

**AN ASSESSMENT OF THE READINESS OF PRESIDENTI'S OFFICE PUBLIC
SERVICE MANAGEMENT IN ELECTRONIC RECORDS MANAGEMENT**
A Case of Tanzania Public Service College and Records and Archives Division

Judith Romwald Newa

**A dissertation Submitted in Partial Fulfillment of the Requirements for the Degree
of Master of Arts (Information Studies) of the University of Dar es Salaam**

University of Dar es Salaam

May, 2017

CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance by the University of Dar es Salaam a dissertation entitled: ***An Assessment of the Readiness of President's Office Public Service Management in Electronic Records Management: A case of Public Service College and Records and Archives Management Division***, in a partial fulfillment of the requirements of the degree of Master of Arts (Information Studies) of the University of Dar es Salaam

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I, **Judith Romwald Newa**, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

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DEDICATION

This work is dedicated to my family especially to my lovely parents late Dr. Romwald Majaliwa Newa and Late Mrs. Odila Newa who sent me to school. Let them rest in peace, Amen. Also I dedicate this work to my husband Goodluck Patrick Makuhana, my daughter Rose, my sons Mike, and Erick for their patience, contribution and support they provided to me throughout the period of my study.

ABSTRACT

The study assessed the readiness of President's Office Public Service Management, (PO-PSM) in electronic records management at the Records and Archives Management Division (RAMD) and Tanzania Public Service College (TPSC). Data for the study were collected from both primary and secondary sources. Primary data were collected through self administered questionnaire, face to face interview and non participatory observation while secondary sources were collected through review of various documentary sources. Quantitative data were analyzed by using Statistical Package for Service Solutions (SPSS) whereby qualitative data were analyzed by using content analysis. Generally, the key findings revealed that the PO-PSM is not well prepared in electronic records management, since various factors were identified which hindered its effectiveness, such as ,lack of awareness and attitude, lack of technical support, inadequate funding, lack of harmonized legal framework on electronic records management and shortage of experts in electronic records management. Other factors were inadequate facilities, and Internet connectivity.

Finally, the study recommends that the government should support higher learning in introducing and enhancing LIS and e-records management curriculum at various colleges and universities in the country through the Ministry of Education and Vocational Training and TCU, government should ensure legal framework on e-records management are implemented. Also, PO-PSM and RAMD should mobilize for adequate funds from donors, government and private sectors to support implementation and utilization of ERM, staff training and acquisition of software and hardware applications. In addition to that, the RAMD should to be made increasing ICT facilities, and installation of e-records and security systems to enhance security of electronic records.

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ABBREVIATION AND ACRONYMS

CalRIM	California Records and Information Management
ERA	Electronic Records and Archives
ERMS	Electronic Records Management System
ESARBICA	Eastern and Southern Africa Regional Branch of the International Council on Archives
ICT	Information and Communication Technology
IFLA	International Federation for Library Associations
IRMT	International Records Management Trust
ISO	International Standards Organization
LGA	Local Government Authorities
Moreq	Model Requirements for the Management of Electronic Records
NASSA	National Archives and Records Services of South Africa
NARA	National Archives and Records Administration
NECCC	National Electronic Commerce Coordinating Council
NHIF	National Health Insurance
NICS	Northern Ireland Civil Service
NRAMD	National Records and Archives Management Development
NRAMP	National Records and Archives Management Programme
POPSM	President's Office Public Service Management
PRONI	Public Records Office Northern Ireland

PSRP	Public Services Restructuring Programme
RAMD	Records and Archives Management Administration
RSA	Republic of South Africa
SOS	Secretary of States
SPSS	Social Product and Service Solution
TAM	Technological Acceptance Model
TPSC	Tanzania Public Services College
UNESCO	United Nations Educational, Scientific and Cultural Organization
US-NARA	US-National Archives and Records Administration

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CHAPTER ONE

INTRODUCTION

1.0 General introduction

The introduction of ICTs fundamentally altered the way business is done and revolutionized records keeping. In fact, computerized systems offer significant advantages over conventional manual methods. In particular, they can manipulate large amounts of information and generate a wide range of information products. On top of that, they offer speed, precision, diversity, flexibility, and a rich and comprehensive documentation of processes. In simple terms, these technologies have changed the way records are generated, processed and managed. These technologies have been so quickly embraced around the world as critical information, data, knowledge, records management and communication tools (Republic of South Africa [RSA], 2006). Today, many organizations carry out their business electronically by using ICTs. These tools have also led to structural changes in governments, notably the acceptance of e-governance by different nations (see Lanzara, 2009). These unfolding changes in governance fostered by the changing technology landscape are also affecting the delivery of public services. The incorporation of e-government features is inarguably enhancing business processes, workflows and records management in the public sector (Scholl, 2003).

The concept of e-records management is within the range of changes caused by a shift in communication and information exchange between governments and citizens from print

to electronic environment and telecommunication utilities. The massive technological evolution in relation to creation of records has brought with it a challenge in the form of managing electronic records (IRMT, 2004). Undeniably, the role played by records in decision making, transparency and other important activities makes them an essential element in the development of any public or private organizations (Kalusopa, 2010 & Kemoni, 2009). On the whole, records play an important role in national development.

1.1 Background to the Study

Over the past two decades, strong advancements have been made in the development of systems, innovations, and technologies such as ICTs that have enhanced the management of electronic records. The shift from paper records automated management systems in 1980s to unconnected electronic records keeping in the early 1990s marked a new page in records management practices. Consequently, within a short period of time the evolution of electronic records management systems has been remarkable (McDonald, 2008). During such changes, two major trends in the world of document and content management have become intertwined. The first is the continuing explosive growth of electronic records (as more records are being created in electronic format and paper-based records are being converted to electronic format). The second trend is the growing number of statutory requirements, legislations, and supporting business practices needed to maintain control of records and comply with legislation (Mnjama & Wamukoya, 2007). Currently there are many initiatives and strategies to merge electronic records management systems. The following paragraphs describe some of the

initiatives taken by governments, sectors, institutions, and organizations in different countries.

The 1990s saw a massive growth in technologies used in working environments across the entire Europe. These developments saw the public sector and organizations employing a wide range of Electronic Record Management Systems (ERMS). In 2003, Northern Ireland Civil Service (NICS) launched a project which was to become what is now known as RecordsNI. Accordingly, in 2009, majority of work carried out by NICS departments, non-departmental public bodies, and other public sector organizations was done electronically. Further, a single Electronic Document and Records Management System for all NI Government Departments were introduced. The successful implementation of the chosen product, the HP system known as TRIM led to a standardization of electronic record keeping processes across NICS. The initiative improved sharing of information between staff and allowed 16,000 users to access a single application to create records of activities in their respective departments. As of March 2009 almost five million documents have been created within TRIM (Public Record Office of Northern Ireland [PRONI], 2009).

In USA, the National Archives and Records Administration (NARA) has been Evolved with taking in preserving, and providing access to early types of computer records since 1965. The first transfer of electronic records from US Federal agencies came to NARA in 1969. From 2009 through 2011, new capabilities and enhancements to existing functionalities were under development to support scheduling, transferring to NARA, ingesting and processing, and providing access to publicly available electronic records

through the Online Public Access prototype. The focus of the final year of the developments was on initiatives that were meant to ensure successful adoption of the Electronic Records and Archives (ERA) System by all agencies of the Federal government by the end of 2012. At that time, all Federal agencies were required to use ERA to schedule and transfer to the National Archives all permanent electronic and non-electronic records (U.S. National Archives and Records Administration [US-NARA], n.d)

In Africa, many countries are gradually transforming their governments to e-governance. For example, in South Africa, the need for effective management of records was further strengthened by a number of Acts which specify the obligation governmental bodies have in properly managing their records, providing access to information in them, ensuring their authenticity, and providing reasons for administrative decisions. These Acts were; the Public Finance Management Act of 1999, the Promotion of Access to Information Act of 2000, the Promotion of Administrative Justice Act of 2000, and the Electronic Communications and Transactions Act of 2000. For example, the National Archives and Records Services have a responsibility to ensure that the records are maintained and protected for centuries to come. To facilitate this, the National Archives and Records Service's role according to the National Archives and Records Service of South Africa Act of 1996 is to promote efficient administration by regulating records management practices of government bodies to ensure sound management of information resources (Republic of South Africa [RSA], 2006).

Similarly, the government of Tanzania has shown commitment to exploiting the power of ICTs by introducing an e-government as a tool for socio-economic growth in the public and private sectors. The introduction of an e-government followed the recognition of the impact of poor records management on the efficiency of government operations, accountability and transparency in the public sector. The government has been working to strengthen its records management systems for more than a decade now by enhancing its ICT infrastructure and service delivery (IRMT, 2011).

In October 2009, the government of Tanzania moved forward with its e-government strategy by issuing two significant circulars that demonstrated its recognition of the vitality of records management as a component of ICT and e-government programs. The circulars provided clear guidance on management and usage of information created in electronic form. Circular No.5 includes requirements that confidential government information should be protected when staff members use electronic storage media and that records identified for disposition should be sent to the Records and Archives Management Department for storage. Similarly, Circular No. 6 also addresses electronic information management issues by providing instructions on the retention and disposition of government information in electronic form (Lowry, 2012).

With the help of the National Records and Archives Management Act of 2002 a Records and National Archives Division was established within the President's Office – Public Service Management (PO-PSM) (Lowry, 2012). The National Records Management and Archives Act provide the mandate to Records and Archives Management Division

to maintain oversight and coordinate the government records management program. Along with these changes, the government integrated the ICTs in its offices in order to facilitate and enhance the delivery of public services. So far, the Tanzanian government has created digital records such as policy documents, strategies and acts through the digitization of hard copy records and creation of 'born digital' records in the e-government system. In 2006, the PO-PSM embarked on a four-year program to improve the management of personnel records during which scanning technologies were used to create electronic copies of key documents that could be needed in the future. Another related development was the introduction of the Global 360 Business Process Management Software used for indexing scanned images and retrieval of captured information (IRMT, 2007).

A study conducted by the World Bank (2007) found that National Records and Archives Management Division (NRAMD) were aware that new infrastructure, policies, and standards were needed to manage electronic records. It was also learned from the study that records management training had been provided to about a third of all Local government Authorities to meet the new demands of managing electronic records. Empirically, Maulid (2015) conducted a study that aimed at assessing the effectiveness of electronic records management systems in selected courts of Tanzania. The findings from the study suggest that the courts of Tanzania utilize print management systems for creation and management of records as indicated by 86% of his respondents. Ngoepe (2008) conducted a study to explore the records management trends in the South African public sector. The study revealed that 50% of the respondents made print-outs and filed

hard copies of their records while only 23% mentioned that they filed them electronically on an electronic document and records management system called Hummingbird.

1.2 Statement of the Problem

The growth of Information and Communication Technologies in the early 1990s and 2000s contributed to rapid changes in records handling in public institutions in Tanzania. Many efforts have been made by the government and other stakeholders to improve e-records management practices in government institutions such as PO-PSM. The initiatives include the amendment of the National Records and Archives Management Act of 2002 done to incorporate the management of e-records. Despite rigorous efforts by the government to introduce an e-government, most of the records in PO-PSM are not electronically managed. Experience shows that print system of records management still dominates. This is evident when seeking services in public offices where workers have to go through piles of files to locate a particular record. Empirically, Maulid (2015) supports that paper based records management system remains the mostly used in daily court operations despite the implementation of an e-system hence the lack of its anticipated effectiveness. It is not known as to which readiness tools are in place to foster effective e-records management as there are hardly studies to assess the readiness of the government of Tanzania to effectively function in e-government environment. As a result, this study was conducted to assessing the readiness of President's Office Public Service Management (PO-PSM) for e-records management.

1.3 Objectives of the Study

1.3.1 General Objective

The objective of this study was to assess the readiness of President's Office Public Service Management (PO-PSM) for e-records management.

1.3.2 Specific Objectives

The specific objectives were to:

1. Study the kinds of e-records found in President's Office Public Service Management;
2. Examine the e-records readiness tools which facilitate e-records management in the President's Office Public Service Management;
3. Explore the staff member's perception of using e-records in President's Office Public Service Management; and
4. Examine the challenges faced by the President's Office Public Service Management in electronic records management.

1.3.3 Research Questions

Specifically, the study aims at addressing the following questions:

1. What kinds of e-records are found in President's Office Public Service Management?
2. What are the tools in place to foster electronic records management in President's Office Public Service Management?

3. What are the President's Office Public Service Management staff's perceptions of e-records management?
4. What are the challenges faced by President's Office Public Service Management in electronic records management?

1.3.4 Significance of the Study

The study findings are important to professionals, planners, policy makers, and other stakeholders in this field of library and information studies. Specifically, the present study fills a specific information and knowledge gap by:

- Generating information and knowledge that could assist planners, policy and circular makers not only in President's Office-Public Service Management in planning and formulating policies, circulars, and amending Acts on records and archives management;
- Increasing awareness on readiness tools that promote e- records management in government institutions; and
- Adding new knowledge and literature to the field of library, information science, and records and archives management; and providing deeper insights to information and library professionals into the management of e-records in government organizations.

1.3.5 Scope of the study

In terms of scope, this study focused on e-records management in the President's Office-Public Service Management located in Dar es Salaam, Tanzania. The study assessed the kinds of records, readiness tools towards e-records management, explored how staff perceived it, and examined the challenges faced in managing the records. The main limitation to this study was the insufficiency of financial resources to support data collections from a larger sample and different government organizations. Consequently, the researcher decided to limit herself to the PO-PSM. Additionally, time for data collection and dissertation writing was very limited making it hard to capture and apply other research designs hence the employment of only a cross-sectional design.

1.4 Definitions of Key Terms

1.4.1 Records

A record is information regardless of form or medium created, received, and maintained by an organization in pursuance of its legal obligation or as part of business transactions (University of St. Andrews, 2004). In this study, records refer to any recorded information which can be used to provide evidence and in decision making in business transactions.

1.4.2 Records Management

According to Kulcu,(2009) records management is a systematic control of records distribution, organization, storage, and retrieval from creation to the ultimate disposition.

In this study records management is a process of controlling records throughout the life cycle.

1.4.3 E-records readiness

E-records readiness is a measure of the degree to which a country, nation, or economy is ready, willing, or prepared to benefit from the use of Information and Communication Technology [ICT] to manage records (Dada, 2006). This study used the term to refer to the degree to which government institutions have integrated e-records management practices in their daily activities.

1.4.4 E-government

E-government refers to external and internal government functions or processes that are carried out in digital form over the internet. E-government involves using ICT to improve the delivery of government services and information, enhance the efficiency and accountability of public administration, and strengthen economic performance (Dikopoulou, 2011). This study used the term to refer to the continuous optimization of service delivery public participation, and governance by transforming internal and external relationships through ICT including the internet and new media.

1.4.5 Information Technology

Information Technology (IT) refers to the tools or equipment such as computers, and telephones used to store, manipulate, and disseminate data and information (Wallace, 2000). In this study's context, IT refers computer hardware (e.g. computer, scanner,

mobile phone, tablets and photocopier) and software that facilitate e-records management.

1.5 Summary of the Chapter

This chapter contains an introduction and background of the study, statement of the problem, objectives, and significance of the study. Further, the chapter discloses the scope and limitations of the study and provides definitions of its key terms. The next chapter contains a review of literature related to the topic of study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of relevant literature on electronic records management. There are numerous reasons for reviewing the literature from other scholars. Boote and Beile (2005) contend that literature review ensures a thorough understanding of a topic and helps to identify potential areas for research. Apart from that, looking at similar work done within an area of interest helps to identify knowledge gaps that demand further investigation, compare current and previous findings, and help a researcher to provide a critique for existing findings and suggest further studies. In the words of Webster and Watson (2002):

A review of prior, relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists and uncovers areas where research is needed.

This quotation entails that literature review is one of the essential tasks in conducting a research due to the fact that it lays the foundation for advancing knowledge, developing theories, and filling existing research gaps. Mwantimwa (2016) summarizes that literature review is a roadmap for a scientific research. To him the road towards a research destination is clear when a critical review and analysis of relevant literature are done. This chapter follows a thematic approach which divides it into sections. The chapter is structured as follows: section 2.2 links the development of ICTs and records

management while section 2.3 discusses types of e-records; section 2.4 analyses readiness tools that promote e-records management; and section 2.5 discusses challenges of managing e-records. The literature sections are followed by the research gap for this study in section 2.6, and models and conceptual framework in section 2.7. The chapter ends with summary of all its contents in section 2.8.

2.1 ICT Development and Record Management

For many years, information management and recordkeeping practices in most organizations have been undergoing a revolution. The 1990s were the years that witnessed an unbelievable diffusion of information technology through a massive and unanticipated spread in the use of computers and local area networks, the internet, and the development of the World Wide Web (WWW) (Maulid, 2015; Campbell-Kelly, 1996). The massive advancement of ICT has fundamentally changed the way records are created, accessed, shared, used, preserved and disposed. From digitized and born digital e-records to the new and more advanced records management practices is journey that seems to keep continuing. The infiltration of ICT into records and archives management has altered record management practices compounding many African countries to respond and adapt to new demands (Asongwa, 2012). The advent of information and communications technologies (ICTs) has transformed the way many organizations create, store, disseminate, and use information. Increasingly, organizations world over are conducting their business functions using different ICT platforms resulting in more and more records being generated electronically. Tafor (2003) argues that the ability of ICTs to enhance record management in organizations is the main reason for their

increased adoption. Additionally, New York State Archives (2005) discloses that e-records can be stored into optical discs, magnetic tapes and increasing number of other media.

In recent years the world has been experiencing an information explosion and massive knowledge production such that the amount of new information and knowledge has roughly doubled in the last two decades. Roughly, 93% of that information is born digital and is stored electronically as well. Personal computers, electronic mail systems, Instant Messaging, the World Wide Web, digital cameras, and other tools have all contributed to the explosion and affected the way people communicate and live. Apart from people's way of living, the information explosion has impacted the way business is conducted in government organizations. The tremendous advancements in technology have placed more sophisticated tools in the hands of office workers. Consequently, most of the electronic information being created by governmental agencies, political subdivisions, and contractors resides on stand-alone personal computers and on networked computer environments (Dada, 2006). Indeed, the management of e-records and information has now gained a significant thrust into national development all over the world (Keakopa, 2006).

However, with these changes most information is usually under the direct control of the individual at a particular desktop, or a network administrator. This means that there are inadequate controls over the creation and maintenance of electronic records such that anyone can create and delete records. This puts the authenticity and reliability of

government records at stake. Records are becoming more informal because they are being created and handled by individuals who have not undergone training in record keeping practices. As a result, records are often not complete, accurate or comprehensive enough to document government activities (Lyman & Hal, 2005).

2.2 E-Records Management Initiatives and Practices

With the shift from paper records keeping to electronic records, new requirements for the collection, storage, preservation, and access to records have emerged (Maulid, 2015). Like paper records, e-records support the day-to-day government operations, and its interactions with citizens and private and public sector partners. By and large, in developed regions such as North America and Europe where government services have increasingly moved online, e-records are becoming the basis for confirming pensions and other entitlements, registering births and deaths, and verifying citizenship. Meanwhile, in Africa few countries like South Africa are able to reap the benefits information technology provides to records management (IRMT, 2004).

