Investigation into the state of Digital Records Management in the Provincial government of Eastern Cape: a case study of the Office of the Premier.

By

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A thesis submitted in fulfillment of the requirements of a Master’s degree in Library and Information Science (M.LIS).

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Supervisor: Mr. F.E. Khayundi
Submitted: August 2011
DECLARATION

I know that plagiarism means taking and using the ideas, writings, works or inventions of another as if they were one’s own. I know that plagiarism not only includes verbatim copying, but also the extensive use of another person’s ideas without proper acknowledgement (which includes the proper use of quotation marks). I know that plagiarism covers this sort of use of material found in textual sources and from the Internet.

I acknowledge and understand that plagiarism is wrong.

Signed……………………………………..

Date……………………………………..
DEDICATION

To my family.
ACKNOWLEDGEMENTS

A number of people have helped in the production of this study. First and foremost, I wish to praise the almighty God for giving me power and strength to complete this study.

Govan Mbeki Research and Development Centre (GMRDC) is acknowledged for financial assistance. Special thanks go to the employees of the Office of the Premier for taking up their time to participate in the survey. The successful completion of the research would not be possible without you and your valuable information and knowledge. I would like also to extend my special thanks to Khanyile (records manager) for assisting me throughout the research.

I wish to express my sincere gratitude to my supervisor, Mr. Khayundi for his invaluable advice, guidance and encouragement, without which the dissertation would never have materialized. Special thanks also go to my family and friends especially my husband, P. Muchaonyerwa, for his moral support and motivation.
ABSTRACT

The study sought to investigate the viability of digital records management in the Office of the Premier (OTP) in the Eastern Cape Province. The objectives of the study were to establish the current status of digital records management in the OTP, determine the compliance with the legal framework, identify the requisite infrastructure for digital records management (DRM), describe the security and preservation measures for DRM, and the challenges of managing digital records. Purposive sampling was used to select 40 participants. A questionnaire was used to collect data. The study revealed that the OTP has taken a number of initiatives aimed at establishing records management practices. However, the study found that the OTP is faced with a number of challenges in trying to use the Electronic Document and Records Management System (EDRMS). The majority of the employees did not have any qualification in records management. This lack of skills and competencies affects the implementation of the new system. The findings of the study showed that most of the employees were resisting using the new system because they were not comfortable with it. The study recommends that the department should encourage its staff to get training to be knowledgeable in the use of EDRMS which generates records; the staff should work closer with the consultancy in order to gain skills and knowledge to facilitate the change process, and the security and preservation of digital records should be enhanced.
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<tr>
<td>CD</td>
<td>Compact Disks</td>
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<tr>
<td>DPSA</td>
<td>Department of Public Service and Administration</td>
</tr>
<tr>
<td>DRM</td>
<td>Digital Records Management</td>
</tr>
<tr>
<td>DVD</td>
<td>Digital Video Disks</td>
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<tr>
<td>EDRMS</td>
<td>Electronic Digital and Records Management System</td>
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<tr>
<td>ESARBICA</td>
<td>East, Southern Africa Regional Branch of the International Council on Archives</td>
</tr>
<tr>
<td>GITOC</td>
<td>Government Information Technology Officers’ Council</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>IRMT</td>
<td>International Records Management Trust</td>
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<td>ISO</td>
<td>International Organization for Standardization</td>
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<tr>
<td>NARSA</td>
<td>National Archives and Records Service of South Africa</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<tr>
<td>OTP</td>
<td>Office of the Premier</td>
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<td>PAIA</td>
<td>Promotion of Access to Information Act</td>
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<td>PSR</td>
<td>Public Service Reforms</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>RM:</td>
<td>Records Management</td>
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<td>SANS:</td>
<td>South African National Standards</td>
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<td>SITA:</td>
<td>State of Information Technology Agency</td>
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<td>SPSS:</td>
<td>Statistical Package for Social Sciences</td>
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<td>SSA:</td>
<td>Sub-Saharan Africa</td>
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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

Records in digital form are becoming more influential in government operations as many countries embark on electronic (e)-government strategies (Lichpack and McDonald 2003). E-government refers to the use of information and telecommunications technologies (ICTs), to enable government to deliver services more effectively and efficiently (Heeks, 2002). The adoption of ICTs in service delivery, which is in line with e-government strategy, has resulted in the creation and use of digital records in most governments. In South Africa, this strategy is believed to increase the efficiency of the internal processes such as those supporting financial and human resources management.

Harris (2009) noted that there are two drivers to the concept of transforming government, the need for greater efficiency in the delivery of public services and the need to improve the quality of service to the rising public expectations. In view of the above, records need to be managed well as part of the transition to the electronic environment, since failure to do this could have some implications, such as loss of records leading to serious business, legal and financial consequences (Mutiti 2001).
Managing records is one of the cornerstones for effective delivery of public services. Barrett (2005) argues that sound records management leads to transparency by documenting and providing evidence of an activity. The author points out that within government departments, records must be accurate and complete to ensure transparency and accountability. Records in whatever form need to be captured, managed and safeguarded in an organized system in order to retain their value as formal corporate records (Harris 2001).

Digital or electronic records management is a key process underpinning electronic government. The electronic delivery of services to business and citizens will produce digital records as evidence of individual transaction. This evidence will need to be retained and maintained over the medium to long term as records which document accountability and preserve reliable access (Harris 2009). This study sought to investigate the viability of digital records management in the Eastern Cape Provincial Government. A case study of the Department of the Office of the Premier (OTP) was used for the investigation. The OTP is responsible for ensuring effective and efficient governance in the Eastern Cape through its leadership role. The Provincial Government seeks to create conditions free of risks or danger through the provision and application of measures aimed at protecting people, property and information. The Provincial governments in general and the Office of the Premier in particular showed that records are being created and used to document actions, confirm decisions, identify rights and responsibilities and communicate information. As a result they need to be well protected and secured from any danger. Well managed records are capable of
improving service delivery and enhancing the relationship between the government and the users. They also foster good governance and accountability. However weak institutional capacity and the absence of a legal framework for records management may affect the services offered by governmental structures.

1.1.1 Digital Records Management
Digital records management developed from the 20th century onwards. Shepherd and Yeo (2003) point out that until recently, almost all records were on paper, but due to developments many organizations are increasingly using information and communication technologies (ICTs) to create, receive, and manage their records. Ngoepe (2008) argues that today there is an ever increasing flood of records generated through media such as computers, tape and digital video disks (DVD) recorders in different formats. Considering the speed at which digital records are created, their management becomes a challenge for most public sectors. For government departments to be able to retrieve information quickly, they need to have proper digital records management systems in place (Milner 2002). Proper records management as noted by Chinyemba and Ngulube (2005) involves establishing systematic controls at every stage of a record’s life cycle, in accordance with established principles and accepted models of records management.

The International Organization for Standardization (ISO) 15489-1 defines records management as a field of management responsible for the efficient and systematic
control of the creation, maintenance, use and disposal of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records. Records created or maintained digitally are often referred to as electronic records. Parrish, Courtney (2007) define electronic records as a combination of text, data, graphics, images or audio information that is created, maintained, modified or transmitted in digital form by ICTs. According to the National Archives and Records Service of South Africa (NARSA) (2007) electronic records include all components of an electronic information system namely: electronic media as well as all related items such as input documents, printouts and metadata.

The anxiety by governments to adopt electronic or digital records management systems (EDRMS) does, however face limitations especially in the developing world. In most cases, both government officials and the public who may want to use government services maintained in digital form lack basic skills in accessing the information. This obviously impacts the relationship between the government and the users of its services. Ngulube (2007) avers that government information especially in the Sub Saharan Africa (SSA) is not properly organized as records management systems in many countries lack the necessary equipment, infrastructure and trained records managers hence they are collapsing. According to Ngulube (2004) the advent of ICTs has brought about a paradigm shift in the production of government information. The transition from paper based records to digital records is happening at a time when many records managers in SSA do not have the necessary skills to deal with digital records.
In South Africa although the management of digital records has not been effectively controlled, the National Archives and Records Service of South Africa Act (no. 43 of 1996) makes provision for the management of digital records. The Act provides the legislative and legal framework according to which digital records management practices in governmental bodies are regulated.

1.2 The Research Problem

The use of technology has enabled government departments to create databases that now handle huge amounts of data online (Keakopa, 2006). This has raised concerns that if the information is not properly managed, it may not be accessed, resulting to violation of citizen's individual rights. The South African government (at national, provincial, and local levels) has committed itself to eventual digitization of its records. While some are ‘born digital’, some records in hard copy are deliberately being digitized for purposes of their easy access and preservation. Digital or electronic records unlike paper based records demand special management regime at all stages of the record’s life cycle. This in turn impacts the functions of the creator which in this case is the government. South Africa like many other governments in the world is grappling with the challenging issues of managing and preserving of digital records (McDonald 2003). Moloi and Mutula (2007) point out that those government departments that have computerized seem to have a framework for managing their digital records. In the absence of a viable digital records management programme in the government, it is probable that digital records generated may not be retained and preserved as required.
No structured research has been undertaken in the province to establish the status of digital records management in the provincial departments.

1.3 The Research Questions

- What is the current status of digital records management in the Office of the Premier (OTP) department?
- Does the department comply with the legal framework that governs the management of digital records in governmental bodies?
- Has the OTP the requisite infrastructure to promote the creation and management of digital records overtime?
- Does the OTP have security and preservation measures in place for the management of digital records?
- What are the challenges of managing digital records in the OTP?

1.4 Research Aims and Objectives

The broad objective of the study was to investigate the viability of digital records management in the Provincial Government of Eastern Cape using the Office of the Premier as a case study. The specific objectives were to:

- Establish the current status of digital records management in the Office of the Premier.
- Determine the compliance to the legal framework for digital records management.
- Identify the requisite infrastructure for the management of digital records.
• Establish security and preservation measures for management of digital records.

• Identify the challenges of managing digital records in the OTP.

1.5 Significance of the study

This researcher is not aware of any studies done on the viability of digital records management in the Eastern Cape Provincial Government. This study is important as it comes at a time when the management of digital records in governments is of great concern because of the increase in the creation/generation of digital records. There has been a sudden shift from manual records management to digital records management because of technological developments. The knowledge generated from this study may be helpful in providing direction in terms of factors needed in the improvement of DRM. It is also hoped that the study will serve as a catalyst in the modification and formulation of records management strategies and policies in the South African government departments. Furthermore, the study may also help other scholars who may want to do research in the same area.

1.6 Delimitations

The study was confined to the Office of the Premier situated in Bisho-King William’s Town. The population of the study was limited to the Office of the Premier employees engaged in digital records creation and management. Furthermore the study was limited to digital records management practices which cover the following themes:

• records management programmes
• records management policies and procedures
records management classification and filing systems
• infrastructure for digital records
• storage and preservation of digital records
• challenges of managing digital records

1.7 Definition of terms
The key terms and concepts are explained in this section to provide the context in which they are used.

1.8 Record
A record is any recorded information regardless of form or medium created during the course of an activity. It shows evidence of a transaction, preserved for the evidential information it contains (Kemoni, 2008).

1.8.1 Record management
Records management is a process of ensuring the proper creation, maintenance, use and disposal of records throughout their life cycle to achieve efficient, transparent and accountable governance (ISO 15489-1).

1.8.2 Electronic record/ Digital record
An electronic record is a record created, housed or transmitted by electronic rather than physical means, and which satisfies the definition of a record. A record can consist of one or more objects, e.g. web page, file, e-mail or document (Smith 2007).
1.8.3 Electronic Document and Records Management System

This is a system that uses electronic document and records management software (EDRMS) to collect, organize, and categorize digitally born records to facilitate their preservation, retrieval, use, and disposition. It is a system used to support the creation, use and maintenance of electronically created records for the purpose of improving an organization’s workflow (Ngoepe 2008).

1.8.4 E-Government

E-government is a way for governments to use new technologies to provide citizens with convenient access to government held information and services and provides opportunities for citizens to participate in democratic institutions and processes where electronic means of interaction between the government and citizens is encouraged to improve transparency and efficiency (Fang 2002).

1.8.5 Security

Security refers to the policies, procedures, and technical measures used to prevent unauthorized access, alteration, theft or physical damage to information (Ngoepe 2008).

