records personnel ensured that correct and adequate metadata was captured for easy retrieval of the record. It was also revealed that some clients opted for manual registration which would also require records officers to correctly capture the data in the system. The same scenario was also witnessed in P1 and P4. However, data

was captured by IT personnel who would ensure that relevant metadata was captured for individuals and companies.

4.3.8 Storage

The study also sought to establish how digital records were stored. Participants indicated a number of storage devices used in their respective organisations. The following are some of the devices used by organisations to store digital records.

- Servers
- Universal Serial Bus (USB)
- Compact Disk (CD),
- External hard drives

An IT officer in P1 mentioned that “Records are stored in file server folders and removable storage media such as disks”. Despite dangers posed by removable storage devices, some parastatals still made use of them. When asked about cloud storage, all respondents were sceptical. The following were some of the comments made by IT personnel of the parastatals under investigations:

Table 4.5: Table showing responses on cloud storage

Parastatal	Participant	Response
P1	B	The nature of records we have here do not permit us to store our records on cloud. We still need to address security issues if we are to adopt cloud computing.
P2	E	At the moment, we are contemplating on adopting cloud storage once they we have considered all security issues.”
P3	H	Cloud computing is slowly growing but we are yet to meet a vendor who will convince us to use it. There is need to ensure that the records of our clients are secured

		and once we have established that, we will see what we can do.
P4	J	As an IT person, I strongly recommend cloud computing but this has been a failure here. People are afraid of security issues.

In P1 and P3, the interviewees mentioned that they have offsite storage facilities in different locations. These were backup records in case a disaster occurs.

4.3.9 Access and security

As fully discussed in previous chapters of this study, digital records are fragile and can be altered or manipulated without leaving any trace. Unless measures are put in place, digital records are prone to manipulation, alteration and deletion without the organisation's knowledge. Therefore, strict provisions should be in place to protect the integrity of such records. That is, there should be measures regulating access and security of digital records.

Results from the interviews with the participants indicated that all organisations have adopted various access and security controls to safeguard digital records. The most used strategy was the use of passwords. An IT officer in P1 commented that, "We have secured computer premises, access restriction through passwords and group policy access level". The access levels determined the rights an individual had when accessing digital records. Some members could only capture data while others had access to edit. For example, in P3 only the registry supervisors had the mandate to edit if there was an error on data entry.

IT officers in all the investigated organisations were the administrators of all records in business systems and those stored in the servers. In fact, they controlled all IT related activities.

4.3.10 Retention and disposal schedules

For paper records, appraisal is critical as it allows organisations to keep only the records they require. This prevents cases whereby files pile up in offices and consuming space. The same is also true for digital records. If records are not appraised, storage facilities will be filled

with records that are not necessary to be kept. Therefore, retention periods should be assigned so that organisations keep records that are important for the day to day business. The study sought to establish whether financial services parastatals in Zimbabwe had retention and disposal schedules for digital records.

In P1, “Financial records are kept by accounts people and the retention periods are in tandem with the audit requirements but they keep those records for as long as they are required by law” remarked the IT officer. The researcher requested to have a copy of the retention schedule but was not given one. It was established that there were no written schedules for digital records in the organisation.

When asked about the existence of retention periods in P3, the registry supervisor remarked, “Information for clients who are not registered are kept for three years before destruction, income tax individual and VAT files are kept for six years before they are destroyed.” It was however established through document review that, these were retention periods for paper records and nothing was in place for those in digital format. The same was also witnessed for digital records in P2 and P4.

4.4 Infrastructure and resources for digital records management

Digital records are dependent on infrastructure and organisations should ensure that necessary infrastructure and resources are available for digital records management to be successful. This section presents findings on the infrastructure that were available and required for managing digital records in the financial services parastatals in Zimbabwe.

The first objective with regards to infrastructure and resources was to identify the available resources dedicated for the management of digital records. This was to assess the level of commitment to digital records management by financial services parastatals in Zimbabwe. Some of the requisite resources which parastatals had were computers, servers and scanners.

It was also observed that there is need for adequate infrastructure to promote digital records management in the organisations under investigation. Even though computers were available, some participants felt that these should be upgraded as they have been overtaken by technological changes.

4.4.1 Budget for digital records management

The researcher in the current study went further to investigate the annual budget set aside for promoting effective management of digital records. In all cases, the records personnel had no idea on the annual budget allocated for the management of digital records as they said it falls under IT department.

The participants were asked, “Can you give details about the annual budget for digital records management activities for your organisation?” The records personnel gave nearly similar responses. A records supervisor in P3 stated, “I do not know the actual annual budget allocated for the management of digital records. Anything that has a relationship with technology falls under IT”. Participant I in P4 mentioned that she is not “aware of the budget since IT department is responsible for drafting the budget.” The interviewee further elaborated that, “The records office only submits the budget for paper records.” The same scenario was also witnessed in P1 as remarked by the registry supervisor, “I think you should discuss that with guys from the IT section. They are the ones who deal with such issues.”

The IT personnel were also asked the same question on budget allocation in relation to digital records management. An IT officer in P1 mentioned that “No budget is specifically allocated to electronic [digital] records management exclusively; we have a budget for IT as a whole. Therefore, electronic records related activities are supposed to be covered by the budget”. Participant H indicated that, “When we draft a budget in this department, it is not entirely on records management but for all IT assets which of course will be useful for managing records.” In P4, participant J mentioned that “the agency wishes to improve and develop the management of records. As such, IT infrastructure is a priority”. The participant stated that “Of late, resources are being procured to advance the management of digital records. These include desktop computers, laptops and scanners”.

Both records and IT personnel were asked if they had installed or had a budget for records management software(s). This is because effective management of digital records requires a records management system. It was established that no parastatal under investigation had installed a system neither was there a parastatal that had a budget specifically for records management software. All participants revealed that they had various business systems but had no ERMS, EDMS or EDRMS.

4.5 Skills and training

A successful digital records management programme should be handled by competent, trained and experienced personnel. Managing digital records requires people who are qualified and skilled. In this regard, the researcher also investigated issues regarding skills and training in relation to digital records management. The objective of this section was to establish the competency levels of records management personnel with a view of identifying their skills and training needs. The section is therefore divided into two sub-sections which are:

- Educational and professional qualifications;
- Induction and trainings needs

4.5.1 Educational and professional qualifications

One of the challenges facing many countries in managing digital records is lack of skilled manpower. If government agencies are to benefit from the use of ICTs, qualified and skilled individuals should be given the mandate to manage the resultant records. This section presents findings on the qualifications, skills and competences of personnel entrusted with managing digital records.

It was established that most parastatals have now professionalised records management by recruiting people with a records management qualifications. Most of the records management personnel were holders of relevant qualifications from reputable tertiary education institutions. In P2, however, there was no records unit/registry hence no one had records management qualifications.

Although a number of personnel had relevant records management qualifications and skills, these fit well for paper records. The personnel still lacked digital records management skills. According to participant A, she did not have relevant skills for managing digital records because these were not fully covered in her studies. It was a sentiment that was echoed by all interviewed records management personnel. As for IT personnel, participant B and J mentioned that they have specific IT skills but as for records management skills they never learnt that.

4.5.2 Induction and trainings

Induction plays an important role in equipping new members with relevant skills accepted in an organisation. It was for this reason that records personnel were requested to indicate what records management induction and trainings were conducted in their respective organisations. In all the investigated organisations, new members of staff undergo an in-house induction on records management procedures. A records supervisor in P3 indicated that it is a must that the induction be conducted for all members of staff. During the induction, new members were taught various records management procedures as listed below:

- Handling incoming mail,
- Handling outgoing mail,
- File movement,
- File closure,
- File storage, and
- General house-keeping procedures.

According to a registry supervisor in P4, “Induction equipped members with necessary records management skills”. As mentioned by the participant, those that would have been inducted performed better. Although induction was instrumental in equipping members with necessary skills, it was established that it was mainly for paper records. As for digital records management, records personnel were not inducted since this duty was for personnel in IT section. Records management personnel were only taught about data entry with regards to IT related induction.