Barry (n.d.) concedes that most record keeping systems are now basically focused on converting paper forms into automated ones and using file management systems instead of each unit creating and managing its own files in isolation from other applications. In fact, the culture of keeping and managing physical records is being taken over by electronic records management systems. As Wamukoya and Mutula (2005) noted, sound recordkeeping practices are “increasingly being emphasized on and demanded to enhance performance, transparency and accountability in government”. However, it has

been noted that despite the fact that all the East and Southern African countries have been subjected to public sector reforms demanded by the World Bank and IMF to enhance transparency and accountability, most of their official records and archives have not changed much. Despite this slow pace in changes, Asongwa (2012) revealed that governments in Africa and many developing countries are looking forward to computerizing their core functions and public services by adopting e-government. Regrettably, these projects fail to succeed because governments neither assess the suitability of the available information frameworks for e-records management, nor do they convince record managers that automation is not a threat to their carriers so that they fully accept and implement them.

The government of Tanzania is not lagging behind in embracing ICTs in records and archives management. The government introduced circulars which provide clear guidance on controlling and using records created in electronic form. The government also published the National Information and Communications Technologies Policy in March, 2003. The policy covers matters such as strategic ICT leadership, ICT infrastructure, ICT industry, and human capital, the legal and regulatory framework for ICT, and local content and universal access. Additionally, a number of significant developments are underway, including the installation of a government-wide network, sensitization of public servants to ICT opportunities, and the implementation of several government-wide systems. The government has also introduced a different circular which addresses issues pertaining to electronic information management by providing instructions on the retention and disposition of electronic government (Lowry, 2005).

Accordingly, the Government of Tanzania have moved further ahead by developing and introducing new policies, laws, and regulations for the management of government records. Such achievements include the Records and Archives Management Act and the National Records Management Policy. These were positive changes that other countries could benefit from. However, it is evident that while new policies and regulations specify actions required to be taken, there is also a need for compliance mechanisms and accountability structures to ensure that the policies and procedures are followed. There needs to be mechanisms to monitor compliance and follow up with remedial action where required (IRMT, 2007).

2.3 Kinds of Electronic Records in Public Offices

There are many kinds of e-records which can be managed by public institutions which include: legislative records, court records, police and prison records, policy files, budget paper, accounting records, procurement records, personnel records, tax records, election registers, and property and fixed asset registers. In addition to the above records, public offices can keep records about entitlements such as pensions, social security records, land records, birth and death records; documents on relationship with other countries, correspondence with national and international bodies as well as loan agreements (NRAMP, 2011). Apart from that, modern organizations are increasingly using digital media and digitally maintained records (Shepherd & Yeo 2003). The types of digital records include word-processed documents, spreadsheets, multimedia presentations, email, websites, and online transactions. Electronic records can be found in many

organizational systems such as databases and business information systems, and shared folders and hard drives (National Archives of Australia Digital Records keeping Guidelines [NAADRG], 2004). Electronic records are just the computerized versions of traditional paper records hence they are equally real evidence of organizational activities. Sources of electronic records range from desktop publications such as Microsoft Word and Excel, emails; and corporate applications such as financial and human resource systems, and corporate databases (Victorian Electronic Records Strategy [VERS], 2002).

This entails that the advent of ICTs has boosted the creation and keeping of records. However, it is also apparent that despite the advancements in ICTs some records are still in paper format.

2.4 E-records Readiness Tools

There are numerous tools that can be used to strengthen the management of e-records in public and private sectors. IRMT (2004) reports that e-records management readiness tools are designed for use in conjunction with existing e-government readiness to permit a high level assessment of the infrastructure capacity. For example, the World Bank provides a free Records Management Capacity Assessment System; a software tool to support a more in-depth evaluation and identification of relevant capacity building resources. Kallusopa, (2011) argues that “these e-records readiness tools have different purposes, audiences and coverage”. However, there is consensus that all e-records readiness tools underscore that attempt to understand e-records readiness in

organizations based on best records and information management practices. In addition to that, Lowry (2012) points out that readiness tools may differ from one country to another but there are common features observed some of which are discussed in subsections that follow.

2.5 ICT Infrastructure

The information infrastructure components that enhance e-records management include internet connection and its bandwidth and computers. Kalusopa (2011) grouped e-records readiness assessment models and tools into two main categories: those that focus on assessing the basic infrastructure or a nation's business or economic growth, and those that focus on assessing the ability of the country to benefit from ICTs. Specifically, the e-readiness tools for records management focus on:

- Physical infrastructure (telephone, electricity etc) with high bandwidth, reliable, and affordable;
- Access to high-speed ICT in government offices, healthcare facilities, and homes;
- Integration and use of ICT in everyday life;
- Existence of government policies that support and promote connectedness;
- Existence of legislative and regulatory framework guiding the use of ICTs and e-information;
- Provision of adequate information communication channels;
- Guaranteed user privacy and online security; and

- Universal access – technologies which are accessible and usable by all citizens.

In his study, Maulid (2015) found that majority(>50%) of respondents cited computer hardware and software, internet, scanners, CD ROMS, mobile phones and audio recorders as very important e-records management facilities.

2.5.1 Policies

Policies such as those for records and archive management and ICT cover several issues relating to information management. IRMT (2007) states that the Tanzania ICT Policy recognizes the ‘capture, preservation and dissemination of relevant government records and archives as a policy challenge. However, there is no direct reference to the need to build records management requirements into government ICT systems. Several scholars have conducted studies on e-records readiness. For example, Ngulube (2004), Wato (2005), and Kalusopa (2011) specifically explored the concept of e-records readiness in the ESARBICA region. The key findings from the studies indicate that in South Africa the authenticity of e-records was supported by the Archives Act while Mozambique did not even have a national ICT policy.

2.5.2 Laws and Acts

Laws and acts are very important ingredients to electronic records management readiness. Maulidi (2015) citing Chibambo (2003) agrees with the above statement by stating that a good records management framework consists of information related laws, policies, programs and records management standards and practices. These should be complemented with qualified human resources to implement and manage systems. For

instance, the Records Management Act of USA allows conducting electronic transactions subject to the same legal standard as paper transactions. Iwhiwhu (2011) point out that the US Government's document on Accomplishment of Government Paperwork Elimination Act (1998) noted that public confidence in the security of the government's electronic information processes is essential as agencies make the transition from paper records to electronic records environment.

A study by Thurston (2007) found that most African countries' archival and records management legislations were similar to those of their former colonial masters and have remained unchanged ever since they were enacted hence negatively affecting progress. For example, in Tanzania, the Public Service Reform Programme of 1990s identified records management as one of the areas that had affected public service delivery. As a result, the Government of Tanzania took several measures aimed at improving records and archives management (IRMT, 2011). For example, National Archives of Tanzania was transferred from the Ministry of Education and Culture to the President's Office, Public Service Management. Additionally, laws such as; the Records and Archives Management Act No.3 of 2002, the Law of Limitation Act of 1971, the National Security Act No.3 of 1970, and the Evidence Act No. 6 of 1967 revised in 2002 were enacted (The National Records and Archives Management Policy [NRAMP], 2011).

As pointed out by Kemoni (2009), various guidelines have been developed by national archives agencies and universities to assist organizations in managing their electronic records. For example, the National Archives and Records Service of South Africa (2006)

developed guidelines for managing electronic records in government bodies. The guidelines cover areas such as the statutory and regulatory framework for electronic records, details on what electronic records include, why electronic records should be managed, and electronic records management principles. Other areas covered are management of electronic records residing in different types of systems, and the responsibilities of governmental bodies regarding the management of electronic records.

2.5.3 Standards

Standards are important tools to electronic records management. They intend to formulate an initial framework or principles which stipulate how records should be managed within organization. Further, standards provide guidelines on what other components of records management frameworks are supposed to do. For example, the International Standards for Records Management (ISO 15489) states that policy should define areas where legislation, regulations, and other standards and best practices have the greatest application in the creation of records connected to business activities. A new international standard for records management (ISO 15489) identifies clear objectives for both public and private sector institutions. The challenges, however, are complex and progress is sometimes slow. The Tanzania National Records and Archives Management Policy of 2011 states; the government shall develop and approve standards, procedures and guidelines for the management of electronic documents and records. In this regard, McLeod (2005) argues that the effectiveness of electronic records management is not just a technology issue. It requires an infrastructure of standards. The Australian

Government through the National Archives set up a standard (AS ISO 15489-2002) for a best practice approach to recordkeeping within the Commonwealth nations.

2.5.4 Staffing

Another important ingredient of electronic records readiness is staffing. Staff should be trained, motivated, respected among others. The rise in the creation and use of electronic records demands new techniques and methods of education and training. Understanding the nature of the records life-cycle, dealing with the massive volume of electronic documents; e-mail, instant messages, and other electronic records, pose new and significant challenges for archival educators, governments, businesses, and individuals at all levels of the society (Kemoni, 2009).

2.5.5 Perceived Importance of Electronic Records

A study conducted by Kashorda & Naema (2014) at Kenyatta University revealed that in the context of e-records readiness every person may have their own perception on issues such as technology, human resource, policies, laws and others. Due to the generation of gaps between the new and old professionals, electronic records management is perceived as a threat to their status as experts. Thus, they find it difficult to cope or measure up with the requirements of the electronic age, and are at the same time, too unwilling to throw away the old practices for new one (Ayoku & Ojedokun, 2008).

Henriksen and Andersen (2008) perceive that the ERM have led to increased efficiency and effectiveness of the government, increased transparency and accountability in

decision making, and enhanced delivery of efficient and cost effective public services to citizens. Ngoepe (2008) perceives an effective records management programme as a major element of the governance of any organization. Accordingly, El-Karesh et al. (2009) explored the trend in primary care clinician perception of a new electronic health records. Their key findings suggest that majority of clinicians perceived that the electronic health records improved the overall quality of services (86%), reduced medication-related errors (81%) and improved communication among clinicians (93%). These findings indicate that the electronic records play a pivotal role in enhancing health services among clinicians.

The by Pera, Kaur and Rao (2014) highlighted the perception of electronic medical records (EMRs) by nursing staff in a teaching hospital in India. The study noted that 75% of the study populations were comfortable working with electronic medical records. Their respondents perceived that “electronic medical records improve timely decision-making and patient care due to immediate access to the patient's disease history”. This entails that access to and use of electronic medical records has impact on performing their tasks and making decision. This further discloses that electronic records in health sector have transformed the way services delivered and decision made.

In exploring the records-keeping professionals’ perceptions of users and use functional electronic records in the Finnish public sector, Packalén (2016) observed that the user of e-records management systems perceived to use the e-records to a lesser extent. Further, the findings revealed that the interviewees perceived that the systems were underused.

This was associated with negative user attitudes towards electronic records systems. On top of that, contradictions between the potentials sought by the e-records systems and the supporting environment for electronic records management systems such as management support, tools and infrastructure for electronic management in the public sector of the Finish government. These findings show that some of the users have positive and negative attitudes towards the use of electronic records in daily operation.

2.5.6 Barriers and Constraints towards E-Records Management

There are many challenges and constraints facing the public sector in managing electronic records. In Lowry's (2012) study on e-readiness and conservation, several challenges facing organizations' readiness for electronic records management were summarized. The challenges were: the lack of strategy to ensure that e- records remain accessible for as long as they are needed; lack of guidance on key issues including classification, naming conventions, and titling to support accurate retrieval, and lack of training in digital records management. The study also cited other challenges namely; the absence of standardized guidance on functional or system requirements, lack of records management input in IT processes, unavailability of formal business continuity plans or assessments of risks to electronic records caused by computer malfunctions or data input errors.

Moreover, many records centers and archives lack clear electronic records acquisition, process, storage, and access policies. As a result, unimportant electronic records or those irrelevant to immediate customers are acquired. This would eventually impact negatively

on the business activities of an organization as argued by Mnjama and Wamukoya (2007:190) that “without access to good records officials end up making decisions on ad hoc basis without the benefit of institutional memory”. They further argue that time has come for information centers and archives to re-examine their electronic records collection policies, staff requirements, access conditions, and disposal practices.

In the U.S, National Records and Archives Administration (NARA) found that the rapid evolution of information and technology makes the task of managing and preserving e-records complex and costly. Similarly, a study by Asongwa (2012) discloses that the major problems of e-records management in Africa are administrative and technically induced. Additionally it is argued that the benefits of managing hybrid records in Africa can only be realized if appropriate infrastructures, workable legislation and regulatory frameworks, adequate finance, and competent ICT personnel are available. Findings from Kemoni’s (2009) indicate that most countries in the ESARBICA region lack capacity and face various challenges in managing electronic records. These challenges relate to the lack of policy and legislation, standardization, authenticity, capacity building, physical infrastructure, and awareness among recordkeeping professionals and government authorities on electronic records management issues.

Asongwa (2012) discusses the challenge of managing electronic records in developing countries and the implications for records managers in sub Saharan Africa. The author observed that in some cases, the failure to create and maintain effective records systems was motivated by the desire to conceal financial fraud and other irregularities. In

addition, staff had limited training or experience on record keeping leading to deterioration of the state of record management. Apart from that, low morale among records managers, and poor remuneration lowered their prestige, their status, and created a general lack of recognition of the importance of records as evidence. The national archives in many countries became marginalized leading to insufficiency of resources, deficient physical facilities, and inadequate infrastructures. A recent study by Maulid (2015) found that shortage of ICT facilities, lack of technical support, unreliable power supply, inadequate experts, insufficient funds, poor internet connectivity, poor legal framework, and absence of policies were among the influencing factors towards effective management of electronic records in the court of Tanzania.

2.6 Technological Acceptance Model and Simplified Technology Acceptance Model

This section presents and discusses the Technological Acceptance Model (TAM) which was introduced by Davis in 1989 and Simplified Technological Acceptance Model by Venkatesh and Bala (2008). Figure 1 summarizes the TAM.

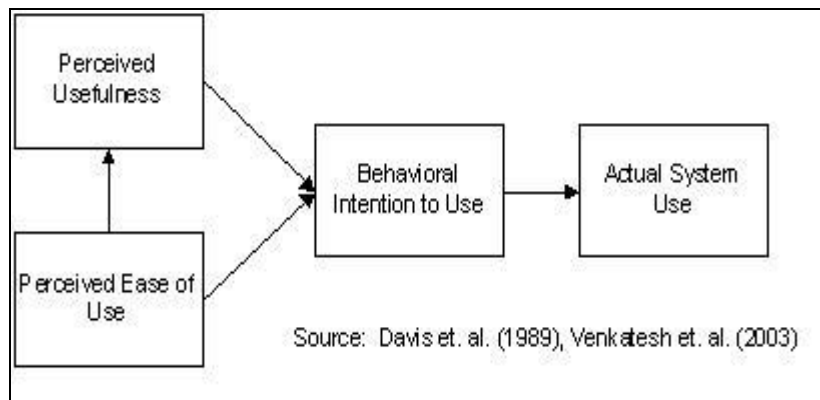


Figure 1: Technological Acceptance Model (TAM)

Computer systems cannot improve organizational performance if they are not used. Unfortunately, resistance to end-user systems by managers and professionals is a widespread problem. To better predict, explain, and increase user acceptance, there is a need to understand why people accept or reject technology or innovations. TAM helps to predict peoples' technology acceptance from a measure of their intentions, and the ability to explain the intentions in terms of their attitudes and subjective norms, the perceived usefulness and ease of use of a technology, and related variables.

2.6.1 Simplified Technology Acceptance Model

To help explain how to gain acceptance of a new technology or system in any organization, Davis *et al.* (1989) developed TAM which Venkatesh and Bala (2008) modified into their new model called Simplified Technology Acceptance Model (STAM). The STAM suggests that individual differences (e.g. gender, age), system characteristics (e.g. output quality, job relevance), social influence (e.g. subjective norms), and facilitating conditions (e.g. top management support) have an impact on perceived usefulness and ease of use of a system. STAM supports that managers cannot get employees to use a system until they want to. To convince employees to want to use the system, managers may need to employ unfreezing tactics to change employees' attitudes towards it. When employees consider a system useful and easy to use they develop behavioral intentions to use and later actually use it.

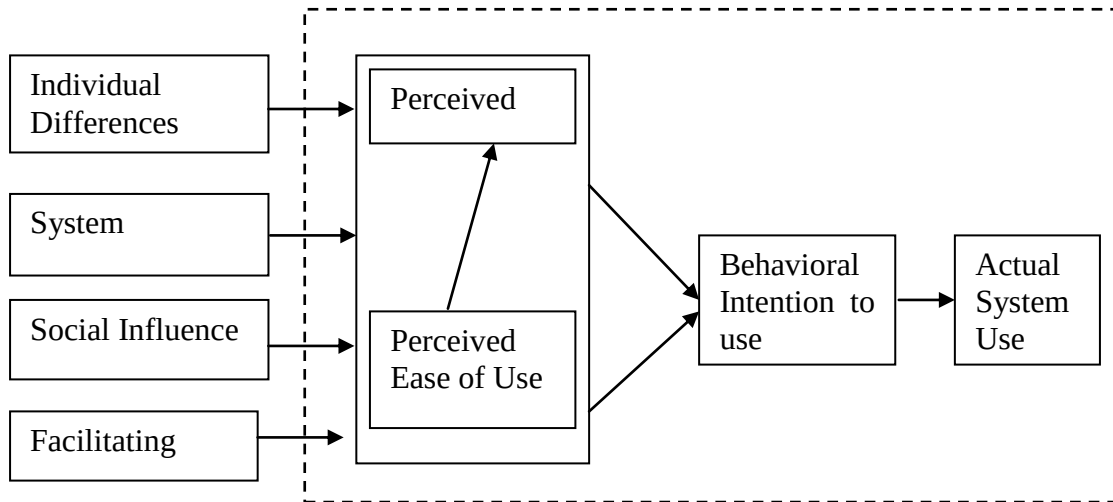


Figure 2: Simplified Technology Acceptance Model

TAM and STAM assume that system use is under the control of the individuals concerned. When employees are mandated to use a system they may use it in the short run, but over the long run the negative consequences of resistance may surface hence gaining acceptance of the system is important (Pearlson & Saunders, 2013).