1.8.6 Policy

A policy is a plan or course of action designed to influence and determine decisions, actions and other matters. It is a guiding principle or procedure (Moloi 2009).
1.9 Organization of the thesis

Chapter 1: Introduction to the study. This provides a background to the study, statement of the problem, research questions, objectives, and significance of the study, limitations and the definition of terms.

Chapter 2: Literature Review. The chapter discusses theories relevant to the study and provides literature previously done by other authors on digital records management in governments. It also gives an overview of the current status of digital records management in South Africa.

Chapter 3: Research Methodology. This chapter discussed the research design, sampling procedures, data collection methods and analyses that would have been used in the research. It also gives an overview background of the department of the Office of the Premier (OTP).

Chapter 4: The chapter presented and discussed the results in relation to the research questions.

Chapter 5: Conclusions Recommendations and. The findings were summarized and recommendations and conclusions given based on the results.

1.10 Summary

The chapter gives the background information of the study, highlighting the overall research problem, research questions and key objectives of the study. It established the importance of the research area and provided the structure of the thesis. The next will discuss theories and literature relevant to the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter seeks to review the relevant literature from various studies in relation to digital records management (DRM) in government departments. It debates various theoretical concepts in records management and then attempts to link the study to the relevant theoretical concepts.

2.2 Theoretical Debates Related to the Study

The study introduces the records life cycle and continuum paradigms as the bases for managing digital records. These theories indicate the principles and practice that guide records management (RM). According to Popper and Millar (1997) the care of records and archives particularly within the context of the public sector is governed by four important principles and concepts namely: records must be kept together according to the agency responsible for their creation or accumulation; in the original order established at the time of their creation; records follow a life cycle and that records can be organized according to hierarchical levels in order to reflect the nature of their creation.

According to Popper and Millar (1997) respect des fonds means respect for the creator of the records or archives which in this case is the government. Archival institutions
must be sure to respect the original arrangement of records and ensure their
descriptions reflect that arrangement, because they have to make records available and
understandable to people who were not involved. Knowing who created or used a
record, and where, when and why, provides the key to retrieval rather than format,
subject matter or content of the records. This is true for modern electronic as well as
the more common paper based records (IRMT 1999).

2.2.1 The record life cycle

Figure 1: The record life cycle

Source: Stephens (1996)

The record life cycle concept was developed in the United States of America (USA)
around the 1930s by the then National Records and Archives Administration (Penn,
Pennix, and Coulson 1994). Mnjama (1996) observed that under the record life cycle,
records passed through three stages namely: active, semi-active and non-active
stages. Popper and Millar (1997) mention that the record life cycle concept has a life
similar to that of a biological organism meaning that records are not static, they are
born, live and then die. In the same manner a record is created, used as long as it has
a continuing value and is subsequently transferred to national archives or destroyed. Johnson and Kallaus (1987) outline the various phases of the record life cycle as indicated in figure one above. Creation is the process whereby the record comes into existence within the department and its integration into a record keeping or database system (Smith, 1995). On creation the record is available for use within the department and used by the appropriate employees. The maintenance and use phase involves the distribution, storage, security and updating the record throughout the organisation (Smith, 1995 and Pen, 1994).

A record is considered to be current if it is used on regular basis (Ricks, Swafford and Gow 1992). Examples of these records include personnel records of current employees, invoices of the current fiscal year, etc. A record is considered to be semi-current when its business value is reduced especially when referenced once a month. Records in this category are salaries for the current fiscal year. Also records are classified as non-current when they have little or no business value and they can be referred to less than ten times a year (Ricks, Swafford and Gow 1992). Examples of these records are cancelled cheques and files of employees whose contracts have been terminated. The destruction phase indicates the end of the record and has no value for business. In this case, its information is considered to be of permanent nature and as a result needs to be retained.

Though the record lifecycle concept has influenced the development of records and archives management around the world it has its own weaknesses. Critics of the
records lifecycle argue that the records lifecycle theory created a distinction between the roles of records managers and archivists. Atherton (1985) argues that the records lifecycle concept has been useful in promoting a sense of order in the overall management of records but it undermines the greater co-operation and co-ordination among archivists and records managers. Some theories have argued that records must be managed from the time of creation, that is the records managers and archivists working together because there is no distinction between a records manager and an archivist especially in the digital era (Bantin, 2008). Yusuf and Chell (1998) indicated that the record life cycle concept has some weaknesses, particularly its application in managing digital records. The authors emphasised that as technology changed, the record is prone to transformation and conversion and this requires co-ordination between the stages of the record lifecycle.

2.2.2 The record continuum

The concept of the records continuum has been welcomed as it addresses the management of paper and electronic records. The lifecycle theory states that records can only live once at each stage in their life. This clearly defines responsibilities for the management of records at each stage. In contrast, the continuum theory developed in the 1990s by Ian Maclean argues that recordkeeping is a continuous process that does not separate the life of a record in time and space (Upward 2000). According to Upward (2004) there are no strict boundaries between archives rights and records management responsibilities, as current records can also become archives from creation. Proponents of the continuum paradigm, such as Bearman (1994) and Cook (1997)
argue that archivists should not wait until the end of the lifecycle, but be involved in the management of records creation. Shepherd (2006) opined that successful management of digital records can only be achieved if digital records are managed as a continuous process.

2.2.3 Linkage of the theoretical framework to the study

This study is based on the records continuum model which recognizes a record as part of business that begins with the record’s creation and continues through its use at all its existence (Shepherd and Yeo, 2003). The Australian archivists have developed the records continuum theory which in contrast to the lifecycle theoretical approach to records management has been defined as consistent and coherent regime of management processes from the time of creation of records (and before creation in the design of recordkeeping systems) through the preservation and use of records as archives. The advantages of a records continuum concept are that it shows the processes of records management moving towards integration. The records continuum is based upon an integration of the responsibilities between records managers and archivists. It begins with the record’s creation and continues through its use at all stages of its existence. Kemoni (2008) argues that the records managers and archivists are brought together under an integrated recordkeeping framework towards the same goals to guarantee the reliability, authenticity and completeness of the records. Therefore the primary focus of a record continuum theory is the multiple purposes of records. It aims at the development of recordkeeping systems that capture, manage and maintain records as long as the records are of value to the organization. The
The records continuum theory argues that the management of records is a continuous process where one element of the continuum passes seamlessly into another (Shepherd and Yeo 2003). The theory represents a technology-driven pattern shift in records management (Bearman 1989). The records continuum approach is relevant to this study because managing digital records should be seen as a continuous process. It is argued that rather than focusing on the records and their status at different points in

<table>
<thead>
<tr>
<th>Process</th>
<th>Records management actions</th>
<th>Archives management Actions</th>
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<tbody>
<tr>
<td>1. identification and acquisition</td>
<td>creation of receipt</td>
<td>selection or acquisition</td>
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<td>2. intellectual control</td>
<td>classification within a logical system</td>
<td>arrangement and description</td>
</tr>
<tr>
<td>3. access</td>
<td>maintenance and use</td>
<td>reference and use</td>
</tr>
<tr>
<td>4. physical control</td>
<td>disposal by destruction or transfer as archives</td>
<td>Preservation</td>
</tr>
</tbody>
</table>

The records continuum model consolidated the eight stages of the record lifecycle concept into four stages namely creation, classification, scheduling and maintenance, and use of information (Atherton 1985). The four actions of records care under records continuum were outlined by Popper and Millar (1997) as shown below:

Four actions of Records care
time, this theory focuses on processes and activities, and therefore fits well within the electronic environment where DRM systems become the central point (Reed 1997).

In essence, the records continuum theory enables the researcher to investigate whether a regulatory environment does exist in the department of the Office of the Premier for digital records management. However despite the acknowledgements and success of the records continuum model in explaining the life of a record, it is important to note that fundamental practices in paper environment as illustrated in the lifecycle approach are still relevant. The researcher is of the view that the lifecycle concept must not be dismissed or rejected since manual systems are still prevalent and paper records still continue to grow, even with increased use of ICTs in the public sector organisations. Instead, the continuum model should be incorporated as an additional strategy that is useful for examining how digital records are managed in government. When managing records it is argued that the lifecycle concept and the records continuum are combined in a seamless process from the moment they are created to their archival phase. There are a number of factors affecting DRM in government departments which this study investigated. The reviewed literature has revealed that governments around the world are increasingly recognizing the importance of managing information, including digital records for good governance. According to Luyombya (2010) effective DRM cannot be achieved without these factors, which support each other and form a coherent whole. The factors include legislation, DRM infrastructure, security and preservation and human resources. These factors formed the theoretical basis for investigating the viability of DRM in the Office of the Premier.
2.3 Towards a Framework for effective digital records management in government departments

Most governments have provided a legislative framework to assure the accuracy and comprehensiveness of the records they make. Laws such as public record laws or archival legislation enable DRM readiness. According to the Constitution (Act no. 43 of 1996 as amended) the National Archives and Records Service of South Africa deals with digital records including e-mails and provides for their long-term preservation in a demonstrably authentic and reliable form. There are also other legislations which pertain to records and archives, notably the access and privacy laws. For example in the United Kingdom (UK) legislation such as the Data Protection Act of 1998 provides for proper management of personal data held in records. The Data Protection Act of the United Kingdom (UK) provides strong data protection requirements for maintaining security of records regardless of format UK (1998). This Act implies that organisations must have in place well designed and effective recordkeeping systems. In South Africa, Venter (2007) established that the NARS’ electronic records management programme is aligned to regulatory requirements of the State of Information Technology Agency (SITA), the Department of Public Service and Administration (DPSA), and the Government Information Technology Officers’ Council (GITOC). According to the National Archives and Records Service of South Africa (2007) although the management of digital records has not been effectively controlled, the National Archives and Records Service of South Africa Act (no. 43 of 1996) makes provision for electronic records. The Act provides the legislative and legal framework according to which digital records management practices in governmental bodies are regulated. NARS and the State of Information Technology Agency (SITA) have embarked on a project to
establish standards for digital records management in governmental bodies pertaining to storage, metadata, preservation and security. In accordance with the section 13 of the National Archives and Records Service of South Africa Act (no. 43 of 1996 as amended), the National Archivist, among other things, determines the conditions subject to which electronic systems should be managed to ensure that sound records management practices are applied to electronic records systems from the design phase onwards, etc.

The Promotion of Access to Information Act (no. 2 of 2000) (PAIA) by the South African government also outlines the need for proper records management. The Act gives effect to the right provided in the Constitution of access to any information held by the state and any information that is held by another person that is required for the exercising or protection of any rights. It is early to tell how the proposed Secrecy Bill will affect PAIA.

2.3.1 Legal and Statutory Compliance

The literature indicates that public organizations need to be aware of their legal and regulatory obligations, and to be able to provide adequate evidence of their compliance with the regulatory environment in the records of their activities (ISO 2001). Available literature also indicates that countries around the world are at different stages of development with regard to DRM. Most countries have archival and records management laws that require effective DRM and provide the authority to dispose of records, for example Canada’s Library and Archives Act (no. 11 of 2004), the United
States’ Freedom of Information Act (no. 5 U.S.C 552), as amended, and the South Africa’s National Archives and Records Service Act (no. 43 of 1996). Such countries have put in place digital records management policies, programmes and systems for efficient management of the records. On the other hand, developing countries, especially those in Africa, apart from South Africa, are lagging behind in the area of digital records management because of the lack of digital records management policies and inadequate expertise for developing sound digital records management programmes (Kemoni, 2009).

Moloi and Mutula (2007) aver that developed countries such as Australia, United States of America (USA) and Canada are making significant progress in the management of digital records. Good records management should be seen as a benefit, not a burden. Research done by McLeod and Childs (2007) indicated that public sector organizations in the UK have realized that effective records management is key to complying with new Freedom of Information legislation and environmental information regulations. Many agencies used the model plans (MAPS) produced by The National Archives (TNA) (2000) to benchmark their current practice against the recommendations for compliance with the code of practice on records management under Section 46 of the Freedom of Information Act 2000. Both private and public sector organizations have been affected by scandals, failures and embarrassing situations that have involved, and in some instances been the result of, mismanagement of records. Many governments institutions around the world have developed guidelines and legislations with the broad context of measuring records management capacity, compliance and/ readiness. In
South Africa it is indicated that the management of digital records is governed by a number of legislations. It is important to state that the existence of these legal regulatory instruments by no means implies the satisfactory management of digital records.