Participants were also asked if there were any records management trainings provided and their frequency. A registry supervisor in P4 mentioned that usually in-house trainings were “conducted but did not have a specific time-frame in which they were supposed to be conducted”. However, these trainings were mainly for traditional records and did not address much on the management of digital records. According to the interviewee, they were just refresher courses. In addition, the participant mentioned that, they rarely attended national, regional and international workshops, conferences or symposiums on records management. She further mentioned that records management personnel had many times requested to

attend such gatherings but they were not approved, shortage of funds cited as the main reason.

Participants in P3 and P1 reiterated that, although trainings were provided, they focused on paper records and did not address digital records management which is trending. The registry supervisor stated they “had a workshop the previous year which was facilitated by NAZ, but was also focusing on paper records”. The information and records officer in P1 commented that trainings need “to be done regularly as this is the way to go due to widespread use of ICTs.”

The study established that, records management personnel need to be trained in digital records management so that such digital records are well managed in these government agencies. Records and IT personnel should also work hand in hand so that skills are exchanged and this will go a long way in creating a conducive environment for the management of digital records.

4.6. Involvement of NAZ in the management of digital records

The widespread use of ICTs has directly and indirectly influenced the way archives should operate. It has been indicated in prior chapters and sections that national archives should respond to the widespread use of ICTs by migrating from the way they have been operating over the years. As organisations embrace ICTs, national archives are expected to be fully involved in the management of the resultant records even before they are created. This entails that they are supposed to be involved in the management of digital records throughout their lifecycle. This means they have to control and guide the creation, use, maintenance and disposal of records to achieve efficiency and effectiveness of digital records management. Therefore, one can note that national archives are critical as they provide guidance and direction for effective management of digital records. As fully discussed in chapter two of this study, in Zimbabwe, NAZ is mandated to provide guidance on the management of records in all public sector institutions including financial services parastatals.

The general objective of this section was to establish the involvement of NAZ in the management of digital records in Zimbabwe. The objective was derived against a background

of a records management system which was mainly for those records in paper format in which the national archives was greatly involved.

4.5.1. NAZ and management of digital records in financial services parastatals

This section presents data collected from participants from both parastatals under investigation and NAZ. The focus on this section was to establish what AZ is doing in creating an enabling environment for the management of digital records in Zimbabwe.

Participants from parastatals were asked the following question: “What help have you been getting from National Archives of Zimbabwe in managing records either in paper or digital format?” The responses showed that the National Archives has been instrumental in providing guidance for creating a conducive records management environment. Table 4.4 reflects some of the verbatim comments by records personnel:

Table 4.6: Table showing responses on the role played by NAZ

Parastatal	Participant	Response
P1	A	They are guiding us in complying with the government standards. They came to do an audit (record survey) on our current standing and to advise us where we need to improve to get things in compliance.
P2	D	I know there is a national archive but to be honest, I don't know their duties. For the period I have been here, I haven't seen them here and I do not even know what we are supposed to be doing with these records. Records have been piling in offices over the years but because we do not have knowledge of what should be done, we just leave them piling up. Like I said before, I know there is an Archives Act but I do not even know the contents of the Act
P3	F	The National Archives helps us on various records management issues. Just a year ago we had a workshop which they were facilitating. We gained a lot from information from that workshop. Again, they are helping

		us with the storage of semi- current records, destruction of obsolete records and giving assistance in coming up with disposal and retention schedule
P4	I	We have been getting a lot of help from National Archives of Zimbabwe. They came and had a survey here. They helped us with the transfer of records which had piled up in offices. Although we have not yet implemented the recommendations they made, they will guide us in improving records management in this organisation.

From the above comments, it was established that in most if not all cases, guidance was provided for the management of records mainly in paper format. This was usually done during records surveys which are conducted by the NAZ. Through document review, this was confirmed by a report of a survey conducted in P4 by NAZ: The parastatal was recommended the following:

- To procure lockable file cabinets and bulk filers for storing records.
- To deposit semi current records at the records centre of NAZ.
- To keep in touch with NAZ records centre for assistance in the management of records.
- Training on registry procedures and classification.

All the recommendations were related to the management of paper records. No recommendation addressed digital records management. This indicated that NAZ was mainly active in the management of paper records and silent in the management of digital records.

At NAZ, interviewees were asked how they have been involved in the management of digital records in public sector institutions. It was established that NAZ was not involved much. Probed to explain why NAZ has not been fully involved, both participants K and L indicated that it was because there was no national policy or framework that was to be used as a reference point in their regulatory role. During records surveys which are carried out by NAZ, the participants indicated that they just ask “are you managing electronic records?” and

nothing more. No recommendations were given with regards to the management of digital records.

The archivists at NAZ were also asked to state what they have done and what they are doing in order to create a conducive environment for effective digital records management in the public sector. Participant K mentioned that:

As NAZ, we managed to produce a document on digital transitional framework (DTF), which at the moment is now at stakeholders' consultation stage. The document is expected to provide guidelines and direction to properly and effectively manage digital records during the transition from paper records in the public sector.

Participants were also asked whether the legal framework supports the management of digital records; the participants gave mixed reactions. Participant K mentioned that the legislation fully supports public sector organisations to manage digital records. He remarked:

The legal framework supports us. The NAZ Act mandates public sector organisations to manage records in whatever format as it does not distinguish record types. In that regard, we are supposed to give advice on proper management of all records including those in electronic form. However, what lacks are other tools such as procedures or policies that are based on the NAZ Act.

Participant L mentioned that the NAZ Act needs to be amended as it does not really cater for digital records. The participant stated that the Act should adopt what other nations like South Africa did in explicitly stating digital records in the act.

Although we are using the current NAZ Act as a legal framework to support the management of electronic records in Zimbabwe, the act needs some amendments as it does not explicitly state electronic records. We should copy what South Africa did in explicitly mentioning electronic records in their act.

As per dictates of the DCC curation lifecycle model in which this study is based, management of digital records should be supported by relevant legislation. In this regard, the researcher asked the participants what NAZ has done. Both participants K and L explained

that NAZ had crafted a new legislation that would address the management of digital records. However, this has taken long to be approved by the responsible authorities as a result of administrative changes. Participant L remarked, “Moving from one ministry to another has prolonged the approval of the new Act we have crafted”. This was explained in detail by participant K who remarked:

Sometime back when the department was still under Home Affairs, we crafted and proposed a new Act that would address digital records. This did not go on well because the department was then transferred to the newly created Ministry of Rural development, Promotion and Preservation of Culture and Heritage. We again started the process. As the process was now in full swing, the department was again transferred to the Ministry of Home Affairs and Cultural Heritage. These changes have delayed the approval of the Act which has a negative effect on the management of digital records in the country.

With regards to the capacity to preserve digital records, both participants at NAZ also revealed that the institution lacks the requisite infrastructure and resources which has incapacitated it to preserve digital records the same they do with paper records. Participant L said “No government institution has so far deposited digital records at NAZ because we do not have the required infrastructure and resources such as servers”.

It was also revealed that NAZ is slowly incorporating digital records management in their trainings. Over the years the focus was mainly on paper records but they are also including digital records so that they are properly managed. For example, participant L mentioned that “when referring to classification systems during trainings, we encourage organisations to adopt a system that can also be used for records in digital format”.

On parastatals` capacity to manage digital records, the interviewees revealed that a number of parastatals were struggling with the management of digital records. One participant K mentioned that “they are concerned with IT systems and other fundamentals of records management are ignored.” The situation was aggravated by the “lack of national direction to manage digital records as they really do not know what they should do.”

It was noted that NAZ needs to be fully involved in the management of digital records in the public sector in Zimbabwe. The involvement of NAZ is crucial as it allows organisations to have a clear, well defined and well informed approach to digital records management in Zimbabwe.

4.7 Summary

The chapter analysed and presented the findings of the study. Although, ICTs have been fully embraced in the public sector in Zimbabwe, paper records are still dominating. Financial services parastatals in Zimbabwe might have a slightly clear direction on the management of paper records, the same cannot be said for records in digital format. Financial services parastatals in Zimbabwe still lack the requisite tools for managing digital records. The study established that a lot has to be done if financial services parastatals are to achieve efficiency in managing digital records. These organisations lack policies, skills and sufficient infrastructure for managing digital records. NAZ is still lagging behind with regards to the management of digital records in the country. The institution is still focusing mainly on the management of records in paper format. The next chapter interprets and discusses the findings of the study.