2.7 Conceptual Framework of Readiness in E-Records Management

Kombo and Tromp (2006) define conceptual framework as a research tool intended to help a researcher to develop awareness and understanding of the situation under scrutiny and communicate it diagrammatically. The Conceptual Framework of E-Records Management Readiness is used to guide this study. The framework composes different variants such as e-records management, perception of the utilization, influencing tools, and readiness and actual utilization of e-records management systems. Figure 3 below presents the framework:

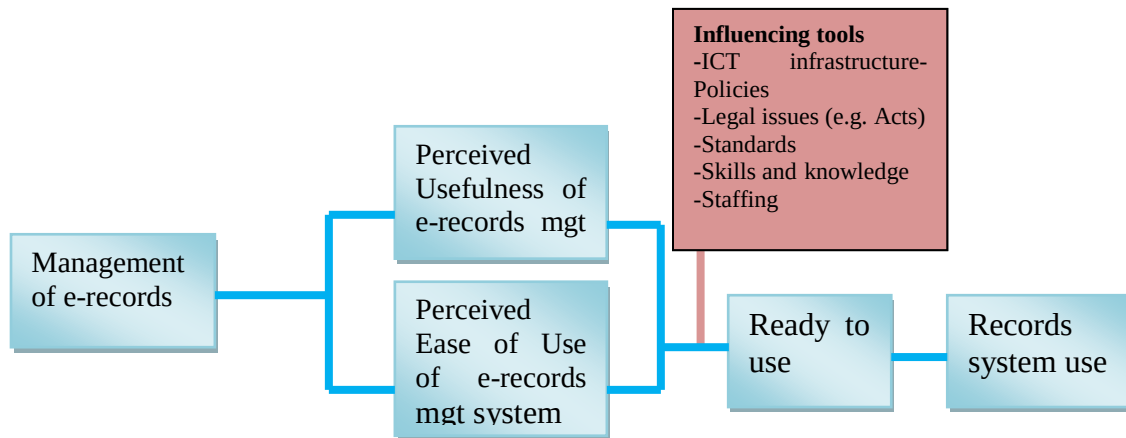


Figure 3: Conceptual Framework of Readiness in E-Records Management

There are numerous factors that foster or deter the adoption of e-records management in different organizations. The adoption of e-records readiness mainly depends on their acceptance. The acceptance of new e-records systems and practices in government or non government organization depends on people's attitudes, knowledge, experience, and perceptions. Apart from that effective e-records management depends on the availability of readiness tools like ICTs (computers, telephones, scanners, and reliable networks). These are the basic infrastructure and tools used in measure the e-records readiness of any organization, be it governmental or non-governmental.

Other important tools include: network bandwidth, reliable electricity, policies, legislative, regulatory frameworks, online security, universal access, expertise, and more. These e-records readiness tools are key requirement for assessing and understanding e-records readiness in government and non-government organizations. E-records readiness tools have an influence on the use of electronic records. Government offices are not resistant to the challenges and constraints facing e-records management

readiness. Common challenges faced by these offices include lack of e-records protection strategy (Lowry, 2012), rapid changes in technology, (IRMT, 2007), incompatible formats of e-records (Dada, 2006), and insecurity (Wamukoya & Mutula, 2005). Similarly, resistance to end-user systems by managers and professionals is a widespread problem facing e-records management readiness.

2.8 Research Gap

The reviewed literatures suggest that there are few studies conducted in African countries which gauge e-records readiness by using different tools. Some studies (e.g. Semkuya, 2000; Franklin, 2009; Ndibalema, 2004; Ndenje, 2010; and Hatibu & Mcharazo, 2012) conducted on management of records in different institutions and organizations. For example, Hatibu and Mcharazo (2012) examined the role of e-records in Tanzania, while Ndenje (2010) investigated the significance of records management in fostering accountability in the public service reform program of Tanzania. Semkuya, (2009) examined the management of electronic health records of National Health Insurance Funds (NHIF) and recommended a further study to examine readiness in the management of e-records in Tanzania. To date, studies assessing readiness for e-records management are still lacking hence very little knowledge exists on this topic. Notably, little is known about tools that influence e-records management in Tanzania. That the study was conducted to assess the readiness of President's Office Public Service Management on e-records management.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents and discusses the research methodology used to assess the electronic records management readiness of the Records and Archives Management Division in PO-PSM. Research methodology is defined as a system of explicit rules and procedures upon which research is based and against which knowledge generated is evaluated (Msabila, 2015). In other words, a research methodology is a systematic way of solving a research problem (Kothari, 2004) or a science of studying how a research project is to be carried out (see Rajasekar *et al.*, 2013). Generally, a methodology covers the research design, study area, study population, sampling procedures, sample size, data collection methods and instruments, data processing and analysis, and data quality control and ethical considerations. The following section describes the research design used in this study.

3.1 Research Design

De Vaus (2013) defines research design as the overall strategy that one chooses to use to integrate different components of a study in a coherent and logical way, thereby ensuring an effective address of one's research problem. Further, a design constitutes the blueprint for the collection, measurement, and analysis of data. On the whole, a mixed (qualitative and quantitative) research design was utilized to collect, process, and

analyze data in this study. While the quantitative approach sought quantitative data in form of numbers and focused on measuring objective facts, the qualitative design sought qualitative data and focused on interactive processes and events to construct social reality and or interpret cultural meanings. Indeed, quantitative data on trends, frequency of using e-records, kinds of e-records and the extent to which e-records were utilized were gathered. Accordingly, qualitative data on opinions, perceptions, and attitudes towards deploying e-records in PO-PSM were also collected. Why was the mixed research design used in the present study? Babbie, (2011). encourage other researchers to use a multi-method approach to collect and analyze data. In his research, Mwantimwa (2012) utilized the mixed research approach and found that the approach provides a variety ways of data collection, analyzing it, and making inferences. Additionally, the design helps to triangulate and increase validity, reliability, and credibility of finding.

3.2 Study Area

The study was carried out at the Tanzania Public Service College (TPSC) and the Records and Archives Management Division of the PO-PSM. According to (Utumishi, [n.d]). The Records and Archives Management Division was established in 1999 through the Government Notice Number 289 of 1999. Then the Government transferred the National Archives of Tanzania from the Ministry of Education and Culture to the President's Office, Public Service Management. In 2002, the Government decided to cancel the National Archives Act No. 33 of 1965 by enacting a new Act of the Records and Archives Management Act. No.3 of 2002. Therefore the Act established the Records

and Archives Management as an Independent Department with the purpose of providing proper Administration and better management of public records and archives throughout their life cycles.

The RAMD was selected because it has the mandate to manage all public records under the Records and Archives Management Act of 2002 of Tanzania. Indeed, the Act (2002: 17) stipulates that “records and archives belonging to the United Republic of Tanzania, created, received, and maintained in the offices of the President and Cabinet, by any ministry, department, commission, committee, office or other body under the government of the United Republic or by the Minister or any other officer or employee”. TPSC was involved due to the fact that it offers different programmes in records and archives management. In fact, students and academic staff at TPSC are among the users of the records and finally, the samples were studied. Archive materials managed by RAMD hence their importance to this study.

3.3 Population of the Study

Population is the universe of units from which a sample is to be selected (Bryman, 2011). A population is an abstract concept which refers to a unit to be studied. In this study, the population was staff in all sections of Records and Archives Management Division and Tanzania Public Service College. Specifically, at the RAMD the study involved records officers, assistant directors, and the director general. At TPSC the study involved both teaching staff and students

3.5 Sampling Procedures

Sampling procedures involve taking a representative sample from a population and using the data collected from it for making inferences (Latham, 2008). In this study, both probability and non-probability sampling techniques were employed to draw a sample from PO-PSM and TPSC. While two types of probability sampling were chosen namely; stratified and simple random sampling, one non-probability (i.e. purposive) sampling was utilized. The probability sampling methods were used to select students and academic staff at TPSC. The following three procedures were followed:

1. Firstly, the study population was identified;
2. Secondly, the stratified sampling technique was used to put respondents into two groups namely students and academic staff;
3. The groups were further divided based on different aspects such as year of study; thirdly, the samples from each group were randomly selected for representation; and
4. Finally, the samples were studied.

Accordingly, staff members from RAMD were purposively selected on the basis of their ability to be key respondents for the study. Another reason for using non-probability sampling was that respondents were few in numbers. Purposive sampling is an approach in which a researcher selects a sample on the basis of his or her knowledge of the population, its elements, and research aims. This is based on the researcher's judgment and purpose of the study Bryman, (2010). On the whole, records officers, heads of

departments, and administrative staff were selected purposefully by approaching them in their respective offices. They were selected based on their ability to provide information with regard to the readiness in electronic records management.

3.6 Sample Size

A sample is a portion, piece, or segment that represents a population used in a study, while the total number of participants selected for a study is referred to as a sample size (Singleton & Straits, 2005). Table 1 below shows population sizes of individual sections at the Records and Archives Management Division, and Tanzania Public Service College; and the sizes of samples obtained from each:

Table 1: Population and Sample Size

Section	Population in each section	Sample size
Records management services	11	8
Archives management section	12	9
Technical section	12	9
Records centre section	7	5
Founders of the nation section	9	6
Tanzania Public Service College	52	39
Total	103	76

Source: Field data, 2016

On the whole, from a population of 103 people, as sample of seventy six (76) respondents (including staff members and students) was drawn. Among the staff members selected one (1) of them was a managing director and another one was an assistant director.

3.7 Data Collection Methods and Instruments

Kothari (2004) suggests that the most proper approach for selecting an appropriate technique for data collection is that which considers the nature of the problem at hand, the amount of time and other resources available, along with the desired degree of accuracy. The data for this study were collected using a combination of methods (triangulation) which included questionnaires, interviews, observations, and documentary. Triangulation was used in order to exploit the strengths of each method and allow them to complement each other. This approach generates confidence in arriving at a conclusion and increases the validity of the collected information. On the whole, the above methods were used to collect both primary and secondary data.

3.7.1 Secondary Data

De Vaus (2013) defines secondary data as facts that have been already collected and put through analysis processes to make them ready for use. In other words, this is the type of data collected from sources other than the original ones in the field. This study's secondary data were collected through library searches. Both published and unpublished materials such as books, reports, academic papers, articles, as well as internet resources were reviewed.

3.7.2 Primary Data

Primary data are the facts collected for the first time (Kothari, 2004). Both quantitative and qualitative data were collected with the help of questionnaires, interviews, and observations. The questionnaires used were structured and self-administered. The

following sections describe the data collection methods and instruments used in this study.

3.7.2.1 Questionnaire

The questionnaire was the main data collection instrument in this study. The study used a self-administered questionnaire with close – ended (which constituted 92% of all the questions) and open questions to collect both quantitative and qualitative data. Answers to close-ended questions are standard and can be compared from person to person (De Vaus (2013) while open-ended questions give respondents opportunities to express their views, opinions and perceptions. The questions asked covered a broad range of issues including respondents' characteristics such as age, sex, level of education, and occupation; kinds of records available, readiness tools, and challenges to managing e-records at POPSM. The scales used to measure the items in the instrument included nominal, continuous, and categorical. These questionnaires were distributed to the 76 respondents from whom 55 (72.4%) were returned. According to De Vaus (2006), on average, 50% is an acceptable percentage for a response rate.

3.7.2.2 Interview

An interview guide with open-ended questions was used to collect data from the study's key informants to supplement questionnaires. During the interview sessions, the researcher probed for more information from the key informants. The responses were recorded in a notebook. According to Bailey (op.cit.), interviews tend to have a better response rate than questionnaires. Interviews are also flexible and provide control over a

situation. The researcher can thus make sure that all questions are answered, and could also probe for more details. Additionally, interviews are particularly useful in getting details in relation to a participant's experience. An interviewer can probe for in-depth information on a topic Mwantimwa, (2012) citing McNamara, 2009. Personally conducted interviews achieve high return and response rates, are flexible, offer opportunities to observe non-verbal behavior, and allow clearing of misunderstandings among respondents.

3.7.2.3 Observation

The study used an observational guide to carry out non-participatory observations at the institutions where this study was conducted. A form was used to record anything important observed. The observations focused on these data were collected through observations because they did not need further elaboration from or elucidation by the respondents. The major task of observations is to supplement important data or information not captured by a questionnaire and an interview. In this study, this method was employed to collect data such as places where records are kept which could be physically observed. Data collected through this method enabled the researcher to compare the real situation with what respondents said.

3.7.2.4 Data Processing and Analysis

The collected data were organized, coded, described, and analyzed. Fisher and Oulton (1999) as cited by Mwantimwa (2012) state that data analysis helps to summarize and describe collected data in an efficient manner so that they can easily be used for practical

purposes. During the analysis process, the data was organized categorically and chronologically, reviewed repeatedly, and continually coded. Quantitative data were analyzed with the help of SPSS (Statistical Product and Service Solutions-Version 16) and Ms Excel 2007 to provide statistical data. The outputs from quantitative data analysis included descriptive (frequency and percent) and inferential statistics (e.g. Chi-Square Test). For example, descriptive statistics were used to analyze respondent's characteristics, types of e-records, and other kinds of variables. Content analysis was applied in analyzing responses from open-ended questions which included perceptions, opinions, and views. The content analysis method is described by Babbie, (2011). As an objective and quantitative method for assigning types of verbal and other data in its context.

3.8 Data Quality Control

Various methods were used to organize and summarize data collected, to present and evaluate findings and come up with conclusions. Both qualitative and quantitative data were processed and analyzed in line with the objectives of the study. Qualitative data arising from interviews and observation were analyzed through content analysis by interview conversations. In quantitative analysis the data was organized, described, coded and analyzed using Statistical Product and Service Solutions (SPSS) programme version 16 to derive from simple descriptive statistics, such as frequencies, percentages and to draw tables and charts.

3.9 Ethical Consideration

This study followed all ethical procedures. For example, respondents' confidentiality was maintained and before data collection by assuring respondents confidentiality was maintained and respondents were informed about the purpose of the study. All the responses obtained have been used for academic purposes only and not otherwise.

3.9.1 Letter of Permission

Permission (in form of a research clearance letter) was sought from the University of Dar es Salaam (UDSM) and submitted to the PO-PSM before data collection started. The goal was to ensure that local laws and guidelines pertaining to such a research were observed. Also, the letter from the University of Dar - es - Salaam which was submitted to the PO-PSM.

3.9.2 Maintenance of Confidentiality

Assurances of confidentiality were made at the beginning of data collection. The researcher introduced herself, the purpose of the study, and the purposes the data would serve. Paramount in these assurances was the issues of anonymity and confidentiality aimed at cultivating trust with among the respondents as well as developing an understanding of the nature of the research. The next section summarizes the chapter.

3.10 Limitations of the Study

The study covered seventy six (76) respondents from the selected categories as representative sample. Some of the respondents could not be reached due to their long-

lasting schedules. For example, students at the TPSC, Academic staff Heads of Departments at the RAMD. Another obstacle was inadequate related literature on the topic in the context of Tanzania since no research has been conducted to assess the readiness e-records management in PO-PSM and other public sectors.

3.10 Summary of the chapter

This chapter discussed the research methodology applied in this study. In short, the study applied a survey research design using both qualitative and quantitative approaches in assessing the readiness of electronic records management in the President's Office Public Service Management PO-PSM. The area of study were the Records and Archives Division (RAMD) and Tanzania Public Service College TPSC in Dar es Salaam region where the study population included records personnel, heads of departments, both assistant managing director, students, academic staff, as well as administrative staff. Purposive and simple random sampling techniques were used to select the sample of the study. Secondary data were collected through reviewing documentary sources while primary data were collected through the use of self-administered questionnaires, face to face interview, and non-participatory observations. Data quality control techniques were used in order to ensure correctness and accuracy of the data obtained from the respondents. The techniques employed included triangulation, pre-testing, and ethical issues. During data analysis both content analysis, and SPSS and Ms Excel programmes were used.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter presents, analyses, and discusses the research findings of this study which assessed the President's Office Public Service Management's readiness for electronic records management. The study's main objective was to assess the management of electronic records by the Records and Archive Management Division (RAMD) and the Public Service College (TPSC) both of which are under the President's Office Public Service Management (PO-PSM). Specifically the aims of the study were to:

1. Study the kinds of e-records found in President's Office Public Service Management;
2. Examine the e-records readiness tools which facilitate e-records management in the President's Office Public Service Management;
3. Explore the staff member's perception of using e-records in President's Office Public Service Management; and
4. Examine the challenges faced by the President's Office Public Service Management in electronic records management.

Accordingly, four questions were formulated to guide the study:

1. What kinds of e-records are found in President's Office Public Service Management?

2. What are the tools in place to foster electronic records management in President's Office Public Service Management?
3. What are the President's Office Public Service Management staff's perceptions of e-records management?
4. What are the challenges faced by President's Office Public Service Management in electronic records management?

Data for this study was collected using a combination of methods: questionnaires, interviews and observations. The data collection tools developed contained specific questions formulated on the basis of the research questions. The general questions (e.g. those on respondents' characteristics) added value to the research despite having no direct relationship to the objective of the study. Data were analysed to derive descriptive statistics (e.g. frequencies, percentages) and inferential statistics (e.g. chi-square test) which have been presented in form of tables and figures. On the other hand, qualitative data were subjected to content analysis and the findings have been presented in a narrative form. The combination of tabular, graphical, and narrative presentations is believed to improve the clarity of findings. The results have been presented in the subsequent sections.

4.1 Background Information of the Respondents

Some of the questions were designed to generate data on the characteristics of the respondents of this study. The information was essential in determining the characteristics and nature of the study population. On the whole, staff members at

RAMD and records users from TPSC were requested to indicate their occupation, sex, age, and education level. The respondents who completed questionnaires were categorized into two groups which were records personnel of the RAMD and records users (student and academic staff) from TPSC.

4.2 Occupation of Respondents

Respondents were asked to indicate their occupations. Results on this question show that 21(38.2%) of the respondents were Diploma in Records and Archives Management students, 12(21.8 %) records officers, 8(14.6%) were administrative staff, 6(10.9%) were academic staff, while 5(9.1%) were librarians, 2(3.6%) researchers and 1(1.8%) was a technical staff. Figure 3 indicates the respondents' occupations.

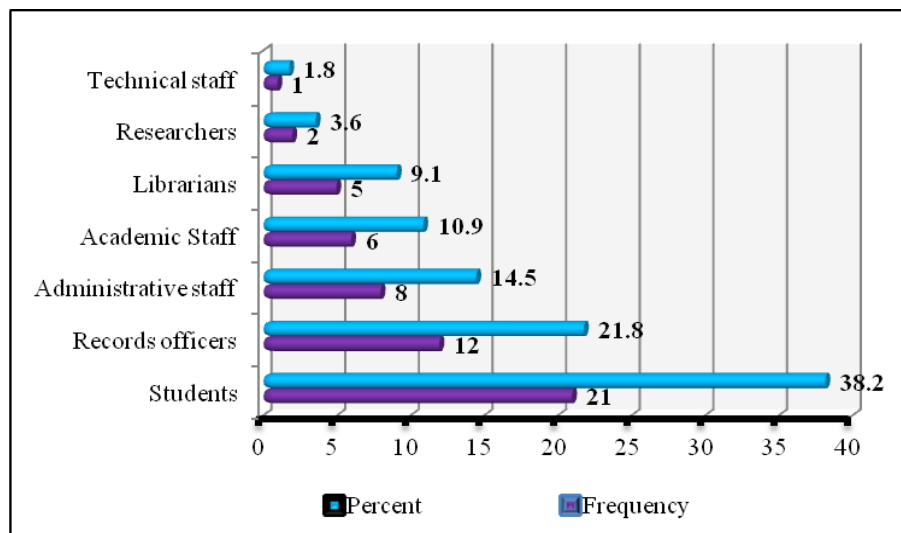


Figure 4: Status of Respondents

Source: Field data 2015

Generally, the findings show that a noticeable percentage (38.2%) of respondent was students. This is due to the fact that it is normal for academic institutions to have higher

numbers of students as compared to staff members hence their high representation in the study's findings. Records officers had the second highest representation at 21.8% and this is attributed to the fact that they are the ones directly responsible for records keeping and management. Further, the findings indicate that the least presence were technical staff at 1.8%.