2.3.2 Legal Framework for e-records management in South Africa

Keakopa’s (2007) study revealed that South Africa had established the necessary policies and procedures to guide the management of digital records. The national Archives and Record Service Act (NARS) of South Africa (no.43 of 1996 as amended), in April 2003, issued three guidelines to help government agencies manage their records namely: records management policy manual; performance criteria for records managers of governmental bodies, and managing digital records in governmental bodies policy guidelines. The National Archives and Records Services through the NARS Act has implemented policies, guidelines and directives for the management of both paper and electronic records by government bodies. All governmental bodies are obliged by legislation to provide for proper management of records in all formats to give effect to the following legal regulatory instruments (for records management).

- The National Archives and Records Service of South Africa Act (no. 43 of 1996 as amended)
- The Public Finance Management Act (no. 1 of 1999)
- The Promotion of Access to Information Act (no. 2 of 2000)
- The Promotion of Administrative Justice Act (no. 3 of 2000)
• The Electronic Communications and Transactions Act (no. 25 of 2002)
  Municipal; Finance Management Act (no. 56 of 2003)

Literature reveals that digital records management is now an essential part of
government structures in the developed world and has recently also become a
significant issue in the developing countries. Like the majority of developing nations,
South Africa has some colonial legacies that still impact the management of its digital
records (McDonald 2003). These include, among others, lack of efficient digital records
management (DRM) skills and a scarcity of records management professionals. In the
developing world managing digital records by government institutions has been of great
concern since there is no complete mechanism in place to cope with the challenges
posed by the management of digital records (McDonald 2000). According to Evans
and Yen (2005) e-government emerged around the 1990s throughout the world leading
to structural and process change in public administration. E-government has been one
of the most important outcomes of Public Service Reforms (PSR). For example in e-
government, services such as acquiring and providing products as well as obtaining
information or completing of business transactions are expected to be done
electronically (Fang 2002). Fang (2002) further argues that governments need to make
efforts to accommodate use of new emerging technologies to support transformation in
the operation and effectiveness of governments in service delivery. In South Africa, the
government has committed to e-government as a strategy for better service delivery to
the public. This includes government to citizens, government to employee, and
government to business and government to government. This transition has seen
digital records being increasingly generated in most government departments. According to Moloi and Mutula (2007) the greatest challenge lies in the management and preservation of such records as evidence of business transactions to enable governments to capture the corporate memory. The National Archives Records Service of South Africa (NARS) strives to ensure that, in the transition to e-government, evidence of transactions in electronic records remains accessible and understandable. To manage records effectively the NARS has endorsed the South African National Standards (SANS) 15489, and SANS 15801 which recommend for trustworthy and reliability and SANS 23081 which requires metadata for records. Electronic service delivery is seen as a new way of doing business in government, and is therefore part of ongoing reforms and transformation of government (Moloi and Mutula 2007). For instance citizens are saved from the burden of going physically to government offices to seek services such as applying for passports, birth certificates or death certificates and filing of tax returns forms. It is an expectation of citizens that governments should provide them with convenient access to public services 24 hours a day.

### 2.3.2 Infrastructure for the management of digital records

The Organization for Economic Cooperation and Development (OECD) (2004) promotes the application and use of ICTs in governments of member countries. It has issued long-term strategies on how ICTs, the internet and other types of network can boost management of digital records. ICTs have enabled government institutions to capture, preserve and disseminate information effectively. Studies done by Keokopa (2008) found that the use of ICTs has been promoted in most African countries to
ensure wider dissemination of information in digital records. The author avers that records form evidence of organizational activities; therefore governments pay more attention to ICTs to ensure that records are kept for their legal value, as proof of evidence and for the purpose of compliance. According to Tiamiyu and Aina (2008), information acts as the main drive for economic growth, that is necessary to foster digital governance and this presents challenges for government bodies to identify strategies for DRM, that is policies and programmes must be put in place to support the management of digital records. Kraema (2005) avers that today’s application of information systems has dramatically changed the way governments carry out their tasks. In most governments computer technology is seen as an instrument of administrative reform, for example, in the day today transactions of business activities concerned with producing bills, recordkeeping payments, budgeting, recording public documents and answering citizen inquiries.

Dearstyne (2005) concluded that that IT professional, not records managers, are in charge of digital/e-records in many settings. Gouanou and Marsh (2004) note that records managers have the skills and methodologies to manage the life cycle of e-records but they have to rely on IT specialists and vendors to provide the tools with which to do it. In order to address the current situation regarding the management of e-records, Moloi (2009) asserts that government should consider enacting legislation on e-records including the use of e-signatures to formalize the acceptance of e-records as official records and legalize their admissibility as evidence of business transactions even in the courts of law.
2.3.4 Records retention and disposal

Records retention is the length of time, as provided for legislation, regulation or administration that records should be retained in an office or records centre before they are transferred to an archival institution or otherwise disposed off (IRMT 1999). Software designed to manage retention and disposals include electronic records management systems (ERMSs) and electronic document management systems (EDRMSs). According to Ekweozor and Theodoulidis (2004) an ERMS is a software application that supports the capture and storage of all electronic records (i.e. word, scanned images and pictures, Web pages, etc) regardless of format. The ERMS supports the application of sound records management practices to organizations. In South Africa public sector organizations have adapted the Electronic Document and Records Management System (EDRMS) for the management of digital records (Abbot 2001). EDRMS allows public sector to create, store, and dispose of records in a paperless manner. The use of EDRMS provides opportunities for easier and faster access to records. Swan, Cunningham and Robertson (2002) content that with electronic systems, records managers can simply click on a specific code to reveal the required information. Thus good record keeping is fundamental to government accountability since it provides evidence of what an organization has done and how it does its business. Venter (2007) contends that the records management system provides the functionality to add disposal instructions and retention rules to all subject files in the filing system identifies records that are due for disposal, alerts the records manager that records are due for disposal and keep an audit trail of all disposal actions. Ardern (1998) further indicates that records management professionals can influence
these changes by identifying them and their impact on the future of records management. In line with the above argument, Mnjama and Wamukoya (2006) observed that digital records and the information they contain is indeed a valuable asset that must be protected. This implies that without a viable legal framework digital records cannot be managed effectively.

2.3.5 Preservation of digital records

According to International Records Management Trust (2009) preservation is an ongoing process. There is no end to digital preservation unless the record ceases to be considered worth of preservation. Preservation practices include developing a preservation policy, establishing security and access controls, ensuring the integrity of the digital record, managing metadata, managing the content of digital records and planning for emergencies (IRMT 2000). Koontz (2003) is of the opinion that the rapid evolution of information technology makes the task of managing and preserving digital records complex and costly because each generation of technology brought in new systems and capabilities without displacing the older systems. The author argues that records are stored in specific formats and cannot be read without software and hardware. Several factors contribute to the challenge of managing and preserving digital records. According to (IRMT 2000) some of which include the following:

*The complexity of electronic records supersedes simple transfer to paper.*

Electronic records have evolved from simple text-based files to complex digital objects that may contain embedded images (still and moving) such as drawings,
sounds, hyperlinks or spreadsheets. These records cannot be converted to paper or text formats without the loss of context, functionality, and information.

Obsolescent and aging storage media put electronic records at risk

Storage media are affected by dual problems of obsolescence and decay. They are fragile, have limited shelf life and obsolete in a few years.

Electronic records are dependent on evolving software and hardware

Electronic records are created on computers with software ranging from word-processors to e-mail programmes. As computer hardware and application software become absolute, they may leave behind what cannot be read without the original hardware and software.

2.3.6 Records Management Programme

Literature reveals that since both paper and digital records are highly at risk, a records management programme (RMP) helps public sector organizations to efficiently manage business processes records. A RMP ensures sound recordkeeping practices that support business activities as well as the capturing and maintenance of corporate memory. Shepherd (2006) opines that effective RMP will help public sector organizations to respond to planned and unplanned events such as audits and disasters. Mnjama and Wamukoya (2006) argued that, without a viable and an effective system to manage digital records governments cannot be held accountable for their decisions and actions and the rights and obligations of citizens and corporate bodies.
cannot be upheld. Egbuji, (1999) argued that the cost of poor recordkeeping in public sector organizations result in costly inefficiencies, unnecessary exposure to liabilities, monetary and other loses. Records differ in value, and sensitivity of certain records may cause harm if disclosed to the wrong part. Sampson (1992) argues that if records are not well managed this may have an impact on certain risks such as the loss of revenues and violation of the law.

2.4 Challenges of Managing Digital Records

Technological developments such as the growth of computer industry have changed the way governments manage their records. Records which are machine and software dependent pose a major challenge to records professionals (Kirkwood, 1994). Kimberly, Cain and Routledge (2001) notes that electronic records pose certain challenges, as they are entirely dependent on technology, both for their creation and their storage and, as a result, they need to be managed over time in a computerized environment. Tafor (2003) emphasized that some of the difficulties associated with electronic records include electronic records being duplicated with ease, dependence on hardware and software technology and the fact that hardware technology on which electronic records depend would become obsolete within a short time. Other challenges include electronic records being easily changed, with little or no trace and the shorter lifespan of the storage media of electronic records than that of paper.
The recent revelation about Wikileaks and its release of 250,000 confidential State Department cables is a challenge faced by both public and private sectors in managing electronic records and controlling information risks (Verace 2010). The author argues that in the era of Wikileaks, it is clear that poor digital records management practices both in the public and private sectors presents a significant global risk particularly in the industry that gets a lot of attention for example the financial services, government and health. Discussing the challenges faced by records managers in government departments in managing digital records, many countries in Sub-Saharan Africa lack the capacity to manage digital records, as noted by Kimberly, Cain and Routledge (2001). Mnjama and Wamukoya (2004) observe that, while many governments had systems and procedures for managing paper based records, the same could not be said of digital records. They further noted that, poor records management practices especially with regard to digital records, poorly developed ICT infrastructure; and limited funding to agencies with statutory responsibilities may hamper effective records management especially in developing countries. The existence of laws, policies and procedures can provide a good basis for managing digital records (Mnjama, Wamukoya and Mutula 2008). Citing Griffin (2003), Mnjama further observed that in many governments, policies and guidance for managing digital records are non-existent, and legislative framework is weak or outdated. The authors further argue that it is important therefore for governments to strive and establish and implement records management legislation, policies and procedures for both paper and digital records as part of their DRM strategies.
Mnjama (2003), in a survey of e-records management in Kenya found that the introduction of computerization in the public sector has resulted in the large quantities of records created electronically. Moreover there appears to be some misconception amongst policy and decision makers as to whether the modern technologies would solve many of their information needs. However like other countries in the East and Southern Africa, Kenya lacks adequate resources for training that can equip records staff with the skills to manage records in an e-records environment. Moloi and Mutula (2007) state that, exploitation of ICT resources within the public service is limited by the absence of an IT policy, in Kenya.

Technological changes such as fragility of media, file deterioration, and hardware and software obsolescence are major challenges to viable DRM programmes. Without suitable storage conditions they will deteriorate. According to Wato (2004), high quality paper records can last 500 to 600 years. This is not the case with digital records stored on compact disks (CD), optical discs, magnetic tape, and other storage devices. As observed by Smith (2007) these media have been designed for short-term storage of information. After a relatively short period of time it is unlikely that the hardware and software will be available to access the records. Barry (2003) referring to the state of DRM in developing countries, argues that in an environment where there is no adequate requisite infrastructure, countries are sometimes inefficient in recordkeeping systems. The challenge is to determine what hardware and software is essential for DRM. This is something difficult because of the increasing sophistication of information technology (Barry 1997). With the advent of electronic records, the challenges for records
managers are great (Barry 2001). The challenges posed by electronic records include non-availability of stable electronic media such as capturing the content, context and structure of electronic records, acceptance of electronic records as evidence, technological obsolescence and acquisition of information technology skills (Wato 2006). According to National Archives and Records Service of South Africa (2006) the unique and fragile nature of electronic data demands a re-evaluation of the way government bodies manage their records. Processes and procedures created to meet the needs of recordkeeping in paper environment do not necessarily apply to electronic records.

2.4.1 Accessibility and Security of Digital Records

Records which are created using electronic/document records management systems (EDRMS) should remain available, usable, understandable and authentic over a long period of time. The DRM literature indicates that digital records and data can be easily deleted and are subject to unauthorized alterations (Stair and Reynolds 2006). The literature also indicates that both the survival and the readability of records can easily be endangered in the electronic environment. Thus the need to design and build systems that ensure the survival of digital records is important (Shepherd 1994).