CHAPTER FIVE

INTERPRETATION AND DISCUSSION OF FINDINGS

5.1 Introduction

Chapter four analysed and presented the research findings. The present chapter interprets and discusses findings of the study. After collection and presentation of data, the researcher is expected to provide an interpretation and discussion to give meaning to that data. As indicated by Kalof, Dan and Dietz (2008), this is the process by which the researcher adds his or her own meaning to the collected and analysed data; and relates it to the views of other researchers. Pandey and Pandey (2015:75) identified the following as major purposes of this chapter:

- To throw light on the real significance of the material in the context.
- To understand implications of the data.
- To provide hints of conclusions and recommendations of the researcher.
- To show the values of greatest worth that has resulted from the research.
- To refer important generalization

In this study, the interpretation and discussion of findings was vital as it helped in broadening the knowledge of issues surrounding the management of digital records in Zimbabwe in general and financial services parastatals in particular. This chapter therefore, provides answers to the research questions raised in Chapter One. In addition, the present chapter highlights similarities and differences with other studies that have been conducted in especially public sector institutions in Zimbabwe and other countries. The same thematic headings that were used in the analysis and presentation of findings in Chapter Four were also adopted in the current chapter. These headings were in accordance to the research objectives and questions raised in Chapter One.

5.2 State of digital records management in financial services parastatals

The previous chapters have indicated that the widespread use of ICTs has greatly impacted on the management of records in various sectors including public sector organisations. Regrettably, the management of the resultant records that is, digital records has been a

challenge. In most cases, tools that are essential for effective and efficient management of such records are usually weak or absent. In this regard, the following sections discuss a variety of issues in order to establish the state of digital records management in the financial services parastatals in Zimbabwe.

5.2.1 Records management unit in financial services parastatals

Records are valuable assets and should be properly taken care of by both public and private organisations. As mentioned by IRMT (1999:1), records provide the foundation for good governance as they serve to document policies, transactions of activities and provide a source of information which supports decision making and accountability. If records are not properly managed, information that would be necessary to support the day to day administration of the organisation will be lost. Furthermore, records are created to provide evidence of transactions and therefore their absence may cripple the operations of the organisation. Therefore, organisations should ensure that records are properly managed so that they serve the purpose for which they were created. This can be done by establishing or putting in place a unit whose sole responsibility is to ensure that a conducive environment for records management is created. This unit should ensure that records in whatever format are effectively and efficiently managed in a systematic manner throughout their lifecycle. This section interprets and discusses findings on the existence and operations of a records management unit in Zimbabwe's financial services parastatals.

As presented in Chapter Four of the present study, most financial services parastatals in Zimbabwe had functional records management units in the form of registries. The following were some of the functions of the registries:

- Receiving incoming mails.
- Sorting mails.
- Dispatching mails.
- Classification of records.
- Control of file movement.
- Data capturing.
- Maintenance of the file plan; and
- Transfer of records to the records centre.

Despite the existence of a registry, at times some officers were not making use of it. This meant that the existence of the registry was in theory only and practically, non-existent to some officers. Similar results were also obtained by Nengomasha (2009:211) who found out that records management procedures which included the use of registry were flouted and not followed in Namibia's public sector. Therefore, records management officers had no control over some records. In the present study, it was found that the situation has been aggravated by the adoption of ICTs. The adoption of ICTs has increased the generation of digital records and the records management unit/registry was slowly losing control over the management of records in the organisations. This was because, some action officers would receive mails directly in their inboxes and registry personnel would not be accountable for such communications.

Again, the functions of the registry indicate that records personnel were still confined to managing traditional records and were not involved in the management of digital records. Thus, although most parastatals had a records management unit, their roles remained mainly for those records in paper format whereas digital records were managed by the IT section. This means that, in practice, organisations have not yet accepted that records management has evolved from mainly paper based to digital. According to Johare (2006:541), digital records management now involve two professions, that is, records management and IT which are different with regards to policy positions and ethics. These two have been treated as opposing rather than complementary professions. Therefore, the registry should involve key players in recordkeeping such as records managers, archivist and IT personnel under a shared responsibility to establish credible digital records management programme Johare (2006:541). The researcher foresees records management becoming extinct if records officers do not claim their space in the digital era.

5.2.2 Types of digital records created/captured

Financial services parastatals in Zimbabwe have embraced ICTs for the conduct of business. In addition, various services are now being offered online. Therefore, the study investigated the types of digital records created/captured by the said parastatals in Zimbabwe. The study revealed that a number of digital records were created/captured. Similar results were also established by Chaterera (2013), Matangira (2016) and Mutsagondo (2017) who highlighted that, the use of ICTs as a result of the adoption of e-government by the government of

Zimbabwe has seen an increase in the creation/capture of digital records in the public sector in Zimbabwe.

The study found out that quite a number of digital records were being created/captured by financial services parastatals in Zimbabwe. Various business systems that have been adopted have contributed to the increase in the creation of digital records. Most of these digital records were however, not regarded as official records as “hard copies” were still preferred as the official way of internal and external communications. The fact that e-mails were printed and filed showed that digital records were not regarded as official records. Some e-mails were not even printed which might make it difficult to hold other officers accountable for their actions.

The study also established that, a considerable number of paper records were being created/captured by parastatals in Zimbabwe. Although ICTs have been embraced, paper records still played a key role in their organisations. In fact, paper records were still popular as compared to digital records. ICT facilities have also increased the generation of paper records.

5.2.3 Policies and guidelines

The literature has highlighted that if organisations are to properly manage digital records, effort should be put in crafting policies and guidelines. Such tools are essential as they direct the proper management of digital records as well as setting the parameters in which organisations should confine within. This means that, proper records management starts with the establishment of policies and guidelines that will control records throughout their lifecycle.

Despite numerous recommendations by various researchers for policies and guidelines to be put in place for effective digital records management, parastatals under investigation are yet to positively respond to the recommendations. It has been highlighted that Zimbabwe did not have a national digital records management policy and therefore it was critical for public sector organisations to craft in-house policies and guidelines. The research findings as presented in Chapter Four showed that financial services parastatals in Zimbabwe did not have in-house policies and guidelines for managing digital records.

In most cases, digital records were created, used, maintained and disposed of without guidelines. This meant that digital records were managed on an *ad hoc* basis. Similar findings as mentioned in Chapter Two were also identified in different countries especially in Namibia, Botswana, and Kenya. According to Mutsagondo (2017:125), the absence of a digital records management policy in the public departments in the Midlands Province in Zimbabwe meant that public officers were incapacitated in managing digital records professionally and efficiently. This was also true for financial services parastatals. Both records and IT personnel were not fully equipped to manage digital records as they were not aware of their organisations` position on the management of digital records.

This was different for paper records since guidelines in the form of procedures manual and instructions directing personnel on how the records were supposed to be managed were in place. Failure by organisations to put in place necessary policies and guidelines was an indication of lack of commitment to create an enabling environment for effective management of digital records. Results of the findings of this research confirmed that although ICTs have been embraced through e-government, there has not been much effort to put in place measures that would control, supervise or direct the management of the resultant records. Financial services parastatals in Zimbabwe are yet to formulate guidelines that would exhibit their commitment in relation to the management of digital records.

Absence of policies showed that the approach to digital records management is mainly informal or rather unwritten. This means that, the proper management of digital records in the financial services in Zimbabwe is still evolving as it is being done without any form of guidelines. This can be equated to the land reform programme in Zimbabwe which was done in the absence of a defined framework. It is like implementation first then regularise later, that is, “putting the cart before the horse”. Things happen in an inverted order.

5.2.3.1 Policies and guidelines for managing e-mail records

It has been highlighted in previous chapters that, the widespread use of e-mails requires a well-defined approach so that the records will be retained for as long as they are needed. Another way of ensuring that e-mail records are properly managed is by putting in place policies and guidelines. The fact that e-mails have been instrumental in conducting business,

this section discusses findings on the existence of policies and guidelines specifically for e-mails.

The study revealed that no organisation under investigation had policies and guidelines to manage e-mails. The absence of such tools in these institutions created a number of records management problems. For example, some officers could communicate with different stakeholders through e-mails which were never accounted for. As such, the probability that organisations could lose records that were essential for the conduct of business was high, thus making it difficult to promote accountability and improve service delivery.