4.2.1 Sex of Respondents

The study needed to bring to light the sexes of the respondents involved. The results reveal that 29 (52.7%) of the respondents were male and 26(47.3%) female. Figure 4 below indicates the sex of the respondents.

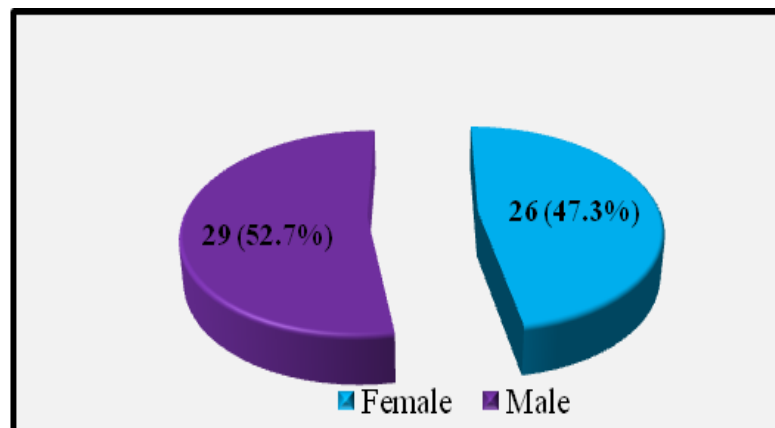


Figure 5: Respondents' Sex

Source: Field data, 2015

In general, the findings reveal that 52.7% of the respondents were male while 47.3% were female. This shows that there was a slight difference between the numbers of male and female respondents at the RAMD and TPSC. This difference can be attributed to the ratio of male to female staff and students available at different institutions in Tanzania. For instance, it was this was also observed that majority (68%) of University of Dar es

Salaam (UDSM) staff members were male, while female staff accounted for only 32%. The data further reveal that the number of female students has been increasing from 38% in 2006/07 to 42% in 2010/11. This entails that apart from the number of male staff members being high, male students continue to represent a bigger percentage of the total students' population (UDSM, 2015).

4.2.2 Respondent Ages

Information on the ages of respondents was considered important in explaining other variables of this study. The findings on respondents' ages show that 19 (34.6%) respondents were aged between 18 and 30 while 18 (32.7%) of them were of ages between 31 and 40, and 15 (27.3%) were aged between 41 and 50. Furthermore, 2 (36%) respondents said they were aged between 51 and 60, and 1(1.8%) was aged above 61.

Table 2 below indicates the age of respondent:

Table 2: Age and Status of the respondents

Age group	Count and Percent	Status		Total	Pearson Chi-square test
		Students	Staff		
18 - 30	Count	14	5	19	$X^2 = 18.631$ df = 4 Sig. = .001
	% within	66.7%	14.7%	34.5%	
31 - 40	Count	3	15	18	
	% within	14.3%	44.1%	32.7%	
41 - 50	Count	3	12	15	
	% within	14.3%	35.3%	27.3%	
51 - 60	Count	0	2	2	
	% within	.0%	5.9%	3.6%	
Above 61	Count	1	0	1	
	% within	4.8%	.0%	1.8%	
Total	Count	21	34	55	
	% within	100.0%	100.0%	100.0%	

Source: Field data, 2015

The findings indicate that majority (94.5%) of the respondents were aged between 18 and 50 years. The results also show that just two respondents were aged between 51 and 60 years while only one respondent was more than 60 years old. It is also revealed that most (66.7%) of TPSC students are youths and young adults aged between 18 and 30 years. Further, the tests of Chi-square ($X^2 = 18.631$, $df = 4$, and $p \text{ value} = .001$) by Pearson supports that there was a significant difference between students and staff members who participated in this study since the p value is less than 0.05. In fact, the findings reveal that most of the RAMD and TPSC staff members were aged between 30 and 50 years.

4.2.3 Respondents' Level of education

Education is an important ingredient of any organization's efforts to foster the presence of desirable competences, knowledge and skills. It was therefore imperative for this study to explore the levels of education of respondents because education is believed to be one of the vital requirements in records management.

4.2.4 Levels of education of RAMD Staff and TPSC

Results indicate that 11(32.4%) of respondents were bachelor's degree holders, 8(23.5%) were masters degree holders, 6(17.6%) had diplomas, 5(14.7%) had certificate of records management and the other 3(8.8%) post graduate diploma holders and 1(2.9%) did not respond. The results are further presented in Table 3 below:

Table 3: Educational level of RAMD & TPSC Staff

Education level (n=34)	Frequency	Percentage
Bachelor Degree	11	32.4
Masters	8	23.5
Diploma	6	17.6
Certificate	5	14.7
Post grad. Diploma	3	8.8
Non response	1	2.9
Total	34	100

Source: Field Data 2015

The findings indicate that a moderate percentage (2.4%) of respondents were bachelor's degree holders, followed by (23.5%), and master's degree holders (17.6%) diploma holders. 14.7% were certificate holders (8.8%) postgraduate diploma holders were the least represented and 2.9% do not respond to the question. These findings show that respondents with bachelor's degree were more than the other sets of respondents. This is apparently a result of the RAMD's recruitment of university graduates done in the recent years.

4.2.5 Respondents' Department and Sections

Respondents were asked to mention the sections or departments they were working for. The findings from this inquest indicate that (22.5%) of respondents were from the Archives Management Section, 6(17.7%) were from the Public Service College Department, 6(17.7%) of them worked for the Technical Section, while 5(14.7%) were from the Records Centre. Furthermore, the Founders of the Nation Section and the Records Management Services Section individually had 4 (11.8%) respondents while 1(2.9%) respondent did not answer the question. The Figure 7 %below summarizes the results:

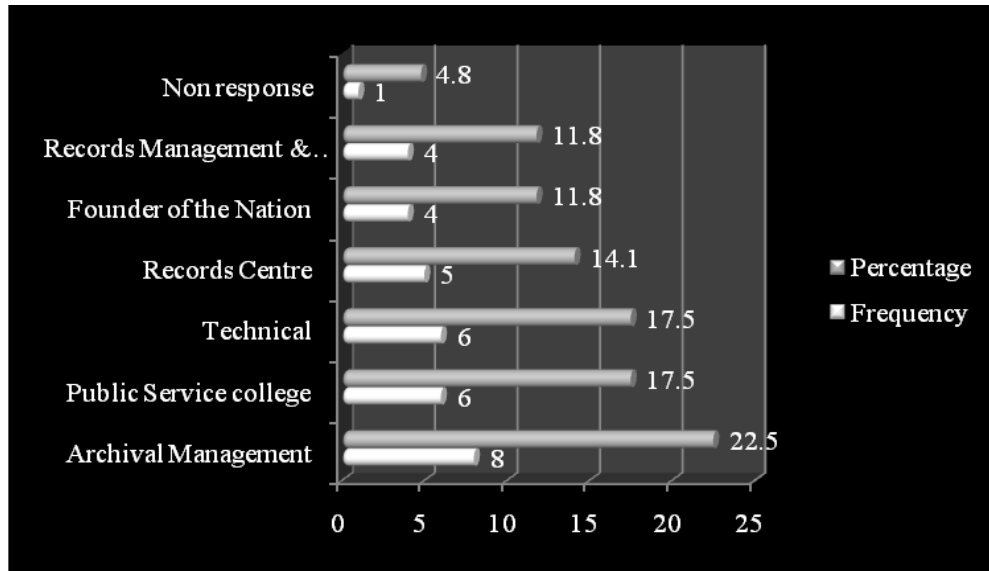


Figure 6: Distribution of respondents by their departments or sections
Source: Field Data 2015

Overall, the President's Office Public Service Management (PO-PSM) has various department, division, and agencies which have been divided according to their responsibilities. The findings indicate a close to normal distribution of respondents considering that a department with the highest representation had 22.2% as compared to the 17.5%, 14.1%, and 11.8%, representations of the other departments.

4.2.6 Responsibilities of RAMD and TPSC

The researcher posed a question aimed at determining the responsibilities of the RAMD and TPSC. The responses reveal that 8 (23.5%) of the respondents from the Archives Management Section were responsible for National Archives while 6 (17.6%) of the respondents from the Records Centre deal with the maintenance of the integrity of all semi-current records. Accordingly, 6 (17.6%) of the respondents from Technical Section are responsible for maintained the physical and intellectual control of documents in

accordance with the principles of provenance and origin, while 5 (14.7%) of the respondents from the Founders of the Nation Section have the responsibility of collecting, preserving & restituting documentary materials & objects of the Founders of the Nation. The results also reveal that 5 (14.7%) of the respondents from the Records Management Section were responsible for providing professional assistance, advice, and guidance on the establishment and management of records systems, and 4 (11.8%) of the respondents from the Public Service College were responsible for training, conduct research, and consultancy. The results are also presented in Table 4 below:

Table 4: Responsibilities of the Departments

Section/department	Responsibilities(n=34)	Frequency	Percentage
Archive Management	Taking charge of the national archives	8	23.5
Records Centre	Maintain integrity of all semi-current records	6	17.6
Technical Services	Maintain physical and intellectual control of documents in accordance with the principles of provenance and origin	6	17.6
Founder of the Nation	Collect, preserve, & restitute documentary materials & objects of the founders of the nation	5	14.7
Records Management Section	Providing professional assistance, advice, and guidance on the establishment & management of records systems	5	14.7
Public Service college	Providing training, conducting research and consultancy	4	11.8
Total		34	100

Source: Field data, 2015

In general these findings disclose that each department has its own responsibilities. The findings indicate that the Archives Management section is in charge of the national archives while the Records Centre deals with the maintenance of the integrity of all

semi-current records. On the other hand, the Technical Section is responsible for maintaining physical and intellectual control of documents in accordance with the principles of provenance and origin while the Founders of the Nation Section deals with the collection, preservation, and restitution of documentary materials and objects of the founders of the nation. Further, the results have revealed that the Records Management Section is responsible for providing professional assistance, advice and guidance on the establishment and management of records systems, and that the Tanzania Public Service College Department's responsibilities are offering training, conducting research, and providing consultancy services on records and library management, and other areas. On the whole, the main responsibilities of RAMD include maintaining oversight and coordinating the government records management programme.

Apart from that, RAMD is responsible for advising the government on records management systems and overseeing staff capacity development in Ministry Department Authorities by offering training in collaboration with the Tanzanian Public Service College. Moatlhodi and Kalusopa, (2016) confirms that RAMD's responsibilities cover the management of all formats of public sector records (from creation to permanent preservation or destruction) in MDAs across Tanzania. As the Government of Tanzania implements its e-government strategy, the RAMD recognizes the importance of building electronic records management capacity and establishing a digital repository as cornerstones of an electronic records management strategy.

4.4 Background Skills and Knowledge on Managing E-Records

This section analyses and discusses respondents' background skills and knowledge on e-records management. Specifically, the section discusses the skills and knowledge possessed by the respondents at the RAMD and TPSC, methods used in attaining the knowledge and skills, and the kinds of formal training and courses attended.

4.4.1 Possession of Knowledge and Skills

Managing electronic records requires staff to have the necessary skills and knowledge on handling technological equipment and electronic information. As a result, this study explored the knowledge and skills possessed by RAMD and TPSC respondents on the management of electronic records. The result obtained show that 38 (69.1%) of the respondents did not have any skills in managing electronic records while 17 (30.9%) said they had background skills and knowledge required in the management of electronic records. The Table 5 below summarizes the results:

Table: 5 Skills on E-records Management

Skills on E-records management	Frequency	Percentage	Chi-Square test
No background skills & knowledge	38	69.1	$X^2 = 8.018$ $df = 1$ $p = .005$
Have background skills & knowledge	17	30.9	
Total	55	100	

Source: Field Data, 2015

Generally, the findings suggest that majority (69.1%) of respondents had no background knowledge and skills while only 30.9% of them had background knowledge and skills in e-records management. This implies that there is a significant variation between

respondents with background knowledge and skills, and those without. Similarly, Chi-Square test ($\chi^2 = 8.018$, $df = 1$ and $p \text{ value} = .005$) confirms that there was a moderate significant difference between those with background knowledge and skills and those without since the p value is not greater than .005. Why such trends? One of the key informants answered that:

The RAMD has not invested much on staff development through training. The funds set aside to support in house training, seminars, international and local conferences, and other kinds of training, are not sufficient.

As a result, the study further found that 41.2% of the respondents attained their knowledge and skills through experience. Other respondents' knowledge and skills resulted from self-teaching, training programs, and learning from others [see Table 6 below]. These results imply that skills and knowledge needed in automation of records retrieval, preparation of retention and disposal schedules, data administration methodologies, functional analysis methodologies, and data modeling are insufficient. In short, staff members at RAMD and students and staff at TPSC do not have sufficient knowledge and skills needed to use computerized records management systems.

4.4.2 Methods of Attaining Knowledge and Skills on E-Records Management

Staff with all the knowledgeable and skills needed to work in electronic records environment will be more effective. This study therefore enquired about the means through which such knowledge and skills are attained by staff members. The results on this part show that 16 (47.1%) of respondents got their skills and knowledge through credited training program 10(29.4%) attained knowledge through their working

experiences, 5 (14.7%), self taught 2 (5.9%) said they learned from others, and 1(2.9%) of respondents did not respond to a question. Table 6 below summarizes these findings:

Table 6: Methods of Attaining Knowledge and Skills

Skills & knowledge of respondents(n=34)	Frequency	Percentage
Learn as a topic at the college	16	47.1
Through experience	10	29.4
Self taught	5	14.7
Learn from others	2	5.9
Non response	1	2.9

Source: Field Data, 2015

The findings indicate that a big percentage of staff who managed electronic records at RAMD did not attend any kind of training on e-records management considering that only 47.1% of the respondents said they attended training programs. These results are attributed to the insufficiency of funds allocated for training. However, other than the funds set aside, there are other efforts to train staff. For example, A RAMD report for the period between 2011/12 -2013/14 reveals that the Government of Oman has supported the department with working facilities and training of 4 staff members on documentation and management of historical records related to Oman (PO-PSM, 2014). Although RAMD is rich with staff of different levels of knowledge in records management, most of them have not attended practical training in electronic records management. During interview session one of respondent said that:

Most of the training they attended focused on theory rather than practical experiences. That is why most of the records personnel lack skills needed in e-records management. This narration suggest that training on e-records are

4.4.3 Formal Training on E-records Management

The researcher wanted to know if records personnel at RAMD staff at TPSC had ever attended formal training on e-records management. The data output show that 26 (76.5%) respondents had never attended any formal training on e-records management while only 7(20.6%) said they had attended formal training, and 1 (2.9%) did not respond. These results are summarized in Table 7 below:

Table 7: Formal Training on E-records Management (n=33)

Formal training on e-record management(n=34)	Frequency	Percentage
Not attended any formal training	26	76.5
Attended formal training	7	20.6
Non response	1	2.9
Total	34	100

Source: Field data, 2015

The findings indicate that majority of staff members at both institutions involved in this study have not attended any formal training on e-records management. Wamukoya & Mutula (2005) in their article on E-records Management and Governance in East and Southern Africa, point out that this is because RAMD depends mostly to donors like World Bank for funds to carry out their activities including training of staff members. These results entail big problems for institutions dealing with record management because e-records are increasingly becoming popular. As pointed out by NECCC (2004) as if it is not problematic enough working in hybrid record environments, government agencies are in the process of deploying electronic records management systems. Without appropriate training, these electronic records management systems will suffer

from the “garbage in-garbage out” syndrome. Anderson (2007) observed that training on e-records management “provides new professionals with knowledge of the theories of the discipline and helps them to explore current practices”. This shows that formal training on e-records management is quite important to foster utilization of e-records in organizations.

4.4.4 Courses attended by the RAMD and TPSC Staff

Respondents were asked to indicate the study areas they attained their highest academic qualifications from. Results show that 7 (20.6 %) of the respondents possessed masters degrees in records management, 3 (8.8 %) had postgraduate diplomas in ICT, 7 (20.6%) of respondent possessed diplomas in records and archives management, 1 (2.9%) had a certificate in IT, and a certificate in records and archives management respectively. In addition to that, 7 (20.6 %) respondents were holders of bachelor’s degrees in business administration and 6 (17.7%) had bachelor’s degrees in public administration while 1 (2.9 %) had a postgraduate diploma in records and archives management. Table 8 below summarizes the results:

Table 8: Kinds of Courses Attended

Courses attended (n = 34)	Frequency	Percentage
Masters in records management	7	20.6
Diplomas in records and archives management	7	20.6
Bachelor’s degrees in business administration	7	20.6
Bachelor’s degrees in public administration	6	17.7
Postgraduate Diploma in ICT	3	8.8
Certificate in IT	1	2.9
Certificate in records & management	1	2.9
Postgraduate diploma of archive & records management	1	2.9
Certificate in ICT	1	2.9
Total	34	100

Source: Field Data 2015

The findings show that around one fifth (20.6%) of respondents were holders of master degrees in records and archives management, diploma in records and archives management and bachelor in business administration. Other staff members were postgraduate diploma in ICT, diploma of archives and records management, diploma in information technology, bachelor of business administration, and bachelor of public administration holders. These results imply that the RAMD and TPSC have staff members with the right qualifications to work at the highest level. In addition, the presence of staff members with IT qualification is a good sign for e-records management despite the fact that no respondent had e-records qualifications. According to PO-PSM (2014) the staff members have attained their qualification from different countries such as the UK, Kenya and Ghana.

4.5 Management Practices for E-Records at RAMD

Several questions on e-records management practices at the RAMD were asked. The following subsequent sections present, and discuss the study findings.

4.5.1 Preferences of Record Formats

Respondents were asked to mention the formats of records they prefer to use in their daily business activities. The results show that 31(56%) of the respondents mention paper records, 19(35%) said they preferred both formats, and 5(9%) respondents mentioned electronic records. Figure 8 below summarizes the results:

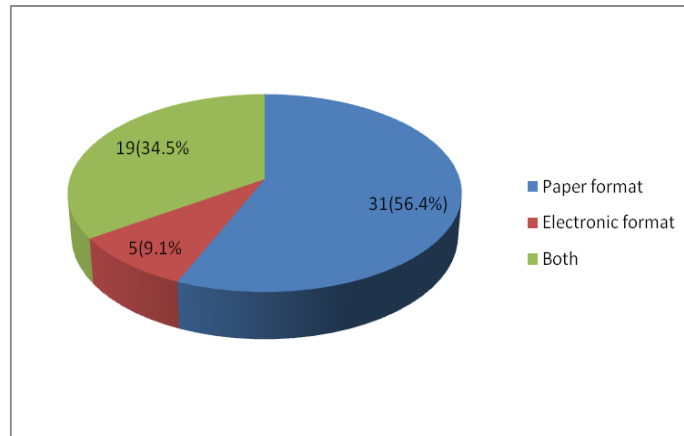


Figure 7: Format of records

Source: Field data 2015

Generally, the findings show that majority (56%) of the respondents prefer paper records. Noticeably, 35% of the respondents said they preferred both formats of records while only 9% of the respondents showed that they prefer e-records. The high percentage of respondents who prefer print records can be attributed to the fact that this format of records has been in use for a long time while e-records are relatively a new phenomenon to many. Respondents who did not prefer e-records explained that e-records have numerous challenges that undermine their management. The challenges cited include technological obsolescence, unreliable power supply, inadequacy of staff, lack of special training, and poor promotion of the records. One of the respondents stated that:

Lack of expertise in electronic records management, technophobia, and lack of computer skills among others lead many records personnel to prefer paper records. Age also determine the use of such system.