There are also challenges to security which may lead to record loss such as data corruption and unauthorized access in which the integrity, reliability and confidentiality of digital records could be compromised. Security refers to the policies, procedures, and technical measures used to prevent unauthorized access, alteration, theft or
physical damage (Laudon and Laudon 2005). There are a number of security dilemmas in digital records management. For example, thousands of patients’ records were accessed online on a government internet server, where records of state hospital patients from around the Eastern Cape are stored (Daily dispatch 2010). Government departments need to control access to their records which contain personal and operational information that should be protected against unauthorized access. Sanders (2009) further argues that the security risks are related to changing regulations such as poor or inconsistently communicated policies. Governments around the world have come up with policies and principles which require the management of digital records. In South Africa all records created and received by government bodies shall be managed in accordance with the records management principles contained in section 13 of the National Archives and Records Service Act (no. 43 of 1996 as amended).

2.4.2 Human Resources Capacity and Training

Human resources capacity refers to the staffing levels, qualifications, skills and experience available for efficient and effective DRM (International Records Management Trust- IRMT, 1999). IRMT (1999) indicates that the lack of trained records managers and staff in governments affects the operations or practices necessary for effective management of digital records. In order to manage digital records effectively, there should be availability of trained staff, basic supplies and money (Kamatula 2010). In most governments, these important elements are lacking or inadequate. To address inadequate training and human resources development for records management personnel, the IRMT and the World Bank (2003) came up with
training programmes which address issues of information technology and policies as well as strategies in the management of digital records. A number of governments and institutions have adopted this and developed training materials in DRM. It is generally accepted that education plays an important role in updating knowledge and skills. It applies to both those who are already working and to prospective workers. Yusuf and Chell (1998) point out that continuous education is needed to update knowledge and skills. They aver that education and training are an essential element in the lifelong development of records managers. Wallace, Lee and Schubert (1992) point out that the most obvious way for records managers in government institutions to enhance their resourcefulness is through education. This can be achieved through training of records managers by conducting workshops, vendor-sponsored programmes, professional seminars, and college or university level courses. In South Africa lack of professional training is very critical. This point is also stressed by Keakopa (2006) who found that there was shortage of fully trained records management staff in South Africa. For example, only one person was self-trained in digital records management in every government institution. Kemoni and Wamukoya (2000) carried out a study to investigate the preparedness of the Moi University records management personnel to manage e-records and concluded that records management staff lacked IT skills and therefore were not prepared to work in an electronic environment. They stressed that adequate training in IT is essential to impart new skills and boost the confidence for the records management personnel. In Botswana, research done by Moloi and Mutula (2007) indicated that e-records management is still in its infancy and is influenced by the structure of the public service sector. There is currently an ongoing computerization
program which has influenced digital records in the form of spreadsheets, databases, word processed documents, e-mail and websites. However there is currently no infrastructure in terms of policy, legislative framework, strategies and guidelines.

### 2.5 Strategies for effective digital records management

Kemoni (2009) opined that various strategies have been developed by national archives to effectively manage their electronic records. For example in South Africa the National Archives and Records Service (2006) developed guidelines for managing electronic records in government bodies. Areas covered by the guidelines include statutory and regulatory framework for electronic records. Other areas covered include managing governmental bodies regarding the management of digital records. In the UK, The National Archives (2009) realizes that the vast majority of government records are now produced electronically and as the result the institution works with central and local government to ensure that electronic records are stored securely but accessible. The Public Record Office of Victoria Province in Australia (2002) developed the Victorian Electronic Records Strategy (VERS) to provide leadership and direction in the management of digital records within the Victorian State government. VERS is a framework of standards, guidance, training, consultancy and implementation projects which is centered around the goal of reliably and authentically archiving electronic records. Various approaches have been adopted by professionals to address the challenges posed by digital records. One of these is the International Research on Permanent Records in Electronic Systems (InterPARES) project which has been conducted since early 2000. This project aims to ensure that digitally produced records
are created in an accurate and reliable form and also reserved in authentic form (Duranti 1999).

2.5.1 Development of Metadata Standards

One way of meeting the challenges of managing digital records is to develop DRM metadata standards. SANS 15489 Information and documentation- Records Management describes metadata as the information needed to be captured along with electronic records describing the identity, authenticity, content, structure and management requirements of records created in the course of business activity. Recordkeeping metadata is an important tool for adequately documenting the identification control and description of records to serve as reliable evidence of organizational activities over time. Metadata should capture the agents involved in the record’s creation, as well as the record’s content, appearance, structure and technical attributes. According to the South African National Standards (SANS) 23081 metadata can be used to identify, authenticate and contextualize records and the people, processes and systems that create, manage maintain and use them and the policies that govern them.

2.5.2 Records Management Standards in South Africa

In South Africa, the National Archives and Records Service (NARS) endorses national standards which require governmental bodies to put the necessary infrastructure, policies, strategies, procedures and systems in place which guide the management of
records both in hard copy and electronic format. These include the South African National Standards (SANS) 15489, and SANS 15801 which recommended for trustworthy and reliability and SANS 23081 which require metadata for electronic records (NARS 2007). A study conducted by Abbot, (1999) on the state of electronic records in South Africa indicated that electronic records were being produced in public sectors and the National Archives of South Africa had established an electronic records management programme based on three control strategies. These were the design and maintenance of electronic records systems, the transfer of electronic records deemed of archival value into archival custody and the identification of electronic records of archival value that should remain in the possession of the creating body.

2.6 Summary

The chapter discussed the lifecycle concept and introduced the records continuum concept as the one suitable for the management of digital records. The conceptual framework for effective digital records management was discussed based on the literature. From the discussion it shows that the management of digital records requires legislation, strong formal institutions, DRM infrastructure and human resources capacity in line with public sector thinking. The next chapter will discuss the methodology that was used.
CHAPTER THREE

METHODOLOGY

3.1 Introduction
This chapter discusses the methodology that was used to investigate the viability of
digital records management in the department of the Office of the Premier. According
to Ngulube (2003) describing the methods applied in a study is very important to enable
other researchers to make use of the study as a reference as well as determining the
validity and reliability of the findings. In this study a case study approach was adopted.

3.2 Brief Overview of the Study Area
This study focuses on the Office of the Premier of the Eastern Cape Provincial
Government. The Eastern Cape Province is located on the south eastern seaboard of
South Africa and is the second largest province with an area of 170 600 km² and
represents 14% of South Africa's land mass. The province lies equidistant from the
major market centres of South Africa and is linked to those centres by a modern
network of air, roads and railways. Eastern Cape was formed in 1994 out of
independent homelands of Transkei, Ciskei and the Eastern Cape. In terms of
population figures, it is the third largest province of South Africa with an estimated
population of 6.4 million (StatsSA, 1996). While English is the main business language,
languages most often spoken are Isixhosa, Afrikaans and Sesotho. The capital,
Bhisho, is conveniently located 60 km from East London, one of two ports in the
province, the other being Port Elizabeth. Eastern Cape is the poorest province. To the African National Congress (ANC) politicians, the main reason for unifying the areas stated above was aimed at combining poverty-stricken regions or underdeveloped areas consisting of Ciskei and Transkei with wealthy areas for example, the Port Elizabeth-Uitenhage area and East London and its surroundings. Four Eastern Cape cities wanted to be elevated to the rank of provincial capital city. Bisho-King William’s Town, Port Elizabeth, Umtata and Grahamstown became strong contenders for the rank of capital city. Bisho-King William’s Town was selected as the provincial capital city because of the following reasons:

- The city has an adequate well-developed infrastructure built for the Ciskei homelands government, for example adequate office space and a communication network. The existing infrastructure could be inherited by the new government and thus reduce the cost of building administrative facilities.
- The city is more or less geographically central to the whole region. Therefore, its centrality would facilitate effective government.
- The city is accessible due to developed communication network including, railway, air and telecommunication. This would enable the government to communicate effectively at all levels.
- Bisho-King William’s Town has enough space for future development relating to the economic, industrial and administrative activities (Siyongwana, 1994).
3.2.1 Gaining entry into the research site

Permission to carry out the study in the Office of the Premier was obtained from the Provincial Director General. A letter was issued to allow the researcher to conduct the study (Appendix 3). Gaining entry into the research site involved visiting the records manager who introduced the researcher to the rest of the employees mostly those who were going to be involved in the study. Data collection process started on the 15th of November 2010 up to 31 January 2011. The researcher had to take a break in mid-December because most of the senior staff and other staff members had gone on vacation. The records manager assisted the researcher, every time she visited the department. The records manager accompanied the researcher and introduced her in every directorate she wished to collect data from. Due to security measures it was difficult for the researcher to go alone and make introductions for herself.

3.2.2 The Research Site: Office of the Premier

The main purpose of the Office of the Premier (OTP) is to provide guidance and focus for the province as a whole through the development and implementation of policies, and the monitoring and evaluation of the performance of departments in effecting service delivery to the people. Citizens of South Africa want better quality services from all levels of government for example they want respectful and courteous service, shorter queues and no misplacement of documents. The Batho Pele motto on transforming public service delivery seeks to introduce a citizen oriented approach that put people first. To this end the Office of the Premier monitors the level and quality of government services and promotes a culture of access, openness and transparency that in turn
should build more confidence between government and the public it serves (South Africa 1997). The promotion of Access to Information Act (PAIA) which came into effect in February 2001, places the obligation on government to make information accessible to the public in order for them to realize their constitutional right of access to information. To this end the organizational structure of the OTP was amended to ensure that it fulfils its mandate and is better aligned to national imperatives that address local challenges.
3.3 Research Design

According to Buckingham and Saunders (2004), a research design is a plan or guide for data collection and interpretation, with sets of rules that enable the researcher to conceptualize and observe the problem under study. It guides the researcher in...
planning and implementing the study in a way that is mostly likely to achieve the intended goal. The study adopted a mixed method approach by using quantitative and qualitative methods to examine how digital records are managed in the Office of the Premier (OTP). The rationale for using both methods is that neither a quantitative nor a qualitative method alone would have been sufficient enough to capture the DRM in the OTP (Miles and Huberman 1994). The investigation focused on the relevant sections (directorates) and intentionally selected personnel in the department for interviewing. The OTP directory was used to select the participants with the help of the records manager. Steps were taken to ensure data reliability and validity by employing more than one technique (triangulation). Triangulation means using different types of measures, or collection techniques to examine the same variable (Onyango 2002). Triangulation was achieved in this study by using interviews, questionnaires and non-participant observation as data collection techniques. Data analysis was by thematic categorisation based on objectives.

3.3.1 Research Method

A case study was conducted in the OTP for a period of 6 weeks. Yin (1984) argues that case studies can involve either single or multiple cases, and numerous levels of analysis. Yin (1984) defines a case study as:

“an empirical inquiry that investigates a contemporary phenomenon within its real life context especially when boundaries between a phenomenon and a context are not clearly evident".
By employing the case study method the study focused on the Office of the Premier where the department represents a single case to provide a detailed evaluation. This was aimed at gaining a first hand and holistic understanding of the viability of digital records management in the department. Case studies are used to illustrate problems or indicate good practices (Yin 2002). For this study a case study was chosen because it:

- Provides in-depth understanding of the social phenomenon (Yin 2003);
- Provides an opportunity to understand a complex situation (Yin 2003);
- Provides an ability to examine the real issues in their natural setting (Bogdan 1992).

Critics of the case study method believe that the study of a small number can be problematic for establishing reliability or generality of findings (Punch 1998). Others feel that it is only useful as an explanatory tool. Yet case studies have been used by researchers as a research method with success in carefully planned and crafted studies of real life situations, issues, and problems (Soy, 1997). The use of multiple sources of evidence such as questionnaires, documents, interviews and observations were adopted to resolve possible difficulties in case studies (Yin 2003). This method enabled the researcher to capture and understand the management of digital records in the department.
3.3.2 Reliability and Validity

Reliability and validity are important qualities of research and must always be taken into account for effective data quality control. Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the population under study can reproduce same results under a similar methodology then the research instruments are considered to be reliable. For example, consistency of the questionnaire will produce the same results when employed under the same conditions. According to Joppe (2000) validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. For example, does your method measure what you said you would be measuring? In order to get consistent answers to the research questions, this study took steps to ensure data reliability and validity by:

- Employing more than one technique to collect data (triangulation).
- Having a standardized questionnaire with both fixed answers and open-ended questions to maximize chances of getting similar responses.
- Observing activities, asked questions and analyzed documents pertaining to OTP.
- Doing a literature review to provide the context with which to interpret the data that were collected.