Results obtained by the study were similar to the results of studies conducted by Keakopa (2007), Mutsagondo (2017), Nengomasha (2009) and Sejane (2004). More than a decade since e-mails have been embraced by government agencies, there still have not been many changes as to how they are managed. For as long as policies and guidelines are not in place, the management of e-mail records will always pose challenges. Organisations risk losing valuable information which will jeopardise their activities.

5.2.3.2 Policies and guidelines for managing social media records

Just like e-mails, social media plays an important role in the conduct of business. As such, the management of social media records should be guided by well formulated policies and guidelines. Organisations are supposed to have a clear and a well-defined approach with regards to the care and control of social media records. This ensures that only important communications are maintained for as long as they are needed and those that are less important are destroyed to open up space and or memory.

The research found that although most financial services parastatals were making use of social media, there were no policies and guidelines to manage the resultant records. One of the reasons that may explain such a scenario is that, a plethora of such records are created or captured which will make it very difficult to manage. The study established that most of these records were regarded as ephemeral and as such, they were not kept for a longer period as they were not considered to be important for the conduct of further business. There were no guidelines to control what was to be destroyed and what was to be kept. Just like with emails,

absence of policies and guidelines to manage social media records may also inhibit measures to promote accountability and satisfactory service delivery.

5.2.4 Standards for managing digital records

Equally important for managing digital records are standards. If organisations are to create a conducive environment for the management of digital records, they should be guided by standards. Standards are essential as they provide a framework in which organisations may benchmark their activities from. Chapter Two of this study discussed in detail various standards that organisations may use for managing records.

The study found similar findings to those of a study conducted by Ambira (2016) in Kenya. The author revealed that there was no single ministry in Kenya that had adopted any form of standard for the management of digital records (Ambira, 2016:281). Likewise, no financial services parastatal in Zimbabwe had adopted any records management related standards. Failure to comply with set standards may compromise the quality in which records are created, used, maintained and disposed. One of the reasons for not adhering to the standards was lack of knowledge. Participants were not aware of the standards that may be used in records management. The fact that, the management of digital records was assigned to IT personnel may have contributed to this scenario. IT personnel were not concerned much with the management of digital records as this was not their area of expertise.

5.2.5 Legal framework

For the purposes of establishing the state of digital records management in Zimbabwe's financial services parastatals, the study also conducted an investigation to establish whether personnel entrusted with the management of digital records were aware of the legal framework. In records and information management, legislation provides a framework of how a record is supposed to be managed throughout its lifecycle. Although, there may be other laws that govern the management of different records in Zimbabwe, the researcher focused mainly on the NAZ Act of 1986.

The findings of this study revealed that, most participants were not aware of the NAZ Act but were aware of the requirements of laws that govern the operations of their organisations.

Consequently, the management of records was poor. The researcher acknowledges that, although a number of authors such as Mutsagondo and Chaterera (2014) have argued that the Act has been overtaken by technology and should not be used for managing digital records, the Act provides the basis for managing such records as reckoned by Matangira (2016).

Smith (2007:28) advises personnel managing records to be aware of and to be able to identify the legal and regulatory environments in which they operate which affect their activities. The scenario in the selected financial services parastatals in Zimbabwe may indicate that, even though an act that addresses all digital records management functions is crafted, it will not guarantee that it would be adhered to. This is because the parastatals were not aware of the act that would guide them even in managing conventional records.

5.2.6 Top management support

Top management support is regarded as one of the success factors for effective management of digital records. As such, the current study assessed how top management were supporting the management of digital records in their respective organisations.

According to Ngulube and Kemoni (2008:303), lack of senior management`s support contribute to the bad state of records. Ngoepe and Van der Walt (2009:142) mention that senior officials tend not to recognize the need for effective records management as well as the importance of records as evidence of the organisation`s activities. This has been proved by the findings of a study by Matangira (2016) which established that lack of top management`s support in Zimbabwe`s public service jeopardised the management of records as it was accorded a low profile. A study by Mutsagondo (2017) in the public sector in the Midlands Province also established lack of top management support was evidenced by the lack of budget for records management activities while other sections such as Finance and Human Resources (HR) had their own budgets. The author further mentions that there were also inadequate and unqualified staff in registries, lack of workshops and modern ICT infrastructure.

The same situation was also identified in this study. Although participants indicated that senior managers were working very hard to ensure that requisite resources and funds for training were availed, their support towards digital records management is still questionable.

The fact that there were no major changes with regards to management of records since the adoption of e-government is a testament for lack of top management support. The procurement of ICT infrastructure in the parastatals under investigation could have been for broader e-government projects not necessarily for records management. Since the adoption of e-government as shall be discussed in later sections, a system dedicated for records managements has not been installed in all parastatals under investigation. The same findings were also found in a study carried out by Ambira (2016) in Kenya.

It is important that senior managers heed to the recommendation of Smith (2007:196) who mentions that senior managers should have an understanding of wider issues regarding digital records management or change in access to information provisions so that they take decisions on strategy and resources. Involvement of top management also goes a long way in advocating for the implementation of necessary and relevant digital records management activities.

5.2.7 Creation and capture

The research confirms the findings from various studies that the widespread use of ICTs has increased the generation of digital records. A research by Mutsagondo (2017), established that almost every officer in government ministries in the Midlands Province in Zimbabwe who had access to a computer created digital records in accordance with his or her line of duty. The same was also true for financial services parastatals in Zimbabwe. Among digital records that were created/captured, e-mails were dominating. Almost every employee generated or received e-mails both for corporate and private business. Digital records were also created/captured through the use of various business systems.

Since creation/capture of a record is a vital function in the life-cycle of a record, it should be guided accordingly. Creation/capture of a record should at least follow a particular format. Various business systems that have been adopted had mandatory fields which helped organisations to capture the required metadata. However, there were no documented policies and guidelines that addressed the creation and capture of digital records in all the financial services parastatals under investigation.

The study established that, the use of ICTs in the conduct of business has distorted the traditional records management procedures and principles. The study revealed that most of the e-mails that were created or received were not accounted for as they did not follow the registry routine. Therefore, as the use of ICTs has increased, most financial services parastatals have not put in place measures that all records created or received were properly maintained in the record keeping systems.

5.2.8 Storage

The environment in which digital records are stored has impact on the lifespan of the record. Therefore, organisations should ensure that systems used to store digital records are secure. In addition, the format and media in which records are stored should maintain their authenticity, reliability, integrity and usability. As such, an appropriate media and strategy for the storage of digital records throughout their lifecycle should be selected.

This study revealed that records were stored on both removable and non-removable devices, and no parastatal had adopted cloud storage. Only records that were created and maintained in the business systems were stored in servers and had offsite back-up storage. The area in which some servers were placed was not pleasing. The rooms showed that, general house-keeping practices were lacking in some parastatals under investigation.

Therefore, as noted by Mutsagondo (2017) in his study, the manner in which records were stored on computer memory could not guarantee that the records could remain authentic and trustworthy. There were no guidelines showing when records stored on digital media should be refreshed or migrated to new storage media to enable them to be accessible when required. This is required because the ever changing technology will make the records inaccessible in the future as new technologies would have been developed.

5.2.9 Access and security

Both private and public sector institutions should ensure that digital records are accessed by people with authority. Therefore, there has to be mechanisms to safeguard privacy and confidentiality and prevent unauthorised use and access to digital records.

The use of passwords to protect digital records from unauthorised access was popular in the financial services parastatals in Zimbabwe. This was also popular in Uganda, Botswana as established by Luyomba (2010) and Kalusopa (2011) respectively. In most cases, access to digital records had access levels. Not everyone and anyone could access certain digital records as personnel had different access levels. However, no participant gave guarantees that the records were completely secured as they had experienced some cases of records manipulation and theft.

5.2.10 Retention and disposal schedules

Keeping unnecessary records uses valuable space/memory and may incur unnecessary costs. Therefore, retention schedules should be crafted so that records are not kept longer than is necessary. Retention schedules are key components in the management of digital records as they allow standardisation in the retention and disposal of records. This means the importance of timely disposal of records in accordance to the retention schedules is a fundamental principle in good records management. With retention schedules, records are retained for as long as they have value. Ephemeral records are disposed of at the conclusion of the business transaction while those of enduring value will be retained.