The above mentioned challenges could be some of the reasons for the popularity of paper format records at the RAMD. This is partly supported by Asogwa (2011) who

argues that due to inadequate skills in information technology in Africa, many archivists prefer records in paper format. In addition, generation gaps between the new and old professionals create different perceptions of computer related process; the older professionals consider technology a threat to their status as experts. This coincides with the argument by Davis et al. (1989) that the utilization of any system depends on the perception and attitudes individuals in organizations have towards it.

4.5.2 Kinds of E-Records Available in the RAMD

The study sought to establish the type of e-records managed at the RAMD. It was vital to first determine the types of records available prior to assessing the readiness in e-records management at the RAMD. It was established that the RAMD keeps different kinds of records. In short, the study indicates that 38 (86.8%) of the respondents mentioned government bills, 36 (81.8%) mentioned speeches of Mwalimu Nyerere, while Government policies were mentioned by 36 (81.8%) respondents, standing orders were mentioned by 32 (72.7%) respondents, and government circulars and reports were mentioned by 30 (68.2%). Table 9 below summarizes the results:

Table 9: Kinds of e-records managed at the RAMD

Kind of e-records managed(n=55)	Frequency	Percentage
Government bills	38	86.8
Speeches of the Mwalimu Nyerere	36	81.8
Government policies	36	81.8
Standing orders	32	72.7
Government circulars	30	68.2
Government reports	30	68.2

Source: Field data 2015

Generally, majority (86.8%, 81.8%, 72.7% and 68.2%) of respondents cited government bills, speeches of Mwalimu Nyerere, government policies, standing orders, and government circulars and reports respectively. These results imply that there are different types of records managed by the RAMD. This shows that the respondents involved in the surveys were familiar with the most of e-records types. From the observations made, the records which were microfilmed and managed by the RAMD were provincial (Regional), district books, and administrative archives. These are records from the former provinces and district of the post-independence era. The others records include 12 provincial files and 114 district books, church archives, private papers from 1885 -1905, gazettes and newspapers; post-independence archives which consist of German records (1890-1918, Tanganyika secretariat records (1919-1960), and over 30,000 records of the chief secretary under colonial office (IRMT, 2011). These records are said to be mostly used by researchers and journalists. Other users included academic staff, students, and foreigners.

4.5.3 Categories of Records Managed at RAMD

A question was asked in order to know the types of records managed at RAMD. The results indicate that 47(87.5%) respondent mentioned archive records, 43(78.5%) mentioned semi-current records, 42(76.4%) respondents mentioned historical records, 39(70.9%) respondents mentioned founders of the nation records, and 38 (69.1%) mentioned active records. Figure 9 below presents the category of records managed at the RAMD:

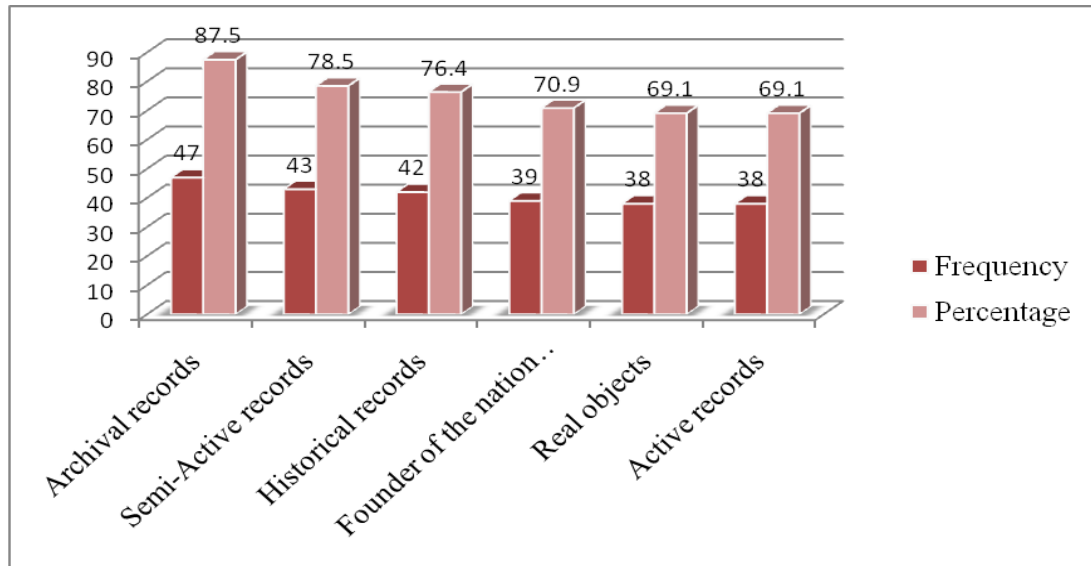


Figure 8: Categories of records managed at the RAMD

Source: Field data 2015

The finding suggest that majority (87.5%) of the respondents said the RAMD manages archival records such as the colonial and Tanganyika government records of different tribe chiefs, and Oman Sultan records among others. The mentioning of archive records by majority of respondents can be attributed to the fact that at that stage the records have historical and research value and are accessed by more people from the public hence the high awareness about their presence.

4.5.3.1 Semi-Current Records

The findings reveal that 78.5% of respondents mentioned that RMD keeps semi-active records from different ministries and departments notably: financial, administrative, as well as legal records. According to the Records Management Act of 2002 sect 10, the Records Centre section is responsible for maintaining integrity of all semi-current records.

4.5.3.2 Historical Records

The results in Figure 9 also reveal that 76.4% of respondents mentioned that RAMD manages historical records such as those about the Maji Maji War, 1st and 2nd world wars, and other wars like the Wahehe tribe and the Germans to mention just few. Historical records are still very important because they allow citizens to know the history of their nation and other things. For example the RAMD in its performance report of 2011/12-2013/14 provides a list of researches and their topics that used these records such as historical research on the urban history of Kigoma – Ujiji with special attention to leisure, religion and mobility; Oscar Kambona; and the history of political opposition in Tanzania between 1920 and 1964.

4.5.3.3 Founders of the Nation Records

Apart from the above records, the findings indicate that 70.9% of the respondents mentioned founders of the nation records such as speeches of the prominent leaders of the nation, books which were written by Mwalimu Julius Kambarage Nyerere, and different agreements made with various tribes leaders. In addition to historical records mentioned above, these records about the founders of the nation are valuable history resources. Luckily, the RAMD has the tools to provide proper administration and better management of public records. In A study by Ndenje (2011) on managing records as a strategic resource in government ministries of Tanzania it was pointed out that the Records and Archives Management Act of 2002 established the Records and Archives Management Department (RAMD) to provide for the proper administration and better management of public records and archives throughout their life cycle.

4.5.4 Kind of Records Accessed and Used

Category of records managed at the RAMD Respondents at RAMD was asked about the records frequently accessed by users. Results indicate that 9(34.9%) of the respondents mentioned archival records, 8(30.8%) historical records, 6(23.1%) government publications, while 3(11.5%) said were mentioned research papers. Figure 10 below summarizes their responses:

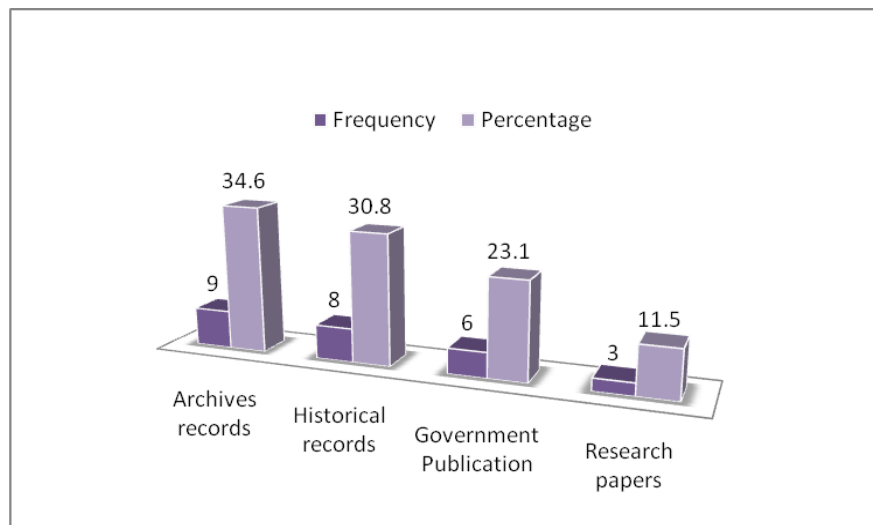


Figure 9: Kind of Records Accessed by Users Source:
Source: Field data 2015

In general the finding reveals that 34.6% of respondents mention archival, 30.8% historical, 23.1% government publications and 11.5% research papers were the records frequently accessed and used. Detailed discussions are provided here under:-

4.5.4.1 Archival Records

The findings disclose that a noticeable percentage 34.6% of respondents stated that users frequently accessed archival records at the RAMD division. Users such as historians, students, researchers, geologists, and others visit RAMD to have access to and use

archival records on the original customs and traditions of the people of Tanzania, real objects, and others. In archival records, information about chiefs of different tribes in Tanzania, and churches can be found and used for different purpose such as research and teaching.

4.5.4.2 Historical Records

The findings indicate that 30.8% of the respondent said historical records are the most frequently accessed by users at the RAMD. This implies that records user from different institutions are interested in historical records which include those about British administration in Tanganyika, the German government. According to Utumishi (2011), the records which served as evidence of legal rights of settlers such as British administration in Tanganyika and the German Government to mention just a few, were frequently accessed by users.

4.5.4.3 Government Publications

The results also show that 23.1% of respondents indicated that government publications were the frequently accessed records at the RAMD. PO-PSM, (2014) testifies that the kinds of government publications frequently accessed and used include district books, Government Acts, bills, policies, government gazettes, parliamentary publications, legislations, discussion documents, statistics, laws of Tanganyika, and reports. The reasons for accessing these records vary but the findings on this enquiry revealed that records and archival materials are important in decision making.

4.5.4.4 Research Papers

This study's findings also indicate that the least percentage (11.5%) of respondents cited research papers as the most frequently accessed and used records. This seems to indicate that among the frequently accessed records, research papers were the least accessed and used. PO-PSM (2014) mentions some of the papers available at the RAMD including a copy of art and copyright: Tingatinga painting in Tanzania, research on the urban history of Kigoma – Ujiji, wildlife, construction in Germany East African and its effect on the people in the Katavi Reserve, Africa; and Living in exile: International relation and everyday life at the Kongwa Camp. In addition, RAMD also contains records on colonial scientific discourse, traditional pastoralism and environment implications of government institutions: a case of Maasai of Tanzania 1919 – 1970s. These records were said to be utilized by different scholars and other individuals such as researchers, archeologist, historians, students, and tourists.

4.6 E-records Readiness Tools

The conceptual framework of Readiness of E-Records Management (REDM) and Technology Acceptance Model by Davis *et al.* (1989) indicate that there different readiness tools that can influence the management of e-records. To find out about e-records management readiness tools available at RAMD a questions to solicit such responses were posed. In general, the findings support that there are different kind of readiness tools at the surveyed area. Specifically, the section discusses availability of e-records management tools that are used in creation and storage of e-records in the PO-PSM.

4.6.1 Awareness on E-Records Readiness Tools

E-records readiness tools are crucial resources to consider in electronic records management hence the posing of a question to identify those available at the study area. The results from this enquiry reveal that 26 (78.8%) of respondents mentioned laws, and staff trained on e-records management, 25 (75.8%) respondents mentioned International Standards and security issues, 24 (72.7%) mentioned policies and circulars, and 21(63.7%) pointed out ICT infrastructure. Figure11 below summarizes the responses:

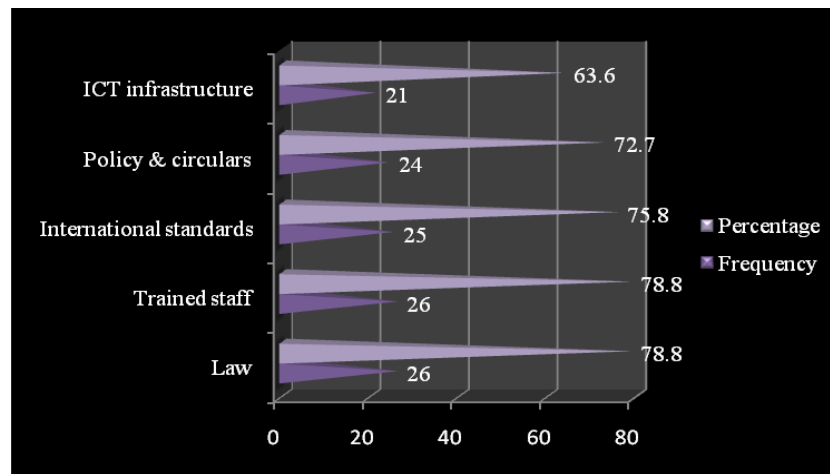


Figure 10: E-records management readiness tools

Source: Field data 2015

The study shows that the majority (78.8%) of respondents mentioned laws on e-records management, 78.8% mentioned staff members well trained on records management, while international standards were mentioned by 75.8%, of the respondents. Further, policies and circulars were mentioned by 72.7% of the respondents, and 63.6% pointed out ICT infrastructure. This indicates that RAMD has a number of e-records management readiness tools. The IRMT (2004) states that e-records readiness tools are intended to provide a benchmark for organizations to assess themselves and to determine

where they stand relative to e-records management. Awareness of the presence of these tools also provides information to assist organizations to develop plans and strategies aimed at improving both their paper-based records and e-records environments. Detailed discussions are provided in the subsequent subsections:

4.6.1.1 Laws

The findings reveal that majority (78.8%) of respondents mentioned laws as one of the e-readiness tools for enhancing the effective integration and utilization of e-records in PO-PSM. Records and archives institutions have to bear in mind that law and regulations influence the use of technology in e-records management. In fact, standards, procedures, and circulars among others help to ensure that electronic records are accurately managed. These findings seem to refute a claim by Griffin (2003) that in many governments, laws, policies, and guidelines for managing records are often non-existent and the legislative and regulatory frameworks are often weak or outdated. On the other hand, the presence of laws is in line with Mnjama & Wamukoya (2006) argument that the level of commitment to managing e-records can be gauged by the existence or non-existence of tools such as policies, laws and procedures. Undeniably, laws are important ingredients of effective management of electronic records. However, the mere existence of a law or policy is not enough evidence that an organization is committed to managing its e-records.

4.6.1.2 E-records Management Personnel

Another significant percentage (78.3%) of respondents said well trained personnel were available at the RAMD. The respondents recognised personnel with knowledge in e-records management as one of the important tools in fostering management of the records. During an interview sessions, one of the administrators stated that:

The organization is taking steps to ensuring the records management personnel have knowledge in computing through the provision of computer training programs. Some of the records management personnel who pursued bachelor degrees in records management have covered electronic records as a topic while others have attended other kinds of training. The assistant managing director argued that:

Training of records management personnel is very important to staff at all levels and it should include practical training in electronic records management. The problem is that Tanzania's University programmes do not offer in-depth practical training on electronic records management.

This quotation entails that LIS education in Tanzania has not effectively integrated e-records management courses in the curriculum. Evidently, only Mzumbe University offers a programme in records management at a bachelor level while the rest offer certificate and diploma level of education. To integrate e-records in the records management practices the availability of competent staff is an important aspect. On the issue staff competence the IRMT (2014) states that institutions should decide on the minimum range of skills and competencies needed to create a sustainable electronic records management programme National archives institutions are increasingly looking at ways of incorporating the principles of managing electronic records into the mainstream activities of any organization. IRMT (2011) points out that this approach

would have many benefits including fostering a reliable treatment of records in any medium and ensuring that all staff members can make some contribution to this specialist area.

4.6.1.3 Policy and Circulars

The findings also indicate that another significant percentage (73.9%) of respondents recognised policies and circulars as readiness tools for electronic records management. A government-wide records management policy has been adopted to define responsibilities for records management and spell out the field's relationships with ICT, Freedom of Information bodies, and the National ICT Policy of 2003. For example, Lawry (2012) points out that Circular No.5 includes requirements that confidential government information should be protected when staff members use electronic storage media like flash disks, and identifies CD-RMs as the right equipment for disposition of records to the National Archives. Similarly, Circular No. 6 addresses electronic information management by providing instructions on the retention and disposition of government information in record form and directs civil servant to apply retention rules.

4.6.1.4 International Standards

The findings indicate that majority (69.9%) of respondents acknowledged the importance of International standards in managing e-records. The Records and Archives Management Division has adopted an International Records Management Standard (ISO 15489) for records management functionality in ICT systems that is ICA-Req or MoReq; standard for archival management and digital preservation; the European Commission Model Requirements for the Management of Electronic Records (MoReq)

(IRMT, 2011). RAMD adopted these standards because their formats have been approved by a recognized standards organization or is accepted as a de facto standard by the industry.

4.6.1.5 Security Issues

Security of records is important factor to consider in integrating e-records in a record management programme. Accordingly, 69.9% of respondents consider security of the e-records as an important readiness tool for electronic records management at the RAMD. This is in line with the fact that records are important in daily business activities because they serve as legal evidence, and help in decision making. IRMT (2009) argues that without proper security, e-record might be subjected to tampering or destruction by unauthorized people hence threatening their integrity and existence. Similarly, Adam (2008) contends that security of records is an extremely important component hence it has to be integrated with a system in a way that will allow an administrator to apply specific security settings to an individual document.

4.6.1.6 ICT Infrastructure and Other Tools

ICT infrastructure is a vital component in e-records management. Unsurprisingly, a significant percentage (52.2%) of the respondents confirmed its importance in fostering e-records management by mentioning it as one of the e-records readiness tools at RAMD. One of the respondents commented that:

From creation to disposition, ICTs are vital facilities. ICTs are an important ingredient to e-records management because they simplify the job of creating, storing, preserving, communicating, preparing disposal

and retention schedules, retrieving and accessing of e-records among other things.

Similarly, IRMT (2009) found that in most organisations, users have access to a series of networked computer drives where they create, store, and access corporate documents and share information through intranet or internet sites. Kasozi's (2012) study on the contribution of ICT in records management observes that ICT infrastructure is a very important ingredient to electronic records management. Further, the study establishes that ICT and record management are both concerned with the creation, storage, accessibility, and security of digital information.