In this study content validity was achieved by making sure that a questionnaire had questions related to policy, security, classification system/file plan, storage and preservation. According to Yin, (2003), with data triangulation, the potential problems
of construct validity can be addressed because different sources of evidence essentially provide multiple measures of the same phenomenon. Instruments for data collection were alternated to provide cross-data validity checks (triangulation).

3.4 Data Collection Methods

Case studies provide in-depth data collection that involves multiple sources of information. Golden (1976) states that the most widely used techniques involve questionnaires, interviews, document analysis and observation. In case study research, the use of various methods to collect the same data is highly regarded, because when you have really triangulated the data, the events or facts of the case study have been supported by more than single evidence (Yin 1984). Studies carried out by Kemoni and Wamukoya (2000); Ngulube (2003); Chinyemba (2003); Chinyemba and Ngulube (2005); Makhura (2005); and Ngoepe (2008) also made use of combination of these research tools. For example, Ngulube’s study used questionnaire as the key source of data supplemented by interviews and observation. The mixed research strategy employed in this research draws primarily on both primary and secondary methods of gathering information and data. By employing the primary method, the researcher was able to collect both quantitative and qualitative data by interviewing the key informants. Secondary methods involved reading published and unpublished articles. The documents varied and included textbooks relevant to digital records management, monographs, scholarly journals, dissertations and the policy reports of the Office of the Premier. Also the study made good use of the internet to access current literature.
3.4.1 Questionnaires

The structured questionnaire (Appendix1) was pretested in the registry and human resources management (HRM) directorates with the assistance of the records manager to eliminate questions that could have been vague or ambiguous. This was also aimed at ascertaining the validity and reliability of data collected using the instrument. The researcher targeted 40 respondents. Questionnaires were distributed and targeted respondents in those directorates which promoted the creation and management of digital records.

Advantages of using questionnaire as a data collection instrument include feedback from the respondents and it is relatively quick method of collecting data (Mitchell and Jolley 2004). It also reduces interviewer bias as respondents are left on their own to complete questionnaires. Information can also be collected from large groups of people. However, questionnaires have their limitations. Open-ended questions can generate large amounts of data that can take long time to process and analyze. One way of limiting this would be reduce the number of open-ended questionnaires. Open-ended questions allowed the respondents to give their views and their own understanding of DRM instead of forcing them to choose one of the several statements usually found in closed ended questions (Strauss and Corbin 1998).

Qualitative data were collected through in-depth interviews which are described as conversation with a purpose (Bernard 2000). Interviews were conducted using
structured and unstructured questions. Interviews with the management staff lasted approximately 15 minutes. Interviews were done as a follow up to seek clarity for the answers given in the main questionnaire. All those included in the interview had initially been interviewed using the main questionnaire. The researcher targeted 15 key informants but only 10 were interviewed. The researcher initially planned to interview the director general for administration and support services, 2 senior managers, 7 assistant managers from HRM, the records manager, IT manager, security manager, Chief Information officer (CIO), legal service manager (policy), and the communications officer. The researcher did not get hold of the director general, and the other management staff from HRM because they were said to be busy in meetings.

Babbie, (2007) emphasizes that interviews will allow the researcher to obtain relevant responses because questions not understood by the respondents will be clearly clarified. Therefore, with face-to-face interviews complete responses were attained because it was very easy to seek clarification. The researcher deliberately selected the open-ended questions from the main questionnaire to enable the study to explore in detail the issues which revolve around DRM within the OTP. The interviews helped to elicit information regarding infrastructure, policies and strategies that are necessary to effectively manage digital records.
3.4.2 Document Analysis

Documents with relevant information relating to DRM in terms of filing systems, storage and preservation and security were analyzed. The documents relating to the management of digital records such as the manual, file plan, information security policy, Acts such as the Promotion of Access to Information Act (PAIA) (2000) and the records management policy for the Office of the Premier were analyzed.

3.4.3 Observation

Bless, Smith and Kagee (2006) define simple observation, also called non-participant observation, as the recording of events as observed by the researcher. In this study the researcher made good use of non-participant observation during the process of collecting data. As its name suggests, non-participant observation demands the researcher to get first-hand information in the area chosen for the study by merely recording facts without interacting with the observed. According to Creswell, (1994) engagement in the setting permits the researcher to hear, to see, and to begin to experience reality as the participants do. During the data collection the researcher merely recorded information by taking notes. Although observation is regarded as a useful method it is very expensive, time consuming, can make the respondents nervous and the researcher has a little control over the situation (Leedy and Ormondo 2005). However, participants were first informed about the researcher therefore their chances of fear and panic were minimized. In the OTP the researcher observed that they were charts mounted all over which talked about EDRMS solution and its benefits. The researcher also noted that the records manager was in the process of introducing a
paperless environment (going green) in the department. The researcher wanted to know more about the charts which were talking about introducing a paperless environment. By observing and discussing with the records manager the researcher noted that the OTP had engaged the consultancy company to install an Electronic Document and Records Management System (EDRMS).

3.5 Sampling procedure
The internal directory was used to select the people for inclusion in the study with the assistance of the records manager. These included the personnel from administration and support services, registry, library, legal services and IT directorates. The researcher utilized judgmental or purposive sampling. Babbie (2008) describes purposive sampling as a type of non-probability sampling where the units to be observed are selected based on the researcher’s judgment about which ones will be the most useful or representative. The need for in-depth data collection in this study demanded that respondents who are knowledgeable in records management be included in the study so as to provide first-hand information on digital records management. The combined knowledge of these officers would enable the study to attain in-depth knowledge of the DRM in the Office of the Premier.

3.5.1 Sample Size
A sample is always intended to be a true representative of the large entity. Abrahamson (1983) defines a sample as a portion of the population that ensures a true representative of the whole group. A sample of 40 was selected from the 487 staff members using the internal directory of the OTP and also with the help of the records
manager. Only those who were involved in the creation and management records were involved. The population included in the study involved seven registry staff members, three library staff members, the records manager, the Information Technology manager, four ICT support staff, the legal service manager, the Director General of the administration and support services, the Chief Information Officer, the security manager as well as 2 senior managers and 5 assistant managers from HRM, 2 managers from the communications directorate and one supervisor from the supply chain. 10 HRM practitioners were randomly selected in the study for the researcher to get the general overview of the DRM in the department because the HRM directorate is the one which was facilitating RM training programmes in the department. From the other directorates, the researcher selected senior managers and supervisors only. According Nachmias and Nachmias (1996) the response rate is the percentage of respondents who returned completed questionnaires. The response rate is of great importance when making generalizations and conclusions. In this study, out of 40 questionnaires which were distributed to cover all those involved in the creation, and management of digital records 30 (75%) were returned.

3.6 Data Analysis

Data analysis is defined by Lewis-Beck (1995) as the process of gathering, modeling and transforming data the goal of highlighting useful information, suggesting conclusions, supporting decisions making. Data from the structured questionnaires were categorized into themes based on the objectives of the study and coded for ease of analysis using the Statistical Package for Social Sciences (SPSS). According to Miles
and Huberman (1994), data reduction is a form of analysis that sharpens, sorts, focuses, discards and reorganizes data in such a way that final conclusions can be drawn and verified. The qualitative data gathered from key informants and non-participant observations were analyzed in order to establish any consistent themes. The analyzed data were presented using pie charts, tables, graphs, frequencies and percentages.

3.7 Ethical Considerations

According to Neuman (2003) ‘ethical’ means principles of conduct that are considered correct especially those of a given profession or group. The principles of conduct are the most important as they address the issue of the content of ethical behaviour. In research there might be some ethical concerns involving participants’ rights such as the right to privacy. The researcher first obtained the respondents informed consent before issuing out questionnaires. Participants were made aware of the type of information the researcher wanted from them, why the information was being sought, what purpose it would be used for, and how they were expected to participate in the study, and of how would directly or indirectly affect them. Respondents were assured of their rights, including the rights to consent, protection of information disclosure and respect for their privacy when collecting data. Permission was also sought again from the directorates selected to conduct research.
3.7.1 Problems Encountered During the Study

Appointments to see senior managers were turned down in some directorates. The managers indicated that they were very busy and did not have time to participate in the survey. The researcher made several visits to the department because not all appointments were attained on the stipulated dates.

3.8 Summary

In this chapter a framework of how the research was conducted is spelt out. Thus, the nature of the research has been established. The instruments for research were also identified and their justifications discussed. The data collection and processing procedures have been described. The next chapter is going to discuss the data analysis, interpretation and discussion of the findings.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter covers the presentation, analysis and discussion of data. The first part presents biographical data of the respondents. Information such as the gender, qualification and position held by respondents in the Office of the Premier department was discussed. The other parts discussed the data based on the objectives of the study and non-participant observation.

4.1.1 Gender of respondents

The response rate is of great importance when making generalizations and conclusions. In this study out of 40 questionnaires which were distributed 30 (75%) were returned. A total of 10 (25%) were not returned. Gender of respondents comprised of seventeen (57%) male and thirteen (43%) female (chart 1). Responses consisted of 17 top management staff and 13 other staff members from different directorates.
4.1.2 Qualification of respondents

The respondents were asked to indicate their highest qualification. The majority (46.7%) had degrees, seven (23.3%) had a matric certificate whereas five (16.7%) obtained diplomas and four (13.3%) of the respondents indicated other qualifications as their highest qualifications. The majority of the respondents were not familiar with records management principles and context and therefore were unable to complete the questionnaire. As a result, most of the open-ended questions were not responded to.

The respondents were further asked if they had received any training in records management. The majority of the respondents (60%) did not have training in records management whereas five (16.7%) had obtained a certificate in records management.
The other four (13.3%) held a diploma in records management and one had a Masters degree in records management (table 1). The department of the OTP does not have staff members who are highly trained in records management except the records manager who has a Masters' degree in RM. The results showed that although the records management staff in the OTP had received training in records management, they were not capable of working with digital records. Some of the records management staff were familiar with RM principles but when interviewed it was established that they were more familiar with paper based environment. At the time of investigation the department was offering short courses in computers for its staff members. The purpose was to enable staff to work with digital records, which were increasingly being generated in the department. The researcher observed that this training was not adequate to enable records personnel to be able to work effectively in an e-records environment. This implies that the records management staff in the OTP does not have adequate training and knowledge in DRM. Studies done by Kemoni and Wamukoya (2000) in an investigation of the preparedness of Moi University records personnel to manage digital records found that it is not possible for staff with no training in records management to work effectively in an e-records environment.
### Table 1: Qualification in records management (n=30)

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training in Records Management</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Certificate in Records Management</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Diploma in Records Management</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Records Management Competency course</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Masters in records management</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

#### 4.1.3 Position Occupied

Respondents were asked to indicate their position within the Department. The majority (56.7%) held positions of a director general (DG), managers, assistant managers and supervisors, five (16.7%) were administration assistants from the HRM and communications directorates, two (6.7%) were holding positions of senior managers and above whereas one held the position of a records manager.
4.2 Current status of records management Programme

The respondents were asked if the OTP had a records management training programme. Majority of the respondents (90%) were aware that the department had a records management programme coordinated by the records manager. Only three (10%) did not have any idea of a records management programme in the department (chart 3). The International Standard for organization (ISO) 15489-1:2001 recommends that organizations should establish an ongoing programme of digital records. In this regard the OTP was complying with regulations and legislations constituted by the ISO.
4.2.1 Records management program

As a follow up the respondents were asked to indicate if the programme covers the management of digital or electronic records. The majority (73.3%) agreed that there was an on-going training programme of digital records management covered by the RM training programme in the department whilst eight (26.7%) were not sure if the digital records management is covered by the RM programme. The response rate showed that the department had a records management programme which supports the management of digital records. Mutiti (2001) opined that the DRM programme must become one of the core functions of the public sector, because digital records have come to stay and must be made an integral part of an organization’s routine operation.
and if possible, this responsibility should be given to a specific unit to conduct the training programme.