No single parastatal under investigation had retention schedules for records in the digital format despite the fact that they were created and used by financial services parastatals in Zimbabwe. For paper records, various types and classes of records had well defined retention periods. Absence of retention schedules meant that, organisations might be losing valuable records and keeping those that have less value.

From the above discussions, it can be clearly seen that the management of digital records in the financial services parastatals in Zimbabwe is still in its infancy. In all the investigated parastatals, there was no documentation to guide digital records management activities as prescribed by the DCC curation lifecycle model. Creation/capture of records was not done in accordance to documented policies and guidelines. The same was also true for appraisal of digital records in all the parastatals under investigation. There were no policies, guidelines or schedules for the evaluation and selection of digital records needed for both short and long-term curation and preservation. In addition, the DCC curation lifecycle stipulates that digital records need to be stored adhering to relevant standards. According to the participants, no

parastatal adhered to any standard(s) in relation to storage of digital records neither for any records management activity.

5.3 Infrastructure and resources for managing digital records

For a digital records management programme to be successful, it should be supported by the availability of proper, relevant and sufficient infrastructure and resources. Therefore, organisations should ensure that they invest in proper and adequate hardware and software. A number of studies have indicated lack of infrastructure and resources as one of the challenges facing organisations in creating a conducive environment for effective and efficient management of digital records.

Matangira (2016) revealed that government ministries in Zimbabwe had not properly invested in ICTs to advance digital records management. Contrary to that, the study revealed that, there is a rise in the procurement of IT infrastructure which is essential for digital records management. With regards to the availability of proper and adequate infrastructure and resources, IT officers in various parastatals mentioned that these are being availed.

However, as mentioned in section 5.2.6, the procurement of the ICT tools was for overall development of e-government projects and not necessarily for records management. This can be explained by the lack of systems for managing digital records. No organisation had a system dedicated for records management. Business systems such as PFMS and SAP have been implemented in most public sector institutions in Zimbabwe, but no single system for digital records management had been installed. This is an indication that, the procurement of IT infrastructure had more to improving service delivery and accountability and less to advancing digital records management.

5.3.1 Budget for digital records management

One of the contributing factors for lack of infrastructure and resources is poor funding. Literature revealed that, digital records management has been a challenge to many organisations because of poor funding. In most cases, records management activities are not usually prioritised in terms of budget allocation as compared to other sections such as Human Resources and Finance among others. The present study, examined financial services

parastatals in Zimbabwe to establish if they had a separate budget dedicated for records management activities.

The study found that no single parastatal had a separate budget for digital records management activities. Similar results were also established by Mutsagondo (2017) who mentions that no single government ministry in the Midlands Province had a separate budget for records management in whatever format. Nengomasha (2009) also mentions that there was no separate budget for records management an indication that it was marginalised. In Namibia, Nengomasha (2009:209) states that records management was catered for under the general services.

This study revealed that records management activities were not allocated their own budgets. Absence of a dedicated budget for records management activities was enough evidence to show that records management was looked down upon. Had it been so important to management, a dedicated budget would have been set aside to advance records management. The fact that there has not been a major change with regards to records management since the widespread of ICTs may be as a result of lack of funds dedicated to advance records management.

5.4 Skills and training

Lack of qualified and experienced personnel has been cited as one of the challenges faced by organisations in managing records. Various studies as mentioned in Chapter Two of this study indicated that people entrusted with records management duties are usually recruited from lowest ranks and some are recruited without any form of qualifications.

5.4.1 Educational and professional qualifications

The findings of this study revealed that, most parastatals under investigation were now recruiting personnel with a records management qualification. However, the capabilities with regards to managing digital records were questionable. Some did not even know basic terms such as metadata. This was despite the fact that records personnel possessed records management qualifications. Amira (2016) stated that the professional and technical capabilities on managing electronic records for records personnel in Kenya were found to be

inadequate as professional knowledge on electronic records and technical skills on management of electronic records on issues like metadata and electronic records management systems was inadequate. The same was also true for records personnel in the financial services parastatals in Zimbabwe.

A study by Mutsagondo (2017) revealed that some of the records personnel in the public departments in the Midlands Province in Zimbabwe were not professionally qualified for the job. According to the author, this was an indication that the government had failed to take records management seriously as compared to other sections such as HR and Finance, and IT that had qualified staff.

Although it has been indicated in most studies that organisations employ unqualified personnel, there was a reasonable change in the financial services parastatals in Zimbabwe. Previous studies have bemoaned shortage of professionally qualified personnel with regards to records management. The present study revealed that, there has been a change in terms of the recruitment of records personnel in government agencies. However, these personnel with records management qualifications were not entrusted with the overall duties of managing digital records. This is probably because the human resources see records management as only confined to paper records and not digital records.

5.4.2 Induction and trainings

Induction and trainings help in equipping personnel with skills relevant for effective management of digital records. It was established in the present study that all parastatals that had a records management unit, records personnel would undergo through an induction training to equip them with necessary skills of managing records in their respective organisations. Besides induction, various trainings were organised to keep personnel appraised with trending issues.

Although inductions and trainings were conducted, they did not address digital records management issues. As indicated in Chapter Four, most of these inductions and trainings focused more on the traditional aspects of paper records management and less on the management of digital records. Frequency of trainings was also not convincing with the fast evolving digital environment. The fact that records personnel were not fully involved in the

management of digital records may indicate that senior managers did not have confidence with records personnel that they were capable of managing digital records. IT personnel, who were entrusted with the responsibilities of managing digital records, were not even equipped with records management skills.

In line with the DCC curation lifecycle, there is need for collaboration among employees to complement each other (Higgins 2008:135). This is important as it improves the quality of digital records management and may guarantee long-term access and preservation of records. This was not the case in the parastatals under investigation. There was no collaboration between records personnel and IT officers which negatively impacted the management of digital records.

5.5 Involvement of NAZ in the management of digital records

National Archives all over the world have a mandate of overseeing the management of records in public sector institutions. They advocate for a conducive environment for effective records management in whatever format. This can be done by crafting policies and standards. The present study sought to assess the involvement of NAZ in the management of digital records in financial services parastatals in Zimbabwe.

Over the years, NAZ has been carrying out records surveys in the public sector institutions. During these surveys, NAZ would inspect registries in government institutions and give recommendations on proper records management. As revealed by this study, the way surveys have been conducted has not changed since the adoption of e-government. As has been the case, records surveys conducted by NAZ focus more on the management of paper records and less on digital records. Guidelines on the proper management of digital records were not provided by NAZ. In addition, no public sector institution in Zimbabwe has deposited digital records for preservation at NAZ because the institution is incapacitated to preserve such records as it does not have adequate infrastructure and resources such as servers. This indicates that creating agencies have been left with the task of managing and preserving digital records as mentioned by Bhebhe (2015:118).

On the other hand, it was revealed that, NAZ was slowly getting involved in the management of digital records in Zimbabwe. NAZ had already crafted the DTF which was expected to

assist public sector institution in the transition to digital environment. A national policy for the management of digital records was also being crafted so that public sector institutions will be guided accordingly in the management of digital records. Again, steps to amend the NAZ Act to fully address digital records management issues were at an advanced stage. The amendment of the Act has been delayed as a result of administration changes and this has derailed the progress of digital records management not only in the financial services parastatals but the public sector in Zimbabwe as a whole.

5.6. Summary

The chapter discussed the research findings. The management of digital records in financial services parastatals in Zimbabwe was at its infancy stage. Digital records were managed close to the same environment in which paper records were managed. Despite the fact that qualified records personnel were now recruited, the management of digital records was a reserve for IT personnel and records personnel were side-lined. No parastatal had policies, guidelines and standards to guide them in managing digital records. Although, various resources were procured, these were mainly for advancing e-government projects rather than advancing digital records management. NAZ which has the responsibility to oversee the management of records in Zimbabwe was not heavily involved in assisting the parastatals in creating an environment conducive for proper management of digital records. The chapter revealed that the management of digital records was still developing as parastatals were still to conform to the requirements of the DCC curation lifecycle model. The next chapter summarises and concludes this study.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter Five presented a discussion on the findings of the study. The present chapter provides a summary of why the research was conducted, how it was conducted and what was found. Firstly, the chapter gives a summary of the study in relation to the research objectives. As advised by Hussey and Hussey (1997:293), the summary in this chapter addresses main points from the results in accordance to research questions. Secondly, general conclusions that are drawn from the findings of the study are also described. Thirdly, the present chapter provides recommendations that would enhance the management of digital records in the financial services parastatals in Zimbabwe. In addition, recommendations for further researches to be conducted are also provided.