Other readiness tools that were mentioned include software such as SPINDEX system developed and maintained by the archives and records service of the United States which is employed by a considerable number of archives institutions in Canada and United States. Other systems are PROSPEC developed by Institute of Engineering on the United Kingdom and system developed at Sheffield University.

4.6.2 E-Records Creation Tools

E-records management needs tools which can create and store records. The researcher wanted to know the types of ICTs which are used in the creation of e-records. The results show that 32 (94.1%) of the respondents mentioned desktop computers, 31(91.2%) mentioned laptops, 27(79.4%) identified scanners, 18(52.9%) mentioned personal digital assistance, 15(44.1%) mentioned microfilm, and 11 (32.4%) mentioned smart phone. Figure 12 below summarizes the results:

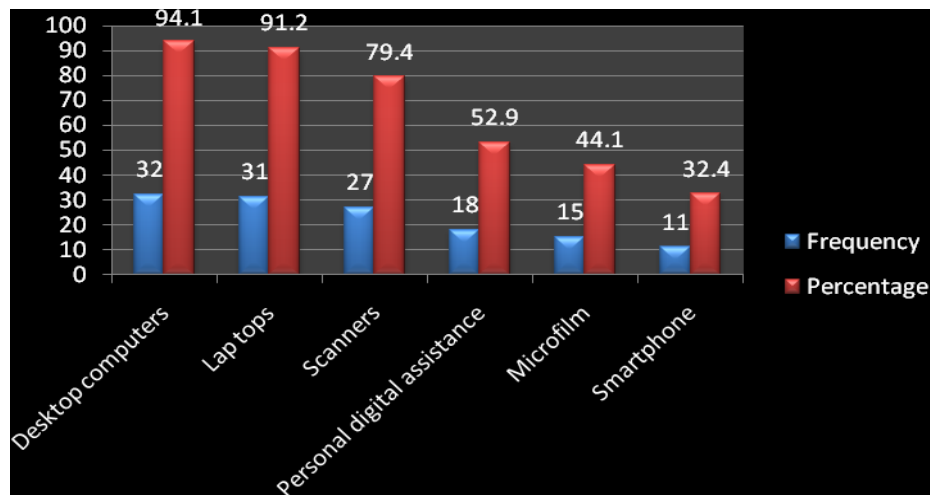


Fig: 11: E-records creation tools

Source: Field data 2015

The findings reveal that there are a number of tools used to create e-records at the RAMD. On the whole, the findings show that desktop computers, laptops, scanners, personal digital assistants, microfilms and Smart phones were the important creation tools for creating e-records. Detailed discussions are here under:

4.6.2.1 Desktop computers

Desktop computers were found to be important in the creation of e-records as indicated by 88.9% of the respondents. This implies that most of RAMD staff use desktop computers in their office activities. These computers have the ability to get interconnected and share resources like printers on networks such as LAN, MAN, and WAN. These results were confirmed through by observations from which desktop computers were found under use to produce electronic records and print them. These findings concur with those by NECCC (2004) which revealed that desktop computers help records management personnel in the principal task of records management. The

records personnel can manage records on their desks by using these computers instead of having to file them in a different room as done with paper based records.

4.6.2.2 Laptops

On the other hand, 86% of the respondents identified laptops as another tool used to creating e-records at the RAMD. IRMT (2004) agrees that laptops can be used in the creation, storage, and retrieval and use of e-records. Additionally, these are mobile tools that can be used anywhere to create records. However, the portability of these devices calls for more protection from theft and unauthorized access to records. (NECCC, 2004) emphasizes that laptops used to create records must be physically secured if left in the office overnight or out of the office.

4.6.2.3 Scanner

Further, the findings reveal that a significant percentage (75%) of respondents pointed out that scanners were used in e-records creation at the RAMD. Scanners are important tools in migrating paper records to digital format. Currently, the RAMD is attempting to scan some of its documents to migrate them to its e-records project. Most of government records which were born in paper format like Acts, policies, circulars, and standing orders among others are scanned to produce digital copies which are nowadays accessible online PO-PSM (2014). Scanning can also be used to preserve paper records from deterioration or damaged.

4.6.2.4 Personal Digital Assistants

Personal digital assistants were mentioned as e-record creating tools by 50% of respondents. Although the respondents mentioned PDAs as e-records creating tools, experience shows that the fundamental functionalities available on most of these tools include an address book, schedule, calendar, note pad, and e-mail. These facilities are mostly used by individual staff in quick data management. According to La Tella,(2008) a PDA is suitable for use in situations requiring quick data management or where information can be harmonized with a PC. By means of a wireless network, information can be exchanged to and from a PDA via a network providing immediate access to necessary administrative and other business data.

4.6.2.5 Microfilms

The findings indicate that 41.7% of respondents mentioned microfilms. The experience shows that RAMD use microfilm to store and accessing archival records. PO-PSM,(2014) point out that a total of 254 German records were microfilmed to protect the original copies and provide back up.

4.6.2.5.1 Smart phone

Furthermore, the findings indicate that 30.6% of the respondents indicated that smart phones were used as e-records creation tools. Experience shows that most employees use their smart phone to store and access records rather than creating. Records which can be created on smart phones are emails, and memos among others. Wamukoya and Mutula, (2005) argue that smart phones are resources that if used effectively to store and

preserve information assets, they can make access more easy. The use of smart phones by records management professionals can transform many aspects of records management practice. Mobile devices have become common place in electronic records management leading to rapid increase in records management software applications for these platforms. Numerous apps are now available to assist with many important tasks such as information and time management, creation of records, maintenance, access, communication, consulting, referencing, and information gathering Ventola (2014) supports the notion that mobile devices like smart phones and their apps provide many benefits for electronic records management perhaps most significantly the increased ease of access to management tools which has shown to support better organizational decision making. However, some records management personnel remain reluctant to adopt these tools. Despite the benefits they offer, better standards and validation practices regarding mobile records management apps need to be established to ensure proper use and integration of these increasingly sophisticated tools into records management practice.

4.6.3 Facilities used to Store Records

The Records and Archives Management Division (RAMD) uses various facilities to store e-records. Results from a question posed to solicit answers from respondents on this matter show that 28 (84.8%) respondents said that flash disks were the tools used to store records, 28 (84.8%) respondents mentioned workstation computers, 24(72.7%) said centralized server computing was used, while 24(72.7%) mentioned CD-ROMs. Further, 22 (66.7%) respondents mentioned microfilm, 18 (54.5%) mentioned external hard

disks, 16 (48.5%) mentioned memory cards, 15 (45.5%) mentioned optical disks, and 13 (39.4%) singled out cloud storage. Figure 13 below summarizes the results:

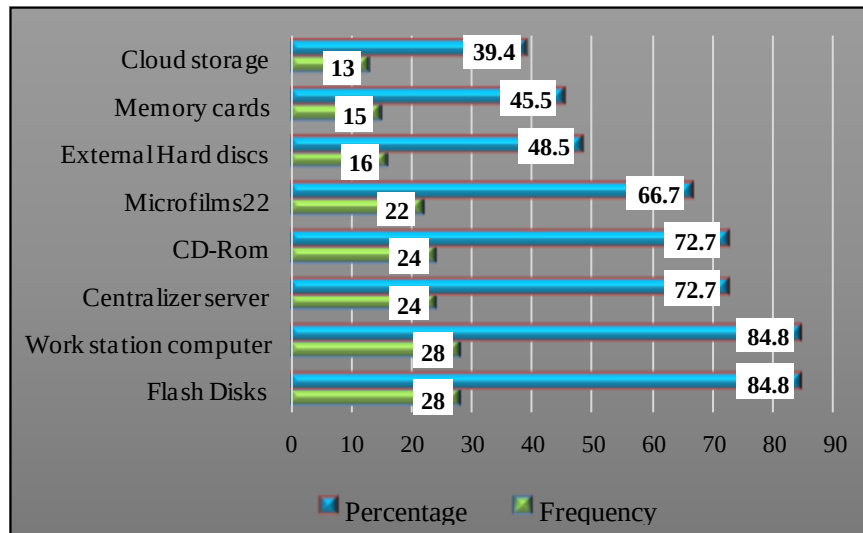


Figure 12 Facilities used to store e-records

Source: Field data 2015

On the whole, the findings suggest that most of the RAMD staff used flash disks, work station computers, microfilm, a centralized server computing, CD-ROM, and external hard disc. Other storage devices used were memory cards, optical discs, and cloud storage. Detail discussions on these media follow:

4.6.3.1 Flash Disks

In finding out facilities used to store e-records, flash disks were found to be one of the most used types of storage tools as indicated by 84.8% of the respondents. The popularity of flash disks can be attributed to their portability and ability to store large amounts of records in different formats such as pictures, audio, as well as records in written form. Indeed, these tools are easy to handle; can be used to back up records and store them in an offsite building for security purposes. Additionally, flash disks allow

deleting and replacing of their contents which means records can be erased and replaced with new ones. SOS (2013) notices that when considering how to manage public records using portable media (such as CDs, DVDs, flash disks, and others), it is important to focus on the electronic records stored on the media and treat the media itself as simply a container for storage the electronic records temporarily not permanently. In this respect, CDs, DVDs, and flash disks are similar to envelopes or boxes in the paper world. This argument makes flash disks a more appropriate choice for records keeping because they are convenient for transporting electronic records from one system to another.

4.6.3.2 Work Station Computers

Similarly, another 84.8% of respondents mentioned work station computers as the tools they used to keep e-records storage. This indicates that computers are mostly used for keep records at the RAMD. By using one of the advantages of computers is that records can be stored in form of a database hence making their retrieval easier. If the computers are connected to the internet the accessibility and retrieval of records could be easier hence saving time for users and records personnel. Today, almost all desktop computers have a built-in modem, a CD-ROM drive, a multi-gigabyte magnetic storage drive, and sometimes a diskette drive which can all be used to facilitate record keeping. Moatlhodi, and Kalusopa, (2016) states that workstation computers are powerful computers, with the capacity to store and process large quantities of data but they can only be used by one person at once. These computers are typically linked together to form a computer

local area networks to allow several people to communicate and share electronic records and other data.

4.6.3.3 Centralized Server Computing

Centralized server architecture is a type of computing where most or all of the processing is done by a central server allowing a host of computers connected to it to access and share the data it contains. In this study significant percentage (72.7%) of respondents mentioned this type of computing as a tool used to store records. Indeed, by using this type of technology records can easily be shared among all the computers connected to the server. On the whole, centralized servers simplify the communication and retrieval of records.

4.6.3.4 CD-ROM

Furthermore, 72.7% of respondents identified CD-ROM as the tools used in storing records at RAMD. Observations revealed that these tools were used to store different kinds of records such as pictures, audio records such as speeches, and written records. The surveyed division and sections in PO-PSM used CD-ROM to back-up of information or to store records for security purposes. In support of these tools, Wamukoya and Mutula (2005) argue that their usage is due to the fact that they are not prone to virus attacks and can store records for a long time.

4.6.3.5 Microfilm

Microfilm is the oldest technologies which were mostly used for storing information before computers became ubiquitous. Consequently, the findings confirm that they are

still in use at RAMD as revealed by 66.7% of respondents. One respondent had this to say about the usage of this media:

The RAMD still uses this media. Microfilm using film strips are used to store information which is accessed through the use of microfilm readers. For a long time now the archives section has used the microfilm facilities to store of information such as books, newspapers, as well as archives records. The advantage of the facility is that it does not get affected by viruses and hackers.

Although RAMD staff cited different kinds of storage facilities, findings from observations suggest that microfilm was the most used electronic media for storing records. Microfilm are able to store records for a long period or permanently. PO-PSM (2014) in its three years RAMD performance report of years 2011/12 -2013/14 stated that RAMD received modern microfilm readers as a grant from the government of Oman. As a result, a total of 254 German records were microfilmed for permanent preservation. IFLA (2011) discloses that microfilm improved access to electronic data and the long life expectancy of microfilm ensures long term preservation and accessibility. Microfilm can last up to 500 years hence ensuring safety of archival texts that have been transferred from brittle paper. Although digitization also offers easy access, microfilm can be used as more than an archival storage medium.

4.6.3.6 External Hard Disks

The findings also reveal that RAMD used external hard disks to keep records. This was revealed by 54.5% of the respondents. The respondents also asserted that these devices are used because of their ability to store large amounts of information. One of the key informants strongly argued that:

Information stored in external hard disks can be deleted and replaced at any time. These devices can also be used in transferring records from one system to another where network based transferring is not possible.

A study conducted by QSA (2014) found that external hard disks and USB flash drives can be used for offline records storage and stored offsite as part of a disaster recovery plan. However, human intervention is required to make these records accessible since there may be administrative procedures for accessing records in offline storage, particularly if they are stored offsite. In the same vein, Ventola, (2014) observed that an external hard disk is a great way to store more digital records like pictures, audio and other large files. It can supplement the storage space on your computer's internal hard disk, especially if the internal hard disk is running low on space. An external hard disk is also a great way to store a backup copy of important files or as an exportation tool for transferring records from one device to another.

4.6.3.7: Memory Cards

Advancements in technology have paved way for diversification in storage mechanisms. Evidently, the RAMD takes advantage of the existence of different storage tools on the market as revealed by 48.5% of the respondents who mentioned memory cards as one of the types of tools used to store records. These tools need to be in mobile phones, computers, or other types of readers for records to be accessed. Observations showed that despite memory cards being mentioned, their usage was more personal than official. Officially, these devices can be used to store records for a short time transferring them to another media for long term storage. O'Reilly Media (2013) observed that memory cards

provide a quick way to transfer information or records between lap-tops, desktop computers, palmtops and other devices.

4.6.3.8: Cloud Storage

The findings also indicate that the RAMD has adopted one of the most recently introduced storage mechanisms known as cloud storage as confirmed by a noticeable percentage (39.4%) of respondents who said that it was one of the ways records were stored.

Ventola,(2014) point out that, this mechanism involves using storage spaces available on internet accessible databases such as goggle, yahoo, and others. This system is very useful because it can store large volumes of data or information and allow easy and can be sharing. Cloud applications are used for a variety of purposes including collaboration, communication, storage, access, or delivery of content. Records for example, Word documents, emails, texts, chats, calendars, databases, and Excel documents, among others created or received in connection with public business are public records. Transactions of public business conducted through cloud-based services are also public records and must be managed in accordance with each record's retention and disposition schedule (CalRIM, 2012). This requires even greater attention to an office's records retention procedures and consideration. If an office is going to offer content through the cloud while hosting in-house data, records management may precede as it traditionally would with locally managed data. However, if records are managed fully in the cloud, careful consideration should be made regarding the

implications of such a practice. For example, if the contract with the cloud vendor expires or the service is no longer supported by the vendor there will be a need to download records as well as any corresponding metadata onto a local system. Furthermore, Minnesota Historical Society (2012) argue that this technology continues to be explored hence it is not yet known if it is safe to use it to keep confidential files or vital records that have to be accessible for 24 hours a day.

4.6.4 Tools Facilitate in Accessing E-records

The researcher wanted to bring to light the tools used in accessing e-records 30(88.2%) respondents mentioned computers and network as the devices used to access e-records, 26(76.5%) mentioned the Internet. Further, 19(55.9%) respondents mentioned scanners while. Table 11 below shows a summary of these tools used in accessing e-records at the RAMD:

Table 10: Tools Facilitate in Accessing records

Tools facilitate accessing e-records(n=55)	Frequency	Percentage
Computer	30	88.2
Network	30	88.2
Internet	26	76.5
Scanners	19	55.9
Institutional Intranet	19	55.9

Source: Field data 2015

These findings indicate that 88.2% of respondents cited computers and network as one of the tools facilitating access to e-records, 76.5% mentioned internet 55% of respondents mention scanner. These results seem to imply that computers and internet are most used tools in accessing e-records. This could be attributed to the fact that computer and the internet are

also popular record storage tools hence their high usage frequency and access of records because all these are depending each other. The subsequent subsections discuss the findings in detail.

4.6.4.1 Computer

The study findings indicate that 47.3% of respondents singled out computers as tools facilitating access to records. CalRIM, (2002) observed that through information management systems, computers provide infrastructure that ensures records are available, accessible, preserved, and when appropriate, destroyed. In other words computers are tools that facilitate the overall process of e-records management.

4.6.4.2 The Internet

Further, 34.6% of the respondents mentioned Internet a tool that facilitates accessing of e-records. Through staff members can access e-records at their desks hence avoiding movements from one office to another. This is because internet is a networking infrastructure connects millions of computers together globally, forming a network in which any computer can communicate with any other computer as long as they are both connected to the internet. Adam (2008) found that anyone can access public records through internet. This means that records users can access public records through website of records and archives authorities at any time so long as their computers are connected to internet.

4.6.4.3 Institutional Intranet

In addition to the above findings indicate that 55.9% of respondents revealed that a RAMD intranet is another tool that facilitates access to records. This tool allows users within the RAMD to have access to records as opposed to the internet where people can access public records from anywhere as long as they are connected. Within this network records personnel store, retrieve, access, and share records with each other. Similarly, Adam (2008) argues that computers in this networked can store, retrieve, share records; and offer complete access control (security) for the network's resources. Modern networks almost always have one or more servers which allow centralized management and access to network resources. User credentials on a privately owned and operated network may be as simple as a username and password. However, with ever increasing attention to computing security issues, these servers ensure that sensitive information is only available to authorized users hence the strengthening of authentication procedures.

4.7 Records Management Standards

This section discusses the access to and kinds of standards used by the PO-PSM to manage e-records.

4.7.1 Access to Records Management Standards

Standards are a vital component of any records management program equally important in e-records management. The researcher asked respondents if the RAMD employs standards in managing its records. The responses obtained reveal that 230(88.2%) of respondents said there are records management standards under use at the RAMD, 4 (11.8%) said there are no standards. Table 12 below summarizes the responses:

Table 11: Records management standards

Records Management Standards(n=34)	Frequency	Percentage
There are records management standards	30	88.2
There are no records management standards	4	11.8
Total	34	100

Source: Field data 2015

The study reveals that majority (85.3%) of respondents agreed that RAMD employs standards in managing records. Further enquiries revealed that the standards employed were adopted from the British colonial leadership. In fact, these standards are important tools in electronic records management from creation to disposition because they cover records and information in all formats. These standards refer to both records and other types of information and establish requirements for their holistic management. Taking this approach to the management of records and information is an indication that authorities now manage their information resources in an integrated manner. Further, the findings seem to imply that only 11.8% of the respondents were not aware of the standards used to manage e-records at the RAMD.

As summarized by IRMT (2011) standards help in creating trustworthy records, ensuring fair usage, supporting short and long term business plans, enabling reliable sharing of relevant records and information, automating governance, and ensuring continuity of processes. Additionally, standards minimize records and information volumes hence preventing unnecessary digital and physical storage and management costs. Apart from that, they facilitate proactive protection and management of records and information that provide ongoing value to government business and the community.