4.2.2 Location of RM Programme

The respondents were asked to indicate the unit which supports the RM programme in the department. Majority of the respondents (70%) indicated that the programme is placed in the HRM sub-directorate which is the Administration Support Services, seven (23.3%) indicated that the programme is found in the Administration Support Services whilst one indicated that the RM programme was located in the Knowledge and Information Management (KIM) unit and the other one also indicated that the RM programme is located in the IT directorate (table 2). The RM programme in the OTP was located in the Administration and Support Services in the Human Resources Management sub-directorate where the Electronic Document and Records Management System (EDRMS) were being piloted. The researcher observed that there was no specific section for RM programme. The location of the EDRMS in the HRM sub-directorate was not good because other members of staff thought that training was for the human resources practitioners.
Table 2: Location of the RM Programme (n=30)

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin Support Services</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>Information Technology (IT)</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Innovative &amp; Knowledge Management Unit</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Others</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The respondents were further asked if they receive training on how to use the EDRMS. The majority (86.7%) indicated that they had received training, while four (13.3%) indicated that they had never received training. It is interesting to note that although a large number of employees indicated that they had received training on how to use the system they were not capable of working with digital records because they did not have skills required to manage digital records.

4.2.3 Allocation of Resources

The researcher wanted to know if the RM programme is allocated appropriate resources to sustain it. The majority of the respondents (53.3%) were confident that the programme is allocated enough resources to sustain it; whereas the rest (46.7%) were not sure whether the RM programme is financially supported (chart 4). Variations in responses may be attributed to lack of communication of the activities that take place within the department. In a separate interview with the records manager it was indicated that allocation of finance for RM programme is a problem since the
department has to deal with priorities first. The RM programme is not considered as priority, and as a result it lacks financial support.

4.2.4 Evaluation of the RM programme

The researcher wanted to know if the RM is regularly evaluated to ensure its continued effectiveness in service delivery within the department. The majority (60.0%) reported that the programme is regularly evaluated whilst twelve (40.0%) did not know if the program is evaluated regularly (chart 5). From those who said the programme is regularly evaluated the majority (40.0%) indicated that the evaluation of the RM programme is done through meetings; six (20.0%) indicated that the evaluation is done monthly by conducting a survey, five (16.7%) indicated that the evaluation is done annually using a statistical analysis; four (13.3%) indicated that the RM programme is
evaluated quarterly whereas three (10.0%) indicated that the evaluation is done through information audits. Although the respondents indicated different means of how the evaluation is done they did not seem to understand about the evaluation process. In order to have a clear picture on how the RM programme is evaluated, interviews were held with the records manager who reported that since the programme started no evaluation had been done because of financial problems. The records manager mentioned that meetings for senior management were normally convened to give progress reports on the RM training programme. This implies that employees were not being updated on the evaluation process.
4.2.5 Rating of the programme

The respondents were asked how they rate the programme in terms of human resources development. The majority (40.0%) indicated that the training improves organizational skills, nine (30.0%) of the respondents rated the RM programme as helpful and as just meeting compliance with archival legislation, the other five (16.7%) rated the programme as effective as it improved organizational skills, whereas the other four (13.3%) rated the programme as helpful as it improved the filing of digital records and retrieval of records. Interviews were held with one of the senior managers in HRM who reported that staff members were being trained on how to use the software called Documentum so that they are able to deliver services as quickly as possible using the Documentum software. He indicated that the aim was to facilitate transparency and
accountability in service delivery in all directorates of the Office of the Premier and other governmental bodies.

As a follow up to the question the manager reported that although staff members were being trained on how to use the classification system most of them were not grasping much. He noted that most the staff members were not able to allocate file reference numbers using the system. The records manager also indicated lack of support from the top management in records management; users want to file their own way and not using the approved file plan. The records manager was further asked if the department had records retention and disposal schedules. It was reported that currently there are no records retention and disposition schedules in the department. Non-current records are transferred to National Archives and Records Centre for disposition. It was not possible during the data gathering stage to obtain details on types and formats of records transferred.
4.3 Legal Framework and record policy

Popper and Millar (1999) observed that policy and legislative framework are necessary to create a conducive environment for the effective management of digital records. The legal and regulatory framework spells out how an organization must manage its records. Interviews were conducted with the Legal Services Manager on whether the department complies with the legal and regulatory framework for digital records management. He pointed out that the South African National Archives and Records Service Act specifies requirements for creating authentic digital records that are usable and reliable for as long as they are required for functional, legal and historical purposes. He further mentioned that section (5) of the South African National Archives and Records Act as amended authorizes the use of digital systems to manage public records. The Act requires public agencies to use Electronic Document and Records Management System...
(EDRMS) to create and manage their records. Therefore, the department is aware of the legal requirements.

4.3.1 Records management policy

Government departments are required to develop a records management policy that regulates records management activities. For the policy to be effective, it has to be endorsed by the head of department as well as the senior management. It should be communicated and implemented throughout the organization. The respondents were asked if the OTP had a records management policy. The majority (90.0%) reported that the OTP had a records management policy whilst three (10.0%) did not know whether the department had the records management policy (chart 7).

The respondents were further asked if the policy is endorsed by the Director General. The majority of the respondents (86.7%) indicated that the policy was endorsed by the director general and communicated to all staff members whereas four (13.3%) were not sure if the policy was endorsed by the Director General. The researcher wanted to know if the RM policy covers the management of digital records. However, respondents were not sure if the policy covers digital records management. In order to get clarity on whether the policy covers the management of digital records, interviews were held with the records manager who reported that the department is currently implementing the digital records management system and the policy is still work in progress. As a result there is currently no separate policy for digital records management in the department. The findings agreed with Makhura and Ngoepe (2005) who found that out of 30 organizations surveyed in South Africa 25 did not have a digital records management
policy. The absence of a digital records management policy in the department may suggest that digital records were not created, captured and managed in a systematic manner.

Chart 7: Records management policy (n=30)

4.3.2 Preferred means of policy communication

The respondents were asked to select the preferred means of policy communication in the department. The majority (63.3%) selected circulars, fourteen (46.7%) indicated that the policy must be communicated through e-mail, whilst 40.0% indicated that the policy must be communicated through the intranet (chart 8). Respondents who were indicated as other specified that e-mail, intranet and circulars should be used as the best methods of policy awareness in the department. The data gathered from the respondents indicated that communication is needed to improve the DRM in the
According to ISO 15489-1 (2001) organizations should define and document a policy for both paper and digital records to facilitate the creation and management of authentic, reliable and useable records capable of supporting business functions and activities as long as they are required. The policy must be communicated and implemented at all levels within the organization. Interviews with the records manager indicated that there is poor communication of policies to staff members within the OTP and a general lack of attempts by the department to create awareness on policies which govern the management of records.

### Chart 8: Means of policy communication (n=30)

#### 4.3.3 Classification system/File plan

The respondents were asked if the OTP had a classification system/file plan. The majority of the respondents (86.7%) said the OTP had a classification system whilst four
(13.3%) did not know the existence of the classification system in the department (chart 9). The respondents were further asked if they file digital records according to the classification system. The majority (72.4%) agreed that they file digital records according to a classification system whereas eight (27.6%) were not sure if digital records were filed according to the classification system. However, interviews with the records manager indicated that the department had a classification system for its registry function approved by NARS. The approved classification system is implemented in the manual registries as well as the Electronic Document and Records Management System (EDRMS). At the time of the investigation the department was implementing an Electronic Document Management System which would minimize the use of paper copies during day-to-day business processes of the department. The EDRMS was to act as a central repository of digital records. It was reported that the proposed solution will process new documents, make provision for back scanning indexing and filing of digital records according to agreed on fields as approved by the records manager.

The respondents were further asked if they received training on how to use the classification system. The majority (76.7%) indicated that they were being trained on how to use the classification system whereas seven (23.3%) said they did not receive training on how to use the classification system. Interviews were conducted with one of the senior managers in HRM who indicated that there is an on-going training programme on how to file records using the classification system. Interviews with various managers from HRM indicated that both the registry staff and employees from
HRM were being trained on how to allocate reference numbers to all correspondence (paper, electronic records and e-mail) according to the approved subjects in the classification system. A follow up on the question with the records manager indicated that only the classification system approved by NARS in May 2008 was used for the classification of paper–based and electronic records. The records manager was further asked if the training had a positive impact on the management of digital records within the department. She reported poor attendance for training as the biggest challenge that impacts negatively on the use of the EDRMS in the department’s business operations. It is probable that employees prefer filing using manual system for their own personal reasons.

**Chart 9: Records classification system (n=30)**
The respondents were asked how they rate the effectiveness of the classification system in terms of retrieval of digital records, accessibility and missing files. The majority of the respondents (50.0%) indicated that the classification system was very effective whilst ten (33.3%) said that the classification system was effective, five (16.7%) reported that the classification system was ineffective as records often got lost (chart 10). Loss and misplacement of records may be partially due to ineffective tools to monitor the movement of files within the department. Interviews with managers and supervisors in various directorates indicated that staff members are not familiar with the classification system as a result records often got lost.
4.4 Infrastructure for digital records management

According to the National Archives’ Archives Instructions, issued in terms of article 13 (4) of the National Archives of South Africa Act (no.1996 as amended), government bodies are required to appoint a member of staff as a records manager. The person shall be responsible for the management of all public records and training of staff. The respondents were asked if the OTP had appointed a records manager. Majority of the respondents, (80.0%) reported that there was a records manager in the department of the Office of the Premier whereas six (20.0%) had no idea if the department had appointed a records manager (chart 11). It is assumed that those who were not aware if the department had appointed a records manager were not working under the records manager. Interviews with the records manager indicated that the records manager had
received training in records management and she was the one coordinating the EDRMS project being implemented in the department. Wamukoya and Mutula (2005) observed that challenges brought about by new technologies required that the records management staff be equipped with new skills and competencies through training to be able to effectively operate in an e-environment. Most of the staff members were not trained in records management.

**Chart 11: Appointed records manager (n=30)**

The respondents were further asked to indicate the level of the records manager in the department. The majority of the respondents (70.0%) knew that of the records manager was at the level of a deputy director, four (13.3%) of the respondents indicated that records manager in the department of the Office of the Premier was at the level of the director. The other four (13.3%) indicated as other said that that they did not know the level of the records manager whereas one of the respondents said that the records
manager was at the level of the director (chart 12). The records manager in the Office of the Premier is at deputy director level and oversees the Administration and Support Services staff and the records management personnel in the department. The knowledge about the level of the records manager was important in terms of work relationship in the department. It determines the way the department is run and how it affects business operations. Interviews with the records manager revealed that the records manager is the one working with the consultancy company which is implementing EDRMS solution in the department. She also indicated that the senior management staff was not part of the pilot group for the EDRMS in the department.
The researcher wanted to establish the extent to which the department of the Office of the Premier was prepared to use the ICT environment for the management of digital records. ICT infrastructure does not solve the problem of managing DRM but the availability of ICT is a key factor to address when considering adapting digital systems (Meijer 2001). The ICT tools allow using digital records systems as part of records creation, capture, storage and preservation processes. The ICT support staff reported that although ICTs were being used in the department they were not used for records management activities.

The researcher wanted to know if the OTP has a separate directorate or unit with the responsibility for the management of ICT infrastructure which captures digital records in
the department. The majority of the respondents (70.0%) said there was a separate unit with the responsibility of ICT management in the department but had no idea if digital records were being captured. Seven (23.3%) did not know if there was a separate unit with the responsibility of ICT management in the department whereas the other two (6.7%) had no idea if there was any unit with the responsibility of ICT management (chart 13). Although the majority of the respondents knew that there was a separate section with the responsibility of ICT management they had no idea if the ICT department could support the creation of digital records. However, the researcher observed that most of the respondents (70%) felt that digital records management should not be the responsibility of the ICT sub-directorate. They argued that the ICT directorate should provide the equipment necessary for DRM only.