6.2 Summary

The study sought to assess the management of digital records with a view of coming up with recommendations that would enhance their management in Zimbabwe's financial services parastatals. The study was motivated by the widespread use of ICTs in both public and private institutions. Just like most government agencies around the world, Zimbabwe has embraced ICTs as part of its commitment towards e-governance, accountability, transparency and improved service delivery. Various e-government projects have promoted the use of ICTs which led to the subsequent generation of digital records. However, as government agencies are promoting the use of ICTs, little or nothing has been done to create a permitting environment for effective and efficient management of the resultant digital records. Already, organisations were facing challenges in managing paper records and this has been aggravated by the advent of ICTs. Some of the challenges cited by scholars include; shortage of qualified and skilled manpower; absence of guidelines, policies and standards and lack of proper and adequate infrastructure. Digital records are different from paper records as they can be distorted easily without leaving any trace. As such, a conducive environment should be created for effective and efficient management of digital records. The DCC curation lifecycle was used as the theoretical framework. The study adopted a qualitative research approach and a multi case research done to collect data from four financial services parastatals in

Zimbabwe. Research instruments that include interviews, document review and observation were used.

The findings of the study revealed that, all parastatals under investigation had embraced ICTs and this had increased the generation of digital records. A list of types of digital records created by financial services parastatals in Zimbabwe is found on Section 4.2.2 of Chapter Four. These were mainly created through various business systems that have been adopted. E-mails constituted the majority of digital records that were created or captured by these parastatals. However, it was revealed that there were no guidelines or policies used for effective management of digital records. Since the adoption of e-government, government agencies under investigation have not crafted guidelines that would help personnel in the management of the resultant records. In addition, no parastatal had adopted any standard to manage digital records.

With regards to the knowledge of legal framework, the study revealed that both records and IT personnel were not aware of the contents of legislation regulating records management in Zimbabwe. Personnel were more aware with the legislations that guided the operations of the parastatals. Lack of knowledge of legal framework did not only jeopardise the management of digital records but paper records as well. This was evidenced by the piling up of files that were supposed to have been transferred to the NAZ in offices and registries.

Out of four parastatals, three had a records management unit in the form of a registry and only one did not have. It was however, revealed that these registries were dominantly managing paper records and the management of digital records was assigned to the IT personnel. This meant that although digital records were generated, the responsibilities of registry personnel did not change much as they were not involved in the management of the said records.

The study also revealed that parastatals have managed to procure ICT infrastructure and resources albeit for overall e-government projects. The procurement of IT related resources was mainly for the advancement of e-government initiatives rather than the advancement of digital records management. This was also evidenced by the fact that no parastatal had implemented an EDRMS that would enable the effective management of digital records.

Research findings showed that, there has been a shift in terms of recruitment of records personnel in the public sector in Zimbabwe. Previous studies bemoaned the lack of skilled manpower to manage records. The present study revealed that all parastatals that had a records management unit were now recruiting personnel who had a records management qualification. It was however, disturbing to note that, these people were not involved in the management of digital records as this was done by IT personnel who had IT qualifications. The results of the research also confirmed that there was lack of staff development in relation to digital records management. The induction and most trainings organised for records personnel mainly focused on the management of paper records. On the other hand, IT personnel who were entrusted with the management of digital records were not trained in various aspects of records management. This posed challenges on the management of digital records.

NAZ was not heavily involved in the management of digital records in the public sector records. Some participants mentioned that they do not even know the duties of the NAZ which was an indication that the department needs to be more visible. Indications of non-involvement of NAZ include absence of a national policy as well as omission of digital records during record surveys. Over a decade since e-government was launched; there has not been a policy that provides advice in relation to the management of digital records.

6.3 Conclusions

This section presents the conclusions drawn from the study. Conclusions of the study are arranged according to the objectives of the study.

6.3.1 State of digital records management in Zimbabwe`s financial services parastatals

Results of the study confirmed that there has been an increase in the generation of digital records in the financial services parastatals in Zimbabwe. This was necessitated by the government`s adoption of e-government which aims at embracing ICTs to perform various functions. Among various digital records created or captured by parastatals under investigation, e-mails were the most used form of digital records. All organisations confirmed that they were using e-mails to communicate with both internal and external stakeholders.

The adoption of a number of business systems has also increased the generation of digital records.

Despite the existence of a records management unit in most parastatals under investigation, the management of digital records was weak. A number of reasons could be attributed to such a scenario. As has been the case, records management personnel were responsible for the management of paper records whereas, the mandate to manage digital records was assigned to IT personnel. This scenario compromises the short and long term management of digital records as some records management aspects were neglected.

One of the contributing factors on the poor digital records management was lack of policies, guidelines and standards. All investigated financial services parastatals in Zimbabwe were managing records in the absence of in-house policies, guidelines and standards. The absence of such tools resulted in personnel using a 'hit or miss' approach as there were no guidelines on how to manage records from creation up to disposal. There were no guidelines to guide and control the creation and capture of records, storage, access and security and also disposal of records. This was not a challenge for digital records only but for paper records as well. The absence of a disposal policy led to a huge volume of records in offices and registries awaiting disposal.

Furthermore, most records and IT personnel were not aware of the legal framework that guide records management in Zimbabwe and this also contributed to a weak records management environment. Personnel were more versed with the legislation that guided the operations of the organisation but little did they know about for example, the NAZ Act. This showed that, there was need for adequate campaigns to raise awareness of the Act so that records are properly managed in the public sector in Zimbabwe.

6.3.2 Infrastructure and resources

With regards to infrastructure and resources, this study revealed that devices such as computers and scanners were procured in most financial services parastatals under investigation. However, such resources though they could be used for the management of digital records, were bought with no records management in mind but to advance e-government projects. Absence of tools such as EDRMS was an indication that the

management of records was still looked down upon or was not a major priority. In addition, the absence of dedicated infrastructure and resources for digital records management meant that parastatals under investigation risks losing important records in the future.

It was also reviewed that no parastatal had a separate budget for digital records management. All participants mentioned that all digital records management requirements were considered under the collective IT budget. This scenario had impacted negatively on digital records management. Had there been a dedicated budget, probably the management of digital records would have been advanced. A separate budget would fund issues such as training and software designing.

6.3.3 Skills and training

Financial services parastatals were now recruiting records management personnel with a records management qualification. In previous studies, it was indicated that most people without any form of a professional qualification were transferred to the registry unit as a promotion from a lower position. The present study revealed that this has slightly changed as most records personnel had a records management qualification. These qualifications ranged from a national certificate to an undergraduate degree. However, these were not charged with the management of digital records. IT personnel were charged with the management of digital records management and it can be concluded that they did not have records management skills. With such a set-up, the management of digital records will always be a challenge.

Records personnel went through induction to be equipped with necessary skills to manage records. It was however, revealed that it was mainly for paper records. The same was also true for trainings. Various trainings that were conducted ignored digital records management aspects. In addition, most of the parastatals were failing to send their personnel for staff development workshops, conferences or symposiums so that they can update themselves on recent records management trends.

6.3.4 Involvement of NAZ in the management of Zimbabwe

NAZ has not been very active in relation to the management of digital records in the public sector in Zimbabwe. During records surveys, NAZ would not give much advice with regards

to the management of digital records. Apart from asking whether digital records are created by the organisation, nothing more is discussed. According to the NAZ Act, the National Archives is supposed to be playing a supervisory role of ensuring that a conducive environment is created for the management of records in whatever format.

Results of this study, indicated that the absence of a national policy has negatively impacted on the management of digital records. Parastatals were in dilemma as to how records were supposed to be managed. This meant that there was no uniformity in relation to the management of digital records in Zimbabwe's financial services parastatals. Had NAZ been directly involved, challenges surrounding that management of digital records would have been minimised.

On the other hand, NAZ was working on a framework that would guide government agencies in the transition from paper based to digital environment. The framework was expected to bring a sense of uniformity in managing digital records across all government organisations. Again the framework aimed at standardising digital records management across government as well as enhancing information sharing and exchange of digital records among government bodies. A national policy for guiding personnel in the management of digital records was being crafted and work was being done to amend the NAZ Act so that it would address digital records management issues.