4.7.2 Kinds of Records Management Standards used by RAMD

There are various kinds of records management standards which can be used in records management. When asked about the kinds of standards used by the RAMD 19 (55.9%) of respondents mentioned international standards, 39 (85.3%) mentioned national and international standards, and 5 (14.7%) singled out national standards while 1(2.9%) respondent did not answer. Table 13 below indicates the responses provided on the kinds of records management standards used by RAMD:

Table 12: Kind of records management standards used

Kind of Records Management Standards(n=34)	Frequency	Percentage
International standards like ISO	29	85.3
Both National & International	24	70.6
National standards	5	47.1

Source: Field data 2015

The results indicate that 55.9% of respondents said the RAMD employed international standards to manage records, 26.5% mentioned national and international standards while least number of respondents (14.7%) mentioned national standards. According to these results the RAMD uses both national and international standards to manage records. This was confirmed in an interview with one of the key informants who agreed that the RAMD uses both standards although there was a planned adherence to the ISO 15489 which is designed to meet the ongoing generic needs of recordkeeping and suitable for government and non-governmental organizations. For example, ISO 15489 Part 1 of 2001 gives a high level framework for recordkeeping and explains the benefits of good records management, the legal considerations, and the importance of making someone responsible for recordkeeping. This part also looks at what is needed for good

records management, designing recordkeeping systems, records management processes, auditing, and training.

4.8 Funds Allocated for E-records Management

A question on the availability of funds to support e-records management was asked. Responses obtained show that 27 (79.4%) of the respondents said that there were no funds set aside to support e-records management while 6(17.6%) respondents said there were funds for such a purpose at the RAMD and 1(2.9%) respondent did not answer.

Table 14 below summarizes the results:

Table 13: Funds for E-records Management

Availability of funds(n=34)	Frequency	Percentage
Funds not available	27	79.4
Funds available	6	17.6
Non response	1	2.9
Total	34	100

Source: Field data, 2015

In general, the findings entail that majority (79.4%) of staff indicated that funds for e-records management were not available while just 17.6% of the staff said there were funds meant for such a purpose. Funds are an important resource in any organization not matter the type of business activities being carried out. During an interview one respondent confirmed the insufficiency of funds allocated to e-records management as indicated below:

The government does not allocate sufficient funds for records management hence it is very difficult to meet all the needs especially those relating to electronic records management. The management of e-records needs infrastructure such as internet,

equipment, practical training to records personnel on e-records management among others. Unfortunately the RAMD mainly does not have other sources of money other than the government through PO-PSM hence the scarcity of these resources. PO-PSM (2014) confirms that the budget allocated to the department is not enough to accomplish its planned activities. This is due to the fact that the management of e-records is not a priority at the RAMD.

4.9 Perceived Importance of E-records Management

Records are the center of the RAMD daily business. In line with the conceptual framework of Readiness of E-Records Management (REDM) and Technology Acceptance Model by Davis *et al.* (1989), respondents felt that effective management of e-records would contribute positively to the growth of an organizations and development of a nation at large. Results on the perceived importance of e-records show that 21 (63.6%) respondents strongly agree that e-records management helps in decision making and accountability, 18(54.5%) respondents strongly agree that they are easy to access and retrieve, 13(39.4%) strongly agree that they save time and money. In addition to that, 12(36.4%) respondents strongly agree that they are easy to share, 10(30.5%) strongly agree that they facilitate transparency, and 8(25%) strongly agreed that they facilitate security of information. Table 15 below summarizes the results:

Table 14: Perceived Importance of e-records management

Response from RAMD staff										
Importance of e-records (n=33)	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	F	%	F	%	F	%	F	%	F	%
Help in decision making and accountability	21	63.6	4	12.1	6	18.2	1	3	1	3
Easy to access and use information	18	54.5	11	33	2	6.1	1	3	1	3
Save time & money	13	39.4	9	27.3	9	27.3	1	3	1	3
Easy to share	10	30.3	12	36.4	6	18.2	3	9.1	2	6.1
Facilitate transparency	10	30.3	11	33.3	8	24.2	2	6.1	2	6.1
Facilitate in security of information	8	24.2	12	36.4	6	18.2	5	15.1	2	6.1

Source: Field data 2015

The findings suggest that e-records management has numerous advantages as discussed hereunder:

4.9.1 Decision Making and Accountability

The findings reveal that majority (75.7 %) of the respondents agree that e-records management enhances decision making and accountability. These results imply that effective management of e-records ensures that the right information needed to make decisions is accessible in a timely manner. In addition to that e-records management ensures that accountability is upheld through ensuring that evidence for every activity is not just available but accessible too. In support of this, IRMT (2011) argues without proper management of e-information necessary for decision-making and accountability will lack evidentiary and reliability, and will be difficult to retrieve over time hence negatively affecting government performance and effectiveness.

4.9.2 Accessibility and Ease of Retrieval

The findings also show that majority (87.5 %) of the respondents agree that e-records management increases the accessibility and ease of retrieving of information. During an interview session, one of the key informants argued that

When there is an excess of unmanaged records and information it is hard for employees to locate the information they need to do their jobs or make use of content that already exists in an office.

Another key Informant argued that:

With appropriate electronic records management information is more easily located, retrieved, and used.

Mnjama and Wamukoya (2006) in their study on E-Government and Records Management: an assessment tool for e-records readiness in government, point out that in assessing e-readiness in government, several issues need to be critically examined. These relate to the integrity, security, authenticity, retrieval, and accessibility of e-records.

4.9.3 Saves Time and Money

Further, the results reveal that 66.7% of respondents agree that e-records management helps to save time and money. One of the key informants agreed with the perception of these respondents by explaining that:

Electronic records utilize optimize usage of office space by reducing redundant records as compared to paper records which are usually duplicated. These records also survive beyond their retention periods without demanding expensive on and off-site storage equipment such as filing cabinets. E-records also need a relatively smaller number of employees to manage them. All these have positive financial effects.

The ease with which e-records can be accessed and removal of geographical barriers (where networks are used) are just some of the ways e-records save time and money.

4.9.4 Easy to Share

The findings also indicate that 66.7% of respondents agree that e-records are easy to share comparing to paper records. Electronic records improve the capacity to collaborate and share information. One respondent argued that the management of electronic records enhances access and sharing of information. The ability to share records electronically has a number of advantages, for example, successfully set inter-departmental queries reduce the time and physical effort required to communicate and move between departments. During an interview session one of the key informants stated that “when one talks to clients questions can be answered instantly with the help of onscreen records without leaving the desk”. Organizations realize significant efficiency and productivity gains after moving to electronic records environments. E-records are easier to create, search, access, and share; they make business processes more efficient, and facilitate collaboration. They are friendlier to the environment

4.9.5 Enhances Transparency

Enhancing of transparency is another benefit of e-records management as revealed by 63.6% of respondent. This can be attributed to the fact that with the help of networks e-records can be accessed by more people hence keeping them informed about things going on in companies or government offices. In support of this one interviewee stated that “e-records management offers a great way of staying up to date on current events”.

As part of the Tanzanian government's efforts to promote transparency, a computer network to allow citizens to file income taxes, apply for employment and insurance, and make use of other government services from a single central web portal has been designed. Similarly, Thurston (2015) states that as Estonia moves toward enhanced interoperability, security, and digital continuity through greater standardization, enhanced information governance is making an increasingly important contribution to achieving openness, transparency, and self-determination. This shows that, like the government of Tanzania, the Estonian government is demonstrating accountability and transparency by enabling citizens to access trustworthy records and data that demonstrate what the government has promised, what it has done, and how it has spent public funds.

4.9.6 Enhance Security of Records

The study reveal that by 29 (87.9%) of the respondents were mentioned that electronic records enhance security. This is the last benefit of e-records management revealed by these results is its ability to enhance records security. A noticeable percentage (60.6%) of respondents agree that doing so positively impacts on the overall security of records. By classifying records, setting passwords, and applying electronic signatures and other security measures can prevent unauthorized people from getting hold of confidential information. Security systems applied to e-records prevent unauthorized people from modifying or erasing them. Additionally, records backups kept offsite and recovery functionalities help to prevent total loss of information in cases of natural and human disasters.

With new technology it is simple to maintain a document's security per the classification assigned throughout its lifecycle, from the first draft to when it gets archived. Authentication technologies are used to verify the identity a user to make sure that users are who they claim to be. As Internet usage continues to grow and more services are made available online, this issue will become increasingly important to the creation of reliable records (NECCC, 2004). When users access e-records, unique identification will have to be provided for security purposes. This kind of security is not available for paper records.

4.10 Preparedness for E-records Management

Respondents were asked to indicate if they were prepared for e-records management. Their responses indicate that 24 (72.7%) of respondents were not prepared while 9(27.3%) of them said they were prepared. Table 16 below indicates the preparedness on e-records management.

Table 15: Preparedness for e-records management

Preparedness (n=34)	Frequency	Percentage
Not prepared	24	72.7
Prepared	9	27.3
Total	34	100

Source: Field Data 2015

The findings indicate that 72.7% of the RAMD and TPSC staff was not prepared for e-records management while only 27.3% said they were prepared for it. Overall, these findings reveal that the level of preparedness for e-records management is low. This situation could be an impact of the challenges already revealed by this study such as the lack of the necessary knowledge and skills among staff members. Success in electronic

records management requires a consideration of various factors. NECCC (2004) suggest that before jumping into electronic records management, the availability of ICT infrastructure, relevant knowledge and skills, and legal framework among others should be ensured because these are the key factors that influence staff preparedness for electronic records management.

4.11 Challenges to Managing Electronic Records

Amid the continuing increase in electronic records, challenges of managing them are also rapidly rising. The conceptual framework of Readiness of E-Records Management (REDM) and Technology Acceptance Model by Davis *et al.* (1989) indicate that there are numerous challenges that affect effective utilization of e-records management systems. Similarly, the same challenges were observed by this study. Responses reveal that insufficiency of funds and Shortage 26 (78.8%) respondents cited security issues, and 21 (63.6%) cited difficulty in implementing policies, circulars, laws, and regulations. Additionally, 18 (56.2%) respondents mentioned poor ICT infrastructure and 12 (33.7%) cited lack of awareness. Table 17 summarizes the results:

Table 16: Challenges of E-records Management

Challenges(n=34)	Frequency	Percentage
Insufficient funds	29	87.9
Shortage of staff in managing e-records	29	87.9
Security issues	23	69.7

Implementation of policy, circulars, laws & regulations	21	63.6
Poor ICT infrastructure	18	56.2
Lack of management support	18	56.2
Lack of awareness	12	33.7

Source: Field data, 2015

Generally the above results show that readiness for managing electronic records at the RAMD faces several challenges as discussed hereunder.

4.11.1 Insufficiency of Fund

The Records and Archives Management Division faces numerous challenges in records management. One of the biggest challenges faced, as revealed by 87.9 % of respondents is insufficiency of funds. This confirms what was written in the three years performance report of years 2011/12 – 2013/14 where it was revealed that the budget allocated to the department is not enough to allow it to carry out its planned activities. The report further revealed that records management is not a priority to most local government authorities (PO-PSM, 2014). In an interview session, one of the key informants confirmed the presence of this challenge by saying that:

The government did not allocate sufficient funds to the RAMD hence it is difficult to achieve the goals set regarding the electronic records management program. According to the 2011/12 – 2013/14 three years RAMD performance report, the budget allocated to the department is not enough to accomplish its planned goals including training of records personnel, purchasing and maintenance of IT other equipment at the head quarters and National Records Centre in Dodoma.

4.11.2 Shortage of Staff

Shortage of staff was reported as one of the big challenges faced by the RAMD in managing e-records as evident from the 87.9% of respondents mentioned. This challenge was further made during an interview session with one of the respondents who had this to say:

We have staff with different levels of education in records management who mostly lack practical knowledge needed in electronic records management. These staff members need practical training to familiarize them with IT equipments used in managing e-records.

From this statement it can be seen that the shortage of staff members is felt because the available staff members lack the skills needed for e-records management. In the same light, IRMT (2003) states that records managers and national archivists do not have the capacity and training to properly articulate e-records issues and provide guidance and input to policy makers and planners.

4.11.3: Security Issues

Further, the findings reveal that security of e-records was among the challenges facing the management of e-records at the RAMD as indicated by 69.7% of respondents. In contrast, findings from interviews show that e-records security was not a big problem or challenge for the RAMD because several precautionary measures were in place. The security measures in place include: classification of electronic records to prevent unauthorized people from accessing, and usage of passwords and other authentication mechanisms. These security measures are some of those suggested by IRMT (2011) which include: tracking systems to ensure that users with appropriate permissions use

information for authorized tasks; password protecting electronic records in databases or shared drives; updating antivirus software on all computers and mobile devices; and using extra measures to secure confidential records sent through emails. Similarly, NECCC (2004) cautions that system access accounts for users and records personnel should not be shared (unless authorized by system administrators) and must be based on unique identifiers like passwords. Where appropriate, accountability should be maintained by basing system access on the principles of least privilege and separation of duties.

4.11.4 Implementation of Policies, Circulars, Laws and Regulations

The government of Tanzania has formulated a lot of circulars, policies, laws, and regulations for e-records management but findings of this study suggest that most of them are not effectively implemented as indicated by 63.6% of respondents. The lack of implementation of the policies and related documents was attributed to their lack of attention to e-records and absence of harmony among them. For example, the Records and Archives Management Act of 2002 covers matters relating to the management of records from creation to disposition but does not say anything about the management of electronic records. Likewise, the Records and Archives Management policy of 2013, the Cyber Crime Act of 2015, the ICT policy of 2003 and other related documents have not addressed matters relating to e-records and their management.

4.11.5 Poor ICT Infrastructure

These findings indicate that poor ICT infrastructure is another challenge faced by the RAMD in managing e-records as revealed by 56.2% of respondents. During an interview session one of the key respondents described the extent of the ICT infrastructure challenge as follows:

We have desktop computers and laptops but most of them need maintenance. In addition, e-records management requires software and other special IT equipment both of which are not available right now.

This can be attributed to the insufficiency of funds to purchase and maintain the ICT equipment. It is obvious that without the appropriate hardware and software and other enabling agents the management of electronic records cannot be possible. In support of this NARA (2002) argues that ICT tools such as computers and record management software support the management of records. Among other things, these tools facilitate the creation, storage, retrieval and access, tracking of records during transfers, and identification of records for retention for destruction.

4.12 Strategies to Improve E-records Management

The researcher wanted to know what respondents felt should be done to improve e-records management practices. Results show that 29 (87.9%) respondents suggested an improvement of ICT infrastructure, 27 (81.8%) suggested boosting e-records security, while 24 (72.7%) recommended more adherence to ISO standards. Further, 23 (69.7%) suggested e-records management training for staff, while installation of an e-records system and improving e-records creation were recommended by 19 (57.6%) of the respondents each. Table 18 below summarizes the results:

Table 17: Strategies to Improve E-records Management

Strategies(n=34)	Frequency	Percentage
Improve ICT Infrastructure	29	87.9
Adhere to ISO	24	72.7
E-records management training	23	69.7
Installation of e-records system	19	57.6
Increase e-records creation	19	57.6

Source: Field data 2015

The above results imply that respondents think that the RAMD has a number of potential strategies that can be used to improve its record management. The subsections that follow discuss the strategies in details.

4.12.1 Improving the ICT Infrastructure

The study found that 87.9% suggested that the RAMD should make efforts to improve its ICT infrastructure so that it better facilitates the management of e-records. This is a sound suggestion considering that ICT infrastructure is a vital factor to consider in e-records management hence its usage in measuring e-readiness of organizations. Mnjama and Wamukoya (2007) quoting Bridges (2001) argue that assessment of e-readiness should focus on both physical and software components of ICT infrastructure. Improved access to ICTs in government offices and homes, integration and use of ICT in everyday life, and the existence of government policies that support and promote connectedness are some of the issues to consider when trying improving ICT infrastructure at national level.

4.12.2 Adherence to ISO Standards

Further, the results above reveal that 72.7% of respondents proposed that the RAMD should adhere to ISO Standards. This suggestion can be attributed to the respondents' understanding of the importance of standards in managing both paper and electronic records. Elias and Bestelo (2011) state that for example, ISO 30300 series offers the methodology for systematic approach to the creation of records.

4.12.3 E-records Management Training

In addition to the earlier suggestions, the findings disclose that 69.7% of respondents recommended investing in e-records management training for staff members. This is another good suggestion because doing so would help to ensure that staff members have the knowledge and skills needed in e-records management. Utumishi, (2014). During one of the interview sessions, an informant stressed the importance of training as follow:

Records managers need to be conversant with various electronic records management systems. Although some of the records personnel here have attended training on e-records management, they still lack the required skills because their training was more theoretical. As a result, the staff members do not have practical skills needed in e-records management. In addition, it is becoming pointless to send staff members for training in this country are due to the fact that most colleges which offer such training do not focus on practical experiences.

These findings imply that training is regarded as an important requirement for strengthening the management of e-records in the PO-PSM hence the need for allocation of enough staff development funds.

4.12.4 Installation of E-Records Systems

The results have also revealed that 57.6% of the respondents recommended the installation of e-records management systems as a strategy for improving e-records management at the RAMD. This is another sound suggestion because when an organization wants to migrate from paper to digital records, purchasing of an e-records management system has to be one of the initial steps. Wamukoya, J. and Mutula, S (2005) in their study on e-government and records Management: An Assessment E-records Readiness in Government, point out the benefit of having such a system in place may supporting import, export and interoperability the of import and export records, and interoperability with other systems, is frequently required functionality. Records may be exported to other organisations in the event of mergers or government reorganizational changes. Many records may retain for longer than the years of the software system itself, and is also be able to export records when transitioning to a new electronic records management system.

4.12.5 Security and Authentication

The system has an impact on the reliability of records issue. Electronic Records Management the Systems allows records to be effectively managed when they have been subject to technological protection measures, electronic signatures and electronic rights management. It gives particular consideration to the ongoing maintenance of records that have been subject to encryption and electronic signatures.

4.12.6 Increase E-records Creation

From the results in table 18 it can be seen that 57.6% of the respondents proposed that the RAMD should work on increasing the production of e-records in order to improve their management. The researcher also observed that the RAMD still depends on paper records because it has very few e-records. This is another sound suggestion because having few e-records and more paper ones leads to splitting of available resources. In this case, it would be no surprise to see more resources going to paper records management because of the division's reliance on them. As a result, e-records management suffers. Increasing the production of e-records will shift the division's attention to them and doing so will have a number of benefits. IRMT (2009) supports this by stating that governments can benefit a lot from implementing e-records management programs some of the benefits are: ease in fulfilling legal obligations, reduction of storage costs, reduction of records retrieval time, and increasing citizens' access to public information. However, these benefits can only be reaped by ensuring more e-records are created

4.13 Recommendations on E-Records Management to the Government

The study asked respondents to make recommendations on what the government of Tanzania should do to improve e-records management. The responses obtained reveal that 33 (97.1%) financial support should be increased, 32(91.2%) reveal that strict implementation of the legal framework supporting e-records management and improvement of e-records security. Further 30(88.2%) the government should support

higher learning institutions in introducing and enhancing records management curricular. Table 19 below presents a summary of these findings.