The researcher wanted to know the availability of staff with ICT training. Findings from the ICT manager revealed that the ICT in-house staff in the department was not capable of managing digital records. He further mentioned that the consultancy has the responsibility for the management and implementation of ICT infrastructure that could support the management of digital records in the department. However interviews with the ICT personnel indicated that outsourcing the development of the EDRMS did not benefit the department. One of the reasons given was that consultants normally come, develop the system and leave. As a result there is no proper skills transfer because the Consultants are in a hurry to finish and go on to the next job. The researcher observed that although computers were used in the OTP, they were not used for DRM.
4.4.2 ICT application to the creation of digital records

The researcher sought to establish if the use of ICTs led to the creation/generation of digital records. Majority of the respondents (83.3%) said the application of ICTs led to the creation of digital records in the department, whilst five (16.7%) were not aware of the generation of digital records using ICTs in the department (chart 14). Those who were aware were further asked to indicate categories of digital records which were generated through the application of ICT. According to chart 14 it is indicated that the Office of the Premier generates e-mails and reports. The data gathered indicated that the OTP has adopted ICT into its business operations. Interviews with the senior manager in HRM found that the Electronic Document and Records Management System which is being piloted in the HRM sub-directorate has substantial databases which resulted from generation of digital transactions and digital records. Interviews
with the records manager and different managers in HRM directorate on the types of
digital records being generated indicated that the following records were being
generated in the HRM directorate: leave forms, records of benefits of employees,
employee wellness records, and employee records of service condition,
correspondence, dismissal and recruitment forms. It was highlighted that the EDRMS
had improved the service delivery by the OTP. For example enquiries from clients and
staff were dealt with by searching online documents stored in the EDRMS. It was
mentioned that backlog on business transactions was reduced for example processing
of pensions funds was done online since the pensioners were able to access their files
online. The researcher observed that properly managed digital records led to
accountability and transparency as the public can access such records to hold the
government accountable. However, one of the managers complained about the
shortage of records management skills in the department. Senior managers reported
the OTP staff needed to be equipped with new skills in order to work effectively with
digital records management systems. They indicated that even those in recordkeeping
did not have adequate RM skills and using EDRMS was a challenge. They indicated
that knowledge and understanding of records management issues would assist them to
work effectively.
Kamatula (2010) reported that digital records, just like paper records, have to be retained for long periods to serve as evidence of organizations’ transactions. Proper procedures and mechanisms should be in place to ensure security, long-term preservation and accessibility of digital records for effective e-governance.

4.5.1 Access and Security of digital records
The respondents were asked if the OTP had a system in place to ensure security and protection of digital records. The majority (60.0%) had no idea, ten (33.3%) said there was a system in place to ensure protection of digital records in the OTP whilst two
(6.7%) did not respond. The variations in these responses may be attributed to lack of awareness of digital records management systems. Interviews with the records manager indicated that the department does not place much emphasis on the security of its records but tries to secure confidential records which are stored in the EDRMS. The records manager reported that there was an offsite server where the information is stored should the system crash. Personal observations revealed that there were no guidelines on digital records security. The records manager was further asked if the facilities provide secure environment for the storage of records. She reported that space storage was a major problem; as a result the store rooms were congested. The rooms where records are kept were too small to handle the bulk of records generated by the department. It was reported that most of the rooms housed paper-based records lacked air conditioners and that the environmental conditions were not suitable for records storage. Regarding the storage of digital records the records manager reported that they are no existing storage facilities for digital records except the database in the proposed EDRMS solution being implemented. Most of the records exist in paper based format. She also mentioned that the department does not have specific security policy for the management and storage media of digital records.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No idea</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Interviews were conducted with the Chief Information Officer (CIO) and the records manager on how records generated in the department are accessed and protected. They reported that in terms of access no staff member shall provide information and records that are not in the public domain to the public without consulting the Chief Information Officer. The records manager said that all staff members were to follow specific guidelines regarding requests for information as stipulated in the Promotion of Access to Information Act (no.2 of 2000). However, the Chief Information Officer reported that the level of secrecy is still a problem in the Office of the Premier. He reported breaches of security as a factor blocking trust in the use of digital records. There were concerns for protection and security measures in place to ensure the confidentiality of digital records in the department. The CIO was of the view that protecting the security and confidentiality of digital records stored on databases was a problem since it can be easily corrupted. Therefore, there was concern about manipulating records in digital recordkeeping systems which generated uncertainty about the use of digital systems as records could easily be deleted.

In terms of access to digital records the IT security manager said access to server rooms is managed with a key card access. The senior managers from HRM further mentioned that not all users can access confidential records in digital form. For example there are people who can view the documents while others can access depending on the level of access security one has. Access to storage areas where electronic records are stored is limited to the Information Technology (IT) staff that had specific duties regarding the maintenance of the hardware, software and media. The research done by Mutiti (2001) revealed that, in most cases the responsibility of managing digital records
is left to IT specialists because records managers are not fully conversant with their roles in digital records management programmes. The records manager reported that currently the department is compiling a disaster recovery plan which talks to the retrieval of information should the system crash. Tshotlo and Mnjama (2010) stated that a disaster preparedness plan is an important tool central to the protection and preservation of records, and it should be incorporated into the overall management plans of the organization.

The researcher also wanted to know how the department deals with threats of: viruses, unauthorized access to digital records, environmental security and database security. Interviews with the IT manager indicated that he was responsible for the day-to-day maintenance of electronic systems that store digital records. The IT manager reported that he ensures that systems that manage and store records are virus free. All users (employees) of records within the OTP are provided with usernames and passwords to access records. Lack of ICT skills for the OTP employees including the records personnel was highlighted as a major problem in promoting the use of digital records in the department. The IT manager also reported that personnel with ICT training, including managers with experience in evaluating and implementing EDRMS solutions were needed for the viability of DRM to be realized in the department. He further mentioned that although the environment is securely protected, there is lack of skills to contribute to the policies and regulations that govern the way records are created, used and managed. The IT manager said that there is lack of equipment that ensures digital records remained accessible. This is also supported by Kamatula (2010) who stated
that proper procedures and mechanisms should be in place to ensure long-term preservation and accessibility of e-records for effective e-governance.

### 4.6 Challenges for DRM

Respondents were asked to select as many as possible of the challenges faced by the department in using ICTs for digital records management. Majority of the respondents (66.7%) indicated that shortage of DRM skills was the biggest challenge, followed by inadequate expertise reported by (50%), ICT facilities (46.7%) and inadequate legal and regulatory system indicated by 26.7%. Those who were indicated as other mentioned that resistance to change was the most notable factor facing the OTP department. It was revealed by the records manager that most employees were not comfortable with the EDRMS solution being implemented in the department because they fear losing their jobs. Those who were interviewed highlighted that there was no integrated approach to managing digital or electronic records in the Office of the Premier. Records were stored in the existing registries but also in offices with little or no control over the records or documents. This resulted into inability to locate documents which often leads to delays in finding documents and responding to requests from internal and external clients. Due to these challenges, the OTP is faced with various challenges relating to holding members accountable for documents. These factors negatively impact on the level of service delivery offered by the OTP staff. In the same vein, Mutiti (2001) found that there was a lack of standards, practices and procedures for e-records management; inability to provide guidance on e-records created in government agencies being mismanaged and overlooked and in most cases records often gets lost.
It was also reported that the greatest challenge faced by the OTP department is a problem of staff retention as highly skilled personnel often leave government for greener pastures especially the ICT staff. As outlined by the IRMT (2004) there is need to address capacity building strategies in governments since most of the services are delivered online.

![Chart 15: Challenges in using ICTs for DRM (n=30)]

**4.6.1 Proposed Recommendations for improving DRM**

Respondents were asked to give recommendations for the good/effective management of digital records in the department. Senior management staff recommended that all the correspondences (memos, letters, circulars and reports) be accessed electronically as this can save time of running around and drafting letters. They were of the view that if all the documents are online they can easily be accessed remotely. Majority of the
respondents (46.7%) (Table 5) did not recommend anything. This may be attributed to lack of knowledge and expertise in DRM. About twelve (40%) of the respondents proposed that the department should put training and development as the first priority. They indicated that it was necessary for staff to gain sufficient knowledge and expertise on the use of the EDRMS being implemented in the department. One of the respondents recommended that all documents in the OTP should be scanned to save space because the department did not have enough space to store the physical documents which are currently stored in the boxes and remained lying idle in the offices. The other one indicated that the department should fast track the process of implementing EDRMS to facilitate the delivery of services within the department such as accessing order forms and requisitions, recruitment forms, vacancies and files on condition of services online, whilst another respondents indicated that the department should secure backup storage facilities for digital records management.

Table 4: Recommendations for improving DRM in the Office of the Premier (n=30)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training &amp; development</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Flow of documents by scanning all of them</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>In a process of implementing DRM</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Backup systems and standardized format of saving digital records</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
<td>46.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
4.7 Summary

This chapter presented the data analysis, interpretation of the results and discussion. Collected data was analyzed and presented in the form of charts, frequencies and percentages. Variables related to digital records management such as records management programme, records management policy, classification system, ICT infrastructure, types of digital records generated in the OTP department, storage and preservation of digital records were examined. The data analysis ended with challenges faced by the department in managing digital records and proposals recommended for improving DRM in the OTP department. In view of the above interviews and observations, as well as the content analysis, it is clear that the OTP has taken a number of initiatives of records management practices. For example, the OTP has engaged a consultant to develop an Electronic Document and Records Management System which resulted in the creation, capturing and storage of digital records as well as an approved records classification system. There is an indication that the OTP records management programme does receive support from the Director-General and the top management staff. The next chapter discussed the conclusions and recommendations based on the findings.
CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
The aim of this study was to investigate the state of digital records management in the Eastern Cape Provincial Government. This chapter gives a summary of the findings and conclusions based on the aim and objectives of the study.

5.2 Current status of DRM
The findings of the study established that there is a records management programme which caters for digital records management in the OTP. The majority of the respondents (90%) knew that the department had a records management programme which also supported DRM. Currently the department is in the process of implementing the Electronic Document and Records Management System (EDRMS) for digital records management. This is intended to guarantee the quality of service delivery in the long term. The study revealed that records such as the leave forms, employee wellness and records of benefits of employees and recruitment forms were being generated and accessed online using the new system. Although most of the respondents (76.7%) indicated that they received training on how to use the filing system, the records manager was of the opinion that less focus on DRM training posed a challenge to the new system. Personal observation revealed that there is lack of skills in this area despite efforts to train staff.
Generally there was lack of sufficient human resources skills in the department for records management programme. This seems to be a common problem in the developing countries (IRMT1999). A review of literature by IRMT (1999) indicated that lack of training in governments affects the operations for effective digital records management. If employees are not trained on how to use the new system, quality of services may not improve. In most government departments, these important elements are lacking or inadequate. As a result records are randomly scattered all over and very difficult to retrieve. The delay in this regard would affect the time the user/customer has to wait for a service.

5.2.1 Compliance with the legal and regulatory requirements

The legal and regulatory measures are components required to foster recordkeeping in the face of challenges of managing digital records. Lichpack and McDonald (2003) argued that legislative and regulatory framework is an important part of the environment necessary for managing records. The OTP has a supportive legal framework under which digital records are captured and used. This study established that a number of national legislations support records management in the OTP. Examples include the National Archives and Records Service of South Africa Act (no.43 of 1996 as amended), The Promotion of Access to Information Act no. 2 of 2000), The Public Finance management Act (no.1 of 1999) and The Promotion of Administrative Justice (no. 3 of 2000), etc. The OTP is complying with the Records Management Model which aims at the promotion of efficient, accountable and transparent government through the proper management of records (NARS 2005). According to the NARS model sound
records management programme should include the presence of a records management policy endorsed by the heads of government bodies and their top management team, as well as by the National Archives and Records Service. The study also established that the OTP department had a policy on the appointment of a designated records manager (chart11). The records manager conducts RM training and oversees the recordkeeping activities of the Administration and Support Service.

5.2.2 Infrastructure for the management of digital records

Managers at all levels were concerned about the location of EDRMS in the HRM sub-directorate. They argued that the EDRMS seemed not properly connected to records management activities and that is why most staff were reluctant about the training in the use of this records management solution. It was argued for instance that the Documentum 6.5 software which facilitates the creation/generation of digital records was only used in the HRM sub-directorate. It was felt that such a discrepancy needed rectification to make DRM facilities more accessible in the OTP. Personal observations also revealed that although computers and the relevant hardware were being used they were not exclusive to digital records management.

5.2.3 Security and Preservation

Most of the respondents (60.0%) did not know that the department had a system in place to ensure the protection of records created in digital form (table 4). Both top management and staff members expressed great concern about the security of records.
They argued that information recorded electronically is not secure and that confidentiality is easily breached when records are kept in digital systems. The records manager revealed that the department had a lease agreement to ensure that digital records are protected against unauthorized access. The Chief Information Officer (CIO) revealed that there was no compliance with policies and procedures that guide the security of digital records in the OTP.

Space to store physical records in the OTP was limited. The researcher observed that the store rooms themselves were congested and lacked suitable physical and environmental conditions. It was evident that the OTP did not also have backup storage facilities for digital records except the database being piloted in the HRM sub-directorate.

5.2.4 Challenges for DRM

Resources, especially adequate funding, to facilitate digital records management programme came up among the major challenges faced by the department. Mnjama, Wamukoya and Mutula (2008) state that there should be necessary resources and funding in order to manage digital records effectively. The records manager revealed that allocation of financial resources for the DRM project was a major problem because the RM programme did not feature in the strategic planning of the OTP.

The findings revealed that the implementation of the EDRMS solution was received with less enthusiasm by the staff. It is probable that its introduction was not supported by the necessary change management training that would have helped in dispelling the fear
that the new solution would lead to loss of jobs. This was compounded by the fact that most of the staff, especially those dealing with records, were not well trained.

5.3 Recommendations

Based on the findings and conclusions, the following recommendations are made.

The need for expertise in managing digital records has been identified as a critical success factor for implementing a DRM programme. It is recommended that the OTP department develops and encourages its staff members to get training so as to be knowledgeable in the use of the technologies that generate digital records. A detailed training plan needs to be developed around the training needs of the department. The OTP must ensure that financial resources are available to support the training needs as well as facilities that could enhance digital records management programme. The consultants installing the EDRMS solution should work closely with the staff who will use the system when the duration of the consultancy comes to an end.

With the increasing use of ICT in the OTP, and in preparation for the switch to e-government there is a need for a dedicated section/unit with the responsibility for the management of digital records. The unit should also be responsible for the formulation of standards, coordination, monitoring and evaluation of all DRM initiatives in the OTP.

There is urgent need to tighten the current security and preservation practices of digital records in the OTP. There should be distinction between the physical and content
security and preservation of digital records. The office of the Chief Information Officer should spearhead the formulation and implementation of a policy as well as rules and regulations to govern the security and preservation of digital records. The policy must be in line with similar policies as practiced under the National Archives and Records Service Act (no. 43 of 1996 as amended).

5.4 Areas of Further Research

Further research should be conducted on the capacity building strategies to manage digital records in government departments. More research is also required to establish the impact of the current state of digital records management on the proposed Promotion of Access to Information Act (PAIA) legislation initiatives in government.

5.5 Summary

The study revealed that the OTP is in a process of implementing an EDRMS to capture, store and preserve digital records generated by the department. Therefore DRM is still work in progress although it has been piloted in one of the directorates. This study has established that although there is an increased use of ICTs in the OTP department they are not used exclusively to support DRM activities. Failure to accept the importance of digital records and inadequate funding are among the challenges affecting the current records management programme in the OTP.
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## Appendix 1: Questionnaire

Mark with an X or Tick on the option relevant to you. Use the space provided to write your answers to the questions.

### Biographical Data

1. Gender

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Your Highest qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Matric</td>
<td>1</td>
</tr>
<tr>
<td>Matric certificate</td>
<td>2</td>
</tr>
<tr>
<td>Post-Matric certificate</td>
<td>3</td>
</tr>
<tr>
<td>Diploma</td>
<td>4</td>
</tr>
<tr>
<td>Degree</td>
<td>5</td>
</tr>
<tr>
<td>Other: specify</td>
<td>6</td>
</tr>
</tbody>
</table>

3. Qualification in records management

<table>
<thead>
<tr>
<th>Qualification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters degree in records management</td>
<td>1</td>
</tr>
<tr>
<td>Records management competency course</td>
<td>2</td>
</tr>
<tr>
<td>Diploma in records management</td>
<td>3</td>
</tr>
<tr>
<td>Certificate in records management</td>
<td>4</td>
</tr>
<tr>
<td>Basic qualification in records management</td>
<td>5</td>
</tr>
<tr>
<td>No training in records management</td>
<td>6</td>
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</tbody>
</table>
4) Your position within the OTP

<table>
<thead>
<tr>
<th>Position</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records manager</td>
<td>1</td>
</tr>
<tr>
<td>Senior manager and above</td>
<td>2</td>
</tr>
<tr>
<td>Admin Assistant</td>
<td>3</td>
</tr>
<tr>
<td>Registry clerk</td>
<td>4</td>
</tr>
<tr>
<td>Information officer</td>
<td>5</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>6</td>
</tr>
</tbody>
</table>

Section A: Current status of digital records management in OTP

4. Does the OTP have a records management programme?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

5. Does the programme cover the management of digital records

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

a) Is the programme meeting your needs?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
b) Which unit/section support records management programme in the Office of the Premier

<table>
<thead>
<tr>
<th>Unit/Section</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge &amp; Information management Unit</td>
<td>1</td>
</tr>
<tr>
<td>Communication</td>
<td>2</td>
</tr>
<tr>
<td>Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>Admin Support Services</td>
<td>4</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>5</td>
</tr>
</tbody>
</table>

c) Has the records management programme been allocated the appropriate resources (financial/equipment) to sustain it?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

7 Is the RM program regularly reviewed to ensure its continued effectiveness?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

a) If yes, how frequently?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>1</td>
</tr>
<tr>
<td>Quarterly</td>
<td>2</td>
</tr>
<tr>
<td>Annually</td>
<td>3</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>4</td>
</tr>
</tbody>
</table>
a) How is the review done?

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>1</td>
</tr>
<tr>
<td>Information Audits</td>
<td>2</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>4</td>
</tr>
</tbody>
</table>

a) How do you rate the RM programme?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived as helpful</td>
<td>1</td>
</tr>
<tr>
<td>Its recommendations implemented</td>
<td>2</td>
</tr>
<tr>
<td>Improves organizational skills</td>
<td>3</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>4</td>
</tr>
</tbody>
</table>

Section B: Legal framework and record policy in the Office of the Premier

8  Does the OTP have a records management policy in place?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

a) If yes, is the policy endorsed by the Directorate

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

9  Are all staff members aware of the policy?
10. How does staff members made aware of the policy?

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail</td>
<td>1</td>
</tr>
<tr>
<td>Intranet</td>
<td>2</td>
</tr>
<tr>
<td>Circulars</td>
<td>3</td>
</tr>
<tr>
<td>Other, Specify</td>
<td>4</td>
</tr>
</tbody>
</table>

11. Is the policy reviewed regularly?

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

12. Does the OTP have a designated/appointed records manager?

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

13. If no who is responsible for records management in the OTP


14. What is the level of the records manager within the OTP

<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>1</td>
</tr>
</tbody>
</table>
Deputy Director | 2
Assistant Director | 3
Other: Specify | 4

15 Does the OTP have a records classification system/file plan?

Yes | 1
No | 2

a) Do you file digital records according to the file plan?

Yes | 1
No | 2

16 Is the file plan approved by the National Archives and Records Service of South Africa?

Yes | 1
No | 2

17 Do you receive training on how to use the filing system/file plan

Yes | 1
No | 2

18 How do you rate the effectiveness of the file plan within the OTP e.g. in terms of retrieval of records, accessibility, missing of files etc
19 Does your department have a disaster recovery plan policy for digital records management?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>No idea</td>
<td>3</td>
</tr>
</tbody>
</table>

**Section C: ICT infrastructure to promote the creation and management of digital records**

20 Do you have a separate section or unit with responsibility for the management of ICT in your department?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Do not know</td>
<td>3</td>
</tr>
</tbody>
</table>

21 Who has the primary responsibility for the implementation of ICT in your department?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house staff</td>
<td>1</td>
</tr>
<tr>
<td>Consultant</td>
<td>2</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>3</td>
</tr>
</tbody>
</table>

22 What are the major uses of ICT in your department?
Research | 1
---|---
Data storage | 2
Data processing | 3
Other: Specify | 4

23 Does the use of ICT have influence on digital records management in your department?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
</tr>
</tbody>
</table>

a) If yes, what categories of digital records are created, received and maintained in your department?

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-mails</td>
<td>1</td>
</tr>
<tr>
<td>reports</td>
<td>2</td>
</tr>
<tr>
<td>publications</td>
<td>3</td>
</tr>
<tr>
<td>Leave forms</td>
<td>4</td>
</tr>
<tr>
<td>Others: Specify</td>
<td>5</td>
</tr>
</tbody>
</table>

24 What system is available for the management of digital records?

..........................................................................................................................................................................................
Section D: Security and Preservation measures within the OTP

25 Do you have a system in place to ensure security and protection of digital records?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>No idea</td>
<td>3</td>
</tr>
</tbody>
</table>

a) If yes, specify………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………

26 In what format are the digital records stored/preserved in your department?

<table>
<thead>
<tr>
<th>Format</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Images Files</td>
<td>1</td>
</tr>
<tr>
<td>Data files</td>
<td>2</td>
</tr>
<tr>
<td>Text Files</td>
<td>3</td>
</tr>
<tr>
<td>Databases</td>
<td>4</td>
</tr>
<tr>
<td>Other: Specify</td>
<td>5</td>
</tr>
</tbody>
</table>

27 Are you satisfied with the way your department is managing digital records?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

a) If yes, what shows that your organization has managed digital records properly?
b) If no, how does your department plan to improve the management of digital record?


Section E: challenges

28 What challenges does your department have in using ICTs for (DRM)? Select all that apply:

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortage of DRM Skills</td>
<td>1</td>
</tr>
<tr>
<td>Insufficient ICT facilities</td>
<td>2</td>
</tr>
<tr>
<td>Inadequate expertise</td>
<td>3</td>
</tr>
<tr>
<td>Inadequate legal and regulatory system</td>
<td>4</td>
</tr>
<tr>
<td>Other Specify:</td>
<td>5</td>
</tr>
</tbody>
</table>

29 Are there any other challenges/factors associated with recordkeeping within your

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>
a) If yes, please explain………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

Recommendations

30 What other proposals would you recommend for improving the management of digital records in the Office of the Premier?
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

Thank you

Munetsi N
Cell 0784014611
E-mail munetsi.ndakasharwa@gmail.com
Appendix 2: Request to Conduct Research

Department of Library & Information Science
Faculty of Social Sciences & Humanities

2nd Floor, Psychology Building
Alice Campus

04 November 2010

Office of the Premier
Eastern Cape Province
Bhisho

Attention Ms T. Khanyile

Dear Madam

Re: Approval to conduct research- Ms Munetsi

I am writing from the Department of Library and Information Science, University of Fort Hare. The purpose of this letter is to humbly request for your approval for our above named Masters student to conduct research in your Offices. Ms Munetsi proposes to do research on the Investigation of the state of Digital Records management in the Eastern Cape 'Provincial Government.
The central argument of this study is that good records management is key to effective and efficient management of any organization. Until very recently records management programmes have presided over paper based records. However in the recent past organizations are witnessing an increasing shift in the format of records which may be impacting on the management and use of the records. The shift to digital/electronic records is attributed to the emergence of information and communication technologies which have become part and parcel of an organizational information infrastructure. As a result the term digital or electronic record has been incorporated in the records management programmes. This has no doubt affected the manner the organizations contact their business. The management and use of digital records is quite different when compared to the management of paper based records.

It is important to state that the research has no interest in the content of the existing digital records in your offices. The study will be limited to the policy governing the management of digital records; the filing systems; the security arrangement for the digital records; the hardware and software used in the creation, receipt and storage of the records; and the preservation programme. It is envisaged that the findings of the study may be, among other things, useful in identifying the challenges of digital records management in your offices in particular and in the provincial government in general. The researcher will deposit a copy of the completed dissertation to your offices so the findings may be shared by the Office of the Premier and other relevant Departments and sections of the Provincial government.

Your assistance in this matter will be highly appreciated.

Kind regards

FE Khayundi
Senior Lecture/Supervisor
22 November 2010

University of Fort Hare
Department of Library & Information Science
Faculty of Social Sciences & Humanities
Alice Campus

Dear Madam

Re: approval to conduct research – Ms Munesti

This serves to conform that we have attended at your request and would like to assist you where possible and allow you to conduct your research in the office of the Premier.

Wishing you a success on your studies an hope that this office will be of good use to gain knowledge and information that you are looking for.

Thank you.

[Signature]

L. Nqunqa
Senior Manager: HR & OS

Date