6.4 Recommendations

One of the objectives of this study was to provide recommendations that would enhance the management of digital records in the financial services parastatals in Zimbabwe. Since recommendations depend on the research findings, this objective was not addressed in Chapter Two, Four and Five. Therefore, this section provides recommendations based on the findings of the study.

- **Consolidation of the registry and IT unit:** There should be a shift of how a registry should operate. With changes that have taken place in the records management field as a result of the advent of ICTs, organisations should adopt new measures that would ensure effective management of digital records. In this regard, records personnel should work together with IT personnel such that an enabling environment for digital records management is created. Digital records management is not and should not be

an IT responsibility but a shared responsibility that needs cooperation from both IT and records personnel. Therefore, registry personnel should not only manage paper records but should also be heavily involved in the management of digital records. That is, the records management unit or registry should be the central control point for paper and digital based information. In this regard, the registry and the IT unit should be consolidated to one unit so that both records personnel and IT officers work together and have one common goal that is, creation a favourable environment for effective digital records management.

- **Standards, policies and guidelines:** As elaborated in this study, the current NAZ Act does not adequately address digital records management activities. As a result of bureaucracy and administrative changes in the government of Zimbabwe, it has taken long for the proposed amended act to be approved. In the meantime, therefore, financial services parastatals are recommended to formulate and implement in-house policies and guidelines that address digital records management activities such as creation, use, access, storage and preservation. In addition, these should adhere to established records management standards such as ISO 15489, ISO 23081, ISO 16175, ISO 26122 and ISO 30300. Considering that there has been an increase in the use of e-mails and social media, policies and guidelines that address the management of the resultant records should also be in place. Policies and guidelines help in defining the way in which digital records should be managed as well as identifying roles and responsibilities throughout the records lifecycle. Thus, they help with consistent approach to managing digital records from creation up to their ultimate disposal. Unless and until relevant policies and guidelines are formulated, the management of digital records in the financial services parastatals in Zimbabwe will not guarantee short and long term access of such records.
- **Top management support:** Records ensure that both private and public sector institutions make decisions from well informed position. Therefore, there is need for senior managers to fully support the management of digital records in their respective organisations. Senior management should advocate for a favourable environment for effective management of digital records. This entails that adequate funding and resource allocation should be provided to advance records management. Since records management is key for any organisation to function well, it is recommended that there should be a representative in the top hierarchy of an organisation. In this case, it will

be regarded as a key function of the organisation just like other areas such as Accounts and HR.

- **Skills development:** The study established that quite a number of personnel do not possess skills for managing digital records. Therefore, records personnel should be afforded the opportunity to be trained in digital records management. The same is also true for IT personnel. Both records and IT personnel are important in managing records and as such, there is need for them to be trained so that they are equipped with necessary skills. This means that, funds should be channelled towards staff development. Further opportunities to attend workshops, conferences and other training opportunities should be afforded to personnel. In addition, tertiary institutions in Zimbabwe should provide a more practical curriculum for managing digital records as opposed to the current set up which has got more emphasis on theory.
- **Procurement of resources:** There is need to procure more resources to advance digital records management. Besides other resources, there is need to implement EDRM so that digital records are properly managed. Digital records management goes beyond just providing servers for storing records. It is important that financial services parastatals procure EDRMS to show their commitment in managing digital records.
- **Involvement of NAZ.** NAZ is recommended to be heavily involved in the management of digital records. The same effort they use for paper records should also be channelled to digital records. This involves the formulation of national digital records management policies and guidelines; include digital records in the surveys and advocating for the amendment of NAZ Act. It is critical for NAZ to come up with a national policy that would ensure proper management of both paper and digital records. Zimbabwe has never had a records management policy since the establishment of NAZ in 1935 and this has over the years compromised records management in public sector institutions. The formulation of a national policy will give the accepted framework for managing records within the public sector, thus, encouraging financial services parastatals and other government agencies to come up within-house policies and guidelines that would direct the personnel to properly manage digital records. These policies and guidelines should address extensively all digital records management issues such as creation, use, access, maintenance, appraisal, storage and preservation.

6.5 Implications for theory and practice

In most cases, as indicated in the literature, tools that are necessary for proper records management such as policies, legislation and infrastructure are either weak or non-existent. The difference between the present study and the other studies is that it managed to illuminate strategies of managing digital records in the financial services parastatals in Zimbabwe. The study has managed to venture into an area which has been barely researched by most researchers especially in Zimbabwe. The study has managed to show how the DCC curation lifecycle model can be useful in the management of digital records from their point of creation. As such, the study may lead to the adoption of the model in the management of digital records across public sector institutions in Zimbabwe. The findings of the study add up to the existing and ongoing literature on digital records management. It is hoped that if implemented, recommendations raised in this study will advance the management of digital records in not only the financial services parastatals but the public sector in Zimbabwe in general.

6.6 Suggestion for further research

The study was conducted in four financial services parastatals. There are more than 60 parastatals in Zimbabwe that also have provincial offices. Therefore, there is need to conduct research in other sectors of parastatals in Zimbabwe. In addition, the studies should also be conducted in all the provinces in the country rather than conducting them at the head offices. The study established that no parastatal had implemented a records management system. Thus, a study investigating factors hindering the implementation of records management systems should be conducted. Records management systems are critical if organisations are to benefit from using ICTs, therefore their implementation should be advocated for.

6.7 Final conclusion

The management of digital records in the financial services parastatals in Zimbabwe is still at nascent stage despite the widespread use of ICTs. This is due to lack or shortage of tools necessary for effective management of such records. These include policies, guidelines and standards, senior management support, dedicated budget, and skilled manpower. Lack of policies, guidelines and standards have affected records management practices such as

creation, access, appraisal and storage. In this case, the management of digital records is done on an ad hoc basis. Since the usage of ICTs has increased, there is need for records personnel and IT personnel to collaborate so that a conducive environment for managing digital records is created. The NAZ should be actively involved in the management of digital records so that organisations will properly manage digital records.

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Appendix A: List of financial services parastatals

1. Zimbabwe Revenue Authority (ZIMRA)
2. National Social Security Authority (NSSA)
3. State Procurement Board (SPB)
4. State Enterprises Restructuring Agency (SERA)
5. Zimbabwe Investment Authority (ZIA)
6. National Indigenous and Economic Fund
7. Competition and Traffic Commission
8. Agribank
9. Commercial Bank of Zimbabwe (CBZ)
10. Infrastructure Development Bank of Zimbabwe (IDBZ)
11. Peoples Own Savings Bank
12. Small Enterprises Development Corporation (SEDCO)

Appendix B: Ethical clearance from UNISA



DEPARTMENT OF INFORMATION SCIENCE RESEARCH ETHICS REVIEW COMMITTEE

Date 2016-04-14

Ref #: 2016_55757243_013
Name of applicant: Alfred
Chikomba
Student #: 55757243

Dear Mr Alfred Chikomba

Decision: Ethics Approval

Name: Mr Alfred Chikomba, 55757243@mylife.unisa.ac.za, +263772725326. [DR A.D.S Rodrigues, TRodrigu@unisa.ac.za, 012 429 6568; Prof M.S Ngoepe, ngoepms@unisa.ac.za, 012 429 6360]

Proposal: Exploration of Strategies for Managing Electronic Records in Zimbabwe's Financial Services Parastatals

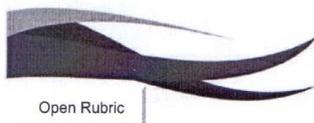
Qualification: Postgraduate degree - Masters

Thank you for the application for research ethics clearance by the INFORMATION SCIENCE Research Ethics Review Committee for the above mentioned research. Final approval is granted for 2016-2018.

For full approval: *The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Dr IS Schellnack-Kelly on 2016-04-14.*

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the INFORMATION SCIENCE Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*



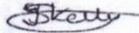
University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

Note:

The reference number 2016_55757243_013 should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the Department of Information Science RERC.

Kind regards,



Signature

Ethics Research Committee, Department of Information Science.