Table 18: Recommendations on E-Records Management

Comments (n=34)	Frequency	Percentage
Increase financial support	33	97.1
Ensure legal framework implementation	32	91.2
Improve Security	32	91.2
Support higher learning institutions in introducing & enhancing e-records management curriculum	30	88.2

Source: Field data 2015

4. 13.1 Increasing Records Management Agencies' Funding

The findings also show that 97.1% of respondents recommended that the government should increase the financial support it gives to records management agencies such as the RAMD. Observations revealed that the RAMD's records and archives which are mostly in paper format and placed on shelves making their retrieval time demanding. Considering that the RAMD has no other sources of funds, a full shift to an electronic environment will require an increase in the government budget received.

4.13.2 Implementation of the E-records Management Legal Framework

Further, the findings reveal that 91.2% of respondents that the government should ensure that the available e-records management legal framework is strictly implemented. This recommendation goes in line with this study's findings on the challenges faced in e-records management which reveals that poor implementation of the legal framework is one of them. It was confirmed from interviews that starting e-records management projects without considering the legal framework in place can be disastrous. The interviews revealed that scanning projects that started independent of the National

Archives and failed to recognize legal and technical requirements have failed, resulting in wastage of a good deal of time and money. All specifications and directions for such projects are provided in different government documents, for example, according to IRMT (2007), Circular No. 6 states that paper records should be digitized in accordance with the standards set by PO-PSM at the RAMD. The government has to ensure that records and archives agencies are aware of the implications of not following relevant legislation and codes such as the Evidence Ordinance, Personal Data (Privacy) Ordinance, Limitation Ordinance, Electronic Transactions Ordinance, and Code on Access to Information. In addition, based on these results, the government should make sure the guidelines and procedures it develops are made known to record management staff.

4.13.3 Improve Security of E-Records

The findings also indicate that 91.2% of respondents recommended improving the security of e-records as a strategy to improve their management. In fact, an e-records management program will be regarded successful if it is able to provide access to reliable records hence the need to ensure records are fully protected from threats like computer-assisted fraud, sabotage, vandalism, and theft. Similarly, IRMT (2011) points out that e-records need to be protected from damage caused by breaches such as computer viruses, and computer hacking. Introduction of e-records has led to increased organizations' dependence on information systems and services hence the increased vulnerabilities to security threats; security issues were not always the primary consideration in system design.

4.13.4 Introduction and Enhancement of Records Management Curriculum

The findings above indicate that 88.2% of respondents recommended that government through the Ministry of Education and Vocational Training, and Tanzania Commission for Universities TCU should support higher learning institutions in introducing and enhancing LIS and records management curricular. The records management and LIS programs currently available have not yet incorporated practical courses or modules that focus on e-records management. In addition to that, so far in Tanzania only Mzumbe University and Tanzania Public Service College offer a degree, and a diploma in records and archives management respectively. This has resulted in a shortage of e-records expertise in the country. The government should work with colleges and universities to ensure that practical training added to in the available curricular.

4.13.5 Summary of the Chapter

This chapter has presented, analyzed, and discussed this study's findings in line with the research objectives and questions. The chapter presents and discusses the study's findings on e-records preparedness of PO-PSM at the RAMD, the kinds of e-records available at RAMD, staff's perception of e-records management, and challenges faced in managing e-records. The next chapter summarizes and concludes the study, and provides policy recommendations and suggestions on areas for further studies.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary, conclusions, and recommendations of the study. The summary provides a brief outline of the study objectives and questions, describes the methodology used to collect and analyze data, presents key findings, and provides conclusions deduced from the study's findings. Finally, it highlights the recommendations to enhancing the management of e-records. In addition, the chapter presents recommendations made based on the findings of the study and suggests areas for further research in the field of electronic records management.

5.1 Summary of the Study

This section provides a summary of objectives, conceptual framework, research methodology, and key findings of this study.

5.2 Objectives

The main objective of this study was to assess the readiness of PO-PSM on e-records management. Specifically, the study aimed at: identifying the kind of e-records found in PO-PSM, examining e-records readiness tools which facilitate e-records management in the PO-PSM, exploring perceptions towards the importance of using e-records in PO-PSM, and examining the challenges faced by PO-PSM in electronic records management.

5.2.1 Conceptual Framework

The Conceptual Framework of Readiness in E-records Management largely derived from the Technological Acceptance Model (TAM) was used in this study. The framework states that effective management of different kinds of e-records depends on numerous factors and tools, and that the acceptance of a new system of records management specifically depends on its perceived ease of use and usefulness. This implies that if individuals perceive a system as useful and easy to use they are likely to adopt it. In addition to these factors, the framework states that system adoption is also influenced by other factors such as top management support, and tools like legal documents, policies, standards, ICTs etc.

5.2.2 Research Methodology

This study adopted a mixed (qualitative and quantitative methods) research design and approach for data collection, processing, and analysis. Primary data were collected through the use of questionnaires with open and closed ended questions, interviews and, non-participatory observation. Secondary data were collected from various published and unpublished sources such as books, journal articles (printed and electronic), and research reports. The collected quantitative data were analyzed with the help of SPSS while qualitative data were analyzed by using content analysis.

5.3 Key Findings

The section summarizes the findings on the types of e-records available in PO-PSM, e-records readiness tools, respondents' perceptions on the importance of e-records management, and challenges faced by the RAMD staff in managing electronic records and how to overcome them. The summary of the study findings is based on the results presented in chapter four of this study.

5.4 Kinds of Record Available at the RAMD

The findings reveal that the RAMD manages various kinds of records such as the founders of the nation speeches, policies, standing orders, and government circulars from different departments. Other kinds of e-records include government reports, Acts, budget speeches and others.

5.5 Electronic Records Readiness Tools

The study findings reveal that majority of RAMD staff were aware of the available kinds of the e-readiness tools that foster the management of e-records. The tools mentioned are national and international standards, policies, ICT infrastructure, and others. Despite the availability of these tools and the efforts made by the PO-PSM, print records remain dominant.

5.6 Perceived Importance of E-Records Management

The findings of this study disclose that staff and students at the study area believe that effective records management helps to enhance decision making, communication, dissemination of knowledge, time management, and security of the records; and leads to reduce costs.

5.7 Challenges of E-Records Management

This study reveals that RAMD faces a number of challenges in its e-records management namely: insufficiency of funds, poor ICT infrastructure, poor security and accessibility of e-records, and shortage of staff capable of managing the records. Furthermore, it was revealed that the division is faced with more challenges such as: poor implementation of policies, circulars, and regulations; insufficient support from the government, and lack of harmony in the legal framework. All these challenges deter the effective management of e-records.

5.8 Strategies for Strengthening E-Records Management

In order to improve e-records management, the findings have suggested a number of measures to take. For e-records to improve, the RAMD is advised to do the following things: improve the ICT infrastructure and security of e-records, adhere to ISO standards, training its staff members in e-records management, install e-records management systems, and increase e-records creation.

5.9 Conclusion

Transforming a traditional government into an e-government is an involving task that should not be underestimated. Success in such an endeavor evidently requires the presence of a supporting environment and readiness tools such as standards, and policies. Undeniably, switching to e-governance requires a shift in records management from paper based to electronic ones. However, e-records management initiatives experience a number of hurdles including financial problems, lack of expertise, and insufficient management support. As a result, achieving tangible and measurable socio-

economic changes, good governance, and competitive and sustainable development requires deliberate measures to improve e-records management to be taken.

5.10 Recommendations

This section provides recommendations for strengthening e-records management in the PO-PSM and areas for further studies.

5.10.1 Mobilization of Financial Resources

The RAMD should take measures to deal with the financial challenges being faced. The division should take deliberate actions to mobilize financial resources that will be used for training records management personnel, purchasing computers, and acquiring software for electronic records management among others.

5.10.2 ICT Infrastructure and Security Systems

The division has to consider making initiatives to improve ICT facilities, and install e-records and security systems to enhance electronic records management. Such actions would ensure that records are accessible and secured at all times. Security measures should include those aimed at preventing unauthorized access to void records misuse, unauthorized disclosure, and modification; and those preventing damage and loss of e-records. To do this, the RAMD should implement a comprehensive programmed information security system like the security tracking system.

5.10.3 Promotion of E-records Use

The RAMD should promote its e-records to increase their usage. Increased usage of e-records will improve the relevance and visibility of the division. This will help the

division to justify its requests for resources such as money which in return will help it improve its ICT facilities, and train staff members among other things. Promotion of the e-records can be done through exhibitions during national trade fair, book festivals, and out rich services.

5.10.4 LIS and Records Curriculum

Colleges and universities should integrate e-records management courses into their LIS and records management curricular. In addition, these courses should be practical oriented to ensure that record management agencies have staff members with both knowledge and skills for e-records management.

5.10.5 Legal Framework

The government should formulate a clear Records and Archives Policy which should be harmonized with the ICT Policy of 2003 and other Acts like Records and Archives Management Act of 2002, Freedom of Information Act of 2004, Data Protection Act 1998, Cyber Crime Act of 2015 as well as Copy right Act of 2002. Doing so will create a clear legislative and regulatory framework for records managers and other information professionals. As a result, adequate information communication channels will be available, user privacy and online security will be guaranteed and universal access and freedom of access to information will be upheld.

5.11 Area for Further Studies

This study has assessed the readiness for electronic records management at the Records and Archives Management Division in the President's Office, Public Service

Management. During the study it was noted that there are number of related areas which need to be investigated. These include:

- Assessing the need for e-records management systems in government ministries;
- A comparative study on the analysis of the quality of e-records management in public and private institutions in Tanzania; and assessing the tangible contribution of e-records to good governance in Tanzania.

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APPENDIX I: QUESTIONNAIRES GUIDE

Questionnaires for President's Office Public Service Management Department of Tanzania Public Service College and Records and Archives Management Division Staff

Dear respondents,

My name is Ms. Judith Romwald Newa, a student of M.A. Degree in Information Studies in the Department of Information Studies, College of Social Science, and University of Dar es Salaam. I am conducting a study on an Assessment of Readiness of President's Office Public Service Management on E-records Management: A case of Selected Records and archives Division and Tanzania Public Service College. Kindly, I would like to invite you to participate in this study by filling in this questionnaire. All the information acquired from the field work will be used for academic purposes only and treated as confidential, and not otherwise. Please express your honest opinion about the subject. Your views are valuable and significance for the study being conducted. The findings will help in improving in electronic records management in public offices in Tanzania. Please use a ball point pen to fill in this questionnaire.

Thanking you in advance.

Section A: Background Information

1. Name of institution.....
2. Department:
3. Occupation (Tick the appropriate)

1. Records officer [☐]	2. IT Professional [☐]
3. Librarian [☐]	
4. Gender:

1. Male [☐]	2. Female [☐]
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5. How old are you? (Tick one among range)

2. 18 – 30yrs [☐]	2. 41 – 50yrs [☐]
3. 31 – 40yrs [☐]	4. 51 – 60yrs [☐]
5. Above 61 [☐]	
6. What your education level? (Tick the appropriate)

1. Primary education [☐]	2. (O level) [☐]
3. (A level) [☐]	4. Certificate [☐]
4. Diploma [☐]	5. Bachelor [☐]
5. Bachelor [☐]	6. Master's [☐]
7. Others (please specify).....	

Section B: Types of records

7. What kind of records RAMD are keeping?

1. Paper records [] 2. Electronic records [] 3. Both []

Section C: Management of e-records

8. Do you have background on e-records management?
Yes [] No []
9. If no in question 8 how did you get your skill?
1. Through experience [] 2. Self taught [] 3. In-house training []
4. Learn from others [] 5. Others (specify).....
10. Which kind of e-records are you manage in your department? Please mention.
.....
10. What are your responsibilities on electronic records management? (Tick all that apply)

S/N	Responsibilities	Response	
		Yes	No
1.	Creation (Typing)		
2.	Processing		
3.	Disposition		
4.	Scanning the documents		
5.	Others (Specify)		

Section D: E-Records Readiness Tools

12. Which e-records readiness tools do PO-PSM – RAMD division have? (Tick all apply)

S/N	E-records Readiness Tools	Response	
		Yes	No
1.	ICT infrastructure		
2.	Computers		
3.	Competent Staff		
4.	Policy and circulars		
5.	Laws		
6.	Training records personnel		
7.	International Standards		
8.	National Standards		
9.	Electronic Signature		
10.	Security Issues		
11.	Network		
12.	Bandwidth		
13.	Other (Specify)		

13. What are the tools used by PO-PSM, RAMD division in creation of e-records (Tick all that apply)

S/N	Tools used in e-records creation	Response	
		Yes	No
1.	Desktop Computer		
2.	Laptops		
3.	Tablets		
4.	Scanner		
5.	Smart Phones		
6.	Personal Digital Assistants		
7.	Others(Specify.....		

14. How are e-records shared within your institution? (Tick all that apply)

1. E-mail [] 2. Through Seminars [] 3. Through Webmail
4. Online database [] 5. Others (Specify).....

15. What are the facilities used to store records in your department? (Tick all that apply)

S/N	Facilities used to store records	Response	
		Yes	No
1.	Flash disks		
2.	Cloud storage		
3.	Work station computers		
4.	Centralized server		
5.	Memory cards		
6.	External hard disks		
7.	Optical discs		
8.	Others (specify)		

16. Do you think fund allocated for e-records management is sufficient?

Yes [] No []

17. Do the (RAMD) have trained personnel for managing electronic records?

Yes [] No []

18. Did you attend any formal training on managing electronic records?

Yes [] No []

19. If the answer to question 18 is “Yes” which level of education you have attained on E-records management? (Cycle the appropriate)

- 1) Certificate in records and archives management?
- 2) Certificate in ICT?
- 3) Diploma in Information Technology?
- 4) Bachelor of records and archives administration?
- 5) Masters of records management?
- 6) Short course of managing electronic records?
- 7) In-house training in managing electronic records?
- 8) Others (specify).....
- 9) None of the above

20. In your daily tasks, do you use records management standards of electronic records management?
Yes ☐ No ☐
21. If the answer of question 20 is 'Yes' which standards do you use? (Tick all apply)
1). International Standards (ISO) ☐ 2). National Standards ☐
3). Both International and National ☐ records do you prefer? (Tick the appropriate?)
1) Paper records ☐ 2) Electronic records ☐ 3) Others (Specify)
23. Please indicate your level of agreement with each of the following statements using the Following scale: 1 = Strongly Agree; 2 = Agreed; 3 = Neutral; 4 = Disagree and 5=Strongly disagree

S/N	Statement on importance of e-records	Level of agreement				
		5	4	3	2	1
1.	Help in decision making & accountability					
2.	Easy to access & retrieval information					
3.	Saves time and money					
4.	Easy to share					
5.	Facilitate transparency					
6.	Facilitate in security of information					
7.	Others (Specify)					

Section E: Challenges of e-records management.

24. What are the challenges faced by PO-PSM towards electronic records management?

S/N	Challenges	Response	
		Yes	No
1.	Insufficient funds		
2.	Poor ICT infrastructure		
3.	Shortage of staff to manage e-records		
4.	Poor accessibility of e-records		
5.	Security issues		
6.	Policy, circular, laws and regulations		
7.	Lack of standards		
8.	Lack of management support		
9.	Others (Specify)		

25. What are strategies do you have on e-records management?

26. Which ways electronic records management can be improved?

27. What other recommendations do you like to give on management of e-records to the President's Office Public Service Management (PO-PSM)

APPENDIX II: INTERVIEW GUIDE

1. What is your position in this department?
2. What level of education do you have?
3. How long have you been working in matters concerning records management at the RAMD?
4. What kind of records are your department manages?
5. Which responsibilities do you have in your department?
6. Do you think fund allocated is sufficient?
7. Do RAMD provide training to records management personnel on e-records management?
8. Do you have records management standards?
9. As a head of department what challenges do you facing in e-records management?

APPENDIX III: CLEARANCE LETTER

UNIVERSITY OF DAR-ES-SALAAM
OFFICE OF THE VICE CHANCELLOR
P.O. BOX 35091 ♦ DAR ES SALAAM ♦ TANZANIA

General: +255 22 2410500-8 ext. 2001
 Direct: +255 22 2410700
 Telefax: +255 22 2410078



Telegraphic Address: UNIVERSITY OF DAR ES SALAAM
 E-mail: vc@admin.udsm.ac.tz
 Website address: www.udsm.ac.tz

Ref. No: AB3/12(B)

Date: 11th February, 2015

To Secretary General,
 President's Office Public Service Management (PO-PSM),
 Dar es Salaam.

UNIVERSITY STAFF AND STUDENTS RESEARCH CLEARANCE

The purpose of this letter is to introduce to you **Ms. Judith R. Nawa** who is a bonafide student of the University of Dar es Salaam and who is at the moment conducting research. Our staff members and students undertake research activities every year especially during the long vacation.

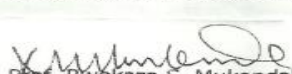
In accordance with a government circular letter Ref.No.MPEC/R/10/1 dated 4th July, 1980 the Vice-Chancellor was empowered to issue research clearances to the staff and students of the University of Dar es Salaam on behalf of the government and the Tanzania Commission for Science and Technology, a successor organization to UTAFITI.

I therefore request you to grant the above-mentioned member of our University community any help that may enable her to achieve her research objectives. What is required is your permission for her to see and talk to the leaders and members of your institutions in connection with her research.

The title of the research in question is **"An Assessment of the Readiness of Tanzania President's Office Public Service Management to Manage E-Records: A Case of Dar es Salaam"**.

The period for which this permission has been granted is from **February to March, 2015** and will cover the following area: **Dar es Salaam Region**.

Should the area be restricted, you are requested to kindly advise her as to which alternative places could be visited. In case you may require further information, please contact the Directorate of Research Tel. 2410500-8 Ext. 2087 or 2410743.


 Prof. Rwekaza S. Mukandala
VICE-CHANCELLOR

VICE CHANCELLOR
 UNIVERSITY OF DAR-ES-SALAAM
 P.O. BOX 35091
 DAR-ES-SALAAM

QUOTATION OF REF. NO. IS ESSENTIAL

APPENDIX IV: PERMISSION LETTER

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE

Telegrams "UTUMISHI", DSM.
 Telephone: 2118531/4
 Fax: 2131365

PUBLIC SERVICE MANAGEMENT,
 P.O. Box 2483,
 DAR ES SALAAM.



In reply please quote:

Ref. No. AB.252/287/01/217

24th March, 2015

Vice Chancellor
 University of Dar es Salaam
 P.O.BOX 35091
DAR ES SALAAM.

RE: ACCEPTANCE FOR STUDENTS RESEARCH CLEARANCE-
Ms JUDITH R NEWA

Refer to your letter Ref No.AB3/12(B) dated on 11th February 2015, on staff and student research clearance.

Kindly be informed that the mentioned student has been accepted to conduct research at this office from March to April 2015. The accepted student should report to the Department of Administration and Human Resources.

A. L. Maro.

For: Permanent Secretary
(PUBLIC SERVICE MANAGEMENT)

CC: Ms Judith R. Newa