Approval template 2014



University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
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Appendix C: Letter used to seek authority to conduct the study

4357 Unit D

Chitungwiza

17 October 2017

The Director

National Archives of Zimbabwe

Dear Sir

RE: REQUEST FOR PERMISSION TO CONDUCT A RESEARCH IN YOUR ORGANISATION

The above subject matter refers. I am currently studying a full dissertation Masters in Information Science (Archival Science) with the University of South Africa (UNISA). My dissertation title is “**Management of digital records in selected financial services parastatals in Zimbabwe**”. One of the objectives of the study is to establish the extent to which NAZ is fulfilling its role with regards to digital records management in these parastatals. I therefore, seek permission to carry out the research in your organisation.

The study involves interviewing records centre, Public Archives and Research, and IT personnel. Information collected from your organisation will be used only for academic purposes. I have attached ethical clearance from UNISA to support this request.

I hope this request will receive your usual positive response.

Yours Faithfully

Alfred Chikomba

Cell: 0772725326

Appendix D: Permission to conduct the study

ZIMBABWE REVENUE AUTHORITY COMMISSIONER GENERAL			
WRITE TO THE COMMISSIONER GENERAL ZIMBABWE REVENUE AUTHORITY PO BOX 4360 HARARE	TELEPHONE: +263-4-790811/4 +263-4-752731/2 FAX +263-4-792113 TELEGRAPHS HARARE	CALL AT: RECEPTION 6 TH FLOOR ZB CENTRE CNR KWAME NKRUMAH AVE/FIRST STREET HARARE	IN REPLY PLEASE QUOTE Request for Authority to carry research

23 February 2017

Alfred Chikomba
4357 Unit D
Shambare Road
Seke
Chitungwiza

Dear Alfred

RE: APPLICATION FOR AUTHORITY AND ASSISTANCE TO CONDUCT RESEARCH

Topic: "An exploration of strategies for the management of digital records in Zimbabwe Financial Services Parastatals".

The above matter refers

Please be advised that your application for authority to carry out the above research has been approved. However, we may be unable to release some of the information to you because of its confidential nature. Upon completion you are required to furnish this office with a copy of your final research findings.

We wish you success in your studies.

Yours faithfully


S. SITHOLE
A/HEAD HUMAN RESOURCES ADMINISTRATION

I Alfred Chikomba-----acknowledge receipt of this letter and accept its contents.

Tel/Cell No. 0772725326 Signature Alfred Chikomba Date 23/02/17

Appendix E: Respondent Consent Form

CONSENT TO PARTICIPATE IN THIS STUDY

I,confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to or do not agree the recording of the interview. (Delete inapplicable)

I have received a signed copy of the informed consent agreement.

Participant Name & Surname.....

Participant Signature

Date

Researcher's Name & Surname(please print)

Researcher's signature.....

Date

Appendix F: Interview guide for records personnel

Semi structured interview guide for records managers

Name of Parastatal

Name of Respondent

Designation

Date of Interview

Period in current position

Place of interview

PART ONE- State of digital records management

1. What is your current position?

2. For how long have you been on your current post in your organisation?

3. Do you have a records management unit? If so, what are the roles of the of the unit?

4. With regards to digital records, what guides you to carry out records management work? **[Probe]: policies, guidelines, instructions, manuals (If there are no polices or guidelines, go to section b of this part)**

5. Do you think these policies or guidelines are adequate for supporting effective digital records management? **Please explain your answer.**

6. What measures are in place to ensure that all staff members are aware of these policies and guidelines?

7. How do you ensure compliance with these policies?

8. a. Which social media platforms are you active on?

b. What controls are in place to manage social media records?

9. What controls are in place to manage e-mail records?

10. Which standards does your organisation use in managing digital records?

11. Which legislation guides you in managing records?

12. What types of digital records does your organisation create/capture

13. Concerning records metadata, how do you ensure that is correctly and adequately captured?

14. What access and security controls are in place?

15. How do you ensure that digital records remain accessible throughout their lifecycle?

16. What criteria do you use to determine when to destroy or digital records?

17. Does your organisation have retention schedules specifically for digital records?

18. How do you store your digital records for future reference?

19. a) Do you store records in the cloud? If yes, what controls are in place to manage these records?

b) If no, where are you digital records stored? In house or off-site?

20. How do you deal with records that are no longer active?

PART TWO- INFRASTRUCTURE AND RESOURCES

1. What resources, facilities and tools are available for digital records management in your organisation?

2. What other resources do you need to manage digital records effectively?

3. Can you give details about the annual budget for digital records management activities for your organisation?

4. Which digital records management system do you have?

5. What is your comment on the adoption of the system by employees?

6. How effective has it been in managing digital records?

PART FOUR: SKILLS AND TRAINING FOR DIGITAL RECORDS MANAGEMENT

1. What prior critical skills and knowledge should people entrusted with the management of records possess before being recruited in this organisation?

2. How many people are responsible for the management of digital records in this organisation? [**Probe to check to establish if they are adequate**]

3. Do records management personnel go through an induction program?

4. Who is responsible for the induction?

5. What kind of trainings are designed for records management personnel?

6. How often are these trainings conducted?

7. a) What trainings (if any) do you feel records management personnel need?

b) Why do you think you need that particular training?

8. Do you think records-keeping staff have the requisite skills and experience to manage records effectively in your organisation? **Please explain further.**

9. In general, do you think staff members, are aware of their record-keeping responsibilities? **Briefly explain your answer?**

10. How do you describe your relationship with IT personnel within your organisation?

PART FIVE: INVOLVEMENT OF NAZ

1. Do you know the functions of the National Archives of Zimbabwe?

2. What help are you getting from National Archives of Zimbabwe?

3. When was the last time National Archives of Zimbabwe staff members visited this organisation?

PART SIX: RECOMMENDATIONS

1. What challenges are you facing as an organisation in managing digital records?

2. What current and future plans are available concerning strengthening the digital records management environment?

3. In your own opinion, to improve digital records management in this organisation, what are your suggestions and recommendations?

Appendix G: Interview guide for IT personnel

Name of Parastatal

Name of Responded

Designation

Date of Interview

Place of Interview

Period in current position

1. What are the functions of your office?

2. What policies and guidelines in your organisation support the use of ICTs?

3. Do these policies and guidelines deal with records management issues?

4. Which standards guide you in managing digital records?

5. What ICT infrastructure does your organisation have to support digital records management?

6. Have you received any training to equip you with records management skills as an IT personnel in your organisation? If yes, please explain.

7. What level of awareness do staff in your parastatal have regarding ICT issues and records management?

8. How do you describe your relationship with records personnel within your organisation?

9. What initiatives have been done regarding improving records management in your organisation? Please explain.

10. What software, if any, is used to manage digital records in your organisation?

11. Are records personnel conversant with the software?

12. What measures are there to ensure that records management personnel are involved in the design of the software that relates to the management of digital records?

13. How do you ensure continued business operations in case of system failure?

14. Which resources are lacking in your organisation to manage digital records?

15. What do you think should be done to improve and promote the management of digital records within your organisation?

THANK YOU

Appendix H: Interview guide for Archivists at NAZ

Name of Parastatal

Name of Responded

Designation

Date of Interview

Place of Interview

Period in current position

1. What are your duties with regards to the management of records?

2. With regards to digital records management in the public sector, how have you been involved?

3. What are you currently doing to ensure that there exists a conducive environment for the management of digital records in the financial services parastatals?

4. What do you think should be done to develop digital records management in Zimbabwe?

Appendix I: List of reviewed documents

- NAZ annual reports 2005-2015
- NAZ mission statement
- NAZ survey reports
- NAZ ACT (1986). (Chapter 25.6)
- Procedures manual
- retention schedules
- Classification Schemes

3. Filing Control System: eg. alphabetical, numerical etc.

.....

4. Filing equipment (type and size)

.....

.....

5. Legal requirements/retention/disposal policy

.....

.....

6. (i) Office (How long)

.....

.....

(ii) Records Centre Operations-Awareness

.....

.....

(iii) Date of last deposit.....

7. Vital records management programme (Information absolutely vital to the survival and reconstruction of the organisation).....

.....

.....

8. Access to registry (Unauthorised entry etc)

.....

.....

9. Security precautions against:

a) Fire

.....

.....

b) Pests

.....

.....

c) Sunlight

.....

.....

d) Dust

.....

.....

10. Do you generate electronic records? Yes No

Problems/Observations

.....

.....

.....

.....

.....

.....

.....

.....

Records survey conducted by: Date: