ALIGNING RECORDS MANAGEMENTAND RISK MANAGEMENT WITH BUSINESS PROCESSES AT MOI UNIVERSITY, ELDORET, KENYA

BY

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DECLARATION

DECLARATION BY THE CANDIDATE

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DEDICATION

I dedicate this work to the memory of my late mother Janerose Nekesa Wanjala, without whom none of this would have been possible.

ACKNOWLEDGEMENT

ABSTRACT

Risk management is a critical component for institutions of higher learning since all educational activities bear a certain level of risk. However, many organizations in Kenya including Moi University are yet to formally integrate risk management programmes into their business operations. The aim of this study was to investigate the extent to which risk management and records management are aligned with business processes in Moi University with a view to proposing a strategy to enhance business processes in line with global best practice. The specific objectives of the study were to: undertake a business process analysis of Moi University and identify the resultant records generated by these processes; assess the current state of records management and risk management at Moi University; identify the problems faced by the institution in view of the current state of records management; identify the risks facing Moi University in relation to its core mandate; establish the role of records management in the mitigation of risks faced by the institution; give recommendations and propose an appropriate records management-cum-risk management strategy to enhance business processes at Moi University. The study was based upon the records continuum model put forth by Frank Upward and the Government of Canada Integrated Risk Management model. The study was qualitative in nature and data was collected through face-to-face semi-structured interviews. The population sample size constituted 50 respondents drawn from the four campuses of Moi University in Eldoret. Key findings of the study were that: the core business operations of Moi University generated a lot of records, both manual and electronic; the state of records management at the institution was poor while risk management practices were non-existent; key risks facing Moi University are strategic, operational, financial, commercial, compliance, technical and systems-related; records management is a risk management function and is an effective tool in risk mitigation. The study concluded that the poor state of records management at Moi University has contributed to inefficiencies in business processes, exposing the institution to various risks. Recommendations proposed were that: Moi University should adopt comprehensive records management and risk management programmes; and that the records-cum-risk management model proposed by the study should be adopted to aid in the implementation of these programmes.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADMIN - Administrative

ADMINS - Administrators

ARMA - Archives and Records Management Association

BPA - Business Process Analysis

CACO - Chief Academic Officer

CADO - Chief Administrative Officer

COSO - Committee of Sponsoring Organisations of the Treadway Commission

ERM: - Enterprise-wide Risk Management

ERMP - Electronic Records Management Programme

FMIS - Financial Management Information System

FoI - Freedom of Information

HRIS - Human Resource Information System

HODs: - Heads of Departments

ICA - International Council of Archives

ICTs: - Information and Communication Technologies

IRM: - Integrated Risk Management

IRMM: - Integrated Risk Management Model

IRMT - International Records Management Trust

ISO - International Standards Organisation

IT: - Information Technology

KACC - Kenya Anti-Corruption Commission

KNA - Kenya National Archives

MIS - Management Information Systems

PAO - Principal Administrative Officer

PSRP - Public Service Reforms Programme

RA - Records Assessment

RC: - Records Continuum

RLC: - Records Life cycle

RM - Records Management

RMP - Records Management Programme

SPAO - Senior Principal Administrative Officer

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CHAPTER ONE

INTRODUCTION AND BACKGROUND INFORMATION

1.0 INTRODUCTION

This chapter gives background information to the study and the institution where the study was conducted. It gives an overview of records management and risk management concepts and provides a brief discussion of records management and risk management at Moi University. The chapter also looks into the statement of the problem that necessitated the need for the research, aim and objectives, research questions, assumptions, significance, scope and limitations of the study. Key terms used in the study are also defined.

1.1 RECORDS AND RECORDS MANAGEMENT

1.1.1 Records

Organisations collect, create, and use a wide variety of recorded documentation. There is data or "raw facts about the organisation and its business transactions". There is information, defined as "data that has been refined and organized by processing and purposeful intelligence". There are records or "any document or other source of information compiled, recorded or stored in written form or on film, or by electronic process, or by any other means". More recently there is knowledge, which is defined as something more than information because it includes the expertise, logic and reasoning developed by accomplished experts in a specific field to solve problems and make decisions (Emery, 2005).

There is as yet, no consensus on the definition of the term "record". According to the USA Federal Records Act, a record is "recorded information, regardless of medium or

characteristics, made or received by an organisation that is evidence of its operations and has value requiring its retention for a specific period of time" (NARA, 2008).

Roper and Millar (1999) opine that a record is a document, regardless of medium or form, created, received, maintained and used by an organisation either public or private or an individual, in pursuance of legal obligation or in the transaction of business of which it forms part or provides evidence. Yusof & Chell (2005) say that records are all those documents, in whatever medium, received or created by an organisation in the course of its business, and retained by the organisation as evidence of its activities or because of the information contained therein, besides fulfilling the requirement to comply with the relevant laws and regulations.

This study adopts the definition put forth by the International Standard ISO 15489-1:2001 which defines records as 'information created, received, and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of business". This definition is sufficiently broad and provides a more complete picture of a "record".

Records fulfill important functions in society by providing evidence of and information about the transactions of individuals and organisations. They provide a mechanism by which individuals, institutions, governments, and societies can be held accountable for their actions and ultimately serve as a foundation upon which public memory is constructed (Marshall, 2006). Thus, the purpose of records is to provide information and evidence used to make decisions, take actions, demonstrate accountability or enable other uses.

1.1.2   Records Management

Like a record, there is no universally accepted definition of the term "records management". This is an indication that the discipline of records management is dynamic (Yusof and Chell, 2005; Kemoni, 2008). Scholars and organisations alike have defined the term in various ways. Taylor (1996) defines records management as the discipline and organisational function of managing records to meet operational business needs, accountability requirements and community expectations. Ngulube (2001) states that records management is concerned with the creation, organisation, storage, retrieval, distribution, retirement and final disposal of records irrespective of their form and media. Archives and Records Management Association (ARMA) International, the association for Information Management Professionals, contends that records management is "the systematic control of all records from their creation or receipt through their processing, distribution, organisation, storage and retrieval, to their ultimate disposition."

Other definitions have been put forth by authors such as Yusof & Chell (2005), Roper & Millar (1999) and Shepherd & Yeo (2003). However, the definition adapted by this study is that provided by ISO 15489-1:2001 which defines records management as the activity responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records. It states that records management includes activities such as: setting policies and standards; assigning responsibilities and authorities; establishing and promulgating procedures and guidelines; providing a range of services relating to the management and use of records; designing, implementing and administering

specialised systems for managing records and; integrating records management into business systems and processes. In ISO 15489-1(2001), thirteen benefits of records management are recognized, which can be categorized into five main aspects namely (1) administrative; (2) financial; (3) operational; (4) legal; and (5) societal benefits.

In spite of the above benefits, information management, including knowledge and records management are not yet widely appreciated worldwide. This is in spite of the fact that information and/or knowledge have emerged as the most important capital in the 21st century (Wamukoya, 2007).

1.2 RISK AND RISK MANAGEMENT

Risk management has been around for ages, it can be traced back to the era of Babylon in 1800 BC. Today, the risk management need has been escalated due to the changing global scenario as illustrated by the not too distant economic and financial disasters such as Enron, World Com and Barings among many others. This has compelled industry financial regulators to formulate by-laws and regulations to save their countries from such disasters. It has also necessitated the need for adoption of risk management principles and strategies (McNeil, et al, 2005).

1.2.1 Risk

Risk is incorporated into many different disciplines; hence there is little consensus about how to define risk. Risk can be defined as the combination of the probability of an event and its consequences (ISO/IEC Guide 73). The Australia/New Zealand Standard for Risk Management defines risk as "the possibility of something happening that impacts on organisational objectives. It is measured in terms of

likelihood and consequence." Thus, risk is an undesirable occurrence in a business, institution or organisation (*AS/NZ 4360:2004*).

Every risk has its own distinct characteristics that require particular management or analysis. An emerging concept in risk management is that there are three types of risk which are opportunity-based; uncertainty-based and; hazard-based. Risk can arise from internal or external sources, and might include exposure to such things as economic or financial loss or gain, physical damage, failure of a project to reach its objectives, client dissatisfaction, unfavorable publicity, a threat to physical safety or breach of security, mismanagement, failure of equipment and fraud (The Victorian Auditor-General's Office, 2004).

Savage (2007) notes that there are many possible sources of risk and areas of impact in a university, which include: people, product, property, image, environment, finance and politics. He further notes that risks in universities can come from uncertainty in financial markets, project failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attacks from an adversary. In addition to these, poor decision-making will also expose an institution to risks.

According to the Victorian Auditor-General's Office (2004), risks facing organisations can be categorized into: strategic risks (risks to the agency's direction, external environment and to the achievement of its plans); commercial risks (risks of commercial relationships, such as failed contractual relationships); operational risks (risks to core business activities, such as inadequate human resources, physical damage to assets or threats to physical safety); technical risks (risks of managing

assets, such as equipment failure); financial and systems risks (risks with financial controls and systems, such as fraud) and compliance risks (risks to meeting regulatory obligations).

1.2.2 Risk Management

According to Meier (2000), "risk management is the process of analyzing exposure to risk and determining how best to handle such exposure". It is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events. It provides strategies, techniques, and an approach to recognizing and confronting any threat faced by an organisation in fulfilling its mission. The Australian Standard *(AS/NZ 4360:2004)* adequately defines risk management as a systematic process of making a realistic evaluation of the true level of risks to the business. Therefore, risk management entails protecting the business from possible negative occurrences, as well as recognizing opportunities and capitalizing on these when they arise.

Risk management is today an integral part of business governance. It is a determinant in the realization of effective corporate governance, improved performance; customer needs satisfaction and meeting compliance requirements. A robust risk management program leading to a positive risk management culture is the cornerstone of good governance, which is in the interest of all stakeholders (Pr. Jean-Paul Louisot, 2008). Organisations are realizing the importance of managing risk proactively and are introducing many new and far-reaching measures to assist in the effort. Continuous changes in marketplace dynamics are also bringing about changes as to how risk is viewed (Marsh Risk Consultants, 2008).

Risk management is associated with any activity, function or process in a way that will enable an organisation such as a university to minimize losses and maximize opportunities and is an integral part of good management practice. It is an iterative process which when undertaken enables continual improvement in decision-making (Massey University, 2009).

ACT Insurance Authority (2004) acknowledges that managing risk enables organisations to achieve their potential with the least interference from the effects of risks. Effective Risk Management also enables organisations to take advantage of opportunities as they arise. Other significant benefits include cost savings, continued access to funding sources (public or private), enhanced security and reputation, and improved staff morale.

The strategies to manage risk include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk. Risk management activities/elements include risk assessment, establishing a central management focal point, implementing appropriate policies and related controls, promoting awareness, and monitoring and evaluating policy and control effectiveness (GAO/AIMD, 1998). Although all elements of the risk management cycle are important, risk assessments provide the foundation for other elements of the cycle. In particular, risk assessments provide a basis for establishing appropriate policies and selecting cost-effective techniques to implement these policies.

The development of a proactive and effective risk management culture is vital to the health and well-being of any educational institution, its ability to receive grants and other funding, and its standing among current and prospective students, alumni, regulators, and the wider community.

1.3   RECORDS MANAGEMENT AND RISK MANAGEMENT

Organisations, public and private, create and capture records in the course of their routine activities. Capturing, maintaining and keeping records means that essential information is available to safeguard the organisation's interests. Quick and accurate access to information in records is critical to the organisation's success. Langemo, states that a high-quality records management program gives an organisation legal defensibility, better customer service, and an improved bottom line.

The business environment is becoming increasingly more dependent on records and information systems to remain competitive in this information-based, services economy. The relative value of a record depends on its true purpose(s), which may be to: support business decisions and activities; analyze and manage business risks; comply with and show compliance with policy and the law; preserve rights and protect assets; and to document ownership of business assets. Application of records and information management principles supports the overall running of the organisation, reducing duplicated effort, minimizing records storage and streamlining records processes, thus ensuring efficient activities across the organisation and consequently supporting its aims.

According to Sampson (2002), records provide information of actions performed and decisions taken. Creating and managing records helps an agency do business and manage the risks associated with that business. Without adequate records, the agency may have difficulty providing evidence of its actions and decisions. Because the costs of poor recordkeeping generally remain hidden, few companies have established comprehensive records management programs to limit the associated risks. A company's records and information and how well they are managed, will affect certain business and legal risks. Any given organisation can be protected by understanding the records it needs to keep.

One risk management approach suggests that the effective management of records reduces the risk of non-compliance, loss of records and inefficient practices all of which could potentially damage an organisation's reputation and consequently performance in a number (if not all) of the performance indicators. Thus, records and risks should be considered in two contexts: records for mitigating business risk and business risks associated with managing records.

Sampson (2002) observes that risk analysis weighs the costs, benefits and risks of various recordkeeping practices against the value of various record groups. The author further observes that there may be risks associated with the existence or the non-existence of certain records and information. A business will want to ensure that certain records continue to exist in order to protect the organisation and its assets and to minimize any risk created by the losses. Because most records lose their value over time, an organisation has the right to dispose of records no longer required by the organisation's policy or law in order to meet its own needs of efficiency and profitability.

Aside from risk avoidance and control, effective records and information risk management can lead to improved performance of the organisation. Records and information risk management initiatives are as much about identifying and capitalizing on opportunities to manage information strategically as they are about minimizing risks and losses. The World Bank (2000) emphasizes that when a records management system works well, the information contained in records can be readily retrieved. The disposal of unneeded records and the retention of valuable information can be managed effectively, and space, facilities, and resources can be used efficiently and economically.

In a nutshell, risk management will enable an organisation to realize the following benefits: document risk mitigation and management; sustainable compliance, with controls in place; lower cost of records life cycle management including document production and electronic discovery; consistency in approach to destroying records; ability to confirm that records management policies and procedures are being followed; greater accessibility to information, and simplification of processes (KPMG: 2005).

1.4   BACKGROUND TO MOI UNIVERSITY

As elaborated in the Moi University Strategic Plan 2005-2015 (Moi University, 2008), Moi University is located in Eldoret, 310 kilometres northwest of Nairobi, the Capital City of Kenya. It was established as the second public University in Kenya by an Act of Parliament, the Moi University Act of 1984. The first cohort of 83 students was admitted in 1984 through a transfer from the Department of Forestry, University of Nairobi. Since then, the University has experienced phenomenal growth from its initial one faculty in 1984, to a total of thirteen (13) Schools and five (5) Directorates in 2011.

The University currently operates three campuses, namely: Main, Town, and Eldoret West Campus. The University has three (3) constituent colleges, (Chepkoilel, Kabianga and Narok) and eight (8) Satellite Campuses, (Nairobi, Kitale, Kericho, Odero Akang'o, Karatina University College, Coast Campus, Odera Akang'o, Northern Kenya campus). Moi University currently has thirteen Schools which include:

1. School of Business and Economics

2. School of Education

3. School of Information Sciences

4. School of Engineering

5. College of Health Sciences

6. School of Nursing Sciences

7. School of Dentistry

8. School of Public Health

9. School of Law

10. School of Biological Sciences

11. School of Arts and Social Sciences

12. School of Human Resource and Development

13. School of Aerospace

The total student enrolment now stands at an estimated 22,364 out of whom 19,429 are undergraduates. The students are registered in 297 programmes consisting of 90 for undergraduate, 134 Master of Philosophy, 61 Doctor of Philosophy and 12 Postgraduate diploma programmes.

The mission of Moi University is to preserve, create and disseminate knowledge and conserve and develop scientific, technological and cultural heritage through quality and relevant teaching and research; to create a conducive working and learning environment; and to work with government and private sectors for the betterment of society. The vision of Moi University is to be the University of choice in nurturing innovation and talent in science, technology, and development. The University's core values are: promotion and defense of intellectual and academic freedom, scholarship and relentless search for truth; fostering teamwork, collaboration, creativity and innovation, effective communication, tolerance, perseverance, and a culture of peace; embracing excellence, openness, consultation, consensus building, efficiency and effectiveness; practicing professionalism, meritocracy, exemplary leadership, equality, integrity and social justice; maintaining a sense of self-respect, discipline, responsibility, institutional loyalty and national patriotism and; continuous improvement of services in order to remain competitive.

The University has a number of objectives that include, to: pursue excellence in teaching, research and outreach; produce well informed, practical, and self-reliant graduates capable of contributing to development in rural and urban areas; offer expertise in areas of national development; promote science and technology for national development; participate fully in the promotion of culture and develop individuals who are responsive to the needs and well-being of others; offer a range of opportunities for training through continuing education and; to secure and manage resources to achieve the above goals efficiently.

To achieve its stated mission and objectives, the University is divided into two Divisions viz.: Academic and Administration headed by Chief Officers appointed in

accordance with section 11 of the Moi University Act. The office of the Chief Administrative Officer in its endeavor to achieve effective and efficient service provision to the University in pursuance of the mission stated is further subdivided into various functional Departments/Sections, which are headed by Principal Administrative Officers.

Moi University is a rapidly growing Institution. Since 1984, the number of staff at all levels has increased from 143 to the current 2, 700 in 2012. However, there has been no formal organisational structure for the institution. The diagram below shows the current tentative organisational chart for Moi University.

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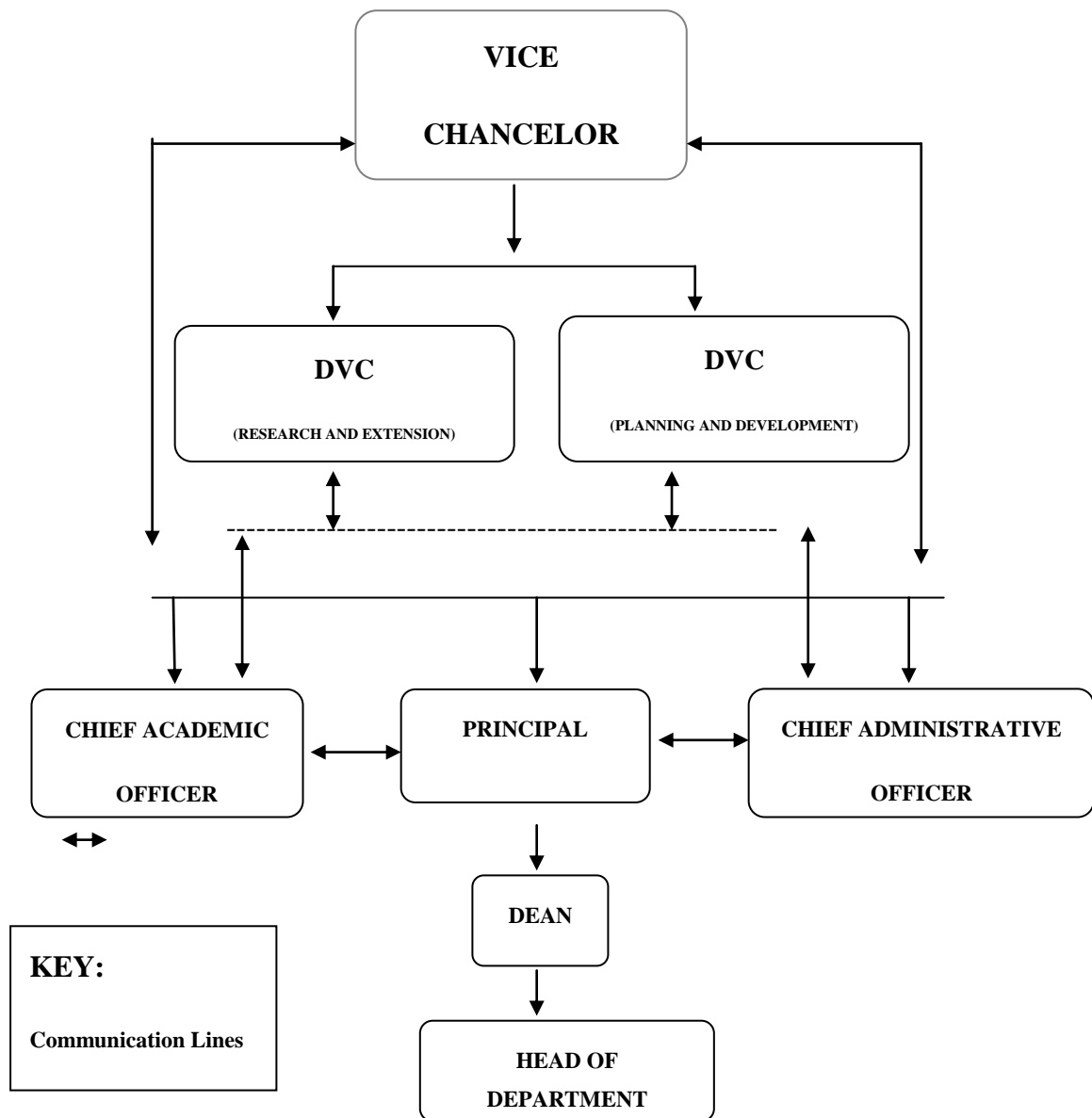
Figure 1.1: Tentative Organisational Structure for Moi University

Source: Moi University Strategic Plan 2009/10 -2014/15

1.4.1   Records Management and Risk Management at Moi University

As a consequence of the establishment of Moi University and its gradual evolution, a lot of records have been created. The management of records in Moi University is through a system of registries, which are charged with the responsibility of managing

specific university records. The registry system in the institution comprises of the Central Registry, Student Registry, Recruitment and Training Registry and the Examinations Registry. Departments and Schools also have their own sub-registries/records offices such as Health Services and Students Affairs registries.

According to Musembi (2002), registry functions include the following:

- Receiving, opening, recording and distribution of incoming and outgoing mail;

- Opening and indexing of files;

- Classification and placing of correspondence neatly in appropriate files;

- Passing files promptly to action officers;

- Provision of records storage and reference services;

- Controlling and tracing the movement of files within an agency;

- Maintenance of security and confidentiality of all records in the registry;

- Preparation, maintenance and updating of an approved and well-planned filing classification scheme and;

- Receiving and disposing of all non-current records.

The Central Registry Services which is a section within the Central Services Department (Administration Division) is headed by a Principal Administrative Officer (PAO). Students Registry, Recruitment and Training Registry are also headed by respective PAOs under the office of Chief Administrative Officer (CADO). The Examinations Registry is headed by a PAO under the office of Chief Academic Officer (CACO).

The Risk Management function at Moi University is virtually non-existent. There is no department or office charged with this responsibility and therefore risk management activities have been undertaken involuntarily. As a result, the institution has not integrated risk management into its business operations, hence the researcher's decision to undertake this study.

1.5   STATEMENT OF THE PROBLEM

Risk management is not yet a formal business discipline in Kenyan organisations. Nevertheless it has never been more significant for academic institutions in Kenya - both public and private- as it is today at a time when the Kenya Government has set in motion the implementation of Vision 2030 as its development agenda. This study was motivated by the fact that many organisations in Kenya including public universities such as Moi University are yet to formally integrate risk management programmes as part of their business operations.

Proper management of records is extremely critical for the successful execution of business operations because they provide a reliable, legally verifiable source of evidence of decisions and actions. They document compliance or non-compliance with laws, rules, and procedures (World Bank, 2000). Several studies previously undertaken by some undergraduate students at Moi University, School of Information Sciences, revealed many deficiencies and ineffective records management practices within the institution. This study has been prompted by the existing poor records management practices at Moi University, orchestrated by the lack of a documented records management programme for the organisation, which in itself is a major source of risks in organisations.

A study undertaken by Kemoni (2007) revealed that fraud and corruption were rampant in Kenya's public sector. According to the World Bank (2000), the loss of control over records creates opportunities for fraud, leads to loss of revenue, and impedes fiscal planning. It makes it difficult, if not impossible, to preserve an audit trail of decisions, actions, and transactions. Incorporating the records management function in the business processes of Moi University will reduce the cases of fraud and corruption resulting from mismanagement of financial records as confirmed by Ngulube (2004) who states that "without proper records management, accountability, transparency and efficiency in public service would be compromised, leading to corruption".

The volume of records being created in both physical and digital media has increased dramatically in recent years, increasing the need for proper modern management of these records. Advances in Information and Communication Technologies (ICTs) have made it possible to process, manipulate, reformat, and change information easily, which poses a risk to the authenticity and trustworthiness of the records content (World Bank, 2000). Lack of streamlined procedures for the management of electronic records in Moi University continues to compromise the legal admissibility of records, paving way for malicious litigation to thrive.

International Records Management Trust (IRMT) (1999) observes that no organisation is totally immune from emergencies or disasters, either from natural causes or human action. Records management supports risk management and business continuity planning. It identifies records which are vital to the running of an organisation in the event of a disaster occurring. Moi University lacks programmes

which can not only help to reduce the probability of a disaster occurring, but also ensures the ongoing operation of the institution's business if a disaster does occur.

For risk management in an organisation to be effective, it needs to be incorporated into its decision-making process, making it central to all activities. Being a relatively new concept, Moi University is yet to align risk management with its functional activities. It is with this goal in mind that this study was conceived to address the above mentioned issues.

1.6   AIM AND OBJECTIVES OF THE STUDY

1.6.1   Aim of the Study

The aim of this study was to investigate the extent to which records management and risk management are aligned with business processes in Moi University with a view to proposing a strategy to enhance business processes in line with global best practice.

1.6.2   Objectives of the Study

The specific objectives of the study were to:

1. Undertake a business processes analysis of Moi University and identify the resultant records generated by these processes;

2. Assess the current state of records management at Moi University;

3. Identify the problems faced by the institution in view of the current state of records management;

4. Identify the risks facing Moi University in relation to its core mandate;

5. Establish the role of records management in the mitigation of risks faced by the institution;

6. Give recommendations and propose an appropriate records management-cum-risk management strategy to enhance business processes at Moi University.

1.7   RESEARCH QUESTIONS

The study was guided by the following research questions:

1. What are the business processes of Moi University?

2. What records are generated by the business processes in Moi University?

3. What is the current state of records management at Moi University?

4. What problems are experienced by the institution as a result of the current state of records management?

5. What risks does Moi University face in relation to its core mandate?

6. What is the contribution of records management towards the mitigation of business risks in Moi University?

7. What strategies can be adopted to align records management and risk management with business processes at Moi University?

1.8 ASSUMPTIONS OF THE STUDY

The study was based on the assumption that despite the existence of registries to manage records, failure to formally align records management and risk management with business processes continues to undermine Moi University's realization of its core mandate.

1.9 SIGNIFICANCE OF THE STUDY

The study is significant in the following ways:

1.9.1 Practical significance

The study has revealed various shortcomings in the way records are managed at Moi University, pointing out their risk impact upon business process efficiency. These include lack of formal guidelines for proper records management, inadequate skilled records professionals and slow progress towards computerization of records in the institution, among others.

1.9.2 Policy-related significance

The study has put forth appropriate recommendations and proposed a strategy for aligning records management and risk management with business processes in Moi University, which if adopted will enhance business operations at the institution.

1.9.3 Theoretical Significance

The study findings contribute to the existing body of knowledge in the fields of records management, risk management and business management by providing a framework for aligning records management and risk management with business processes to enhance business efficiency.

1.10 SCOPE AND LIMITATIONS OF THE STUDY

1.10.1 Scope of the study

The scope of the study constituted the campuses of Moi University located within Eldoret town. They included the Main campus which is located 35km from Eldoret municipality and Town campus (comprising of College of Medicine, West campus and School of Law (Annex) Campus). The targeted groups of respondents were the University management, selected Deans of Schools, Heads of selected Departments, Senior Administrative Officers, ICT staff, records staff and Secretaries.

1.10.2 Limitations of the study

Few studies have been undertaken linking records management and risk management in institutions of higher learning in Africa; hence availability of relevant literature remains a challenge. To overcome this problem, the researcher looked at separate studies on records management and risk management in other sectors such as banking.

Being a relatively new concept in strategic management in Kenya, the researcher found that risk management was comprehended by few staff, mainly the senior cadre in Moi University. The researcher therefore chose to utilize face-to-face interviews to collect data, which provided an opportunity for the researcher to explain the aspects which were not understood by some of the respondents.

1.11 SUMMARY

This chapter has provided an introduction to the study. The chapter commences by defining key terms and discussing the meaning and importance of both records management and risk management in an organisational setting. Background information to Moi University and the key concerns of the study among them the statement of the problem, aim and objectives of the study have been highlighted, serving as a basis for subsequent chapters in the study. The chapter has also revealed that records management and risk management impact upon business processes in organisations.

1.12 DEFINITION OF TERMS

The following are the key terms used in the study:

1. **Records:** information created, received, and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of business (ISO 15489-1:2001).

1. **Records management:** the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records (ISO 15489-1: 2001).

2. **Electronic records:** Information captured through electronic means (Duranti: 2001).

3. **Risk:** an uncertain event or set of events which, should it occur, will have an effect on the achievement of objectives (Management of Risks Standard: 2002).

4. **Risk Management:** Risk management as the systematic application of management policies, procedures and practices to the task of identifying, analyzing, assessing, treating and monitoring risk (Victorian Auditor-General's Office: 2004).

5. **Business process:** a collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers (Fineman et al: 2001).

CHAPTER TWO

LITERATURE REVIEW

2.0   INTRODUCTION

This chapter presents a review of documented literature in both records management and risk management. It commences with a brief introduction, followed by a discussion of the theoretical framework and the literature review in that order.

Kothari (2004) and Mugenda and Mugenda (2004) concur that literature review is an account of what has been published on a topic by accredited scholars and researchers. It is therefore a summary of materials that have been published by renowned scholars and researchers on a given topic, which is meant to provide background information on the topic.

According to Kaniki (2002) in Kemoni (*n. d.*) there are various types of literature review and these include: historical reviews which consider the chronological development of literature, and break the literature into stages or phases; thematic reviews that are structured around different themes or perspectives, and often focus on debates between different schools; theoretical reviews which trace the theoretical developments in a particular area, often showing how each theory is supported by empirical evidence and; empirical reviews which attempt to summarize the empirical findings on different methodologies.

Needham (2000) identifies three main types of literature review namely: a general survey of the literature on a particular topic; a focused survey of the literature on a topic and; a systematic review.

A literature review may constitute an essential chapter of a thesis or dissertation, or may be a self-contained review of writings on a subject. In either case, its purposes are to: place each work in the context of its contribution to the understanding of the subject under review; describe the relationship of each work to the others under consideration; identify new ways to interpret, and shed light on any gaps in previous research; resolve conflicts amongst seemingly contradictory previous studies; identify areas of prior scholarship to prevent duplication of effort; point the way forward for further research, and; place one's original work (in the case of theses or dissertations) in the context of existing literature (University of California, 2005).

Irrespective of the type of study that a researcher is undertaking, a literature review is written to highlight specific arguments and ideas in the field of study. The foregoing literature review therefore demonstrates to the reader why this research study is useful and important. It also attempts to give a clear understanding of the research topic and related concepts.

2.1   THEORETICAL FRAMEWORK

According to Mugenda and Mugenda (2004), a theory is a system for explaining phenomena, which states constructs and the laws that inter-relate the constructs to one another. Kombo and Tromp (2006) define theory as any systematic and coherent collection of ideas that relate to a specific subject. They add that a theory, in the scientific sense of the word, is an analytic structure designed to explain a set of empirical observations.

A scientific theory does two things:

- it identifies the set of distinct observations as a class of phenomena, and;

- it makes assertions about the underlying reality that brings about or affects this class.

The term *theoretical* is sometimes informally used in place of *hypothetical* to describe a result that is predicted by theory but has not yet been adequately tested by observation or experiment. Hannabus (1993) points out that any research work should be based on some theoretical framework. Therefore, theory provides a starting point for research. In scientific research, Kemoni (2007) says that theories serve four main purposes: description, explanation, prediction and control. They help us to know why particular records management practices have to be done the way they are done; they help us establish and justify the basis for managing records in one way and not the other.

Theories are basically the basis upon which models are formed. A model can be said to be a hypothetical description of a complex process or entity. It is the act of representing something. Kemoni (*n. d.*) states that models can be used to explain theories. Koutsoyiannis (1979) states that there are two main purposes of a model, namely: analysis and prediction. Models are therefore important in research studies since they give purpose and direction to a study.

2.2   RECORDS MANAGEMENT MODELS

Many theories have been advanced by renowned records and archives professionals about records management, among them the life- cycle and records continuum

models. A study conducted by Kemoni (2008) revealed that there are other existing records management models which include the following:

- The entity life history theory (Shepherd and Yeo, 2003);

- The International Council on Archives (ICA) Electronic Records Management Guidelines;

- The National Archives of Australia Records Management Guidelines (AS ISO 15489 2002);

- The National Archives of Australia Digital Recordkeeping Guidelines (2004);

- The National Archives and Records Service of South Africa Guidelines (1996);

- The British National Archives (BNA) 2005 Model;

- The Victorian Electronic Records Strategy Model (VERS) 1995;

- The University of Pittsburgh Electronic Records Management Model (1996);

- The Australian Design and Implementation of Record Keeping Systems (DIRKS) Methodology (1996).

Literature reveals that the life cycle model is the dominant model for records management, from which other records management theories were developed. Shepherd and Yeo (2003) concur that all the records management models originated from the records life-cycle model. The records continuum model was formulated in reaction to the shortcomings of the life-cycle concept. A discussion on these two models follows.

2.2.1   The Records Life Cycle (RLC) Model

The records life-cycle model is the basis for records management. According to Akussa (1996), 'it is … universally acceptable among archivists and records

management professionals that the life-cycle concept is the most integrated and comprehensive approach to records management'.

The development of the RLC concept began in USA in the 1930s and was invented by the National Archives of the USA, in response to the ever-increasing volume of records produced by organisations. The records life-cycle concept was regarded as a theory which provided the framework for the operation of a records management programme (Yusof and Chell, 2005). The theory was developed by Theodore Schellenberg and has been the prominent theory for North American Archivists and Records Managers.

According to Upward (2001), a life cycle, in its origins in natural science, can be defined as the entire series of processes constituting the life history of an organism. Xiomi (2003) notes that the life-cycle model uses a birth-to-death analogy to describe records as passing through a series of stages where a record was created, used as long as it had continuing value and was subsequently transferred to a National Archive or destroyed. In other words, a record has a life similar to that of a biological organism: It is born (creation phase); It lives (maintenance and use phase); It dies (disposition phase).

Different scholars present these phases differently. For example, Charman (1984), Hardcastle (1989), Hare and Mcleod (1997), and Penn, *et al* (1994) share the view that records pass through an active or current phase to a semi-active or semi-current phase and then to a non-active or non-current phase (Chachage and Ngulube, 2006).

From these differences in the identification of the different stages of the life-cycle model, it is evident that the records life-cycle theory is a conceptual visualization and not a placement of the records' life into distinct spaces and times. Contrary to the widely held view by proponents of the continuum model, the records life-cycle framework neither fixes stages in the management of records nor assigns any particular professional group to their management. The records life-cycle concept only provides a structure for effective and efficient records management (Penn, *et al* 1994). Hence, this identification of phases in the RLC model created a distinction between the roles played by Records Managers and Archivists, as observed by Upward (2001) who says that "the Archivist intervenes in the cycle sometime towards the end of the lifecycle when the record becomes inactive and archival."

According to the systems theory where everything is connected to everything else, the stages of the records life-cycle are subsystems that constitute the model as opposed to compartments perceived by those opposed to the model. Senge (1990) points out that one of the fundamentals of systemic thinking is to view the system as a whole, realizing that the whole is greater than the sum of its parts. In that regard, the focus should be on the system – records life-cycle model – instead of the individual conceptual stages.

Nevertheless the records life cycle model is the starting point for creating a records management program. Without it, records management programs would not be cost-effective or well run. Despite the important contributions of the RLC concept to the records and archives management domain, the model presents a number of shortcomings, which led to the development of the records continuum concept.

2.2.1.1 Why the Records Life-cycle Model is not Applicable to the Study

The RLC model creates the impression that records management and archival management are separate activities, implying that the Archivist is only responsible for archival records, hence his role comes in towards the end of the life cycle. This is not the case in the current study which aims to address the management of records in their entirety, from the time records are created or received, through their management and use and eventual disposition.

More significantly, Moi University is a large institution which generates both manual and electronic records. As pointed out by Yusof and Chell (2005), the RLC model is inadequate in the sense that it cannot be applied in managing electronic records. Thus, the records life-cycle theory may be more applicable to those studies dealing with the management of paper- based records in organisations.

2.2.2   Records Continuum (RC) Model

Mckemmish (1998) defines "continuum" as something continuous of which no separate parts are discernible, a continuous series of elements passing into each other. According to the Australian Records Management Standard AS4390, "the records continuum is a consistent and coherent regime of management processes from the time of the creation of records (and before creation, in the design of recordkeeping systems) through to the preservation and use of records as archives". The continuum model therefore regards the records management process as a continuous activity that focuses on the operations that produce records (Bantin, 2002).

The proliferation of information and communication technologies (ICTs) and the perceived shortcomings of the records life-cycle motivated scholars to suggest the records continuum model in the field of records management (Flynn, 2001; Upward, 2001). Theorists such as Frank Upward, Sue McKemmish, Barbara Reed and Don Schauder adopted the RC model as an alternative to the records life-cycle to cater for electronic records (Chachage, 2005; Flynn, 2001). Furthermore, some scholars favoured the records continuum model as opposed to the life-cycle model because it combined records management and archival activities in the management of recorded information.

The earliest view of the continuum concept came from Australian national archivist Ian Maclean in the 1950s. He said records managers were the true Archivists and that archival science should be directed towards studying the characteristics of recorded information, recordkeeping systems, and classification processes. His views promoted the search for continuity between archives and records management.

According to Atherton (1985), all stages of records are interrelated, forming a continuum in which both records managers and archivists are involved, to varying degrees, in the ongoing management of recorded information. He explained that records underwent lifecycle stages as a series of recurring activities within both archives and records management. The underlying unifying or linking factor in the continuum was the service function to the records' creators and all users. Atherton's view pointed out the dangers of separating records management and archives administration under the life-cycle model.

The Records Continuum (RC) as a model concept was formulated in the 1990s by Australian archival theorist Frank Upward (Upward, 2001) based on four principles:

1. A concept of 'record' which is inclusive of records of continuing value (archives), stresses their uses for transactional, evidentiary and memory purposes, and unifies approaches to archiving/recordkeeping whether records are kept for a split second or a millennium.

2. A concept of records as logical rather than physical entities, regardless of whether they are in paper or electronic form.

3. Institutionalisation of the recordkeeping profession's role with emphasis on the need to integrate recordkeeping into business and societal processes and purposes.

4. Recognition of Archival Science as the foundation for organising knowledge about recordkeeping. Such knowledge is revisable but can be structured and can be explored in terms of the operation of principles for action in the past, the present and the future.
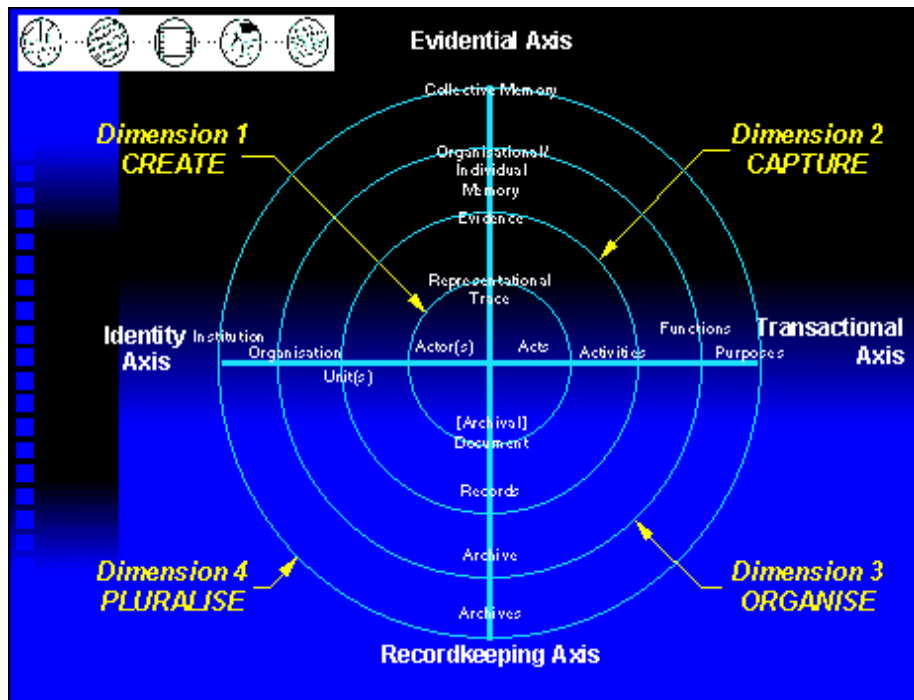
Figure 2.1 - Records Continuum Diagram: Adapted from McKemmish (1998) Yesterday, Today & Tomorrow: A Continuum of Responsibility. Available at http://www.sims.monash.edu.au)

McKemmish (1998) points out that the model (figure 2.1) provides a graphical tool for framing issues about the relationship between records managers and archivists, past, present, and future, and for thinking strategically about working collaboratively and building partnerships with other stakeholders.

Kennedy J. and Schauder C. explain the four dimensions that Upward used in his concept of the continuum model:

1. At level one, the model identifies accountable acts and creates reliable evidence of such acts by capturing records of related/supporting transactions. Records of business activities are created as part of business communication processes within the organisation (e.g., through e-mail, document management software, or other software applications).

2. At level two, recordkeeping systems manage "families" of transactions and records series documenting processes at the work-unit or single-function scope of complexity. Records that have been created or received in an organisation are tagged with metadata records.

3. At level three, a seamless recordkeeping scheme that embraces the multiple systems and families of records that serve the entire documentary needs (i.e., business, regulatory, and cultural/educational/historical) of a single juridical entity. Records become part of a formal system of storage and retrieval that constitutes the organisation's corporate memory.

4. At level four, a collaborative recordkeeping establishment under the guidance of a suitably empowered public recordkeeping authority serves the needs of the total society, its constituent functions, and the entities that carry them out. The recordkeeping establishment serves the documentary needs of many entities within its jurisdiction and ensures the accountability and the cultural memory of the society as a whole. Records required for purposes of societal accountability (for example by corporate law) or other forms of collective memory become part of wider archival systems that comprise records from a range of organisations.

Xiomi (2003) explains that in a continuum, there are no separate steps. Managing records is seen as a continuous process in which one element of the continuum passes seamlessly into another. In agreement with this view, Millar (1997) identifies the following four actions of records care under the records continuum model:

▪ Identification and acquisition distinguishes records management actions as the creation or acquisition of records, while archives management actions relate to the selection and acquisition of archives.

- Intellectual control constitutes records management actions that include classification of records within a logical system, while archives management actions relate to the arrangement and description of archives.

- Access involves records management actions that relate to the maintenance and use of records, while archives management actions relate to the description of archives.

- Physical control constitutes records management actions pertaining to either disposal of records by destruction, or their transfer to the national archives, while Archives management actions relate to the preservation of archives.

In summary, Fynn (2001) explains that the records continuum model is significant because it:

- broadens the interpretation of records and recordkeeping systems offered by the lifecycle model. Such broadening is helpful, given the variety of contexts in which archivists and records managers operate and in which archives and records are used.

- reminds us that records (including archives) are created and maintained for use as a result of business and administrative functions and processes, rather than as ends in themselves.

- emphasises cooperation beyond the walls of repositories especially between the closely related, if occasionally estranged professions of archives administration and records management - a cooperation that is more important than ever in the contemporary climate of outsourcing and cross- sectoral working.

Although the RC model has been, and continues to be, of benefit to the recordkeeping profession, the model has generated certain concerns and fears. For example, Picot (1999) observes that the model and notions of its theory ignited some fear and threats in records and archives professionals. The fear was that records managers and archivists shared both territory and professional competencies and thus, the continuum model posed a threat to their autonomy. However, the model still remains the dominant framework for records management today.

2.2.2.1 Relevance of the Records Continuum Model to this Study

The RC model's purpose-oriented systems approach to records management changes the role of recordkeeping from reactive to proactive. This is very important in a large academic institution like Moi University where modernization of paper based recordkeeping systems is being embraced and large volumes of traditional paper documents are being replaced by digital ones. These records need to be properly managed right from the time of their creation and throughout their life cycle to their archiving. The records continuum model describes the processes for managing records (paper as well as digital) from the point of creation. The RC model is thus tailor-made for Moi University, which is a modern organisation that is increasingly embracing change in the management of its paper records and in the production, processing and management of information.

The RC model places a particular emphasis on the need to integrate recordkeeping into business processes. The current study sets out to investigate the role that can be played by records management in managing risks in the business operations of Moi University. The RC is the model of choice since it proposes an integration of recordkeeping functionalities into an organisation's business processes.

According to McKemmish (1998), the best-practice mechanism behind the RC model uses an integrated approach to managing records and archives. Records managers and archivists are brought together under an integrated recordkeeping framework with the same goal: to guarantee the reliability, authenticity and integrity of records. For Moi University, the RC framework is quite ideal in that it advocates for cooperation between business process managers, the University Archivist and the records professionals in various arms of the institution. This will ensure the creation of the right records, containing the right information, in the right format; organize the records and analyze their content and significance to facilitate their availability; make them available promptly to those (administrators and researchers alike) who have a right and a requirement to see them; systematically dispose of records that are no longer required; and protect and preserve the information for as long as it may be needed (if necessary, forever).

The RC advocates for the identification of records of organisational activities that need to be retained, then implementing business systems designed with built-in recordkeeping capabilities to ensure capturing records of evidential quality as they are created. This aspect of the RC is essential in Moi University where knowledge sharing between departments is a necessity for the smooth running of business processes and operations.

2.3 RISK MANAGEMENT MODELS

Ramirez et al (2008) observes that over the past two decades, a number of risk management standards have been developed as a result of demands from different industries, increased maturity of the profession, and higher expectations from

regulators regarding the understanding and management of risk. Each one of the standards has aspects that could benefit particular organisations. Some include more detailed recommendations, while others use a more general approach. The following is a brief reference to some of the most widely used risk management standards and a discussion of their applicability to the present study.

2.3.1 AAIRM Model

This Risk Management Standard which was published in 2002 is the result of work by a team drawn from the major risk management organisations in the UK - The Association of Insurance and Risk Managers (AIRMIC), ALARM (The National Forum for Risk Management in the Public Sector) and The Institute of Risk Management (IRM). In addition, the team sought the views and opinions of a wide range of other professional bodies with interests in risk management, during an extensive period of consultation.

The standard includes references to areas such as: terminology definition for risk; risk management; risk assessment; risk analysis; risk evaluation; risk reporting; risk treatment; risk monitoring and review of the risk management process, and; the structure and administration of risk management. These processes are represented in figure 2.2 below.
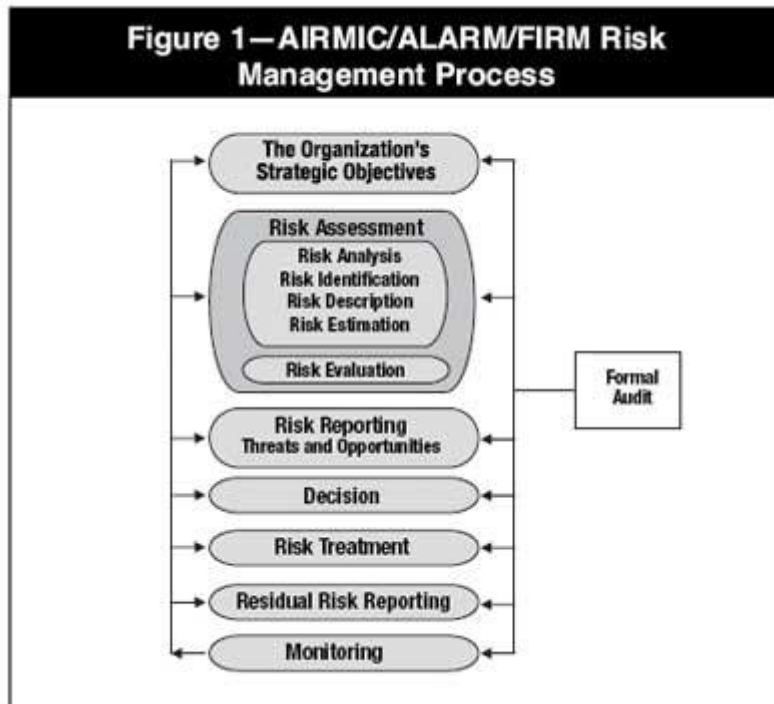
Figure 2.2: Association of Insurance and Risk Managers (AIRMIC), ALARM (National Forum   for Risk Management in the Public Sector) and Institute of Risk Management (IRM) Model

Figure 2.2 shows the process flow to be followed during the operation of the risk management function, maintaining a cycle that covers the organisation's strategic objectives to monitoring of the risk management model. The process flow is supported by formal audits.

The standard also includes an appendix with a useful list of risk identification techniques as well as risk analysis methods and techniques that could be used to learn more about available developments that could support the execution of the risk management functions.

The standard represents best practice against which organisations can measure themselves. Though the standard provides a good overview of the stages and activities required for risk management; more details would however be required to implement a real life process. This framework was found to be unsuitable for this study in view of the fact that it cannot be practically implemented to suit the specific needs of Moi University which is a non-profit making organisation. Therefore the risks facing the institution cannot be estimated financially which is a prevalent aspect of the model.

2.3.2   The Australia and New Zealand, AS/NZ 4360:2004 Model

The well-known Australia and New Zealand Standard 4360, *Risk Management Systems Standard* (AS/NZ 4360: 2004) includes slightly more detail than the AAIRM standard. AS/NZ 4360 is the result of a long-term evolution and maturity starting in 1995, with a second edition in 1999 and the current version published in August 2004.

AS/NZ 4360:2004 follows a similar baseline as the model recommended by the AAIRM. Although it does add some references to the task of communicating and consulting the results, the model lacks the specific references to roles and responsibilities available in AAIRM. A representation of the standard is included in Figure 2.3 below.
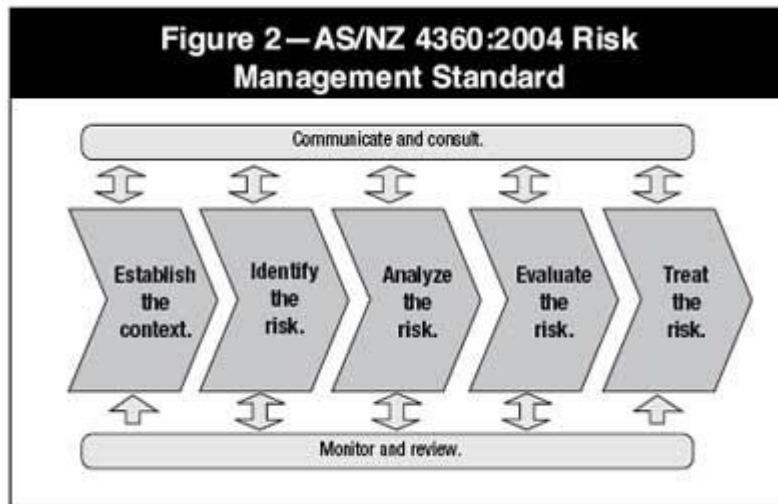
Figure 2.3: Risk Management Standard 4360: 2004

The AS/NZ risk management process and the AAIRM standard follow a similar framework and allow risk managers to follow an end-to-end process to ascertain the risk levels applicable to the specific context, analyzing and evaluating the risk, and then treating the specific risk levels and reducing exposure. There is a particular focus in the AS/NZ standard to the context of the process, starting with a phase dedicated to establishing the contextual information for the risk management framework.

The model was not selected for this study since in the view of the researcher, the standard created a focus on assessment rather than risk action, thus falling short of providing practical solutions to risk management problems identified in Moi University.

2.3.3   The Management of Risk (M_o_R) Model

The UK Office of Government Commerce (OGC) issued a risk management model titled "Management of Risk: Guidance for Practitioners (M_o_R)." This guide,

originally written in 2002, with a new version released in 2007, includes more detailed guidance than AAIRM and AS/NZ 4360. The M_o_R guide is intended to help organisations put in place an effective framework for taking informed decisions about the risks that affect their performance objectives across all organisational activities, whether these be strategic, programme, project or operational.

The M_o_R framework covers four main areas namely:

1. Principles. These are critical for the development of good risk management practice.
2. Approach. This includes elements required to ensure the successful implementation of the risk management model.
3. Processes. These are process steps required for risk management, including activities involved in ensuring that risks are identified, assessed and controlled.
4. Embedding and reviewing. These entail effective mechanisms that ensure the consistent implementation of principles and procedures within the organisation. These are critical to successful implementation of the risk framework.

The M_o_R model could not be adopted for this study since it was designed to suit organisations where risk management practices have already been instigated. This is not the case in Moi University, where risk management remains an intuitive rather than a formal practice.

2.3.4   COSO Enterprise Risk Management Model

The Committee of Sponsoring Organisations of the Treadway Commission (COSO) *Enterprise Risk Management* (ERM) defines Enterprise Risk Management as a process effected by an entity's board of directors, management and other personnel,

applied in strategy setting across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives (Committee of Sponsoring Organisations of the Treadway Commission, 2004).

The COSO framework provides very useful information to deploy and operate the risk management function. Originally formed in 1985, COSO is a voluntary private-sector organisation dedicated to improving the quality of financial reporting through business ethics, effective internal controls and corporate governance. In 2004, COSO published an updated document, Enterprise Risk Management—Integrated Framework.

The COSO model includes areas recommended by other risk management models as well as a three-dimensional matrix matching four objective categories, eight components and an entity's units. This visualization of risk components provides significant value, as it can help risk professionals to break the problem into smaller elements, simplifying the analysis and review of solutions. As a result, automated tools could be developed to provide a representation of the risk profile of an organisation.

The areas included in COSO in the first dimension are internal environment, event identification, risk assessment, risk response, control activities, information and communication, and monitoring. These are referenced to the second dimension, which includes entity level, division, business unit and subsidiary. Both are then mapped with the third dimension, which covers areas including strategic, operations, reporting and compliance.

Enterprise risk management is not strictly a serial process where one component affects only the next. It is a multi-directional, iterative process in which almost any component can and does influence another. This multi-dimensional view allows risk professionals to slice the areas and concentrate on smaller domains - all while maintaining the global scope.

2.3.4.1 Criticism of COSO Enterprise Risk Management Model

While ERM provides important benefits, limitations exist (COSO, 2004). These limitations result from the realities that human judgment in decision making can be faulty, decisions on responding to risk and establishing controls need to consider the relative costs and benefits, breakdowns can occur because of human failures such as simple errors or mistakes, controls can be circumvented by collusion of two or more people, and management has the ability to override enterprise risk management decisions. These limitations preclude the board and management from having absolute assurance as to achievement of the entity's objectives.

The literature also reports that critics have challenged the applicability of ERM to institutions of higher education, based on the view that ERM is only relevant for the for-profit world. For the above reasons, this model was found unsuitable for the present study.

2.3.5 The Integrated Risk Management (IRM) Model

The IRM model was originally developed to deliver on the commitment set out in Results for Canadians - A Management Framework for the Government of Canada (2001) to strengthen risk management practices within the Public Service. Its aim was

to support the four management commitments outlined in Results for Canadians: citizen focus, values, results and responsible spending.

The Government of Canada (2001) states that IRM is a continuous, proactive and systematic process to understand, manage and communicate risk from an organisation-wide perspective. It is about making strategic decisions that contribute to the achievement of an organisation's overall corporate objectives.

The purposes of the Integrated Risk Management model are to: provide guidance to advance the use of a more corporate and systematic approach to risk management; contribute to building a risk-smart workforce and environment that allows for innovation and responsible risk-taking while ensuring legitimate precautions are taken to protect the public interest, maintain public trust, and ensure due diligence; and propose a set of risk management practices that departments can adopt, or adapt, to their specific circumstances and mandate (Government of Canada: 2001). According to the Canadian Government (2001), the IRM Framework is comprised of four related elements. The elements, and a synopsis of the expected results for each, are presented below:

1: Developing the Corporate Risk Profile

This is about understanding the operating environment as an important first step in developing the corporate risk profile. Developing the risk profile at the corporate level is intended to examine both threats and opportunities in the context of an organisation's mandate, objectives and available resources. An organisation can expect three key outcomes as a result of developing the corporate risk profile: Threats

and opportunities are identified through ongoing internal and external environmental scans, analysis and adjustment; Current status of risk management within the organisation is assessed including challenges/opportunities, capacity, practices, culture - and recognized in planning organisation-wide management of risk strategies; The organisation's risk profile is identified including key risk areas, risk tolerance, ability and capacity to mitigate learning needs.

2: Establishing an Integrated Risk Management Function

Establishing an integrated risk management function means setting up the corporate "infrastructure" for risk management that is designed to enhance understanding and communication of risk issues internally, to provide clear direction and demonstrate senior management support. To be effective, risk management needs to be aligned with an organisation's overall objectives, corporate focus, strategic direction, operating practices and internal culture. In order to ensure risk management, consideration must be given to priority setting and revenue allocation. Risk management needs to be integrated within existing governance and decision-making structures at the operational and strategic levels.

3: Practicing Integrated Risk Management

Implementing an integrated risk management approach requires a management decision and sustained commitment. IRM must be designed to contribute to the realization of organisational objectives. IRM builds on the results of an environmental scan and is supported by appropriate corporate infrastructure.

The following outcomes are expected for practicing integrated risk management: A departmental risk management process is consistently applied at all levels, where risks are understood, managed and communicated; Results of risk management practices at all levels are integrated into informed decision-making and priority setting, that is, strategic, operational, management and performance reporting; Tools and methods are applied as aids to make decisions; Consultation and communication with stakeholders is ongoing-internal and external.

4. Ensuring Continuous Risk Management Learning

Continuous learning is fundamental to more informed and proactive decision-making. It contributes to better risk management, strengthens organisational capacity and facilitates integration of risk management into an organisational structure. To ensure continuous risk management learning, the following outcomes should be pursued: Learning from experience is valued, lessons are shared - a supportive work environment; Learning plans are built into organisation's risk management practices; Results of risk management are evaluated to support innovation, capacity building and continuous improvement at individual, team and organisation levels; Experience and best practices are shared internally and across the organisation.

The four elements of the Integrated Risk Management Framework are presented as they might be applied: looking outward and across the organisation as well as at individual activities. This comprehensive approach to managing risk is intended to establish the relationship between the organisation and its operating environment, revealing the interdependencies of individual activities and the horizontal linkages.

2.3.5.1 Applicability of the Integrated Risk Management Model to the Study

The Integrated Risk Management Model (IRM) was found to be adequately applicable to the current research study and was therefore selected to address the risk management aspect of the study. The justifications for selection of the model are discussed below.

The IRM model was initially designed to address risk management issues in the Canadian public service. It can therefore be used by any public, private or community enterprise, association, group or individual. Thus, IRM model is not specific to any industry or sector and can be adopted for use in institutions of higher education such as Moi University. The model can be successfully applied to government organisations internationally, unlike the other models which mainly apply to the private sector.

The IRM model was chosen because it demonstrated the ability to aid in the achievement of the aim and objectives laid down by this study. The model provides guidance in the identification of threats and opportunities, assessment of the current state of risk management in organisations, identification of key risk areas in view of the core functions of the institution and development of a framework to mitigate risks. All these are incorporated in the objectives of this study.

The IRM model emphasizes the need to align risk management with an organisation's overall objectives, corporate focus, strategic direction, operating practices and internal culture. In a nutshell, the model advocates for the alignment of the risk management process with the business processes and operations of an organisation. Therefore, the

model provided guidance on the method of aligning and integrating risk management activities within the business processes of Moi University.

The model constitutes all the important aspects contained in previous risk management standards and is therefore best suited for adoption by the current study. It can be utilized to harmonize risk management processes in existing and future standards. It provides a common approach in support of standards dealing with specific risks and/or sectors, and does not replace those standards.

However, what is lacking in the IRM model is the records management component which is a major source of risk that requires to be properly managed within an organisation. This study has attempted to address this shortcoming by introducing the aspect of alignment of records management and risk management with business operations and has put forth a model to guide in this process.

2.3.6 Triangulation of the Records Continuum and Integrated Risk Management Models

Triangulation is the combination of methodologies in the study of the same phenomenon. It is the use of multiple theories in tandem to study an organisational phenomenon. It mixes theories, methods, and multiple data sources to strengthen the credibility and applicability of findings (Hoque, 2006). The purpose of triangulation in qualitative research is to increase the credibility and validity of the results.

This study was based on both the Records Continuum Model and the Integrated Risk Management (IRM) model. Triangulation of these two theories was necessary given

the fact that the study touches on two professionally distinct but practically related areas of management, i.e. risk management and records management. In principle, because records management and risk management are management tools for all business processes, they are important considerations in every organisational activity. Hence the combination of the two theories successfully informed the study on the best approach to use in aligning them with the organisation's business processes.

2.4 RECORDS AND RECORDS MANAGEMENT CONCEPTS

2.4.1 The Records Concept

Whilst all records are information, not all information is a record. Many scholars and organisations have attempted to bring out this distinction by defining the term "record". According to Agere, S. *et al* (1999), a record is any medium in or on which information is recorded. Medium includes paper, electronic, magnetic tape and disc, microfilm, audio-tape, film, slide and photograph.

Cox (2001) defines records as an extension of human memory, purposefully created to record information, document transactions, communicate thoughts, substantiate claims, advance explanations, offer justifications and provide lasting evidence of events.

Shepherd and Yeo (2003) opine that a record is not defined by its physical form, age, or the fact that it contains information. It is essential characteristic is that it provides evidence of some specific activity. Activities may be undertaken by people or may be largely or wholly automated. Records can exist in any medium and in many forms, including documentary, databases, photographs and audio visual. Most organisations have hybrid record systems, with some records in paper and some in digital form.

Other authors have made their contributions towards the definition of a "record" (for example Roper and Millar (1999), Schellenberg (2002) and International Council on Archives). However, the working definition for this study is the one provided by the International Standards Organisation on Records Management (ISO 15489–1:2001) which defines records as "information created, received, and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transactions of business."

Agere *et al* (1999) state that records can be classified into three (3) types, namely:

- Current records which are in active use;

- Semi-current records whose use has declined and are used only from time to time. In other words they are semi-active and;

- Non-current records which are no longer in active use and are being kept in order to fulfill other secondary uses such as legal and audit requirements or for research value.

In an Information Technology (IT) environment, it is important to understand what "records" are, from a records management perspective. According to IRMT (2009), electronic records are different from manual or paper-based information in a number of ways. Some important qualities of electronic data include: the small 'size' of the data and information; the ease with which data can be replicated; and the consequent portability of electronic data, which can be moved and used in various locations in the same room or on the other side of the world. These distinctions present both opportunities and challenges to organisations which have legal, technological and even strategic implications in organisations. These challenges (and opportunities) call

for the need to develop and implement comprehensive electronic records management programs in order to take advantage of the opportunities and mitigate the risks.

2.4.1.1 Importance of Records

Kemoni (2007) states that records are required for developing and implementing policies, planning, keeping track of actions, achieving consistency in decision-making, providing effective service to citizens and achieving greater efficiency. This confirms that records are critical to business process efficiency. According to Dearstyne (1988) records are created for some purpose and can have either a short-term or enduring (archival) value. The value can be administrative, fiscal, legal or informational.

Mnjama and Wamukoya (2004) point out that, records are valuable assets that need to be managed and protected. Besides providing essential evidence of organisational activities, transactions and decisions, records also support business functions and are critical for the assessment of organisational performance. McLeod and Childs (2007) agree by adding that records support more effective and efficient business, underpin e-government and service delivery, help to demonstrate accountability, transparency and corporate governance, and are the source of information for citizens in the context of open government and freedom of information.

According to Shepherd (2006), organisations use records to support accountability, when they need to prove that they have met their obligations or complied with best practice or established policies. Cox and Wallace (2002) express a similar view by stating that accountability and transparency cannot be achieved in an environment where information is not available. Records management underpins accountability.

Records provide a reliable, legally verifiable source of evidence of decisions and actions. They document compliance or non-compliance with laws, rules, and procedures (World Bank, 2000). Duranti (2001) agrees that records play a crucial role in most human endeavors and are essential to all business and social interactions.

Dearstyne (1988) observes that records document past policies, decisions and alternatives. By consulting the records, local officials do not waste time and resources by "re-inventing the wheel" when they approach similar problems and issues. Hence good records management practices result in prompt decision-making which enhances service delivery in an organisation.

Shepherd and Yeo (2003) note that there are three key values which can be met by good records: First, organisations use records in the conduct of current business, to enable decisions to be made and actions taken. Records provide access to precedents and policies, and evidence of what was done or decided in the past. They enable organisations to guard against fraud and to protect their rights and assets.

Secondly, organisations use records to support accountability, when they need to prove that they have met their obligations or complied with best practice or established policies. Organisations are accountable in many ways, to meet legal, regulatory and fiscal requirements, undergo audits and inspections, or provide explanations for what was done. Internally, records are used to prove or assess performance. External accountability is especially important to public sector bodies, which are responsible for their actions to government and the wider public.

Thirdly, records may also be used for cultural/historical research, to promote awareness and understanding of corporate history. The wider community also has expectations of transparency in public service, the protection of rights and the maintenance of sources for collective memory.

Perhaps the best summary of the usefulness of records is that which is provided by Piggot (2002) a senior information solutions consultant with the Word Bank who says that "without access to good records, officials are forced to take decisions on an *ad hoc* basis without the benefit of institutional memory. Fraud cannot be proven, meaningful audits cannot be carried out and government actions are not open to review".

2.4.2 The Records Management Concept

There is no universally accepted definition for the term "records management" and this is an indication that the discipline of records management is dynamic (Yusof and Chell, 2005). However, various authors and organisations have attempted to define the term. The National Archives' Records Management Best Practices Guide defines records management as a process of ensuring the proper creation, maintenance, use and disposal of records to achieve efficient, transparent and accountable governance. Agere *et al* (1999) define records management as a term used to refer to the way official records (correspondences, files, information) are organised in such a way that they have meaning and can be used continuously by managers, records professionals, educational institutions, legal authorities and any other interested parties. Section DL1.105 of the United States Department of Defense standard DoD 5015.02-STD (2007) defines records management as "the planning, controlling, directing,

organizing, training, promoting, and other managerial activities involving the life cycle of information, including creation, maintenance (use, storage, retrieval), and disposal, regardless of media."

This study adopts the ISO 15489-1 (2001) definition issued by the International Standards organisation which defines records management as the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records.

According to Dearstyne (1988), records management is based on the premise that records require managing, in the same sense that other local governmental resources need managing. Records management should be regarded as important as other governmental operations. According to the American National Archives and Records Service (NARS), sound records management implies that records are managed in terms of an organisational records management programme governed by an organisation's records management policy. Mat-Isa (2005) supports this notion by arguing that a strategic approach to records management is vital in order to facilitate recordkeeping and retrieval. For these reasons, records management is increasingly becoming an important instrument for good management in organisations today.

Emery (2005) observes that essential elements of a records management program include a records retention policy and a set of procedures where records are classified, retention periods are defined and destruction procedures are prescribed. Classification

of records and maintaining them with the appropriate metadata is necessary so that this information can be retrieved quickly when required. The ISO standard on records management specifies what should be included in a records program and establishes criteria for businesses and government agencies throughout the world (ISO 15489-1: 2001).

2.4.2.1 Importance of Records Management

An organisation's ability to function effectively and give account of its actions will be undermined if sound records management principles are not applied. According to Bilotto and Guercio (2003) archival and records management theories and principles are increasingly becoming relevant at a corporate level. Penn *et al* (1994) point out that the records management programme must exist because the function of managing recorded information is a necessity. In support of this view, Cloete (1998) refers to record-keeping as one of the auxiliary activities that are performed to improve the effectiveness and efficiency with which the other functions are performed or to make the performance of the other functions possible.

Kersey (2003) states that proper record keeping practices are key to improving accountability. This is because records form the foundation of good and accountable administration. Poorly managed records lead to inability to access information needed to support policy formulation, implementation and delivery of programmes and services. Therefore, proper records are important strategic resources for any organisation that needs to show good governance and accountability.

Makhura (2005) states that "the main purpose of records management is to manage and control the flow of records with the necessary information within a particular organisation". The author highlights the correlation between proper records management and improved performance of an organisation to ensure competitive survival and argues that records constitute the most vital resource and are essential for the operation of organisations. In contrast, unorganised or otherwise poorly managed records mean that an organisation does not have ready access to authoritative information to support sound decision making or delivery of programmes and services.

These sentiments are shared by Marobella (2005) who adds that business records should be managed for them to comply with regulatory, legal and ethical requirements. Compliance is mainly concerned with information integrity, privacy and records retention. Since records provide evidence of activities, they need to be managed within systems that control them throughout their existence.

Shephard (2006) emphasizes the significance of records management by highlighting the following benefits:

- Records which are well managed as part of an appropriate records management programme will help an organisation to conduct business in an efficient, accountable manner, deliver services consistently, support managerial decision making and transparent policy formation and ensure continuity in policy execution, management and administration.

- Effective records management will help the organisation to respond to planned or unplanned events such as audits or disasters. It will also protect the interests of

present and future stakeholders, including employees, clients, government policy makers, historians and citizens; will help meet regulatory and audit requirements; provide evidence of organisational activity for litigation support, protect the interests and rights of stakeholders and; maintain corporate memory.

▪ An effective records management programme will ensure that records are available for use when needed, that privacy and confidentiality are maintained and that redundant records are destroyed. Without effective records management these objectives will be more difficult to achieve.

Similar observations have been made by the Government of South Australia (2005) which confirms that there are a multitude of benefits that can be expected from agencies and authorities that have embraced adequate records management such as: ability to mitigate the considerable risks associated with inadequate records management practice, specifically, accountability, transparency, sound corporate governance, and public sector efficiency; compliance with statutory requirements; ability to provide enterprise-wide access to documents, records and information resources contained within multiple databases; ability to manage electronic documents and records as inviolate and credible evidence; knowledge of fundamental records management practices and how they relate to Freedom of Information and Information Privacy principles, and; increased productivity and individual accountability.

Blake in Kemoni (2008) also gives the following benefits of effective records management: supporting efficient working and information exchange; facilitating evidence-based policy making and supporting the administration of data protection

principles and effective implementation of Freedom of Information (FoI) and other legislations through organisation of records.

Other researchers and scholars have given their views on the benefits of records management in organisations. It is clear that good records management practices are critical to efficient business process management and sound service delivery.

2.4.2.2 Effects of Poor Records Management on Organisations' Business

Kanzi (2010) warns that ineffective management of records can result in problems in the medium to long term when important documents cannot be found (Kanzi, 2010). Failure to manage records leads to build-up of closed records, overcrowding and disorganisation. Kallaus (1987) points out that poor recording keeping can lead to: Loss of information resulting to loss of evidence; waste of resources-financial and physical; inadequate and poor decision making due to inadequate information; loss of confidence among customers due to loss or misplacement of their records; demoralized staff as a result of long and tiring duration taken in search of and retrieval of records and; poor recording of corporate memory.

According to McKinnon (1994), poor recordkeeping attracts corruption like flies to carcass. Thurston (1997) supports this view by adding that poor records management can erode an organisation's accountability, enhance its potential for corruption, and undermine the confidence of stakeholders and the trustworthiness of the organisation's records. Properly managed records are a powerful deterrent against malpractices since this means that officers are held accountable for their actions.

Wamukoya (2000) observes that poor recordkeeping results in: poor decision making; lack of transparency and accountability; theft, corruption and plunder of resources; mistrust of the organisation and those who run it; frustrations amongst staff, stakeholders and citizens; poor productivity and failure to meet obligations and mandates, and vulnerability to lawsuits. All these shortcomings expose an entity to grave risks which endanger its continued existence. The National Archives of Scotland (2011) note's that companies create records-management programs to avoid business risks and to achieve various benefits as follows:

- Litigation. Opposing lawyers can use a company's records in litigation. However, a legally compliant records-management program that documents the programmatic destruction of records when permitted can stop such requests.

- Access to information. A good records management program promotes access to information. Only appropriate staff should have access to the organisation's records.

- Compliance management. It is easier to prove compliance with a records-management program that documents records policies and procedures as a part of routine business processes.

- Volume reduction and cost control. Records management ensures the retention of necessary records only, thereby efficiently managing records-related costs and significantly reducing unnecessary records volumes.

- Program consistency. Companies can effectively control records and answer inquiries from outside counsel or regulators when the records management program is consistent.

2.4.3   Records Management in Developing Countries

Records are a valuable resource and asset and organisations should seek to protect and preserve their records as evidence of actions. Despite the crucial role played by records and records management, there is a consensus amongst researchers that many organisations in developing countries including government departments pay little attention to the management of records (Barata, 2001; International Records Management Trust (IRMT), 1999; Mnjama, 2004; Ngoepe and Van der Walt, 2009; World Bank, 2000). There is generally inadequate recognition of the importance of records as evidence and senior officials often tend not to recognize the need for, or value of, effective records programmes (Millar, 1997; Ngoepe and Van der Walt, 2009).

In government ministries of many African countries, records management is widely seen as a lower grade service area, and virtually no attention is given to the way information is created, structured and managed (IRMT, 1999). This is evident in many organisations today where records management tasks are performed by untrained staff. Millar (2004) notes that the lack of adequate training is closely related to lack of appreciation for and awareness of the importance of records management. Studies undertaken by authors such as Kemoni (2007) distinguish records management problems as the root cause of poor service delivery in public sector organisations and parastatals in Kenya, where untrained staff are deployed to perform records management tasks.

According to Mnjama and Wamukoya (2004) countries in east and southern Africa are faced with a number of challenges including: an absence of organisational plans for managing records; low awareness of the role of records management in support of organisational efficiency and accountability; lack of stewardship and coordination in handling records; absence of legislation, policies and procedures to guide the management of records; absence of core competencies in records and archives management; absence of budgets dedicated to records management; poor security and confidentiality controls; lack of records retention and disposal policies; and absence of migration strategies for records.

Further, a survey conducted by Mnjama and Wamukoya (2004) in Kenya and Botswana, as well as visits to Tanzania, Ghana, The Gambia, and Sierra Leone revealed many problems in the management of records, including:

- poor layout of the records office especially where records are managed centrally;
- untidiness in the records area, with records scattered all over the place, on the floor, on top of filing cabinets, along corridors and basements and carports;
- regular loss of files and information;
- lack of file indexes or registers indicating the existence of the record in the organisation;
- lack of retention and disposition schedules;
- poor storage for semi-current records;
- poor supervision of records staff, and;
- ignorance of the value of information, for instance, lack of security procedures in handling sensitive or classified information.

The growing challenges in records management in Kenyan public and private organisations is a major source of risk to business performance. This calls for the development and implementation of strategies designed to mitigate records -related risks.

2.4.4 Legal Frameworks for Records Management in Kenya

The management of public records in Kenya is guided by the following legal regulations:

a) ISO 15489 - documentation and records management

ISO 15489, the international standard for information and documentation-records management, provides guidance on managing records. An organisation seeking to conform to ISO 15489 needs to have the following in place:

1. A records management policy whose objective is the creation, maintenance and management of authentic, reliable and accurate records that are capable of supporting business functions and activities. The policy should be endorsed and adopted at the highest decision making level, and should be implemented throughout the organisation;

2. Lead records management responsibility and accountability should be defined and assigned to a person with appropriate responsibility.

3. Organisations need to create and maintain authentic and reliable records, and to protect the integrity of those records for as long as required. This will include:

   - Ensuring that reliable records are created- a reliable record is one whose contents can be trusted as full and accurate representation of transactions and activities captured on the records;

   - Assessing the risks that would result from failure to maintain authoritative records;

- Preserving records and making them accessible over time in order to meet business requirements;

- Complying with legal and regulatory requirements and organisational policy;

- Ensuring that records are maintained in a safe and secure environment;

- Safeguarding the integrity of records - this refers to their being complete and unaltered;

- Compliance – records should be managed in accordance with the legal and regulatory environment;

- Providing an appropriate storage environment and media that afford records adequate protection; and

- Records systems should provide timely and efficient access to and retrieval of records needed for business and accountability requirements.

Although the standard lays out the ideal records management best practice, few organisations in Kenya have achieved this and only a handful of government agencies have put in place records management policies. At the national level, the records management policy still remains in draft form, a pointer that the ISO 15489 documentation and records management standard has not been fully implemented in the country.

b) The Public Archives and Documentation Service Act, Cap 19

This is the principal law that governs management, preservation and disposal of public records. The Act mandates the Director of the Kenya National Archives and Documentation Service (KNADS) to:

- Examine any public records and advice on their care, preservation, custody and

control;

- Require transfer to the custody of the KNA and Documentation Service, public records he/she considers should be housed in the National Archives, and;

- Authorise the destruction of public records judged to be of no further administrative or reference value to the creating office.

Section 5A of Cap 19 states that every Permanent Secretary or head of government department or chief executive of a state corporation or local authority shall supply to the Director two copies of any published or generally circulated documents or report produced by that office whether in hardcopy or microfilm; and the creating office may prescribe the period for which the document shall remain restricted from circulation to other public offices or members of the public.

Section 8 of the Public Archives and Documentation Service Act Cap 19, makes it an offence to destroy public records without the Director's authority.

c) The Records Disposal Act, Cap 14

This Act facilitates the management and disposal of court records in Kenyan courts. The Act mandates the Chief Justice and the Registrar of the High Court, in consultation with the Director of the KNADS to make rules for the disposal of court records.

d) The Chief Secretary's circular on the destruction of non-current government records   (Ref. OP.1/48A/66 of 28th November 1985)

The circular states that it is the responsibility of the public offices to effectively manage their records. Para graph (b) of the circular states that "in the event that a

government ministry or department considers that particular records are no longer needed for current administrative purposes, the Director of the KNADS shall be notified without delay and requested for their appraisal and disposal." The circular further states that "no valueless public records shall be kept for longer than necessary as this will result into wastage of public funds through uneconomical usage of office and equipment."

e) Government Financial Regulation and Procedures, Section 4: 2-5

These were issued to provide guidance on the management and disposal of accounting documents. The relevant section of the chapter states that the Accounting Officer may give permission for the destruction of accounting books and documents provided such records have been audited and are of no archival value. Accounting documents with outstanding audit queries shall not be destroyed. The director of KNADS may be requested to examine the records before their destruction.

Other guiding regulations for records in Kenya include the following:

- Circular OP.1/48a/11/10 of 7th July 1988 on depositing of reports and other generally circulated documents in the KNA.

- Directorate of Personnel Management (DPM) Circular on personnel records – Ref. No. DPM.12/6A Vol.1 (71) of 12th March 2008.

- Circular OP.39/2A of 14th April 1999 on cases of missing and lost files and documents in the public service.

- Circular OP.39/2A of 14th November 1999 on cases of missing and lost files and documents in the public service.

2.5   RISK AND RISK MANAGEMENT CONCEPTS

2.5.1   Risk Concept

The risk concept was originally coined in France by an economist named Henry Fayor just after the Industrial Revolution (Institute of Electronics, Information and Communication Engineers Technical Report, 2001).

The M-o-R Standard (2002) defines risk as "an uncertain event or set of events which, should it occur, will have an effect on the achievement of objectives. Maya (2008) defines risk as the uncertainty that surrounds future events and outcomes. He observes that risk is a fact that all organisations come across and is therefore important in organisational life. In other words, risk consists of a combination of the probability of a perceived threat or opportunity occurring and the magnitude of its impact on objectives." Within this definition 'threat' is used to describe an uncertain event that could have a negative impact on objectives or benefits; and 'opportunity' is used to describe an uncertain event that could have a favourable impact on objectives or benefits.

This study adopts the definition given by the Australia/New Zealand Standard for risk management which defines risk as "…the possibility of something happening that impacts on organisational objectives. It is measured in terms of likelihood and consequence." (AS/NZ 4360:2004). This definition takes into consideration the fact that risk has either a negative or positive implication.

Risk arises out of uncertainty. It is the exposure to the possibility of such things as economic or financial loss or gain, physical damage, injury or delay, as a consequence of pursuing a particular course of action. The concept of risk has two elements, the likelihood of something happening and the consequences if it happens (Victorian Auditor-General's Office, 2004).

All organisations have expressed or implied objectives. Risk management will actively support the achievement of those objectives. It is not a process for avoiding risk: when used well it can actively allow an institution to take on activities that have a higher level of risk (and therefore could deliver a greater benefit), because the risks have been identified, are understood and are being well managed, and the residual risk is thereby lower. Therefore, risk management is not just negative- ensuring that bad things are less likely to happen, but also positive - making it more likely that good things will happen (HEFCE, 2001). This can be achieved by putting in place appropriate frameworks to achieve business process efficiency.

2.5.1.1 Types of Risk

Every risk has its own distinct characteristic that requires particular management or analysis. Most people will recognize the 'obvious', or most apparent, risk that they are facing. According to NSW Department of State and Regional Development, there are three types of risk:

1. Opportunity-based risk. These are risks associated with not taking an opportunity and those associated with taking an opportunity. The latter is a conscious decision to accept identified risk associated with an opportunity and then to implement processes to minimize any negative impacts and maximize gains.

2. Uncertainty-based risk. This is the risk associated with unknown and unexpected events. This type of risk has attracted more recognition as a result of negative events such as Y2K; September 11; Kenya's August 1998 bomb blast; and recent natural disasters such as the Asian tsunami. Uncertainty-based risks are: unknown or extremely difficult to quantify; catastrophic or disastrous in nature; associated with negative outcomes; and not possible to control or influence.

3. Hazard-based risk **-** this is the risk associated with a source of potential harm or a situation with the potential to cause harm. This is the most common one associated with business risk management.

The Victorian Auditor-General's Office (2004) says that risks can be categorized according to the goals, objectives or outcomes in the agency's corporate, strategic or business plans. At the highest level, these represent risks to the agency's ability to implement government policy. They further add that risks can also be categorized into: strategic risks (risks to the agency's direction, external environment and to the achievement of its plans); commercial risks (risks of commercial relationships, such as failed contractual relationships); operational risks (risks to core business activities, such as inadequate human resources, physical damage to assets or threats to physical safety); technical risks (risks of managing assets, such as equipment failure); financial and systems risks (risks with financial controls and systems, such as fraud), and; compliance risks (risks to meeting regulatory obligations).

2.5.1.2 Risks Facing Public Universities

The business of government is increasingly more complex. The boundaries between the public, private and community sectors are ever more porous, and policies that

demand whole-of-government approaches are more and more common. Public sector organisations must manage not only their own risks, but also the risks that come with joined-up government and inter-agency partnerships (The Victorian Auditor-General's Office, 2004).

There is a greater recognition of the variety, the increasing number, and the interaction of risks facing organisations. Risks in a University can exist at a number of different levels. They may be: corporate or strategic; faculty level; departmental level and; personal level. Queensland Government (2011) opines that risks are caused almost exclusively by people, processes and procedures, and natural events.

The Victorian Auditor-General's Office (2004) further notes that there are 3 types of state-sector risk, each of which calls for a different response:

1. Agency-level risks. These can become risks to the state because of their size and significance, because of the wider impact of measures to manage them, or because of poor management by agencies;

2. Inter-agency risks, which if unmitigated by one agency, become risks for other agencies;

3. State-wide risks, which are beyond the boundaries of any one agency and call for a response across agencies coordinated by a central agency.

This categorization of risks can be equated to the risks facing public universities in Kenya. Public universities face individual/institutional risks, inter-institutional risks and nation-wide risks. There are many possible sources of risk and areas of impact in a public university. Examples of sources of risk in a university include: people, product, property, image, environment, finance and politics (Savage, 2007).

Sources of risk can affect: asset and resource base cost, both direct and indirect; continuity of education and business; intangibles; legal liability; management, policy and financial management; people, the community; performance of activities, how well the activity is performed; physical and natural environment; reputation and image; timeliness of activities, including start time, downstream or follow-up impacts (Queensland Integrated risk management Government, 2006).

2.5.2 The Risk Management Concept

As with the definition of risk, there are equally many accepted definitions of risk management in use. Some describe risk management as the decision making process, excluding the identification and assessment of risk, whereas others describe risk management as the complete process, including risk identification, assessment and decisions around risk issues. A discussion of some of these definitions follows.

Meir (2000) defines risk management as the process of analyzing exposure to risk and determining how best to handle such exposure. HEFCE (2001) describes risk management as a process which provides assurance that: objectives are more likely to be achieved; damaging things will not happen or are less likely to happen and beneficial things will be or are more likely to be achieved. The Australian Standard (AS/NZS 4360, 2004) defines risk management as a systematic process of making a realistic evaluation of the true level of risks to the business.

Coe in Visser and Erasmus (2002) refers to risk management as the process of identifying and controlling risks of all kinds: accidents, fire, theft, and liability suits. Valsamakis *et al* (1992) also in Visser and Erasmus (2002) refer to risk management

as a managerial function aimed at protecting the organisation, its people, assets and projects against the consequences of pure risk, more particularly, reducing the severity and variability of losses. In the researcher's view, these definitions are incomplete and fail to give a complete representation of the risk management process.

The Victorian Auditor-General's Office (2004) defines risk management as the systematic application of management policies, procedures and practices to the task of identifying, analyzing, assessing, treating and monitoring risk. This definition covers all steps in the risk management process, that is, risk identification, analysis, assessment, treatment and monitoring of the process and has been adopted by this study.

Barrett, P. (2005) observes that risk management in the public sector has gone from a fairly 'woolly' concept that lacked any real level of sophistication or maturity in its application to one where it is now generally accepted that business processes, risks and controls across an organisation are interrelated. There continues to be a generally heightened concern and focus on risk management, particularly in light of the series of high-profile business scandals and failures world-wide (Australian National Audit Office, 2005).

The University of Oxford (2007) states that there are six main ways of managing risks (risk control):

1. Avoidance: identifying and implementing alternative procedures or activities to eliminate it.

2. Contingency: having a pre-determined plan of action to come into force as and when the risk occurs.

3. Prevention: employing counter-measures to stop a problem from occurring or having impact on an organisation.

4. Reduction: taking action to minimize either the likelihood of the risk developing, or its effects.

5. Transference: transferring the risk to a third party, for example with an insurance policy.

6. Acceptance: tolerating the risk when its likelihood and impact are relatively minor, or when it would be too expensive to mitigate it.

The Victorian Auditor General's Office, (2004) advices that good risk management is based on a well-planned, logical, comprehensive and documented strategy. This strategy provides general policy guidance, and plans and procedures that can be used as part of the organisation's everyday work to manage risk.

2.5.3   Risk Management Process

The ACT Insurance Authority (2004) gives the following guiding steps to risk management which are based on the Australian/New Zealand Standard AS/NZS 4360:2004 - Risk Management:

a) Establish Goals and Context

Identification/validation of goals is a critical first step in the risk management process. Effective risk management requires a thorough understanding of the context in which a Department or Agency operates. The analysis of this operating environment enables an organisation to define the parameters within which the risks to outputs need to be managed.

b) Identify Risks

Identify the risks most likely to impact on outputs, together with their sources and impacts. It is important to be rigorous in the identification of sources and impacts as the risk treatment strategies will be directed to sources (preventive) and impacts (reactive).

c) Analyze Risks

Identify the controls (currently in place) that deal with the identified risks and assess their effectiveness. Based on this assessment, analyze the risks in terms of likelihood and consequence. Refer to the Risk Matrix to assist in determining the level of likelihood and consequence, and the current risk level (a combination of likelihood and consequence).

d) Evaluate Risks

A 'risk assessment' identifies possible disasters and emergencies that might occur in the region or within the organisation itself. It then considers how damaging these emergencies or disasters might be to the organisation (IRMT, 1999). This stage of the risk assessment process determines whether the risks are acceptable or unacceptable.

e) Determine the Treatments for the Risks

Treatment strategies will be directed towards:

- avoiding the risk by discontinuing the activity that generates it, (rarely an option when providing services to the public),
- reducing the likelihood of the occurrence,
- reducing the consequences of the occurrence,
- transferring the risk, and
- retaining the risk.

Potential treatment options are developed according to the selected treatment strategy. The selection of the preferred treatment options takes into account factors such as the costs and effectiveness. The determination of the preferred treatments also includes the documentation of implementation details (such as responsibilities, a timetable for implementation and monitoring requirements). The intention of these risk treatments is to reduce the risk level of *unacceptable* risks to an *acceptable* level (that is, the target risk level).

f) Monitor and Report on the Effectiveness of Risk Treatments

The relevant manager is required to monitor the effectiveness of risk treatments and has the responsibility to identify new risks as they arise and treat them accordingly. Managers are also required to report on the progress of risk treatments at regular intervals.

2.5.4   Risk management and Corporate Governance

According to HEFCE (2001), corporate governance is the way in which an organisation is controlled and governed in order to achieve its objectives and operate with integrity. The Organisation for Economic Co-operation and Development (OECD) (2004) also defines corporate governance as a system by which business corporations are directed and controlled. The organisation also contends that corporate governance does not guarantee success and sustainability of organisations; however, it does provide a better approach for organisations to demonstrate transparent and accountable governance.

Effective risk management is the cornerstone of good corporate governance and can lead to improved performance resulting in better service delivery, more efficient use of resources, and better project management as well as helping to minimize waste, fraud and poor value-for-money decision making (Australian National Audit Office, 2005). Therefore, sound risk management is an essential component of good corporate governance, hence the increased profile in recent times in the relationship between corporate governance and risk management.

The role of risk management in corporate governance creates the need for risk management to be considered during strategic and business planning activities. Thus, the risk management strategies should be aligned with the strategic and business planning approaches of entities. The Australian National Audit Office (2005) proposes that risk management should be treated as a strategic issue so that:

a) a responsibility planned business outcomes, outputs and activities do not expose the organisation to unacceptable levels of risk;

b) use of resources is consistent with organisational priorities; and

c) the risk management strategies are integrated with the management actions of staff at all levels in the organisation including recognizing that all staff have to manage risks.

2.5.5 Risk Management in Public Universities

Good risk management practice is about having a holistic approach, driven by a desire to balance stability and innovation. However, the Australian National Audit Office (2005) observes that much of the approach to risk management in the public sector continues to be intuitive rather than as a result of a strict application of risk management techniques and standards.

Maya (2008) points out that risk management is a very critical input for educational organisations because all educational practices bear a certain level of risk. They are established through decision-making processes some of which may be either correct or incorrect. Therefore, these institutions assume the risks that can occur if the approved decision is incorrect.

Risk management in universities involves handling efficiently and reasonably the risks that occur as a result of teaching and learning activities rather than avoiding risks. Abraham (1999) says that the basic element in educational institutions is human beings and that the cost of educational activities is high. If they are handled efficiently, human resources in the organisation will be in a secure position and limited resources can be used efficiently.

The following drivers are increasing pressure to transform risk management for institutions in higher education according to HEFCE (2001):

- Fierce competition for faculty, students, staff, and financial resources;
- Pressure for increased productivity, responsiveness, and accountability while reducing costs;
- Increased external scrutiny from government, the public, governing boards, journalists, and taxpayers rights groups;
- Powerful new technologies that require significant investment of both financial and human capital resources;
- Rapidly increasing entrepreneurial ventures beyond the traditional educational venues that create stresses and strains on traditional administrative and financial infrastructures;

- Increased competition in the marketplace, and;

- Increased levels of litigation in general and internally, with ever-increasing levels of financial competition.

A study carried out by HEFCE (2001) reports that institutions that are engaged with risk management are most likely to have tangible benefits from the process, which include:

- Consistent and systematic management behavior in institutions;

- The ability to systematically identify, assess and seize opportunities in ways that were not necessarily possible before;

- Promotion of healthy self-criticism within institutions, which has in itself opened up new directions and new opportunities.

2.6 NEXUS BETWEEN RECORDS MANAGEMENT AND RISK MANAGEMENT

Cunningham and Montana (2007) state that beyond any ethical or client service considerations, sound records management is risk management. That this is true is well- known in the business world, where records retention scheduling and its many related activities have long been viewed as an exercise in risk management as well as a vehicle for controlling costs. Cunningham and Montana also observe that risk management as it concerns records management deals with three high level issues:

1. Poor organisation - To have a record and not be able to find it is, for most compliance purposes, the same as not having it at all. A good records management program properly deployed, has many tools for accurately and efficiently availing hard copy and electronic digital information when it is needed.

2. Failing to maintain records long enough - Dealing with this issue is one of the basic functions of a records retention schedule. The business needs and ethical and regulatory environment of the organisation should be analyzed in sufficient detail to ensure that records of all types are maintained for legally sufficient periods of time.

3. Maintaining records too long - At some point, any record loses all viability. In the case of a business record, all applicable retention periods have been met and all business utility is gone. Its disposition becomes both a risk and cost issue. Destruction saves on floor space costs while off-site storage is associated with its continued maintenance, disposition, short-circuits and subsequent attempts by third parties to obtain the records.

Mat-Isa (2005) points out that most organisations have neglected good record-keeping practices thus exposing organisations to risks from various quarters. Cunninghan and Montana (2007) advice that some combination of administrative management in the form of indexing, physical storage arrangements and the like, combined with suitably chosen retention periods, creates a situation in which the firm and its clients are at lowest risk of any adverse consequences arising from poor management of records and information.

This turbulent records environment requires managing major categories of risk - financial, operational, reputational and regulatory. A risk-based approach to records management identifies and gives priority to risky records, ensuring that those records are protected, managed through their life cycle, available as needed, and appropriately destroyed at the end of their life cycle. This approach is known as records risk

management because it addresses the records that carry the greatest organisational risk first. It sets priorities - considering risk and cost - to alleviate the most intense organisational pain and worry, to say nothing of fines and court-ordered awards (Mat-Isa, 2005).

Records risk management connects *record* risk events to *business* risk events. For example, not being able to produce a record is a record risk event. A business risk event would be a compliance audit. After connecting the two, an organisation understands its records by the risk they present. This helps focus records management efforts and sets priorities for records management initiatives.

Mnjama (2004) states that the value of state records derives, among others, from the information they contain and evidence they provide. Any given organisation can be protected by understanding the records it needs to keep. Records provide information of actions performed and decisions taken. Creating and managing records helps an agency do business and manage the risks associated with that business. Without adequate records, the agency may have difficulty providing evidence of its actions and decisions.

According to the University of Texas State (2009) the records management program is in itself a risk management tool. The records management program ensures sound recordkeeping practices that support business activities, assist in the capture and maintenance of corporate memory, and ensures compliance with relevant legislation. The records management program is designed to prevent: inability to identify the existence of records; lack of full and accurate records of business activities and

University administration; loss or inaccessibility of documents, including emails, letters, reports, etc.; lack of documentation detailing verbal decision making processes; lack of control over access to records; inability to locate records or track their movements; premature destruction of records without appropriate approval or retention of records without documented reason.

Bearman (1994) analyzes the consequences of recordkeeping accountability failures in terms of organisational and societal risks:

- organisational risks of recordkeeping accountability failures include: lack of evidence that an organisation did something under contract or according to regulation; inability to find mission-critical information; loss of proof of ownership, rights, obligations; lack of documentation of who knew what when; inability to locate in its proper context information that may be incriminating in one context and innocent in another; inability to demonstrate that policies and procedures were in place and consistently followed.

- Societal risks of recordkeeping accountability failures include: functioning of society and its institutions is impaired; evidence of the rights of people as citizens and clients is lost; inability of societal watchdogs to call to account governments, corporations and individuals; loss of collective, corporate and personal identity; loss of individual, corporate and collective memory, and; inability to authenticate and source mission-critical information.

Records are one of the basic litigation support tools. Without them there can be no litigation as they provide information through which evidence is derived and decisions are made (Kanzi, 2010). A well designed records management system helps

protect an organisation legally. Mnjama (2004) adds that state records not only document past decisions, they often establish and protect the current rights and responsibilities of both the government and the governed. From an organisational perspective, records document the fundamental rights of members of the organisation and its obligations. Thus, records are critical in mitigating legal and reputational risks arising from litigation.

Agere *et al* (1999) argue that the keeping of records and storing of information in an organisation has, in the last few years become critical not only for historical purposes but also, and more importantly, for current and future managerial and policy development. They further add that in reviewing the performance of the entire public service machinery, it has always been necessary to review the objectives, functions, rules and regulations, procedures and practices. The overall outcome of these reviews would be the development of organisational manuals, policies and procedures which would guide staff towards best practices and ways of doing things. Thus, records management provides the basis for development of these documents and gives evidence of compliance to them.

The Kenya Anti-Corruption Commission website states that opportunities for corruption are manifested through lack of regulations and guidelines, manipulation of records, poor storage and maintenance of records, loss and delays in records retrieval (KACC, 2011). According to the World Bank (2000), well managed records provide a cost-effective deterrent to fraud and corruption. Properly kept and authentic records can serve as evidence to identify abuse, misuse and non-compliance with financial institutions and other laws and regulations. Thus proper records management protects an organisation against financial risks caused by poor financial management.

An effective records management system is a critical element in the preparation of an institution's financial statements. It will allow for verification of the completeness and accuracy of data reported in financial statements and assist in the compilation of the audit process. The World Bank (2000) states that poor record keeping affects the entire accounting function, with the result that reporting and auditing may become virtually impossible.

Records management seeks to efficiently and systematically control the creation, use, maintenance and final disposition of the records which are routinely created as a result of an organisation's activities and transactions. Records management will help to ensure that: only the right information is created in the first place; information is kept as long as is necessary and no longer; information can be located and retrieved in a timely and controlled manner; information is secure (JISC, 2009). Records management is an effective tool in ensuring operational efficiency and consequently protects an organisation against operational risks.

Harries (2009) argues that achieving success overall is more than the sum of individual parts. It depends, very often, on a successful sharing of meaningful information between parts. This emphasizes the significance of embracing ICTs in its business functions and operations. Modern ICTs when properly harnessed will contribute towards eliminating technological and systems risks which expose the organisation to dangers of delayed access to required information contained in records. Harries (2009) further adds that a breakdown in the sharing of information between parts leads to a breakdown in service delivery.

The link between records management and risk management cannot be ignored. It is clear that poor records management is a major source of risk exposure in organisations. Proper records management is therefore critical for successful risk management.

2.7   RELATED EMPIRICAL STUDIES

The study sought to identify any previous studies linking records management and risk management in institutions of higher learning. The study found that such a study has not been undertaken before although one such study was undertaken in the banking sector. This section discusses studies relating to both records management and risk management and their significance to the current study.

Ambira (2010) carried out a study on *Records Management and Risk Management at Kenya Commercial Bank Limited, Nairobi Area.* The study aimed to investigate records management and risk management at KCB and to suggest recommendations and a framework to enhance both records management and risk management. A major finding of the study was that poor records management practices across KCB were in themselves a considerable source for risks. This corresponds with the findings of the current study which also reveal that poor records management practices at Moi University has exposed the institution to various risks, amongst them operational, financial, strategic and compliance. The study recommends that the Risk Management Division should integrate records management within the KCB's enterprise-wide risk management strategy. A records management model to support risk management at KCB is proposed. This corresponds with the current study which recommends a model for the alignment of records management and risk management with business processes in Moi University.

Kanzi (2010) investigated *the role of Records Management with specific reference to Anathole District Municipality*. This was a research undertaken for a Masters degree in Public Administration. The purpose of this study was to investigate the role played by records management in an organisation. One study objective was to critically analyse the management of records at Anathole District Municipality. Of significance to the present study was the author's view that "every institution's management has a duty to protect its resources (records inclusive) against any risk that may result in their loss." Among the major findings of the study was that the records management function was not receiving the attention it deserved at the organisation and that Anathole District Municipality's risk management programme was still at an infant stage. The study recommended that the records management function be incorporated into the organisation-wide strategic plans and that the records manager should participate in the risk management programme so as to ensure that all records management related risks are brought to the attention of the management and are included in the strategic and budget plans. These recommendations correspond with those put forth in the current study.

In a thesis dissertation submitted by Ndenje-Sichalwe (2010), entitled *The Significance of Records Management to Fostering Accountability in the Public Service Reform Programme of Tanzania,* the author investigates the extent to which records management practices fostered accountability in the Public Service Reform Programme (PSRP) in some government ministries in Tanzania in order to establish the extent to which they foster accountability in public service reform programme. The findings of the study indicated that records in some government ministries in Tanzania were not properly managed to foster accountability in the implementation of

the PSRP. Another significant finding of the study was that disaster preparedness and security control for records and archives was lacking in some of the government ministries. These findings closely relate to the current study since accountability, disaster preparedness and security control are all risk management measures.

The importance of records management in mitigation of risks is highlighted in a study undertaken by Ngoepe (2008) titled *An Exploration of Records Management Trends in South African Public Sector: A Case Study of the Department of Provincial and Local Government*. The study explores records management trends in the Department of Provincial and Local Government (DPLG) to establish if the Department was managing records according to legislative requirements. Key findings of the study included: Records Management was not an objective of the strategic plan of the department; there is no integrated records management risk mitigating framework in the DPLG. The study proposed that for records management to receive the attention it deserves, it should be a strategic objective for the department's strategic plan. The author emphasises the need to sensitise staff and top management on the benefits and risks of records management. He also recommends that proper records management be enforced by mainstreaming it in the balance scorecards of all employees in the DPLG. Just as in the present study, findings in both studies indicate that proper records management is key to business process efficiency.

2.8   SUMMARY

Risk management is gradually gaining dominance as a crucial tool in the business world. Records management is an equally vital tool in the running of organisations since it forms the base for the effective implementation of all business activities. This

chapter has provided the theoretical framework upon which the study will be based. It has also outlined a review of related literature on these two separate, yet intimately related concepts.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0   INTRODUCTION

This chapter discusses the research methods and techniques that were adopted by the researcher in carrying out this study. These include a discussion on research design, target population, sample size and sampling techniques and a description of instruments and tools used in data collection. Also discussed are reliability and validity of the research instruments; pilot study and pre-testing of the instruments; data presentation, analysis and interpretation; procedures and ethical considerations.

3.1   RESEARCH DESIGN

The study adopted a case study approach, described by Mugenda and Mugenda (2004) as an in-depth investigation of an individual, group, institution or phenomenon. Ordho and Kombo, (2002) echo similar sentiments that case study design seeks to describe a unit in detail, in context and holistically. The authors also identify other research designs which include: descriptive design (where the researcher reports the findings by describing the state of affairs as it exists); experimental design (where subjects are randomly assigned to an experimental group which receives the treatment or to a control group which does not receive treatment, then comparing the performance of both groups, assuming the two were initially equivalent); correlational design (enables the researcher to assess the degree of relationship that exists between two or more variables); and cross cultural research design (used to compare the behavior patterns of different cultures).

The case study research design adopted aimed at collecting data pertaining to records management and risk management at Moi University as a unit and their impact upon business processes of the institution. This information was useful in helping to formulate a framework for incorporating the two aspects into the organisation's business operations. The findings of this study can be applied to other academic institutions in Kenya and in other parts of the world.

Qualitative techniques were employed to collect data using face-to-face interviews and documentary review. Qualitative approach was preferred as it provides rich data about real life situations and is able to make sense of behavior and understand behavior in context (Bryman, 2008; Cresswell, 2005).

The qualitative technique proved to be useful because it permitted research to go beyond the statistical results reported quantitatively. It made it possible to explore and understand the respondents' beliefs, experiences, attitudes, behaviour and interactions during the data collection stage. Qualitative techniques such as in-depth interviews were employed to find out more about the views and experiences of staff concerning risks facing the organisation and the role of records management in risk mitigation.

3.2   STUDY POPULATION

Cooper (2006) defines a population as the total or aggregate of all the units possessing certain characteristics on which the sample seeks to draw inferences. Kombo and Tromp (2006) concur that a population is a group of individuals, objects or items from which samples are taken for measurement.

The study population consisted of 150 respondents drawn from the two campuses of Moi University in Eldoret town (Main and Town campuses). The subjects included 6 top management representatives, 9 Deans of Schools, 25 Heads of Departments (HODs); 40 Senior Administrative staff (comprising of Senior Principal Administrative Officers (SPAO), Principal Administrative Officers (PAOs) and Senior Administrative Officers (SAOs); 30 ICT staff; 20 Records staff in the registries and other departments and Schools; and 20 Secretarial staff. The criterion for their selection was based on their role as records creators, custodians, users and key informants. The study population was drawn from the following Schools:

1. School of Law (Annex Campus)

2. College of medicine (Town Campus)

3. School of Arts and Social Sciences (Main Campus)

4. School of Business Management and Economics (Main and Town Campuses)

5. School of Education (Main and Town Campuses)

6. School of Information Sciences (Main)

7. School of Engineering (Main)

8. School of Environmental Studies (Main Campus at the time of the study)

9. School of Human Resource Development (Main and Town Campuses)

The offices and departments that participated in the study included:

1. Office of the Vice Chancellor   – Main Campus

2. Office of the Deputy Vice Chancellor (Planning & Development) –Main Campus

3. Office of the Deputy Vice Chancellor (Research & Extension)   – Main Campus

4. Office of the Chief Academic Officer   – Main Campus

5. Office of the Chief Administrative Officer   – Main Campus

6. Council Secretariat Office   – Main Campus

7. Senate Secretariat Office   – Main Campus

8. Deans Secretariat Office   – Main Campus

9. Legal Office   – Main Campus

10. Performance Contracts Office   – Main Campus

11. Registry   - Main and Town campuses

12. Students Affairs   - Main campus

13. Health Services   - Main and Town campuses

14. Finance   - Main and Town campuses

15. ICT   - Main and Town campuses

3.3 SAMPLING METHOD

There are several sampling methods that can be used by the researcher but their choice must be guided by the purpose of the study and research questions that need to be answered. Kombo and Tromp (2006) observe that study sampling designs are divided into two broad areas:

▪ Probability designs (includes Simple, Stratified, Systematic and Cluster random sampling techniques) and;

▪ Non-probability designs (includes Quota, Convenience and Purposive sampling techniques).

The study utilized non-probability sampling design. Purposive sampling was used to select respondents from the study population. Gerrish et al (2006) define purposive sample as one where people from a pre-specified group are purposely sought out and sampled. In purposive sampling, researchers rely on their experience and ingenuity to select respondents who seem to be appropriate for the research study.

3.3.1 Sample size

The sample size comprised 50 respondents made up of 6 representatives of the top management, 7 HODs, 7 Deans of Schools, 8 Senior Administrative Officers, 8 ICT staff, 8 records staff, and 6 Secretaries. The top management included representatives from the Office of the Vice-chancellor, Deputy Vice-chancellor (Planning and Development), Deputy Vice-Chancellor (Research and Extension), Chief Academic Officer, Chief Administrative Officer and the Finance Officer. Table 3.1 below shows the categories of respondents, study population, selected sample and corresponding percentages.

Table 3.1: Study Population and Sample Size (N=50)

Participants	Population	Sample	Percentage (%)
Management Representatives	6	6	100
Heads of Depts.	25	7	28
Deans of Schools	9	7	77
Senior Admin. Staff	40	8	20
Records Staff	20	8	40
ICT Staff	30	8	26
Secretaries	20	6	30
TOTAL	**150**	**50**	**33.3%**

As shown in Table 3.1 above, the sample size comprised 50 respondents, who represented thirty three point three per cent (33.3%) of the study population. This sample was purposively drawn except for the six top management representatives that were all selected to participate in the study.

3.3.2   Justification of the Sample Frame

The researcher purposively selected the sample size from the study population. The numbers were arrived at by selecting staff with the highest relevant qualifications and working experience to ensure that the data was adequately informative and reliable.

The top management representatives were the key informants in this study since they were mainly engaged in decision making, policy formulation, authorization and implementation processes, which have a direct impact on records management and risk management activities in the organisation. They informed the study on the major risks facing the institution and the type of records which were vital to the continued existence of the University. The researcher was able to interview all six top management representatives since the top management staff themselves were too busy, making it impossible to interview them.

The HODs, Deans of Schools and Senior Administrative officers were selected because they are engaged in policy formulation and implementation, which determines the degree of risk exposure for the institution. They also informed the study on the types of records used in the daily business transactions of the institution.

Registry staff and records personnel in other departments and Secretaries were selected because they were involved in the management of records at various stages of their life-cycle. ICT staff handle the technicalities relating to IT infrastructure and resources and therefore informed the study about technical and systems risks, which are prevalent in today's business environment. They also shade light on the current state of e-records management in the institution.

3.4   DATA COLLECTION METHODS

In view of the in-depth nature of the study, the researcher utilized both primary and secondary data. Primary data was obtained using face-to-face interviews and observation while secondary data was obtained using documentary review. The two research methods which complimented one another led to collection of comprehensive and reliable data.

3.5   DATA COLLECTION INSTRUMENTS

3.5.1   Interviews

The researcher designed semi-structured interview schedules consisting of open-ended questions to collect data for the study. The questions asked were derived from the objectives and research questions guiding the study. Face-to-face interviews were conducted though telephone interviews were also used when there was need for further clarification of previously provided information. The data was collected mainly by note-taking.

According to Oka and Shaw (2000), interviews are the primary data collection techniques for gathering data in qualitative methodologies. Use of interviews helped to eliminate any conflicts and misunderstandings about the aim and objectives of the

study by respondents. The method facilitated flexibility of questions and also allowed for the observation and recording of non-verbal communication, thus increasing the quality and quantity of data collected. This method of data collection was of mutual benefit to both the interviewer and interviewees since the interview sessions provided a learning opportunity for both parties concerning the theoretical and practical aspects of records management, risk management and business processes.

3.5.2   Documentary Review

Documentary review was used to confirm or verify some of the data collected. The documentary evidence used by the researcher included paper materials such as memos, reports and plans, as well as computer files and other artifacts. Examples of the specific documents included the Moi University Strategic Plan 2005 − 2015; Moi University Report (2008); files from the Personnel registry; documented information accessed at the Moi University Website, among others.

The data collected from these documents confirmed the views of Slater (1990) who advises that in qualitative research, one should not neglect existing ready-made material. The documents and records, published and unpublished were used to provide information concerning the records management and risk management situation at Moi University.

3.6   RELIABILITY   AND   VALIDITY   OF   THE   RESEARCH INSTRUMENTS

3.6.1   Reliability

To ensure reliability of the data, the interview schedules used for data collection were carefully designed so that the questions could be comprehended and answered correctly. A clear explanation of the purpose of the interview was provided which

ensured that the responses were within the context of the study. Documentary review was undertaken in depth and in addition, continuous consultation with the researcher's academic supervisors was done. Reliable data was ultimately achieved which Kothari (2004) describes as a measure of the degree to which a research instrument yields consistent results or data after repeated trials.

3.6.2   Validity

"Validity is concerned with whether the findings are really about what they appear to be about" (Saunders, Lewis and Thornhill: 2007). To ensure validity of the study, the history surrounding the gradual evolution and development of the institution was checked and verified to ensure that only true facts were recorded. In designing the interview schedules which were the major data collection instruments, the researcher was guided by the study objectives and research questions. To eliminate ambiguity during interviews, the researcher clarified any questions and information that was not clearly understood by the respondents, thus ensuring that only relevant responses were recorded.

3.7   PILOT STUDY AND PRE-TESTING OF THE INSTRUMENTS

The reliability and validity of the interview schedules was tested in a pilot study using a pre-test checklist with the aim of identifying and correcting any defects in the research instruments and to test their ability to provide appropriate feedback. However, the pretest data was not analyzed together with the rest of the data collected in the study. This is in line with the view of Mugenda (2003) who states that the purpose of pre-testing research instruments is to ensure that, items in the instruments are stated clearly and have the same meaning to all the participants.

The pilot study was carried out before the actual data collection process commenced. One participant from each strata of the study population was selected to take part in the pilot study. The researcher ensured that these participants were not part of the actual study. Any shortcomings that were detected during the pilot study were corrected accordingly to ensure accuracy and reliability in the collection of data for the actual study.

3.8   DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Some aspects of quantitative research were used in the presentation and analysis of data using descriptive statistics. The data collected was analyzed thematically in line with the objectives and research questions of the study. The data was organized and the relationship between the categories established. Themes and categories were established using codes. The codes were used to identify specific information, facts, attitudes and feelings from the text. Tables and percentages were dominantly used to reveal the relationships between various variables. The researcher then made use of the information to answer the research questions. This process supported the statement made by Mugenda and Mugenda (2004) that data analysis is the process of bringing order, structure and meaning to the mass of information collected.

3.9   PROCEDURES AND ETHICAL CONSIDERATIONS

Since the researcher is an employee of Moi University, the data collection exercise progressed smoothly without any hitches. The researcher fully explained the study to the subjects in advance. Clear and accurate information about the research study was given to all the study subjects prior to the commencement of the study. They were informed about the aim and objectives of the study and their decision to participate in

the study was purely voluntary. During and after the study, the identity of all the respondents remained anonymous. The findings were treated with the utmost confidentiality and have only been used for purposes of this research. Data presentation, analysis and interpretation of the findings were done honestly and objectively by the researcher. Other ethical malpractices such as plagiarism were avoided. Finally, the preliminary findings of the study were explained to all the participants on completion of the study.

3.10 CONCLUSION

This chapter has discussed the methods and techniques used in investigating records management and risk management at Moi University. The main research procedure used for the study was the qualitative research method. As a result of the qualitative nature of the study, a small sample size was selected from the study population, which the researcher considered to be adequately representative as to allow generalization for the population. The research instruments used during data collection have been discussed, giving justification for their selection. Data presentation, analysis and interpretation have also been discussed.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1   INTRODUCTION

This chapter presents, analyses, and interprets the findings of the study. Data was collected from observation, documentary review and from face-to-face interviews of fifty (50) respondents. The data presentation is descriptive in nature and the analysis takes into account the study objectives. Data presentation was also structured along the study objectives and research questions. The following is the sequence of data presentation, analysis and interpretation:

1. Categories of respondents and interview response rate;

2. Analysis of business processes at Moi University;

3. Current state of records management at Moi University;

4. Problems experienced in view of the current state of records management;

5. Risks facing Moi University in relation its core mandate.

6. The role of records management in the mitigation of risks faced the institution.

7. Respondents' recommendations.

The study findings are presented as per the respondents' categories which comprised of staff from the Management, Deans, HODs, Senior Administrative Officers, ICT personnel, Records staff and Secretarial staff. Statistical data is presented using tables and figures.

4.2 CATEGORIES OF RESPONDENTS AND INTERVIEW RESPONSE RATE

4.2.1   Categories of Respondents

The total number of respondents interviewed was 50. They included six top Management representatives (12%), twenty-two senior level officers (44%) and twenty-two middle level staff (44%). The Management representatives included senior officers from the offices of the Vice Chancellor (VC), Deputy Vice-chancellor (Planning and Development), Deputy Vice-chancellor (Research and Extension), Chief Academic Officer (CACO), Chief Administrative Officer (CADO) and Finance Officer (FO).

The senior level officers included: seven HODs (14%), seven Deans of Schools (14%) and eight Senior Administrative Officers (16%). The middle level staff comprised eight ICT staff (16%), eight Records staff (16%), and six Secretaries (12%). The researcher chose to place the Deans of Schools and Heads of Departments in one category owing to the similarities in most of their duties and responsibilities.

The study further sought to find out the distribution of respondents per campus. Responses to this are shown in Table 4.1 below.

Table 4.1: Distribution of Respondents per Campus

Campus	Mngt. Reps.	Deans	HODs	SAOs	ICT	Records	Secretaries	Total Resps.	%
Main	6	5	4	3	4	5	6	33	66
College of Med.	-	1	1	2	2	1	-	7	14
Annex	-	1	1	2	1	1	-	6	12
West	-	-	1	1	1	1	-	4	8
Total	**6**	**7**	**7**	**8**	**8**	**8**	**6**	**50**	**100**

From Table 4.1, it is evident that Main campus was largely represented in the study (66% of the study sample) compared to the other campuses. This is because it is by far the largest campus, boasting of seven Schools and is in essence the headquarters for all campuses of Moi University. School of Medicine which has four Schools was second in the number of respondents, with seven staff (14%) participating in the study. Annex and West campuses had six (12%) and four (8%) staff respectively participating in the study.

4.2.2   Response Rate

A total of 50 respondents were interviewed, which was the study sample size. A response rate of 100% was achieved by the study, as indicated in Table 4.1 above. The researcher was able to affirm Kothari's view (2004) that using the interview technique to collect data ensures that samples can be controlled more effectively as there arises no difficulty of missing returns and non response generally remains very low.

4.3 BUSINESS PROCESS ANALYSIS OF MOI UNIVERSITY

One objective of the study was to conduct a business process analysis (BPA) to understand the kinds of activities that constitute the business processes of Moi University and the types of records generated by these processes. An understanding of business activities of the respondents was useful in establishing the importance of records management and risk management in the organisation. It was also intended to give an understanding of the business processes of Moi University and show how records management and risk management underpinned the business operations of the institution. The respondents in each category were asked about their business activities and the records created and/or received as a result of these activities. Their responses varied as discussed below.

4.3.1   Feedback from Management Staff

The top management were the key informants for this study since they were mainly engaged in decision making and policy formulation processes, which have a direct impact on the organisation's business processes. A total of six top management staff were interviewed. The respondents were asked about their key responsibilities and they cited the following:

- Strategic planning for the institution for example expansion, renovations and employment.

- Policy formulation and implementation.

- Resource mobilization through investments, sourcing for funds, links with other universities and so on.

- Review and monitoring of decisions approved by Council which is the highest governing body in the university.

- Management and accounting of funds, for example by approving procurement of goods and services and so on.

- Advice Council and government on issues concerning the institution such as litigation.

- Constitute various committees to perform specific functions, for example staff and students disciplinary Committees.

- Act as a bridge between the Council and staff of the institution.

Records created or received out of these activities include:

- Administrative records i.e. records resulting from day-to-day activities such as transport matters, fuel records, purchase, maintenance, policy and strategic records.

- Financial records such as records of salary payments (payroll), statements of accounts, expenditure receipts, budgetary records, fees payment reports, research funds, donations and grants records, among others.

- Architectural records such as maps and blue prints.

- Personnel records such as those pertaining to matters like disciplinary, training, staff development, expenditure, skills, labour requirements and costs.

- Students records for example population, performance, students' status and categories (for example gender, foreign students' records and records of students with special needs).

- Other records include circulars, minutes, notices, internal memos, correspondences, statistical records, audit and other reports.

The data from the respondents indicated that management staff were engaged in essential business processes which determined the continued existence of the institution. Their activities resulted in the generation of important records which also included vital records.

4.3.2   Feedback from HODs and Deans

The study sought to establish the business activities of HODs and Deans of Schools and the records thus generated. A total of seven HODs and seven Deans of Schools were interviewed, constituting 28% of the selected sample. The respondents indicated that their duties included:

- Participating in strategic planning on matters pertaining to the School and institution when called upon (for example staff establishment and introduction of new courses).
- Ensuring smooth running of departmental programs and activities.
- Overseeing the implementation of School programs on behalf of the VC.
- Course and syllabus development.
- Procurement of materials and equipment for the School/department.
- Supervision of staff.
- Attending meetings of Senate and other managerial activities.
- Representing the School/department on various Committees.
- Recruitment of staff for the School/department.
- Management and accounting of funds for the School/department.
- Liaison between the Schools/departments, VC and Top Management on important issues.

The records created and generated in the course of these activities included: Policy records; academic records (such as students' performance and course progress, internal and external examiners reports, School Boards and Departmental Committee reports, research reports, Conference papers and reports); financial records (such as statistical records and expenditure records); internal and external correspondences (like minutes, reports, circulars, notices, records on linkages with other academic institutions); personnel records (for example advertisements, interview reports, appointment letters, disciplinary letters and so on); Senate records, Council reports and other records of Management meetings.

Data from the respondents revealed that Deans and HODs were engaged in business activities which generated important records that required proper management for the efficient running of the institution.

4.3.3   Feedback from Senior Administrative Officers

The study targeted Senior Administrative Officers in the institution comprising of the Senior Principal Administrative Officers (SPAOs), Principal Administrative Officers (PAOs) and the Senior Administrative Officers (SAOs), in that order of seniority. Eight respondents were sampled and interviewed from this group, constituting 16% of the study population sample size. They were asked to explain their business activities and their collective responses were as follows:

- Performing duties relevant to their specific job designations, for example, the PAO-Recruitment co-ordinates duties pertaining to recruitment such as advertisement of positions, short listings, interviews and recruitment of various cadres of staff;

- Take part in strategic planning for their departments;

- SPAOs report to the Chief Administrative Officer (CADO) and Chief Academic Officer (CACO) and inform them on issues within their specific jurisdictions i.e. SPAO - CACO reports to Chief Academic Officer and SPAO- CADO reports to Chief Administrative Officer;

- Attending meetings on various committees;

- Staff Supervision;

- Coordination of University activities such as periodic ISO audits, inaugural lectures and graduation ceremonies;

- Implementation of decisions passed by Management;

- Procurement and accounting of funds;

- Monitoring and reporting;

- Act as a bridge between their departments and the Chief Administrative/Academic Officers.

Some of the records created by their activities included: administrative records, Personnel records, financial records, minutes, reports, circulars, notices, advertisements, expenditure records, Council, Senate and Management records, staff appraisal records, policy records, general committee reports, audit reports, monitoring and accounting records.

The study established that Senior Administrative Officers performed duties which generated many records which had to be properly maintained and availed when required to avoid risks to business operations.

4.3.4   Feedback from ICT Staff

The eight respondents in this category (16%) were asked to explain the business processes which they engaged in as part of their work and they cited the following responses:

- Systems administration and maintenance of ICT equipment.

- Networking and general ICT infrastructure.

- Maintenance of University website.

- ICT Policy formulation, interpretation and implementation.

- Provision of ICT training for staff in other departments.

- Database Management, systems administration and software development.

Regarding their business activities, the respondents indicated that they were mainly engaged in technically oriented activities which gave rise to various records such as:

- Policy documents,

- Systems maintenance records (weekly, monthly, and yearly);

- Internet infrastructure records;

- Internet users' and e-mail records;

- Inventory of ICT equipment;

- ICT training records;

- ICT staff records.

- Other records such as internal memos, various reports, circulars, minutes, procurement/purchase records, statistical and other financial records.

The respondents were further probed on whether the ICT department at Moi University has any role in managing electronic records in the organisation. The respondents reported that the ICT department only provides and maintains the servers

onto which departments keep their electronic records but has no control on the kind of records stored on the servers since the decision on what is to be stored on the servers is determined by the users.

The data collected indicated that ICT staff were mainly charged with the responsibility of ensuring information security in Moi University which surmounted to handling the threats to electronic records. Their activities resulted in the generation of various records, both electronic and manual, which required proper management.

4.3.5 Feedback from Records Staff

The eight respondents in this category reported to be involved in the following business activities:

- Receipt, capture and creation of records (both paper and electronic) – opening of files and data entry;

- Selection/appraisal and classification of documents possessing "record" qualities which include financial, administrative, historical, vital and legal values;

- Maintenance of records – ensuring that files are in good condition and that storage conditions in the records office are ideal.

- Retrieval of records for access – involves proper naming, storage and availing of records on request;

- Storage and security – restricting records access to authorized staff only;

- Disposition of records – carry out physical checks to identify non-current records and storing them separately as archives.

- Preparation of various reports such as file Census, financial, expenditure and accounting reports;

▪ Advice on procurement of records materials and equipment, and;

▪ Represent HODs in meetings when called upon, for example management and other committee meetings.

The records created and generated by their activities included: correspondences, minutes, circulars, inventories, vital records, administrative, personnel, students records, academic, financial records, legal records, statistical, Health/Medical records, Senate, Management records, audit and other reports.

The data collected revealed that the records staff at Moi University had the responsibility of protecting records throughout their life-cycle and availing them in a timely manner when required. This meant safeguarding the records from any risks or threats.

4.3.6   Feedback from Secretaries

The six participants in this category were sampled from the six Top Management offices included in the study. The interviews revealed that secretaries were involved in the following business activities:

▪ Receive and make official calls;

▪ Take dictation in shorthand and transcription;

▪ Handle incoming and outgoing mail;

▪ Creation, maintenance and storage of e-records, for example typing of drafts, reports and minutes;

▪ Deal with enquiries and;

▪ Receive and attend to visitors.

Records created out of these activities included: reports, minutes, circulars, internal memos, letters, budget records, personnel, administrative, medical records, correspondences, notices, statistics and other financial records.

The data collected from Secretaries indicated that they were an important link between the records custodians that is the Central Registry and the records creators and users in the institution.

The foregoing findings have brought to light a number of issues as discussed below:

An analysis of business processes in an organisation basically constitutes what is known as Business Process Analysis (BPA) exercise. As observed by Fineman et al (2001) in Ambira (2010), the first step to improving a process is to analyze it in order to understand the activities, their relationships, and the values of relevant metrics. Roper and Millar (1999) define BPA as an analytical framework that involves analyzing organisations as systems or the process of systematically and objectively gathering information about business systems and subjecting that information to formal analysis. This includes identifying broad organisational goals and supporting business areas and processes, and business process definition and decomposition.

In this study, BPA was undertaken in order to clearly depict the relationship between the three major elements of the study (records management, risk management and business processes of Moi University) based on the business activities of the selected respondents. The groups of respondents were purposively selected, based on their perceived risk exposures in relation to their work. In the study, six categories of respondents were selected as components and their business processes were identified

in order to come up with an informed view of the business processes of the entire organisation. The results of the BPA undertaken by the researcher revealed that all the respondents interviewed were engaged in records management related activities at various stages of the records life-cycle. An analysis of these Business Processes as presented by the respondents revealed that all 50 respondents interviewed in the study were involved (directly or indirectly) in activities relating to teaching, research and extension services, which form the core business (substantive functions) of Moi University. The Deans of Schools and some of the HODs (28%) are directly involved in these core activities while all the other categories of staff support the core activities (are engaged in facilitative functions) in various ways as depicted by their business activities.

Findings of the BPA revealed that a lot of records were generated (created and/or received) by Moi University in the course of its business transactions. The BPA also revealed that all business activities resulted in records and the record types generated depended upon individual business activities. This confirms the views of scholars such as Wamukoya (2000) who say that records are bi-products of business activities. The Central Registry which is located at the Main Campus is the main custodian of records for the institution. Other sub-registries such as the registries in other campuses, Students Registry, Recruitment and Training Registry and Health Unit Records Office and the records offices in some departments and Schools specialize in the management of specific groups of records.

4.4   CURRENT STATE OF RECORDS MANAGEMENT

The study set out to establish the current state of records management at Moi University. This was necessary in order to identify the ways in which the existing records management practices have contributed towards the institution's risk exposure and/or risk mitigation. The elements investigated to meet this objective revolved around the four actions of records care under the Continuum model identified by Millar (1997), that is, identification and acquisition; intellectual control; access, and; physical control.

4.4.1   Feedback from Management

The study sought to find out from this group of respondents, their awareness (or lack of it) of the significance of records management to the business processes of the organisation; existence of a records management programme or guidelines for the organisation; recruitment and training of records staff in the institution and; impact of the existing records management system on business processes.

Awareness of the Significance of Records Management to Business Processes

The study sought to determine whether top management was convinced that records management contributed positively to business processes of the institution. This was confirmed when all six respondents (100%) acknowledged that records management was significant in business operations and were all in agreement that records determine the efficiency of all business processes and must therefore be identified and managed properly. They however indicated that the institution had not been quick to embrace records management principles and was only recently awakening to this realization through the adoption and implementation of the ISO Quality Management

and Documentation Procedures manual which emphasizes good records management practices in all business processes.

Existence of a RM Program, Policies, Procedures or Guidelines

The respondents were asked whether any records management policies, program(s), procedures or guidelines have been formulated to guide records management activities. Five of the respondents (83.3%) reported that there was no such program or guidelines in the institution. However, one respondent (16.6%) said that it was possible that some departments and schools may have developed guidelines for the management of their own records but added that if such guidelines existed, they had not received formal approval by Management. All six respondents pointed to the ISO Procedures Manual as the only existing tool at present for attaining intellectual control over records in the organisation. Clearly therefore, there was no formally approved policy guiding the management of records in Moi University.

The respondents were further probed on the procedure for the management of archival materials in the institution. One respondent remarked:

> "Management approved the establishment of an Archives section within Margaret Thatcher Library for this purpose. However, the Library in collaboration with Central Registry should have formulated a policy that would guide the management of archives in the institution, which would see the Archives section in MTL become fully operational".

The other two respondents said the University's archives were kept by the registry and library but agreed that there was no policy governing their management. Clearly, the University's archival records were not properly managed.

Recruitment and Training of Records Personnel

The study sought to determine management's role in ensuring adequate staffing for the records management function in the institution by seeking their views on recruitment and training of records personnel. Three respondents (50%) said that management have in the recent past recruited adequate records management staff in the institution. Two of the respondents (33.3%) said that the institution lacked adequate records staff. One respondent remarked that:

"Although the institution has recruited trained records management personnel in the recent past, most of them were deployed to perform duties that were not related to their field of specialization".

The respondent further elaborated that a good number of staff with formal training in records management had been deployed to perform administrative duties in other departments or to the Library instead of being deployed to perform records related duties in relevant departments.

Regarding training of staff in records management, three of the respondents felt that the institution had created a conducive environment for staff to further their studies and as a result a good number of staff had gained training in the field at certificate, Diploma, Degree and Masters levels in the field of records management. Two of the respondents said that management continually facilitated training seminars for staff in

records management. Upon further probing, the respondent gave three examples of such training seminars organized for clerical staff in the institution. One was carried out in 2006 and was facilitated by Prof. Wamukoya and Prof. Kemoni who at the time of the study were both members of staff in the School of Information Sciences, Moi University. The second training was held in 2010 and was facilitated by Prof. Kemoni and Mr. Oyamo, both staff from the School of Information Sciences. The third and most recent training took place in June, 2011 and was facilitated by Massey who is also a staff at the School of Information Sciences, Moi University.

Impact of Existing RM System on Business Processes

The study sought to establish from the respondents, the effect of the current record keeping system on their work. All six respondents confirmed that the records management system was basically manual and acknowledged that the system impacted negatively upon business processes of the organisation. Some of the problems pointed out by the respondents as resulting from the manual records management system included:

- Delays in information retrieval;

- Files and records were in bad physical state due to poor storage equipment and mishandling;

- Missing files.

In the respondents' view, the manual records system contributed to poor service delivery in the organisation. They were however optimistic that this will be rectified by the on-going records computerization exercise at the institution. As explained by the respondents, the institution has embarked on a program that would see all sectors of the institution computerize their records within the current financial year, 2011/2012.

4.4.2   Feedback from Deans and HODs

The study sought to find out the following from the respondents: their awareness (and that of the staff working under them) of the significance of records management to the business processes of their Schools/departments; existence of a records management program, policy, procedures or guidelines in their Schools/departments; records management staffing and training; existing records management system(s) and their impact upon business processes.

Awareness of the Significance of Records Management to Business Processes

The respondents were asked whether they appreciated the importance of records management to business processes. All the respondents said they acknowledged the fact that records management was crucial in the running of the institution; hence they were all aware of the significance of records to business processes.

The respondents were also asked whether the staff in their departments and schools were aware of the importance of records management to business processes. Nine of the fourteen respondents (64.3%) said their staff were aware of the value of records management and attributed this to the efforts made by the management to sensitize staff on the importance of documentation as an essential ISO requirement. The occasional seminar trainings for clerical staff in the institution were also cited as contributing to staff awareness on records management. Five respondents (35.7%) said their staff were not aware of the significance of records management. They attributed this to the fact that some employees were recruited and deployed to perform records tasks yet they had trained in different fields.

Existence of RM Program, Policies, Procedures or Guidelines

Regarding the existence of a records management programme, policy, procedures or guidelines in their Schools and departments, all fourteen respondents (100%) admitted that they did not as yet have any such documents specifically designed for records in their Schools/departments. The only guiding document for them was the ISO records management procedures manual. Ten of the respondents (71.4%) reported that there was a lot of disorganisation in the general management of records in their sections.

Records Management Staffing and Training

The respondents were asked about the availability of trained records management staff in their Schools and departments, who were actually performing records management tasks. Three respondents (21.4%) said they had trained RM staff who were actually performing RM duties. They however pointed out that these officers were not properly placed in the administrative cadre in accordance with their professional qualifications. Six respondents (42.9%) said they had staff with records management qualifications who were deployed to their schools/departments to perform non-records management duties such as administrative duties. Five respondents (35.7%) however said they lacked staff with formal training in records management and therefore the records in their schools and departments were managed by untrained staff.

Existing Records Management System and the Impact upon Business Processes

The study sought to find out whether the system used to keep records in the departments and schools was manual, electronic or hybrid (manual and electronic). Seven of the respondents (50%) reported to be using the manual system exclusively

and attributed this to the slow process for procurement of computers in the institution and lack of trained records management and ICT staff in their sections. Consequently, paper records were the format of records in these sections. In contrast, the other seven respondents reported to be using the manual system but were at the same time in the process of inputting their records into an electronic system, hence they were using a hybrid system. This meant that paper records were being input into the computer systems although the manual system was still largely in use. None of the respondents had a purely electronic records management system in operation.

In reference to the effectiveness of the manual system in recordkeeping, the respondents cited a number of problems experienced which included:

- "Inadequate storage space for records";

- "Wastage of time during retrieval";

- "Loss of records";

- "Misfiling of records" and;

- "Overall inefficiency and poor service delivery".

In the sections where transition from manual to electronic record systems was underway, the respondents reported that the electronic records management system was beneficial to their business operations in the following main ways:

- "Enhanced space utilization";

- "Ease in retrieval and access of records";

- "Greater security and records storage" and;

- "Improved service delivery and efficiency in business operations".

4.4.3   Feedback from Senior Administrative Staff

The Study sought to find out from these respondents their awareness of the significance of records management for business processes; impact of existing record keeping systems upon service delivery and; challenges faced due to poor records management practices.

Awareness of the significance of records management to business processes

The study established that all eight respondents (100%) were aware of the importance of records management to the business processes of Moi University. However four of the respondents acknowledged that they first became aware of this significance as a result of the Implementation of ISO requirements. The other four respondents claimed to have had prior knowledge of records management from formal training.

Impact of Existing Records Management Systems on Business Processes

Views were sought from the respondents regarding the impact of the existing records management system on business processes. Six of the respondents (75%) said that the manual records management system had a negative impact upon business operations in the institution. The remaining two respondents (25%) said that the manual system was an "enabler" to service provision in the institution since it made it possible to get required information for the execution of business transactions. However, they reluctantly agreed that sometimes the records were not availed at the right time hence delaying processes. The respondents cited the following problems faced as a result of the current records management system:

- "Delays in accessing required records";

- "Missing/lost records" and;

- "Lack of adequate records management staff with up-to-date ICT skills".

4.4.4   Feedback from ICT Staff

The 8 participants in this category held various job designations such as Systems Administrator, Database Administrator, ICT Planning Officer and ICT Technician. The study sought to find out the following from the respondents: e-records management (ERM) practices in the department and existing e-records Policy/program/procedures.

State of E-records Management

The respondents were asked whether there were any records management practices being undertaken for the e-records handled by the ICT department. All of the respondents agreed that the management of e-records was being practiced from an IT perspective as opposed to a Records Management perspective. One respondent noted that:

> "The ICT department is the overall manager of the institution's e-records since it provides the storage space upon which the records are stored. In other words, The ICT department avails the "server" for e-records".

Another respondent added that:

> "Even though there are a number of Management Information Systems (MIS) such as the Financial Management Information System (FMIS), Human Resource Information System (HRIS) and the Alumni Information System (AIS), the ICT department only provides the technical support to maintain the records created and stored in these systems".

Existing ERM Policy/Program/Procedures

Regarding the existence of a Policy governing the management of e-records in the department and institution as a whole, the respondents concurred that there was no such document. They added that the only formal document available was the ICT policy for Moi University which was first written and approved in 2003. The policy has since been revised and the 2009/2010 edition is awaiting approval by the University Council.

4.4.5   Feedback from Records Staff

The study sought to establish the following from the eight respondents in this group regarding the current state of records management at Moi University: existing records management programs/Policies/Procedures; awareness of the existing records management Programs/Policies/Procedures; level of professional training relevant to records management and; management of e-records.

Existing Records Management Programs/Policies/Procedures

The study sought to find out from the respondents whether there were any records management programs, policies or procedures in the organisation. Five of the respondents (63%) said no such documents were in existence in their departments. They admitted that they managed their records in accordance to the ISO requirements for records management. However, one of the respondents pointed out that due to the unique nature of some records (for example the medical and finance records) management of such records had not been addressed by the document. The respondent from the Finance department reported that the management of financial records was guided by the Financial Regulations Policy which was a government

document and the ISO Procedures Manual. Two of the respondents (25%) were completely ignorant of whether or not a records management program, policy or procedures existed in the institution.

Knowledge of Existing RM Procedures

Having established that records management operations in the organisation were mainly guided by ISO procedures on documentation, the study sought to find out the respondents awareness of these procedures. Five of the respondents said they were very conversant with the documented procedures and were implementing them to the best of their ability. One respondent, a records officer in charge of medical records pointed out that in some areas the ISO procedures could not be applied to medical records for example, on disposal. However, two of the respondents said they were not familiar with any records management procedures.

Level of Records Management Training

In order to establish their suitability for records management work, the respondents were asked to state their formal qualifications. Table 4.2 contains a summary of their responses.

Table 4.2: Responses of Records Staff on Highest RM Qualifications

Level of RM Training	No. of Times Cited	Percentage (%)
Masters (Mphil)	-	-
Bachelors Degree (Bsc)	2	25
Higher National Diploma	-	-
Diploma	3	37.5
Certificate	2	25
None	1	12.5
Total	**8**	**100**

As presented in Table 4.2 above, none of the respondents had a Master of Philosophy degree in Information Sciences, two of the respondents had bachelors' degrees in Information Sciences (records management option), two had Diplomas in Information Sciences (Library Studies option) while one respondent had a Diploma in Information Sciences (records management option). Two respondents had Certificate in records management while the last respondent was a Form four leaver with no formal training in records management. Thus 87.5% of the respondents in this category had formal training in records management.

State of E-records Management

The respondents were asked to comment on the management of e-records in their departments. All of the respondents reported that they handled electronic records. They all said that their departments were in the process of computerizing their paper

records. The researcher confirmed that the Central Registry was in the final stages of creating a human resource database for the personnel records, while the Finance department was running a pre-test of the newly introduced FMIS which stored student records, payroll, financial accounts and budget records among others. The Health Services department was also in the process of creating a system for the Medical records while Students Registry had a complete database of all student records from the year 2004. However it was evident that the manual records management system was relied upon to a greater extent in comparison to the computerized system.

When asked whether the requirements for secure and trustworthy e-records were being put into consideration for the e-systems being developed, the respondents all said that they were using passwords to ensure security of records. When probed further on the type of passwords used it became apparent that the issue of ensuring security for e-records was not taken seriously.

4.4.6   Feedback from Secretaries

In line with determining the current state of RM in the institution, the study sought to establish the following from the six respondents in this category: their awareness of the significance of RM to business processes; knowledge of existing guidelines on RM and; satisfaction with the current system of RM.

Awareness of the Significance of RM to Business Processes

All the respondents displayed good understanding of records management and reported that they were quite aware of the importance of records to business functions. One respondent observed that: "without records management a business will inevitably close down."

When probed on their possession of practical records management skills, another respondent pointed out that: "records management is taught as a unit in a course called Office Practice in Secretarial studies."

Knowledge of Existing Guidelines on RM

When asked if they were aware of any formal document that stipulates guidelines on RM in the institution, all 6 respondents said they were conversant with the ISO procedures on records management, apparently because they were attached to Management staff where they were expected to be conversant with all university policies and programs.

Satisfaction with the Current RM System

All the respondents said that they used computers to create, receive and store records. They also admitted that despite having computers, they still worked more with paper records than e-records.

Regarding the efficiency of the manual records management system, one respondent said she was fairly satisfied with the system in the institution. The other respondents were dissatisfied with the manual system since it reduced efficiency in work performance. One respondent said that: "the manual system is very inefficient since getting files from the registry is a nightmare".

The respondent further explained that sometimes it was impossible to trace the exact location of a file which was out of the registry, thus delaying the decision making process by action officers.

The findings above generally revealed a state of poor records management practices in Moi University. There was evidence of an organisation slowly awakening to the realization of records management as an essential and important element in the success of business processes. Majority of the respondents interviewed acknowledged that indeed records management was significant in the business processes of Moi University but as the study progressed it became evident that formal recognition of records management was yet to be realized. In spite of the institution being in existence for close to 26 years (as at the time of this study), no formal records management program or policy has been formulated for the institution. The study revealed that Moi University is currently in the process of implementing the ISO procedures on records management as part of the requirements of conformity to the International Standards organisation.

The findings also revealed that no records management programme, procedures or guidelines were in existence in the institution. This confirms the observations made by scholars that there is generally inadequate recognition of the importance of records as evidence and senior officials often tend not to recognize the need for, or value of, effective records programmes (Millar, 2004; Ngoepe and Van der Walt, 2009). One of the records respondents from Finance department (16.6%) reported that the department had a RM policy known as the Financial Regulations Policy document. On further probing it became evident that the policy was indeed a government document and hence not specific to Moi University. Clearly, the institution does not have any formally laid down guidelines to streamline the management of records in the organisation from their creation to disposal. A good number of the respondents were also ignorant of the ISO procedures for RM. Thus, lack of a RMP and ignorance

of the RM guidelines in use was the major cause for the poor state of RM in the institution, posing a wide range of risks to the institution.

According to the study findings, the institution does not have adequate records management staff to perform records-related duties. This was evident during the interviews which revealed that in most departments and schools, records management duties were performed by clerks, most of whom were not trained in records management. The few trained records management staff were not well placed in the organisation in comparison to their qualifications while others were deployed to perform none-records related duties. This resulted in demoralization amongst the records management staff, which affected their work performance. This affirmed the observations made by IRMT that in the government ministries of many African countries, records management is widely seen as a lower grade service area, and virtually no attention is given to the way information is created, structured and managed (IRMT, 1999).

It was also evident from the findings that the institution did not prioritize training for records management staff. Mnjama (2004) warns that despite high value of records management, there is a tendency to see RM as a trivial activity, that is routine and not core to business functions. Githaka (1996) argues that the major constraints hampering the development of archival services in Kenya should be attributed to quality and quantity of staff. This is a reflection of the records management staffing situation at Moi University which has led to people-oriented risks such as non-performance and poor service delivery.

The findings from all the respondents revealed that the records management system in the institution was predominantly manual, though mechanisms were in process to transfer to a computerized records system. Most of the respondents reported dissatisfaction with the manual system, indicating that it gave rise to a lot of challenges in records management activities, some of which included: shortage of storage space for records, delays in retrieving required records, loss and misplacement of records, wear and tear, lack of control over records resulting in records being accessed by unauthorized persons, among others. These findings show that majority of the respondents were of the view that the manual records management system was the prime cause for poor service delivery and hence inefficiency in business processes. This exposes the institution to operational, reputational, financial and other risks.

The study finding also revealed that computerization of the manual records management system was at its infancy stages in Moi University. This being the case, there was as yet no program or policy governing e-records management in the institution. Most of the respondents revealed that computerization of records was underway in their sections. However the findings revealed that the process was in most sections not managed by professional records management staff and hence the requirements for good e-records were not being incorporated into the system. In a previous study undertaken to investigate the management of e-records at Moi University, the author states in her findings that "it was apparent therefore, that the creation and receipt of electronic records did not adhere to any records management principles or policy" (Nasieku, 2010). Mnjama (2004) fully captures the challenges posed by the adoption of ERM when he observes that "although the introduction of

information and communication technologies in government ministries and departments might have been hailed as a major step towards improved information-processing provision, it has had negative effects on the development of an efficient records management program. First, the introduction of ICTs has led to an increase in the generation of paper records, especially accounting records. Second, the introduction of computers and the incorrect assumption that automation is the only way of providing quick and accurate information for decision making, leading to a neglect of the management of paper-based records, which still constitute the vast majority of recorded information in the country. Finally, no efforts have been made to link the use of computers with an efficient records management program." The study found this to be the situation at Moi University. Paper documents were printed unnecessarily, resulting in proliferation of paper records which were poorly managed and took up office space unnecessarily. This situation has exposed the institution to operational, financial and system risks.

4.5 PROBLEMS EXPERIENCED DUE TO THE CURRENT STATE OF RECORDS MANAGEMENT

The third objective of the study was to identify the problems faced by Moi University as a result of the poor state of records management at the institution. Data was collected from 22 respondents comprising of ICT staff, records staff and secretaries (44%). These were the people involved in the actual records management activities unlike the Management staff, HODs, Deans and Senior Administrators who create and use records (action officers). The respondents were asked what records management problems they faced at the institution and how they overcame these challenges.

4.5.1 Feedback from ICT Staff

All 8 respondents in this category admitted facing many records-related problems and cited the following:

- "Poor management of e-records due to lack of a specific ERM policy ";

- "Lack of staff with skills in systems and records maintenance e.g. digital preservation skills, resulting in problems of inefficiency in managing e-records";

- "Changing technologies have given rise to issues of compatibility and operability of old and new systems";

- "Poor maintenance of computers and storage devices by IT personnel";

- "Ensuring data integrity and security is a challenge";

- "System failures and virus attacks";

- "Offering ICT services to staff in other departments who lack computer literacy skills" and;

- "Hardware & software obsolescence".

The study also sought to establish from the respondents how they attempted to overcome the challenges faced. They gave the following responses:

- "There is a plan to integrate ERM in Moi University ICT policy";

- "The department has been organizing continuous training programs for ICT staff";

- The ICT Director has been advising management to recruit more ICT staff";

- "Enhancement of system security";

- "Acquisition of modern ICT equipment";

- "The department has also been facilitating ICT training for staff in other departments".

4.5.2 Feedback from Records Staff

The study also sought to establish the major challenges faced by records staff in the management of records from the 8 respondents in this category. Their responses were as follows:

- "Manual records management system inefficiencies, resulting in delayed information access, loss and misplacement of records, records security problems, space problems, among others";

- "Lack of formal guidelines for records management has contributed to the current state of poor records management at the institution";

- "Insufficient funding for records management has been a drawback in the execution of records management activities, resulting in overall organisational inefficiency";

- "Inadequate skilled RM staff has negatively affected professionalism in the records management function in Moi University" and;

- "Low Grading of RM staff consequently has given rise to low staff morale and poor performance amongst records staff, resulting in poor service delivery".

The above cited challenges identified by the respondents correspond accurately with Mnjama's (2004) assessment of the reasons behind the poor state of registries in public institutions. He observes that "perhaps the poor state of record keeping practices in Kenya can be explained by:

- failure by senior management to establish acceptable records management goals and practices;

- failure to hire competent and qualified staff in the area of archives and records management;

- failure to provide adequate storage facilities, thus causing registry staff to lose morale and motivation;

- failure to encourage training in the area of archives and records management;

- failure to provide financial and administrative support to those involved in registry work;

- failure to provide close supervision of those engaged in registry work;

- failure to implement various recommendations on the management of records; and

- emphasis on the introduction of information and communication technologies as a means of solving information management problems at the expense of developing paper-based records management systems."

Asked how these challenges were addressed in order to mitigate risks faced, the respondents gave the following approaches:

- "Up-scaling of computerization efforts";

- "Individual departments lobby for recruitment of skilled records staff and continuous training of existing staff";

- "Individual departments request for additional funding, specifically for records management activities".

4.5.3 Feedback from Secretaries

The study sought to establish from secretarial staff the challenges they faced in the management and handling of records, both paper and e-records. They cited the following challenges:

- "Lack of skills and knowledge in records management, especially ERM";

- "Lack of a records management policy in the institution";

- "Delays in getting required records from the registry";

- "Ensuring security and integrity of data/records" and;

- "Hardware and software obsolescence".

The respondents indicated that the above challenges were addressed in the following ways:

- "Enrolling in the on-going ICT staff training program";

- "Seeking clarification from registry staff when in doubt";

- "Using passwords and securities on computers and proper storage of paper records";

- "Requesting for state-of-the art computers and storage equipments for records".

From the foregoing findings, it is evident that poor records management practices at Moi University have had a negative impact upon business processes in the institution as a whole. Mat-Isa (2005) points out that most organisations have neglected good recordkeeping practices thus exposing themselves to risks from various quarters. This is true of Moi University where the records management function has been neglected, consequently causing problems of inefficiency in business processes.

Lack of records management guidelines was highly cited as the major cause of records management problems in the institution. Specifically, the study was able to establish that lack of a records management program for the institution has resulted in lack of uniformity in records management practices. According to the University of Texas State (2009) the records management program is in itself a risk management tool. Therefore the non-existence of a records management program is a menace to risk mitigation at the institution.

The study findings revealed that Management has not prioritized capacity building for records management in the institution. This was confirmed by the respondents' sentiments that there were few trained records management professionals and most of the records staff employed were wrongly placed in comparison to their qualifications. This scenario at Moi University prevails in spite of the requirement by the International Standard for the development of records management programmes, ISO15489-2 *Information and Documentation-Records Management-Part II*, which emphasizes the importance of records management policies and support for records management from senior management of an organisation (International Standards Organisation (ISO) 2001b). Lack of adequate trained staff in records management has led to the problem of lack of professionalism in records management activities which in turn has impacted negatively upon business processes.

The respondents also pointed out shortcomings such as the inadequacies of the current manual records management system, along with the slow pace at which computerization of the records system is moving. Strained records management budgets also featured as a big hindrance to the success of records management in Moi University. These problems and many others were seen to be sources of risk exposure for the organisation.

4.6   RISKS FACING MOI UNIVERSITY IN RELATION TO ITS CORE MANDATE

The fourth objective of this study was to determine from the views of the respondents, the key risks facing Moi University in relation to its core mandate. The question was directed to the Management, Deans and HODs, ICT staff and records staff. Senior

Administrative staff and Secretaries were excluded for purposes of avoiding duplication of data on risks faced. The risk rating used was based on the Victorian Auditor-General's Office (2004) categorization of risks facing organisations.

4.6.1 Feedback from Management

The six respondents in this category were asked to state the risks they faced in their work as top management staff in Moi University, in relation to the institution's core mandate. Table 4.3 depicts their responses.

Table 4.3: Risk Rating for Management Staff

Risk Type	No. of Times Cited	Percentage (%)
Strategic Risks	6	100
Commercial Risks	1	16.7
Operational Risks	6	100
Financial Risks	6	100
Compliance Risks	4	66.7
Technical Risks	2	33.3
Systems Risks	2	33.3

Table 4.3 above indicates that from management's point of view, the highest type of risks faced were strategic, operational and financial. Strategic risks arise mainly from making uninformed or delayed decisions. The operational risks include: market demands – Moi University has been expanding rapidly; uncertainties in value creation

potential for new business opportunities; regulators, rating agencies, among others. Financial risks cited by the respondents included: frauds, financial mismanagement, inadequate funds, risks to electricity supplies, high medical costs, dealing with regulators, delayed fee payments and many others. Technical and systems risks were each cited by two respondents while commercial risks were cited by one respondent who said that Moi University was presently channeling a lot of effort towards maintaining a competitive edge over other universities in the country.

4.6.2   Feedback from Deans and HODs

The respondents were asked to state the risks facing Moi University and their responses were as shown below.

Table 4.4: Risk Rating for Deans and HODs

Risk Type	No. of Times Cited	Percentage (%)
Strategic Risks	14	100
Commercial Risks	5	35.7
Operational Risks	12	85.7
Financial Risks	10	71.4
Compliance Risks	9	64.3
Technical Risks	4	28.6
Systems Risks	3	21.4

As shown in Table 4.4 above, operational, strategic, financial and commercial risks were highly cited by this group of respondents. Operational risk was rated highly by respondents who felt that business processes in their departments/schools were not undertaken as required due to inadequate trained staff. Strategic risks were said to be high because of the impact caused by delayed or wrong decisions which affected organisational objectives. Asked to explain their views on why financial risks featured highly, one respondent said that delays in fees payment was a hindrance in the implementation of academic and administrative activities while another said that the lengthy formalities involved in getting approval for funds in many cases led to delays in carrying out urgent business processes and in some cases, some activities completely failed to be undertaken. High operational expenses, fraud and corrupt dealings by staff were also pin-pointed as sources of financial risks in the institution. Compliance risks were attributed to lack of policies and regulations governing specific business operations. Technical and systems risks were also noted, albeit on a smaller scale due to problems such as lack of adequate staff who are computer literate and lack of modern technologies for information management.

4.6.3 Feedback from ICT Staff

The respondents in this group were asked what type of risks they faced in relation to their work as IT professionals in the institution due to poor records management. The respondents demonstrated satisfactory understanding of the risk management concept. One of the respondents explained that:

> "From an IT perspective, risk is the harm to a process or the related information resulting from some purposeful or accidental event that negatively impacts the process or the related information."

The risks cited by these respondents are shown in Table 4.5 below.

Table 4.5: Risk Rating for ICT Staff

Risk Type	No. of Times Cited	Percentage (%)
Strategic Risks	8	100
Commercial Risks	2	25
Operational Risks	6	75
Financial Risks	4	50
Compliance Risks	4	50
Technical Risks	7	87.5
Systems Risks	5	62.5

From Table 4.5, it is evident that the prevalent risks cited by the ICT Staff were strategic risks, followed by operational, technical and systems risks. The respondents explained that they faced financial risks such as the escalating costs associated with maintaining an increasingly complex technology infrastructure; operational risks associated with service interruptions and system security breaches; and strategic risks resulting from shifting public policy concerns regarding privacy, identity theft, and public liability. In summary the risks cited were due to the following threats given by the respondents:

▪ Accidental Disclosure - The unauthorized or accidental release of classified, personal, or sensitive information/records.

▪ Alteration of Software – An intentional modification, insertion, deletion of

operating system or application system programs, whether by an authorized user or not, which compromised the confidentiality, availability, or integrity of data, programs, system, or resources controlled by the system. This includes malicious code, such as logic bombs, Trojan horses, trapdoors, and viruses.

- Bandwidth Usage - The accidental or intentional use of communications bandwidth for other than intended purposes.

- Electrical Interference/Disruption - An interference or fluctuation may occur as the result of a commercial power failure. This may cause denial of service to authorized users (failure) or a modification of data (fluctuation).

- Intentional Alteration of Data - An intentional modification, insertion, or deletion of data, whether by authorized user or not, which compromises confidentiality, availability, or integrity of the data produced, processed, controlled, or stored by data processing systems.

- System Configuration Error - An accidental configuration error during the initial installation or upgrade of hardware, software, communication equipment or operational environment.

- Telecommunication Malfunction/Interruption - Any communications link, unit or component failure sufficient to cause interruptions in the data transfer via telecommunications between computer terminals, remote or distributed processors, and host computing facility.

When probed further on whether there were any guidelines or instructions in the department governing the management of e-records, the respondents said that there was no specific policy governing e-records management. They admitted that as IT professionals, records management was not a priority area and said that this was the responsibility of individual departments and schools in the institution.

4.6.4   Feedback from Records Staff

The records staffs were asked what risks they were exposed to in the course of their records management activities. The table below gives statistical representation of their responses.

Table 4.6: Risk Rating by Records Staff

Risk Type	No. of Times Cited	Percentage (%)
Strategic Risks	8	100
Commercial Risks	1	12.5
Operational Risks	7	87.5
Financial Risks	5	62.5
Compliance Risks	7	87.5
Technical Risks	5	62.5
Systems Risks	2	25

As shown in Table 4.6 above, strategic and operational risks were cited highest by the respondents. One respondent remarked that: "the bad state of records management has had a lot of strategic implications upon the institution".

Inadequate records management staff was pointed out by the respondents as a prevalent source of operational risk in the institution while all the respondents cited lack of modern computers and records storage equipment as a source of technical and systems risks. The respondents also cited the lack of a records management program, policies and guidelines as being the cause of compliance risks in the institution.

The Australian and New Zealand Risk Management Standard, AS/NZS 4360:2004, defines risk as the chance of something happening that will have an impact on planned achievements. From the foregoing findings, it is quite clear that the business processes of Moi University are not free of risks, confirming Maya's (2008) sentiments that "risk is a fact that all organisations come across and that gains importance in organisational life." He adds that "organisations face several risks due to possible changes in themselves and in their environment and those who manage these risks successfully can survive, thus restoring themselves. Maya (2008) adds that "risk is a very critical input for educational organisations because all educational practices bear a certain level of risk. Therefore, it is important to analyze risk correctly and to manage it in a successful manner." From the study findings, it is evident that all the respondents faced risks in the course of their daily business transactions.

According to the Victorian Auditor-General's Office (2004), risks facing organisations can be categorized into: strategic risks (risks to the agency's direction, external environment and to the achievement of its plans); commercial risks(risks of commercial relationships, such as failed contractual relationships); operational risks (risks to core business activities, such as inadequate human resources, physical damage to assets or threats to physical safety); technical risks (risks of managing assets, such as equipment failure); financial and systems risks (risks with financial controls and systems, such as fraud) and compliance risks (risks to meeting regulatory obligations). The study used the Victorian Auditor General's Office approach to identify the risks facing Moi University in relation to its core mandate (teaching and learning).

Basing upon the Victorian Auditor-General's Office (2004) categorization of risks, below is a comparison of risk ratings as provided by the respondents:
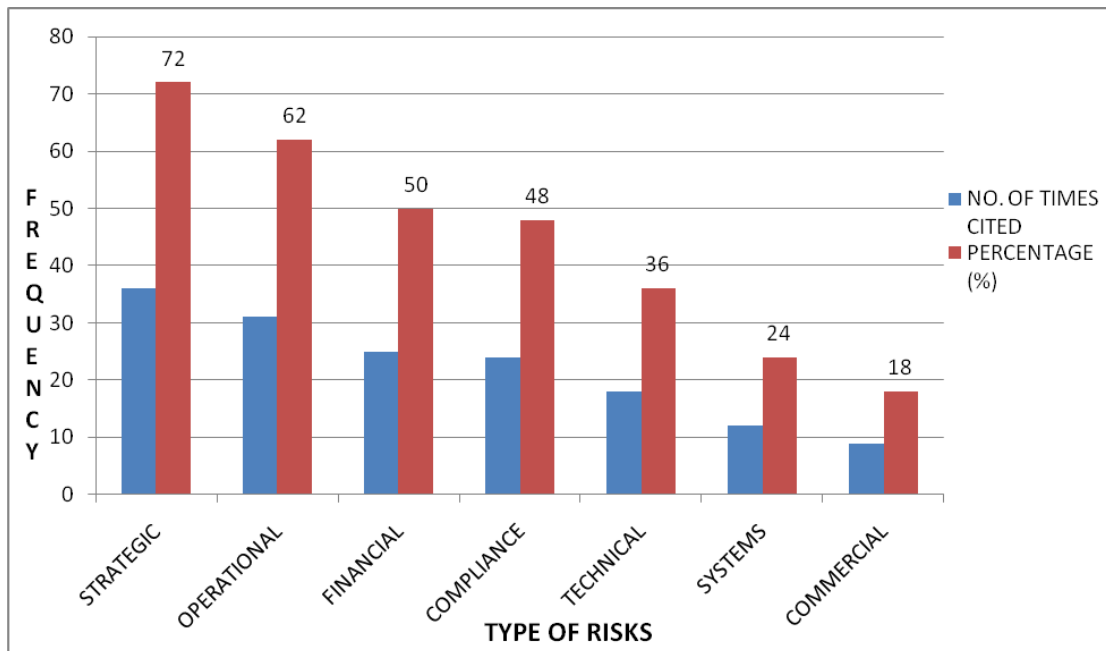
Bar Graph 4.1 Risks Facing Moi University in Relation to its Core Mandate

The bar graph above reveals that strategic and operational risks were the highest risks facing Moi University. Strategic risks were cited by 36 respondents (72% of the total 50 respondents). Since all Universities are in the business of imparting knowledge through teaching and research, measures have to be strategically laid down to ensure that this goal is realized. This means that universities are constantly facing strategic risks as a result of uncertainties in laying down strategic agendas. Strategic risks at the institution were noted in the form of threats such as increased competition from other Universities, reputational damage, changing market demands (of graduates), keeping pace with technological innovations, and capital availability, among others.

Operational risks ranked second as the prevalent risk types in Moi University, having been cited by 29 respondents (58%). According to the Comptroller's Handbook (2000), operational risk is risk arising from fraud, inability to deliver products or services, human error, management failure, inability to maintain competitive advantage, faulty controls and inability to manage information. The respondents who cited operational risks pointed out threats such as inadequate staffing, lack of adequate trained staff, and the current information system (not fully automated) as being sources of operational risk exposure in the institution.

Financial risks were third in rating, having been cited by 25 respondents (50%). Some sources of financial risks cited by respondents included delays in fees payments, financial mismanagement, inadequate funding, too many formalities involved in getting approval for funds, high operational expenses, payment of claims, fraud and corruption cases, among others.

Marobella, (2005) observes that business records should be managed so as to comply with regulatory, legal and ethical requirements. The author also adds that compliance is mainly concerned with information integrity, privacy and records retention. The findings for the study revealed that compliance risks were cited by 24 respondents (48%). These were due to non-conformity to policies, regulations and other laid down guidelines. Notably, compliance risks were cited by 7 out of 8 records staff who all felt that the institution was exposed to risks due to lack of compliance with legal frameworks governing records management. Besides the recently formulated ISO guidelines on the general management of records in institutions there is a general ignorance of existing legal regulations governing records e.g. the Public Archives Act

1965, Cap 19 which governs records disposal and the financial orders issued by the government guiding the disposal of accounting records, among others.

Technical risks were cited by 18 respondents (36%) and these were mainly respondents from ICT and records staff. 12 respondents (24%) cited systems risks and these were mainly respondents from the ICT department. The technical and systems risks were mainly attributed to lack of modern technologies for records and information management and inadequate skilled manpower to manage e-records. Most of the respondents complained that they lacked state-of-the-art equipment, especially computers in their offices. This was found to be one of the factors contributing to poor service delivery in the institution. Many of the respondents admitted having enough computers but said that they still experienced inefficiencies in their business operations since their systems lacked software designed to undertake their specific business processes.

Last but not least, commercial risks were cited by 11 respondents (22%). These were attributed to the harsh competition that was now a reality for Moi University which was struggling to maintain a lead over its business competitors.

The above findings confirm Maya's (2008) views on risks in educational institutions. He notes that risk management is critical for educational organisations in two ways. Firstly, educational institutions are established through decision-making processes and come across several problems during their existence. Since decisions taken within the educational organisations may be either correct or incorrect, educational administrators assume the risks that can occur if the approved decision is incorrect.

Secondly, the basic element in educational institutions is human beings and cost of educational activities is high." Thus, the risks facing educational institutions are mainly strategic, operational and financial risks.

Another important finding under this objective was that the risk management process is foreign to a large percentage of the university population. A few of the respondents displayed a good understanding of the risk management concept. The researcher in most cases had to go to great lengths to explain the concept to the respondents before proceeding with the interviews. Those who understood the concept however admitted that their understanding was only theoretical and not from any practical experience since the risk management concept was yet to be embedded in the business operations of Moi University.

4.7   THE ROLE OF RECORDS MANAGEMENT IN RISK MITIGATION

The fifth objective was to find out how records management practices have contributed towards risk mitigation in Moi University. The respondents were interviewed on the impact of the current records management practices on risk management in the institution. This question was directed at the Management staff, Deans and HODs, and the Senior Administrative staff, who are the users of records. Records staff, ICT and Secretarial staff were not required to respond to the question because they were mainly concerned with the maintenance and custody of records. The questions directed to the respondents were on the following aspects:

- Whether records management is a method of risk mitigation;

- How records management acts as a tool for risk mitigation, and;

- Combining records management and risk management strategies to improve business processes.

4.7.1 Feedback from Management

Records Management as a Method of Risk Mitigation

All six respondents (100%) acknowledged that proper records management was a means for realizing risk mitigation. They voiced different views to this effect, for example:

- "Records management aids in making informed decisions on matters of organisational importance";

- "Proper records management ensures that records responsibility is clearly outlined";

- "Records management makes it possible to carry out audits and reviews to ensure that the laid-down strategic plans and core mandate of the institution are obtained".

- "Records management reduces financial costs for the institution by availing documentation on organisational funds and helps to curb frauds and corruption";

- "Records management cuts down on litigation costs by availing records required as evidence".

The Role of Records Management in Business Risks Mitigation

The respondents were all in support of an approach which would combine records management and risk management strategies so that greater efficiency will be realized in business processes by mitigating business risks. They gave the following views:

- "Using records management as a tool in risk management will result in improved business processes".

- "Records management + risk management = efficient service delivery"

- "Combining records management and risk management will propel the organisation towards the realization of set goals and objectives.

4.7.2   Feedback from Deans and HODs

Records Management as a Tool for Risk Mitigation

The 14 respondents were asked to give their views on whether or not they believed records management was a tool for risk mitigation. 8 of the respondents in this category (57%) felt that records management aided in risk mitigation while four of the respondents (29%) said that they did not believe that records management could be used as a risk mitigating tool. The other two respondents (14.3%) said they had no understanding of the risk management concept and hence said they did not know. The respondents who opined that proper records management served to mitigate risks in the institution cited supporting views as summarized below:

- "The newly introduced FIMS has aided in increasing efficiency in the management of fee payment records and other financial information, thus reducing financial risks".

- "The ISO procedures on records management have helped streamline RM, lifting the profile of records management in the institution, thus improving on compliance".

- "Records management has enhanced decision making by facilitating access to required information, thus contributing to efficiency in business operations".

- "Records management has helped improve staff performance, improving service delivery in the institution".

Records Management, Risk Management and Business Processes

When asked about their views on whether combining records management and risk Management will have any impact upon business processes, all the respondents concurred that improving records management and adopting risk management will indeed improve the business processes of the institution.

4.7.3   Feedback from Senior Administrative Staff

Records Management as a Tool for Risk Mitigation

The eight Senior Administrative Officers were asked to give their views on whether records management played any role in risk mitigation. Five of the respondents in this category (63 %) felt that records management practices were a method of mitigating business risks while two respondents (25%) disagreed. One respondent (13%) said she did not know whether this was true or not.

The 5 respondents were asked to explain how records management has aided in risk mitigation in the institution and they gave the following responses:

- "Ensures that all records pertaining to business processes are properly kept and availed when required, thus enabling timely decision making".

- "Records management has improved service delivery, giving the institution a competitive edge over other institutions".

- "Records management provides a mirror for accountability in all business transactions".

- "Introduction of electronic records management practices has improved the image of the institution and its reputation".

Records Management, Risk Management and Business Processes

The respondents were interviewed on whether records management and risk management should be integrated into the business operations of the institution. All the respondents were in support of this, saying that more efficiency will be realized when this is done.

The foregoing findings show a clear relationship between records management and risk management. For an organisation to implement risk management strategies successfully, records management is critical. 19 Out of 28 respondents (68%) felt that the records management function in the institution acts as a risk mitigating tool in the institution. These findings confirm the nexus between records management and risk management in that while poor records management will result in risks in an organisation, good records management practices will enhance risk management.

Among the reasons given by respondents in support of records management as a tool for risk management were that it is important in strategic decision making, helps cut down on costs, reduces risks from litigation, and improves staff performance, among others. The findings strongly point to the possibility of adopting a records management-cum-risk management strategy aimed at improving business processes in the institution. All of the 28 respondents interviewed on this aspect (100%) agreed that combining records management and risk management was likely to have a positive impact upon business processes by improving on efficiency.

4.8   RESPONDENTS' RECOMMENDATIONS

The study sought recommendations from the respondents on how to improve records management and risk management practices at Moi University and their varied responses were noted as below.

4.8.1   Recommendations Made by Management Staff

1. "Sensitize management staff on records management and risk management";

2. "Revise the institution's strategic plan to prominently feature records management and risk management practices";

3. "Set up a department headed by a risk manager to oversee risk management in the institution";

4. "Increase funding for RM functions";

5. "Capacity building through recruitment and training of RM staff";

6. "Hasten computerization of the RM system throughout the institution".

4.8.2   Recommendations Made by Deans and HODs

1. "Sensitize all managerial staff on risk management";

2. "Capacity building through recruitment of records staff and training of existing staff";

3. "Formulate policies addressing records management and risk management";

4. "Employ a Records Manager to oversee records management activities in the institution";

5. "Speed up computerization of records';

6. "Increasing allocation of funds for RM activities".

4.8.3   Recommendations Made by Senior Administrative Staff

1. "Conduct workshops and seminars to train and sensitize all staff on records management and risk management";

2. "Recruit more records staff and deploy them to perform records management duties";

3. "Speed up computerization of records in the institution";

4. "ICT staff should facilitate inter-connectivity among all campuses to enable knowledge and information sharing";

5. "Prioritize computerization of registry functions to ensure efficiency in registry operations";

6. "Allocate additional funds for records management activities in all sections of the institution".

4.8.4 Recommendations Made by ICT Staff

1. "A comprehensive RMP that addresses both paper and electronic records should be formulated";

2. "Sensitization of ICT staff on records and risk management";

3. "Increase budget provisions for acquisition of modern ICT equipment in order to keep pace with modern technologies";

4. "Employ additional ICT staff with current skills and knowledge";

5. "Organize for continuous training of ICT staff";

6. "Carry out continuous training for staff in ICT to ensure staff in other departments are adequately skilled in ICTs".

4.8.5 Recommendations Made by Records Staff

1. "Formulation of a comprehensive records management policy that addresses all record formats";

2. "Formulation of specific records management policies to address specific record types e.g. medical, financial and architectural records";

3. "Sensitization of records and other staff on risk management";

4. "Introduction of a standardized records management system for the institution";

5. "Management should increase budget allocations for records management activities";

6. "Purchase of computers should be prioritized to speed up the records computerization process";

7. "Capacity building for records staff through recruitment and training".

4.8.6 Recommendations Made by Secretarial Staff

1. "Have formally laid-down procedures for records management";

2. "Sensitize all staff on records management and risk management";

3. "Procurement of computers and other equipment for records storage";

4. "ICT staff to continually train secretarial and other staff to ensure they have required skills in computers to adequately handle electronic records";

5. "ICT staff to help Secretaries deal with risk of data security and virus attacks";

6. "Registry staff to advice on matters of records management when called upon".

The recommendations given by all the respondents indicated that there was need to improve records management and implement risk management strategies, geared towards enhancing efficiency in business processes at Moi University.

4.9   SUMMARY

This chapter has provided a presentation, analysis and interpretation of the study findings in line with the objectives of the study. Suggestions put forth by respondents to improve on records management and risk management practices at Moi University have also been provided.

CHAPTER FIVE

SUMMARY OF RESEARCH FINDINGS, CONCLUSION AND

RECOMMENDATIONS

5.0   INTRODUCTION

This chapter presents a summary of the research findings based on the research questions. The chapter provides a conclusion derived from data presented in chapter four and makes recommendations intended to improve the process of aligning records management and risk management with the business processes at Moi University. A records management- cum- risk management model to facilitate the process is also provided.

5.1   SUMMARY OF RESEARCH FINDINGS

Below is a summary of the study findings based on research questions formulated at the onset of this study.

5.1.1 Research Question one: What are the core business activities of Moi University?

The study established that Moi University's core business activities were:

1. Provision of education through teaching and learning;

2. Teaching, research and extension services.

The study also established that though these were the major business activities, they were supported by other business activities which included:

1. Strategic planning and development;

2. Resource mobilization and other financial processes;

3. Policy formulation and implementation;

4. Monitoring and review;

5. Staffing;

6. Provision of modern and reliable information systems and technologies;

7. Provision of medical services to staff and students;

8. Compliance with legal requirements related to the business processes of the institution.

5.1.2 Research Question two: What records are generated by business processes/activities in Moi University?

The study established that the above business activities led to the generation (creation and/or receipt) of the following records both in paper and electronic formats:

1. Administrative records;

2. Financial records;

3. Architectural records;

4. Personnel records;

5. Medical records;

6. Students records;

7. Academic reports;

8. Council, Senate, Deans' and other Committee records;

9. ICT records;

10. Other records such as circulars, minutes, notices, internal memos, advertisements, correspondences, statistical records, audit and other reports, research and conference records, etc.

5.1.3 Research Question three: What is the current state of records management at Moi University?

The study revealed that the state of records management at Moi University was poor as a result of the following factors:

1. Lack of a formal records management program/policy;

2. Lack of records management procedures/guidelines;

3. Inadequate records management staff to perform records management duties;

4. Insufficient level of awareness of the significance of records management in relation to business processes;

5. Lack of adequate continuous training for records management staff;

6. Existence of a manual records management system as opposed to an electronic one.

5.1.4 Research Question four: What problems are experienced by the institution due to poor records management?

The study revealed that Moi University experiences the following major problems due to poor records management practices:

- Lack of uniformity in records management activities due to lack of a records management program;

- Lack of professionalism in records management work due to lack of adequate trained staff in records management, which has impacted negatively upon business processes.

- Inadequacies of the current manual records management system;

- Strained records management budgets since the RM function is yet to receive adequate recognition by the management in the institution.

5.1.5 Research Question five: What risks is Moi University exposed to in relation to its core mandate?

The study revealed that all the respondents acknowledged facing risks in the course of their daily business transactions and the following key risks were identified:

1. Strategic risk – caused mainly by making uninformed or delayed decisions

2. Operational risk – arising from informal operational processes, inefficiencies, reduced service quality and so on.

3. Financial risk – caused by delays in fees payment, frauds, inadequate funds and financial mismanagement.

4. Commercial risk – caused by increasing market demands.

5. Compliance risk – caused by non-compliance to government regulatory policies, rules, regulations and procedures.

6. Technical and systems risks – resulting from failure to embrace modern technology tools, knowledge and skills in business processes, reliance on outdated technology and work processes.

The study used the Victorian Auditor-General's Office (2004) categorization of risks facing organisations to assess and identify the risks facing Moi University.

5.1.6 Research Question six: What can be done to improve records management and risk management at Moi University?

According to the findings, the respondents interviewed provided various suggestions in order to improve both records management and risk management practices at Moi University as indicated below:

Recommendations for improving records management included:

1. Sensitize staff on records management;

2. Revise the institution's strategic plan to prominently feature records management;

3. Increase funding for records management functions;

4. Capacity building through recruitment and training of records management staff;

5. Hasten computerization of the records management system throughout the institution;

6. Formulate policies addressing records management;

7. Formulate a comprehensive records management programme that addresses both paper and electronic records;

8. Employ a Records Manager to oversee records management activities in the institution;

9. Conduct workshops and seminars to train and sensitize all staff on records management, and;

10. Registry staff to advice on matters of records management when called upon.

Recommendations for improving risk management included:

1. Sensitize staff on risk management;

2. Revise the institution's strategic plan to prominently feature risk management practices;

3. Set up a department headed by a risk manager to oversee risk management in the institution;

4. Formulate policies addressing risk management, and;

5. Conduct workshops and seminars to train and sensitize all staff on risk management.

5.1.7 Research Question seven: How can records management be used to mitigate risks in Moi University?

The study established that records management can be used to mitigate risks in the following ways:

1. Proper records management will safeguard the institution against strategic risks by enhancing the decision making process through the provision of records to facilitate informed decision-making.

2. By clearly defining records management responsibilities and monitoring staff performance, operational risks will be managed and service delivery will be enhanced.

3. Records management is an enabler to the audit and review process in the institution since it ensures availability of required evidence and documentation, thus reducing reputational and compliance risks;

4. Proper records management enhances transparency and accountability of all business transactions. By so doing, records management not only helps to mitigate against financial risks, but also to curb corruption and fraud;

5. Good records management practices will gradually boost the image and reputation of the institution with other competitors, thus giving it a competitive edge over other Universities.

5.2   CONCLUSION

Moi University being an academic institution is mainly engaged in facilitating teaching, learning, research activities and extension services. These core business processes are supported by a host of other non-core business activities, which result in the generation of records in both paper and electronic formats. From the findings of

this study, it is evident that records are bi-products of the organisation's business processes, which strongly corresponds with the views of Duranti (2001) that records play a crucial role in most human endeavors and are essential to all business and social interactions. Clearly therefore, these records must be properly managed to ensure that they are readily available in a timely and useable form and this means implementing sound records management strategies to safeguard the records. This is in line with the views of Mnjama and Wamukoya (2004) who say that records are valuable assets that need to be managed and protected. The study therefore concludes that business processes at Moi University depend upon properly managed records for efficiency, without which the organisation is exposed to various business risks.

The study findings revealed a poor state of affairs in the records management function at Moi University. This corresponds with views provided in the literature by researchers and scholars that despite the crucial role played by records and records management, many organisations including government departments pay little attention to the management of records (Barata, 2000; International Records Management Trust (IRMT): 1999; Mnjama: 2004; Ngoepe and Van der Walt: 2009; The World Bank: 2000). Though most of the staff interviewed were aware of the significance of records management to business processes, the records management profile at the institution was found to be low. This is attributed to the lack of a formal records management program/policy in the institution. There are also no procedures or guidelines for records management and therefore laid-down standards for records management activities are lacking. Staffing for the records management function in the institution is inadequate. There are very few records management professionals in the institution and some of them have been deployed to perform non-records

management duties. In many departments, the staff performing records management duties do not have any formal training in records management. The institution has not been active in facilitating continuous training for the records management staff, which has contributed to poor service delivery. The records management system currently in use is largely manual though an enterprise-wide computerization project for records was in progress at the time of the study. Although Moi University does not fall within the category of government ministries, the current state of records management at the University confirms the view that "in the government ministries of many African countries, records management is widely seen as a lower grade service area, and virtually no attention is given to the way information is created, structured and managed (IRMT 1999). Poor records management has resulted in a lot of challenges in the management of records at the institution such as delays in retrieval and access of records, leading to delays in decision making. A solution to this situation lies in the International Standard, ISO 15489-2 *Information and Documentation-Records Management-Part II*, which emphasizes the importance of records management policies and support for records management from senior management of an organisation (International Standards Organisation (ISO) 2001b). The study concludes that the poor state of records management at Moi University has contributed to inefficiencies in business processes, exposing the institution to various risks.

The study established that business processes at Moi University were mainly exposed to risks due to the poor state of records management, supporting the observation made by Mat-Isa (2005) that most organisations have neglected good record-keeping practices thus exposing themselves to risks from various quarters. Moi University is mainly exposed to strategic, operational, financial and compliance risks, due to poor

records management practices. Factors contributing to these risks included lack of adequately trained records management staff, shortcomings resulting from the manual records management system in use, changing technologies and data security, among others. Some of the respondents cited compliance risks, and especially the lack of a program/policy to govern records management activities as a major contributing factor. Five respondents cited technical risks which they attributed to the constantly changing technology. Three of the respondents cited systems risks as a result of failure of the systems to operate as required. In view of the above findings, the study concludes that inadequate records management practices are the root cause of risks to business processes at Moi University, giving rise to the need to urgently streamline records management at the institution as part of its risk management strategy.

The findings of the study revealed that besides the records-related risks, Moi University faced other types of risks that ranged from strategic to operational, financial, commercial, compliance, technical and systems. This findings support Maya (2008) who points out that risk management is a very critical input for educational organisations because all educational practices bear a certain level of risk. All the respondents acknowledged facing risks in the course of their daily business transactions. The major risks affecting the mission, vision and objectives of Moi University were found to be strategic and operational. Operational risks were cited by 35 respondents (71.4% of the total respondents) while 100% of the respondents cited strategic risks. The study therefore concludes that Moi University is highly exposed to other risks related to its business mandate of providing education through teaching, research and extension services.

Study findings revealed that records management impacted greatly upon all business activities at Moi University. Failure to properly manage business records has compromised the ability of Moi University to meet legal, regulatory and compliance obligations and has created significant overhead costs in the institution. The study also found that effective processes for the creation, use, protection, retention and disposition of business information and records are critical components to mitigating financial, compliance, strategic and operational risks. It can therefore be concluded that records management is a risk management function and can be an effective tool in the mitigation of all risks facing Moi University. This corroborates the view held by the University of Texas State (UTS: 2009) that the records management program is in itself a risk management tool. In other words, sound records management is critical to successful risk management in Moi University.

5.3 RECOMMENDATIONS

In view of the findings of the study which are presented and discussed above, the study makes various recommendations as outlined below. The recommendations if implemented, will aid in mitigating risks at Moi University and also enhance efficiency in the institution's business processes.

5.3.1 RECORDS MANAGEMENT

5.3.1.1 Development and Implementation of a Comprehensive Records Management Program

One of the key findings of the study was the need for a records management program. Moi University Management should design an enterprise-wide records management program to address the creation, use, protection, retention and disposition of business

information and records in the institution. The University Central Registry in collaboration with the School of Information Sciences could play an important role by conducting an initial assessment of all business activities to ensure that all record types and series are covered in the records management program.

The adoption of a records management program will help Moi University attain efficiency, reduce costs, demonstrate compliance, protect its rights, defend claims and improve operations. This will safeguard the institution against all kinds of risks.

5.3.1.2 Computerization

There is need to fully embrace records management automation across the organisation. The University management should prioritize funding of the on-going records automation project in order for electronic records management to become a reality in Moi University. The same records management principles and policies applied to paper records must also govern the management of electronic records. Planning and proper analysis of the manual system should be done before computerization. A task force should be constituted to determine the resource requirements and the functional requirements in each department. It should be headed by the head of the Central Registry and should incorporate other key departments such as Finance, ICT, heads of records sections in departments and representation from senior Management. A well organized recordkeeping system will facilitate easy access to information by users at Moi University.

5.3.1.3 Development and Implementation of an Electronic Records Management Program (ERMP)

The head of the Central Registry should in collaboration with the head of ICT department, develop an Electronic Records Management Program which will address all aspects of electronic records management. Digital records (electronic records) raise specific issues that go beyond general records management. An ERMP will address issues of security, authenticity, integrity, and accessibility of electronic records. The strategy should also integrate the following:

- The legal framework as it applies to Moi University;

- All relevant aspects of electronic records;

- The organisation's preferred management procedures and technologies;

- Long term storage and access needs (both legal and operational), and;

- It must also pay attention to electronic records management standards.

A sound integrated electronic records management strategy will have a positive impact on strategic business decisions, allowing the institution to adapt quickly to market changes. Timely access to critical information will also allow the organisation to react more quickly than its competitors.

5.3.1.4 Development of Specific RM Policies and Procedures

The officers in charge of records sections in the various units of the institution should work together with the head of Central Registry to develop policies which specifically address unique records such as medical, financial, students, architectural records, etc. The purpose of such policies will be to establish the principles, responsibilities and requirements for the management of those particular record types. This will aid in addressing issues that have not been adequately addressed by the records management program.

5.3.1.5 Recruitment of a Qualified Records Manager

The University's top management should employ an adequately trained Records Manager on a senior scale. Ideally, the records manager should hold a Masters or Doctoral degree in Records or Archives Management and should have at least three years working experience in the area of records management.

Having a records manager to oversee all records management activities in the institution will provide the professional leadership that is currently lacking at Moi University.

5.3.1.6 RM Staff Capacity Building and Training

The institution's top management needs to prioritize staffing for the records management function in the institution. Deployment of the right people to be in charge of records is a key step in the management of records. Officers in charge of records should be people of integrity, qualified and competent. Placement of these professionals should be at a high level. Additional recruitment of trained records management personnel is necessary to ensure that records management duties are undertaken professionally.

Continuous training should also be organized for the records management staff to enable them upgrade their knowledge and skills in line with current developments in ICTs and other emerging trends in the records management profession. In addition, there is need for an enterprise- wide records management educational program to sensitize all staff on records management.

5.3.1.7 Lobby for additional resources

As in most public organisations worldwide, the records management function at Moi University receives minimal budget allocation which is the reason for the poor state of records management. The head of Central Registry and heads of departmental records sections should actively lobby for adequate budgetary support, by demonstrating the benefits of records management such as enhancement of efficiency, reduction of costs, litigation support, and so on. General support and improvements in the work environment of records personnel should also be advocated for by the head of the Central Registry.

Records personnel in charge of departmental records sections also have a responsibility to prepare comprehensive budgets for records management activities in their units. The records management budget should be reflected in the departments' consolidated budgets.

5.3.2   RISK MANAGEMENT

5.3.2.1 Set up a Risk Management Department

Another key finding of the study was that Moi University should set up a Risk Management Department. There is need for top management to consider establishing a risk management department in the institution which should be headed by an officer with risk management skills. The department should be placed under the records management department and should be headed by a records manager with a Masters or PhD degree in records management, with a minimum of three years working experience. In order to add real value, it is vital that risk management is embedded into the day-to-day business operations of the organisation so that progress towards the achievement of set goals can be achieved.

5.3.2.2 Development of a Risk Management Program

There is need for the institution to have a formally approved risk management program to underpin risk management. Since there is currently no risk manager in the institution, the management should engage on an interim basis, the university Auditor to develop such a program. The Auditor should work with the heads of records sections and ICT department and all Heads of Departments and Schools in developing the program that will culminate in a full-fledged directorate of the university.

5.3.2.3 Risk Management Sensitization

There is need for the management to arrange for external resource persons to target specific staff groups to sensitize them on risk management in order to develop a risk management culture. They should involve external role models from established organisations (locally or internationally) to deliver the program. The management and other top officials also require training and sensitization in risk management and change management. Such training should be done on a continuous basis.

5.3.3   RECORDS MANAGEMENT AND RISK MANAGEMENT

5.3.3.1 Adoption of a Records-cum-Risk Management Model

For records management and risk management to be effectively integrated into the business processes of Moi University, there is need for adoption of an organisation-wide ERM-cum-Risk Management model. The University Management should adopt the model proposed by this study which could then be customized by the ICT department and embraced by all business entities in the organisation. This model will help address records and risks related issues in the organisation.

5.3.3.2 Vital Records Program

In order to ensure business continuity in the event of disasters happening, it is necessary to have a Vital Records Program which is also a risk management tool. A vital records management program helps prevent the loss of critical records (i.e. contracts, agreements and other records) by scanning and storing them off-site. The Vital Records Program is designed to:

1. Prevent loss of vital records;

2. Prevent unauthorized access to vital records;

3. Prevent litigation or financial loss etc. resulting from the inability to produce vital records when required;

4. Prevent inability to effectively operate in the event of a disaster;

5. Prevent adhoc destruction of records, and;

6. Aid prompt resumption of business using records stored off-site.

The Central registry head should take responsibility for the design of such a program.

5.3.3.3 Reviewing the Strategic Plan

There is need to review the organisation's strategic plan so that records management and risk management components are clearly entrenched in it. By incorporating these elements in the strategic plan of the organisation, their profile will be raised and a formal communication will be passed to all members of the organisation concerning the expected RM and risk management practices. This will largely contribute to the achievement of organisational goals and objectives.

5.4 SUGGESTED MODEL FOR THE ALIGNMENT OF RM AND RISK MANAGEMENT WITH MOI UNIVERSITY'S BUSINESS PROCESSES

This study proposes a model framework that can be adopted to align records management and risk management practices with the business processes of Moi University. The model has borrowed from the records continuum model formulated by Australian archival theorist Frank Upward. The risk management element was borrowed from the Integrated Risk Management Model developed by the Canadian Government.

Stage 1:
Records & Risk Profile
- Constitute committee;
- BPA, RA, ERA activities;
- Establish current state of RM & Risk Management;
- Develop & maintain risk database & risk inventory;
- Reporting into RM/RMS.

Stage 2:
RM & Risk Mgt F/works
- Formulation of relevant programs, policies & procedures;
- Review strategic plan
- Determine legal frameworks;
- Reporting into RM/RMS.

RM/RMS

Stage 5:
Monitoring & Modification
- Control process to verify program performance;
- Benchmarking;
- Internal audits to assess BP efficiency;
- Review program to embrace modern trends;
- Reporting into RM/RMS.

Stage 3:
Resource Allocation
- Funding for RM & risk management;
- Capacity building (recruitment & training);
- Identify RM & risk management champions;
- Physical resources e.g. space & equipment;
- Reporting into RM/RMS.

Stage 4:
Program Implementation
- Enterprise staff sensitization & education by the champions;
- Enforce adherence to programs, policies & procedures;
- Ensure compliance;
- Ensure budget allocations & time slots are met;
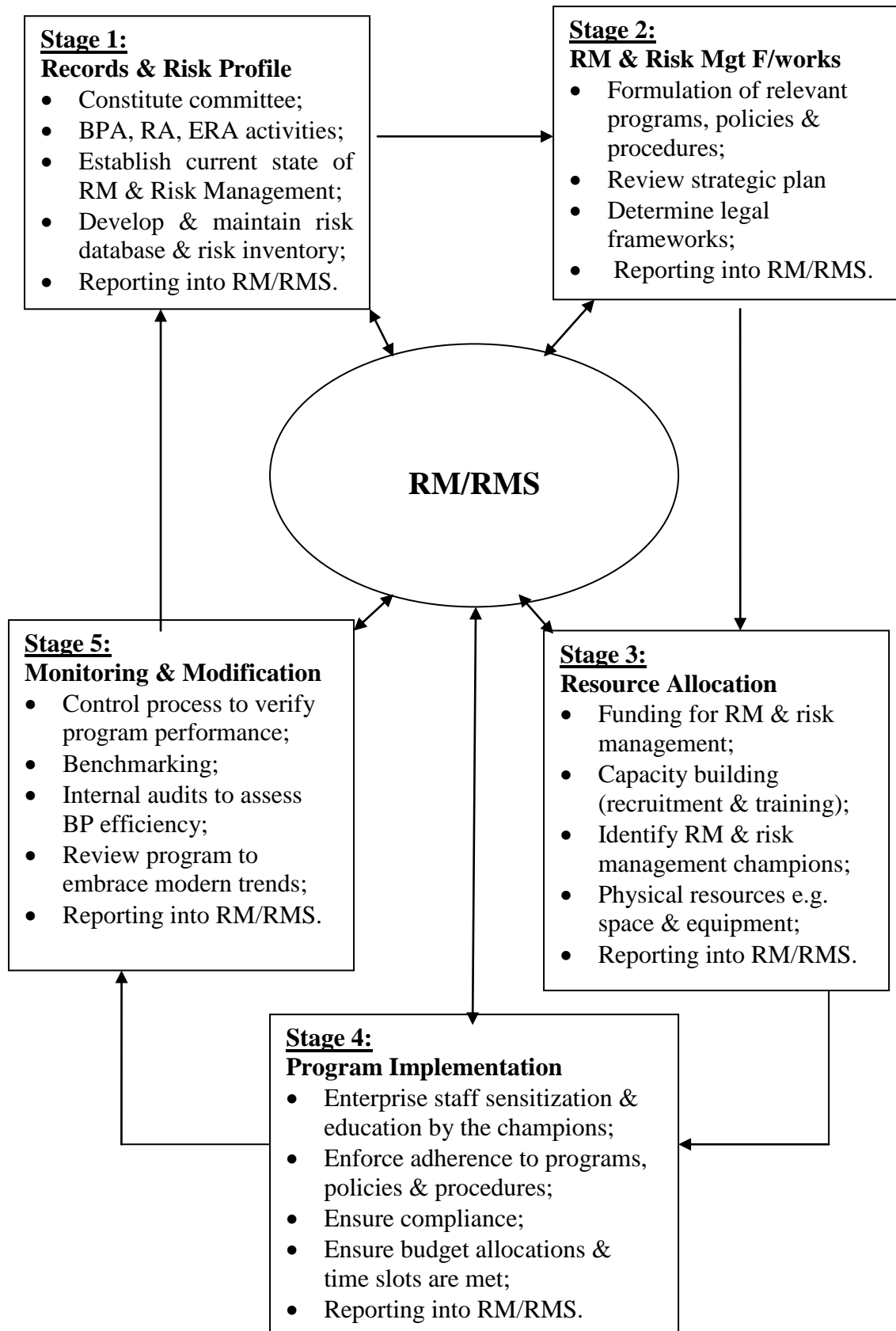- Reporting into RM/RMS.

Figure 5.1: Proposed Records Management – cum– Risk Management Model for Moi University

Stage 1: Developing Enterprise-wide Records and Risk Profile

This stage would entail constituting a committee to undertake a business process analysis with the aim of assessing RM and risk management at Moi University and the following activities will be undertaken:

1. Formation of a RM and risk management committee to direct program activities;

2. Analysis of all business processes in the organisation;

3. Undertake a records assessment (RA) to identify records generated by the business processes (paper, electronic, magnetic, or photographic formats);

4. Undertake an Enterprise-wide Risk Assessment (ERA) to identify risks faced, including records-related risks;

5. Establishment of the current state of records management and risk management;

6. Develop and maintain a risk database and records inventory;

7. Records management and risk management reporting into the Records Management/Risk Management System (RM/RMS).

Stage 2: Developing Records Management and Risk Management Frameworks

At this stage, records management and risk management infrastructures will be set up. Frameworks for records management and risk management will be designed and approved formally thereby achieving top management support. The following will be done:

1. Formulation of records management and risk management programs, policies and procedures in line with business processes;

2. Developing a disaster management and vital records programs;

3. Entrenching records management and risk management components within the organisation's strategic plan;

4. Determining the legal frameworks for both records management and risk management;

5. Records management and risk management reporting into the RM/RMS.

Stage 3: Resource Allocation for Records Management and Risk Management

Specification of all resources required for implementing records management and risk management programs is done at this stage. This would include:

1. Provision of funding for records management and risk management activities;

2. Capacity building for records management and risk management through recruitment of new staff and training of existing staff;

3. Identification of records and risk management champions in the institution;

4. Appointment of a records manager and establishment of a risk management directorate;

5. Provision of physical resources e.g. storage space (for active, semi-active and archival records) and equipment for records e.g. cabinets and computers for the records management and risk management system;

6. Records management and risk management reporting into the RM/RMS.

Stage 4: Implementation of Records-Cum- Risk Management Program

Implementation of the Records-cum-risk management program is realized at this stage. The following will be done:

1. Records and risk management champions educate and sensitize staff on program details;

2. The committee enforces adherence to the established programs, policies and procedures;

3. The committee ensures compliance to program requirements, laws and other stipulated procedures;

4. The committee ensures budget allocations and time slots are adhered to;

5. Records management and risk management program reporting into the RM/RMS.

Stage 5: Monitoring and Modification

This stage involves assessing program performance to determine compliance or lack of it. The Records-Cum- Risk Management program will only be effective if it is implemented and monitored. Once the initial direction for records management and risk management is set, it is important to verify that everyone is complying with all the processes. The following will be done:

1. Have a control process to verify that the records and risk management programs, policies and procedures are followed.

2. Assess the diagnostic deliverables for records and risk management i.e. benchmarking;

3. Assessing business process efficiency through internal audits;

4. Review of the records and risk management programs to embrace modern trends;

5. Incorporation of new laws affecting records management and risk management into the program;

6. Ensure changing exposures to risk are assessed consistently and modified as required;

7. Records management and risk management reporting into the RM/RMS.

The RM/RMS and by extension the ICT department, is central to the model since all information relating to the program is fed into the system at every stage and resultant reports are generated by the system. All the steps in the program are implemented in a continuum without any breaks, hence it is a continuous process.

5.5   SUGGESTIONS FOR FURTHER RESEARCH

The areas of records and risk management are both wide and comprise of many important elements which require to be addressed by organisations. This study restricted itself to the areas depicted in the aim and objectives and was therefore not exhaustive in fully addressing records and risk management at Moi University. The study therefore suggests the following areas for further research in Moi University and other academic institutions:

5.5.1   The Contribution of Proper Recordkeeping towards Auditing of Business Processes and Risk Mitigation

The study was not able to focus on auditing which like records management, is an important tool for risk management. Part of the internal auditor's job in an organisation is to ascertain the quality of an organisation's business processes. Auditors rely on information to verify their findings and records management is the discipline that identifies and controls records within the organisation. Records management can therefore be a strong, unbiased partner to internal auditing by organizing an organisation's records and safeguarding them from the risks inherent in inappropriately handled information. This study therefore recommends that research be undertaken to establish the role of auditing and records management in risk mitigation.

5.5.2   RM as a Tool for Disaster Management and Risk Mitigation

Further research is also required in the area of disaster management and records management, which is also a powerful tool in risk management. Preservation of mission-critical information and system operations is vital for business continuity in any organisation. There is need to undertake a study to identify the possible disasters that Moi University could possibly encounter, identify the vital records in the institution that require to be protected against such disasters and to possibly recommend a solid risk management plan detailing appropriate actions in the event of a disaster happening.

5.5.3   Risk Management and Records Management as an Effective Approach to Corporate Governance

Research should also be undertaken to investigate the link between records management, risk management and corporate governance at public universities. Good records management and risk management practices ultimately culminate into good corporate governance. There is need to investigate the state of governance at Moi University and the contribution of records management and risk management in supporting good corporate governance.

5.5.4 Knowledge Management (KM) and Records Management as supporting Frameworks for Risk Management

KM introduces the ability to create, capture and reapply knowledge and codify experience and expertise. The role of records management in the knowledge economy is positioned as one that should identify the knowledge assets of the organisation and to what extent these assets can be derived from the records of an organisation, and to

provide a system to log, index, maintain access and protect these assets. Research should therefore be undertaken to establish how records management and KM frameworks support risk management in academic institutions.

REFERENCES AND BIBLIOGRAPHY

Abraham, J. (1999). *Identifying and Managing Risk* In New Directions for Higher Education, No. 107.

ACT Insurance Authority (2004). *Guide to Risk Management*. Available at http://www.treasury.act.gov.au/actia/Guide.doc. [Accessed on 10/8/2009].

Agere, S. Lemieux, V. & Mazikana. P. (1999). *Better information practices*: *Improving records and information management in the public sector*. Managing the public service strategies for improvement series: No. 6. London. Commonwealth Secretariat.

Akussa, H. (1996). "The state of Electronic records management in South Africa: an Overview". *ESARBICA Journal: Journal of the Easter and Southern Africa Regional Branch of the International Council on Archives.* Vol 20:62-70.

Ambira, C. M. (2010). "Records Management and Risk Management at Kenya Commercial Bank Limited, Nairobi Area". Mphil. Thesis.

Anderson, G. (1998). *Fundamentals of Educational Research*.2nd Ed.- London: Falmer Press.

Atherton, J. (1985). "From life cycle to continuum: some thoughts on the records management-archives relationship. Available at http://www.journals.sfu.ca [Accessed on 14/02/2009].

Archives and Records Management Association (ARMA) (2008). "Vital records: identifying, managing and recovering business-critical records. Available at www.arma.org/Bookstore/productdetail.cfm. [Accessed on 07/2/2009].

Australian Standards Organisaton (2004). *Australian/New Zealand Standard for Risk Management -AS/NZS 4360*. Available at http://www.theirm.org/publications/Risk-Management -standard-030820 pdf. [Accessed on 1/06/09].

Bantin, P. 2002. "Electronic records: A review of a decade and a reflection of future directions". In: Kent, A. and Hall, C.M. (eds). *Encyclopedia of Library and Information Science* 74. New York: Marcell Dekker: 47-81.

Barata, K. (2001). "Records, computers and resources: A difficult equation for Sub-Saharan Africa". *The Information Management Journal*, Vol. 35 No.1, pp.36.

Barreiro and Albandoz (2006). *Handbook for Post Graduate Research Students*. Available at: http://www.pginfiuhirac.uk. [Accessed on 10/07/2009].

Barrett, P. (2005). *Future challenges for risk management in the Australian public sector.* Paper presented at the RMIA-ACT Chapter conference. 7th April, 2005. [Online]. Available at http://www.anao.gov.au/media/uploads.pdf

Bearman, D. (1994). "Archival Management to Achieve Organisational Accountability for Electronic Records" In Electronic Evidence: Strategies for Managing Records.

Bearman, D. and Trant J. (1997). A *report of the Electronic Records Research Working Meeting, May 28-30, 1997*. Available at http://www.dlib.org/dlib/july97/07bearman.html. [Accessed 02/04/2009].

Bilotto, A. & Guercio, M. (2003). "The management of corporate records in Italy: Traditional practice and methods and digital environment". *Records Management Journal* 13(3): 136–146.

East African Regional Branch of the International Council on Archives (ESARBICA) "General Conference on Archives, Society and Good Governance". Maputo, Mozambique, July 22-26, 2003.

Bryman, Alan (2008). *Social research methods*. 3rd ed. Oxford: OUP.

Casualty Actuarial Society (CAS) Enterprise Risk Management Committee (2003).

Chachage, B. and Ngulube, P. (2006). "Management of Business Records in Tanzania: an Exploratory Case Study of Selected Companies". *South African Journal of Information Management*, Vol. 8 (3) September, 2006. Accessed at http://www.sajim.co.za.

Charman, D. 1984. *Records Surveys and Schedules: A RAMP Study with Guidelines*. Paris: UNESCO.

Chibambo, M. (2003). *Records Management: The Key to Good Governance and Sustainable Development*. Paper presented at Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA) General Conference on Archives, Society and Good Governance. Maputo, Mozambique, July 22-26, 2003.

Cloete, J.N. 1998. *South African public administration and management*. 9th edition. Pretoria: Van Schaik.

Committee of Sponsoring Organisations of the Treadway Commission (COSO) (2004). *Enterprise Risk Management – Integrated Framework*. Available at http://www.coso.org/-erm.htm. [Accessed on 12/01/2010].

Cooper, D. (2006). *Business Research Methods*.-9th Ed. New York: McGraw-Hill/Irwin.

Cox, R.J. 2001. *Managing Records as Evidence Information*. London Westport.

Cox, R. J. and Wallace, D. A. (ed) (2002). *Archives and the Public Good: Accountability and Records in Modern Society*. USA: Greenwood.

Cresswell, J. W. (2005*). Research design: Qualitative, quantitative, and mixed methods approach,* 2nd ed. London: Sage Publications.

Cummings, J. M. (2001). *Records Management is Risk Management*. Available at http://www.mmia.net/doc/Personnel%20Records%20Management.PPT. Accessed on 07/07/2009].

Cunninghan, G. and Montana, C. (2007). *The Lawyer's Guide to Records Management*.

Dearstyne, B.W. (1988). *The Management of Local Government Records: A Guide for Local Officials.* USA: American Association for State and Local History.

Duranti, L. (2001). Concepts, Principles and Methods for the Management of Electronic Records. *Journal of the Information Society*, 17: 271-279.

EDRM, (2006). *Records Management and Best Practices in E-discovery* available online at http://intranet.fulbright.com/site/publications/index.cfm. [Accessed on 02/04/2009].

Emery, P. (2005). *Why Records Management?* Records Management Report, published by CMS Watch. Available at info@cmswatch.com. [Accessed on 11/5/09].

Fineman, C. et al (eds) (2001). Business Process Analysis Worksheets and Guidelines. Available at http://www.ebxml.org/specs/bpWS.pdf. [Accessed on 7/5/2009].

Fraenkel, J.R. and Wallen, N.E. (1993). *How to Design and Evaluate Research in Education*. McGraw Hill: New York.

Fynn, A. (2001). Records Continuum Model in Context and its Implication for Archival Practice. *Journal of the Society of Archivists.* Vol. 22, No. 1.

GAO/AIMD, (1998). *Executive Guide: Information Security Management: Learning From Leading Organisations*. Available at http://:www.gao.gov/special.pubs/ ai00033.pdf. [Accessed on 10/05/09].

Gerrish, Kate, Lacey Anne (ed.) (2006). *The Research Process in Nursing*. 5th ed. Oxford: Blackwell.

Githaka, B. (1996). Constraints on the Development of Records Management in the Kenyan Public Offices. *ESARBICA Journal*, Vol. 15.

Government of Canada (2001). *Guide to risk management*. Available at http://www.rdec.gov.tw.

Government of South Australia (2005). *South Australian Government records management strategy: Managing public sector records*. Available at http://www.archives.sa.gov.au/files/management-strategy-ARM.pdf

Hannabus, S. (1995). *Approaches to research.* Aslib Proceedings 47 (1).

Hardcastle, S. (1989). *Providing Storage Facilities.* In: Peter, E. (ed.) *How to Manage Your Records: A Guide to Effective Practice.* Cambridge: ICSA Publishing.

Hare, C.E. and McLeod, J. (1997). *Developing a Records Management Programme.* London: Aslib.

Harries, S. (2009). "Managing Records, Making Knowledge and Good Governance*".* *Records Management Journal.* Vol 19, No. 1. Emerald Group Ltd.

HEFCE for JISC (2001). *Records Management: Senior Management Briefing Paper.* Available at http://www.jisc.ac.uk/publications/documents/smbp_rm.aspx. [Accessed on 07/03/2009].

Hoque, Z. (2006). *Triangulation. What is it, When to Use it and How to Use it?* Available at http://72.14.205.104. [Accessed on 02/07/2009].

Institute of Electronics, Information and Communication Engineers Technical Report (2001). Available at http://sciencelinks.jp/j-east. [Accessed on 01/05/2009].

International Council on Archives (ICA, 2011). *ICA guidelines and functional requirements for electronic records management systems*. [Online]. Available at e-records.chrisprom.com.ica-guidelines.

International Organisation for Standards (ISO). 2001. *ISO 15489-1 Information and Documentation-Records Management-Part 1 General*. Geneva: ISO.

International Records Management Trust. (2004). *The E-Records Readiness Tool.* Available at http://www.nationalarchives.gov.uk/rmcas/
[Accessed on 29/06/2009].

International Records Management Trust-IRMT- (1999). *The Management of Public Sector Records: Principles and Context, Organizing and Controlling Records*. Available at http:64.233.183.104/search?q=catche:HOxs2Lkj:www:irmt.org/ download/DOCUME. [Accessed on 07/05/2009].

International Records Management Trust-IRMT (2009). *Understanding the Context of Electronic Records Management*. Available at http://www.irmt.org/documents/educ. Accessed on 12/12/2009.

ISO Records Management Standard 15489-1 (2001b). *Information and Documentation: Records Management Standard*.

JISC Infonet (2009) Northumbria University. *Records Management Audit*. Available at http://www.jiscinfonet.ac.uk/infokits/records-management/info. [Accessed on 05/05/2009].

(ISO/IEC Guide 73). Available at http://www.previ.be/pdf/31010_FDIS.pdf. [Accessed on 06/07/2010].

Kenya Anti-Corruption Commission (KACC, 2011). *Corruption prevention guidelines in public procurement.* [Online]. Available at www.eacc.go.ke/docs/CORRUPTION-PREVENTIONGUIDELINES.pdf.

Kallaus, J. (1987). *Records Management, 4th edition*. Cincinnati: South Western.

Kaniki A. (2002) in Kemoni, H. (n.d.). *Theoretical Framework and Literature Review in Graduate Records Management Research*.

Kanzi, N. (2010). *An Investigation of the Role of Records Management with Specific Reference to Amathole District Municipality*. Available at http://dspace.nmmu.ac.za:Kanzi.pdf. [Accessed on 12/01/2011].

Kaufmann, D., Kraay, A and Zoido-Lobaton, P. (1999). *Aggregating Governance Indicators*. Policy Research Working Paper, no. 2195 Washington, D.C. World Bank.

Kemoni, H. (2007). *Records Management Practices and Public Service Delivery in Kenya*. PhD Thesis, University of KWAzULU-Natal, South Africa.

Kemoni, H. & Ngulube, P. & Stilwell, C. (2007). "Public Records and Archives as Tools for Good Governance: Reflections within the Recordkeeping Scholarly and Practitioner Communities". *ESARBICA journal* Vol 26:3-18.

Kemoni & Ngulube, P. (2008). "Relationship between Records Management, Public Service Delivery and the Attainment of the United Nations Millennium Development Goals in Kenya". *Information Development. SAGE Journals*.

Kemoni, H. (2008). "Theoretical Framework and Literature Review in Graduate Records Management Research". *African Journal of Library, Archives and Information Science*. Vol.18 (2) October, 2008.

Kennedy J. and Schauder C. 1999. *Records Management: A Guide to Corporate Record Keeping*. 2nd ed. Melbourne: Wesley Longman.

Kersey, M. (2003). *The benefits of lifecycle records management*. Records Management Bullettin, issue 113, 34.

Keya, S….et al (1989). *Guidelines for the Formulation of Research Project Proposal*.-Nairobi: OUP.

Kombo, D.K. (2006). *Proposal and Thesis Writing*. - Nairobi: Pauline Publication Africa.

Kombo and Tromp (2006). *Proposal and Thesis Writing: An Introduction*. Nairobi: Tromp Paulines Publications.

Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*. 2nd Ed. - New Delhi: New Age International (P) Limited.

Koutsoyiannis, A. (1979). *Modern microeconomics.* Publication: London Macmillan.

KPMG LLP, (2005). The U.S. Member Firm of KPMG International. Langemo, M. (1995). *Successful strategies for establishing or strengthening a records management programme.* ARMA International Annual 40th Year Conference, Nashville, Prairie Village, K. S. ARMA.

Lipchack, A. and McDonald, J. (2003). *Electronic Government and Electronic Records: e-Records readiness and capacity building: an electronic discussion* 19-12 December 2003. Available at http://www.irmt.org/discussionpaper.pdf. [Accessed on 02/05/2009].

Makhura, M.M. 2005. *The contribution of records management towards an organisation's competitive performance.* Doctor Litteranum Philosophiae's thesis. University of Johannesburg. [Online] Available at: http://ujdigispace.uj.ac.za/theses/ [Accessed: 15/05/2010].

Management of Risk: Guidance for Practitioners (M_o_R) (2007). http:www.mor-officialsite.com.

Marobella, J. R. 2005. The World: can US and Western European Regulatory Environment help predict Future Global Initiatives? *The Information Management Journal 39 (2): 18-20.*

Marshall, J. (2006). Accounting for Disposition: A Comparative Case Study of Appraisal Documentation at the National Archives and Records Administration in the United States, Library and Archives Canada, and the National Archives of Australia. DPhil Desertation. University of Pittsburg. Available at ttp://dscholarship.pitt.edu/6251/1/marshallj200612dissertation.pdf

Marsh Risk Consultants (2008). *At Risk: Do Educational Institutions Make the Grade?* Available at http://www.marshriskconsulting.com/st/PSEV. Accessed on 15/06/09.

Massey University. *Annual Report 2009).* Available at http://www.massey.ac.nz/massey/fms/About%20Massey/Documents/Annual-Report-2009.pdf– pg 5.

Mat-Isa, A. (2005). *Records Management and Accountability of Governance.* Available at http://www.hatii.arts.gla.ac.uk/staff/AMI/Records. [Accessed on 20/07/09].

Maya, C. I. (2008). "Risk Management". *World Applied Sciences Journal* 4 (Supple 1): 29-32. Available at http://www.idosi.org/wasj/wasj4 (s1)/6.pdf. [Accessed on 30/6/ 2009].

Mckinnon, (1994). *Records Management and Accountability of Governance.* Accessed at http://www.hatii.arts.gla.ac.uk/staff/ami [12/2/2009].

McKemmish, S. (1998). *Yesterday, Today and Tomorrow: A Continuum of Responsibility*. Available at http://www.sims.monash.edu.au. [Accessed on 30/06/ 2009].

McLeod, J. & Childs, S. (2007). Records management capacity and compliance toolkits. *Records Management Journal*. Vol 17, No. 3. Emerald Group Ltd. pp. 216-232.

McNeil, A., Rüdiger, F. & Embrechts, P. (2005). Quantitative Risk Management. Princeton University Press, Princeton. Available at http://press.princeton.edu/chapters/s8056.pdf

Meier, R. (2000). *Integrating Enterprise-Wide Risk Management Concepts into Industrial Technology Curricula*.

Millar (1997). *Principles of Records and Archives Management*. London:ICA/IRMT.

Millar, L. (2004). *Authenticity of electronic records. A report prepared for UNESCO and the International Council on Archives* (ICA Study 13-2). Paris: International Council on Archives. Available at http://www.ica.org/biblio/study13 2 Erev.pdf. Accessed on 2/12/2009.

Mnjama, N. (2003). "Archives and Records Management in Kenya: Problems and Prospects". *Records Management Journal*, Vol. 13 Iss: 2 pp. 91 – 101.

Mnjama, N. (2004). *Records and Information: the neglected resource*. Paper presented at Information management services Annual Records Management Conference, Kruger National Park, SA, 18-21 May, 2005.

Mnjama, N. and Wamukoya, J. (2004). "Managing University Records*". ESARBICA Journal*, Vol.21, pp. 32-34.

Mnjama, N; Wamukoya, J (2007), "E-Government and Records Management: An Assessment Tool for E-Records Readiness in Government", Electronic Library, Volume 25, No. 3, pp274 – 284.

Moi University Website: 2009.

Moi University Report (2008). Available at http://www.moiuniversity@mu.ac.ke. [Accessed on 06/07/ 2009].

Moi University (2009). Moi University Strategic Plan 2009/10 -2014/15.

Moi University Strategic Plan (2005-2015). Available at http://www.moiuniversity@mu.ac.ke. [Accessed on 06/07/2009].

Mugenda and Mugenda (2004). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.

Mukangara, E. (2000). *Information Resource Management for Policy Formulation*, I*mplementation and Program Decision-making in Government Ministries in Tanzania*. Ph.D.Thesis. Pietermaritzburg: University of Natal.

Musembi, M. (2002). *A Manual of Records Management*. Nairobi: Kenya National Archives.

NARA (2008). *"Basic Laws and Authorities of the National Archives and Records Administration"*. Available at http://www.archives.gov/about/laws. [Accessed on 20/03/2009].

Nasieku, P. (2010). *Management of Electronic Records at Moi University, Kenya.* Mphil. Thesis.

National Archives and Records Service (NARS) (2006). *Records Management Policy Manual.* NARS, Pretoria.

National Archives of Scotland (2011). *Electronic Records Guidance: Starting point for electronic records*. Available at http://www.nas.gov.uk/recordkeeping/ERGuidance/StartingPointERM.asp. [Accessed on 9/04/2010].

National Archives' Records Management Best Practices. Available at http://www.national.archives.gov.za. [Accessed on 9/04/2010].

Ndenje-Sichalwe (2010). "The Significance of Records Management to Fostering Accountability in the Public Service Reform Programme of Tanzania".

Needham, G. (2000).*Research and Practice: Making a Difference*. London: Care.

Nengomasha, C. (2007). *Managing public sector records in Namibia: a proposed model.* Namibia Development Journal, Vol 1, No 1. Available at http://ndj.unam.na/index.php/ndj/article/view/12/12. [Accessed on 4/04/2009].

Neuman, W.L. (2000). *Social Research Methods: Qualitative and Quantitative Approaches*. Boston: University of Pretoria.

Neumayer, Eric (2002). "Is Good Governance Rewarded? A Cross-national Analysis of Debt Forgiveness". *World Development Journal,* Vol. 30, no. 6.

Ngoepe, M. (2004). *Accountability, transparency and good governance: The National Archives and Records Service of South Africa's role in helping government to better service delivery to the South Africans.* Conference Paper. Available at: http://www.liasa.org.za [Accessed on 04/06/2011].

Ngoepe (2008). *An Exploration of Records Management Trends in South African Public Sector: A Case Study of the Department of Provincial and Local Government*. MPhil Thesis.

Ngoepe, M. & Van der Walt, T. (2009). "An exploration of records management trends in the South African Public sector". *Mousaion Journal* Vo. 27 No. 1.

Ngulube, P. (2001). "Guidelines and Standards for Records Management Education and Training: a Model for Anglophone Africa". *Records Management Journal*. Vol.11 no.3 pg.155-173.

Ngulube, P. 2004. "Fostering accountability and justice: opportunities for records managers in changing societies". *ESARBICA Journal: Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives.*

Ngulube, P. and Tafor, V.F. (2006). "An overview of the management of public records and archives in the member countries of the East and Southern Africa Regional Branch of the International Council on Archives *(ESARBICA)"*. *Journal of the Society of Archivists*.

Organisation for Economic Co-operation and Development (OECD) (2004). *OECD Principles of Corporate Governance.* [Online]. Available at http://www.oecd.org/corporate/ca/corporategovernanceprinciples.pdf.

Oka, T. and Shaw, (2000). *Qualitative Research in Social Work*. Available at http://www.pweb.sophia.acip/t-oka/papers/2000/qrsw/.html. [Accessed on 05/072009].

Oliver, P. (2004). *Writing Your Thesis*. New Delhi: Vistaar Publications.

Ordho and Kombo (2002). *Techniques of Writing Research Proposals and Reports in Education and Social Sciences.* Nairobi, Masola Publishers.

Palmer, M. 2000. "Records Management and Accountability Versus Corruption, Fraud and Maladministration". *Records Management Journal*. Vol 1, No. 2.

Penn, I.A., Pennix, G. and Coulson, J. (1994) '*Records management handbook'* 2nd ed Gower p.7.

Picot, A. (1999). *The Continuum*. Available at http://www.sims-cal.sims.monash.edu.au. [Accessed on 05/07/2009].

Piggot, S. (2002). *Evidence based governance in the electronic age.* Paper presented at the 32nd Annual Conference of the Association of Caribbean University Research and Institutional Libraries, Jamaica, 22 May-1 June.

Pr. Jean-Paul Louisot. *Effective Risk Management is Critical to Your Organisation's Future*. Available at http://:www.riskandinsurance.com/userpdfs/CPCUWhitePaperJune.pdf. [Accessed on 15/06/09].

Kenya Law Reports (KLR, 2011). *Public Archives and Documentation Services Act Cap 19.* [Online]. Available at www.kenyalaw.org/klr.pdf.

Kenya Law Reports (KLR, 2011). *Records Disposal Act, Cap 14.* Available at www.kenyalaw.org/klr.pdf.

Queensland Government (2011). *A Guide to Risk Management.* [Online]. Available at http://www.treasury.qld.gov.au/office/knowledge/docs/risk-management.pdf.

Ramirez, D. et al (2008). "Risk management standards: the bigger picture. *Information Systems Control Journal, Vol 4, 2008.* Availabled at http://www.isaca.org/journal/past-Issues/2008/volume-4/Documents/jpdf

Roper, M. and Millar, L. (Ed) (1999). *Managing Public Sector Records*. London: IRMT.

Sampson, K. L. (2002). *Value-added Records Management*: *Protecting Corporate Assets, Reducing Business Risks*. 2nd ed. WestPost: Greenwood Publishing Group. Available at books.google.co.ke. [Accessed on 1/06/09].

Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research Methods for Business Students.* 2nd Ed.-Harlow, England: Financial Times Prentice Hall.

Savage, A (2007). *Applying Risk Management in a University Environment to Manage the Risk of Fraud and Corruption.* Paper presented at the Australian Public Sector Anti-Corruption Conference. Available at http://www.apsacc.com.au/papersAdrianSavage.pdf [Accessed on 06/07/2009].

Schellenberg, R. (2002) *Modern Archives: Principles and Techniques*. Chicago: University of Chicago Press.

Sebina, P. (2004). "Freedom of Information, Records Management and Good Governance: Any symbolic relationship?" *Journal of the Eastern and Southern Africa regional branch of the International Council on archives*. Vol. 23, No. 1.

Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organisation*. New York: Doubleday/Currency.

Shepherd, E. (2006). Why Are Records in the Public Sector Organisational Assets? *Records Management Journal*.

Shepherd, E. and Yeo, G. (2003), *'Managing Records: A Handbook of Principles and Practice'*, Facet, London p.22.

Slater, M. (1990). *Research Methods in Library and Information Studies*. London: The LA.

Taylor , B. (1996). *Records Management for Museums and Galleries: an introduction*. UK, Chandos Publishers.

Thurston, A. 1997. *Records management as a public sector accountability function*. Available from: http://findarticles.com/ [Accessed: 04/06/2010].

University of California, 2005). *Literature Review*. Available at http://library.stkate.edu/pdf/litreview.pdf Accessed on 5/07/2010.

University of Oxford (2007). *Assurance Framework relating to Risk Management in the University of Oxford*. Available at h**ttp://www.admin.ox.ac.uk/finance/planning-r**eporting/capital. [Accessed on 10/03/2009].

University of Texas (2009). *The University of Texas System.* [Online]. Available at www.utsystem.edu/orm.

Upward, F. (2001). *Structuring the Records Continuum- Part One: Post Custodial Principles and Properties*. Available at:http://www.sims.monash.edu.au. [Accessed on 07/06/2009].

Victorian Auditor-General's Office (2004). *About Risk Management*. Available at www.audit.vic.gov.au. [Accessed on 01/06/09].

Victorian Auditor-General's Office (2004). *Good practice guides: Managing Risk Across the Public Sector.* Available at www.audit.vic.gov.au. Accessed on 15/06/09.

Visser, B. and Erasmus, W. (2002). *Management of Public Finance: A practical Guide.* Cape Town: Oxford University Press.

Wafula Nabutola. *Risk and Disaster Management – A Case Study of Nairobi, Kenya*. Republic of Kenya. Available at http://www.fig.net/pub/jakarta/papers/ts_16/ts_16_4_nabutola.pdf. Accessed on 12/06/2011.

Wamukoya, J. (2000). "Records and Archives as a basis for Good Government: Implications and Challenges for Records Managers and Archivists in Africa" **In** Records Management Journal, Vol. 20.

Wamukoya, J. (2007). *Fostering Trust and Accountability through Records Management*. A Paper Presented at the ICA/ISO Workshop held at the United Nations, Nairobi, Kenya.

Wamukoya, J. & Mutula, S. M. (2005). *Capacity-building Requirements for E-records Management: the case in East and Southern Africa* In Records Management Journal, Vol.15 (2). Available at http//emeraldinsight.com. [Accessed 01/02/2010].

World Bank Group (2000). *Managing records as the basis for effective service delivery and public accountability in development: An introduction to core principles for staff of the World Bank and its partners.* Available at: http://web.worldbank.org/.[Accessed on 04/06/2010].

Xiomi, A. (2003). "An Integrated Approach to Records Management: the Records Continuum Model's Purpose-oriented Approach to Records Management Changes the Role of Recordkeeping" **From** *Reactive to Proactive. Information Mnagement Journal,* July 1, 2003.

Yusof, Z. M. & Chell, R. W. (2005). *Issues in Records Management*. Pennerbit UKM: Bangi. Available at www.penerbit.ukm.mu/f73-5.html. [Accessed on 10/03/2009].

APPENDIX 1 – INTRODUCTORY LETTER TO RESPONDENTS

Dear respondents

I 'am an Mphil student at Moi University, School of Information Sciences, undertaking a research study titled "Integrating Records Management, Risk Management and Business Processes: A case Study of Moi University".

The aim of the study is to investigate the relationship between records management and risk management, and to establish how proper records management can help mitigate the impact of risks upon the institution. I have selected your departments/sections because of their functions and operations which relate to the aims and objectives of the study.

Your input to this study is very important because of the topic/subject of study which is pertinent to the on-going efforts to make Moi University an even better managed institution.

The outcome of the research will provide more insights into practices which expose the institution to all manner of risks: operational; financial; technical; business; compliance; regulatory; reputational; etc. The study will also look at records management as a tool in the management of institutional risks and suggest recommendations on how risks can be managed through proper records management.

I therefore ask for your support in the provision of required information and hereby assure you that all information contributed towards the study will be treated with utmost confidentiality and used exclusively for this research only.

Juliet A. Erima
Mphil Researcher.

APPENDIX 2 - INTERVIEW SCHEDULE FOR MANAGEMENT STAFF AND SENIOR ADMINISTRATORS

SECTION A: BIO-DATA

Name of campus...

Designation of Officer………………………………………………….........

Department……………………………………………………………...............

Years of service in the position…………………………………………………...

Highest Academic Qualifications..

Gender……………………………………………………………………..

Nationality…………………………………………………………………....

SECTION B:

1. What is the core business/ core functions of Moi University?

2. How are these core functions carried out? What information/records are required in order to carry out these functions?

3. What kind of information/records are generated as a result of these business functions?

4. What types of risks emanate/or are likely to emanate from these business activities?

5. Does the University have any clear strategies for dealing with these risks?

6. If yes, which ones are they and how are they implemented? If no, how does the University deal with potential or real risks emanating from: a) Within the University? b) Outside the University?

7. Is there a records management programme, policy, procedures or guidelines in Moi University?

8. If yes, is the programme supported by a documented official University policy?

9. If no, what kind of risks is the organisation exposed to due to lack of a records management policy?

10. In your opinion, how has records management contributed to the business activities/success of the University?

11. In your opinion, which groups of records are critical to the continued existence/ continuity of the University?

12. Besides the registry staff, how are the other employees of the University involved in the management of records?

13. Does the University have a formal mechanism or a structured way of determining potential risks?

14. Are staff ever provided with formal training on records management and risk management?

15. If no, do you think such training is necessary?

16. What problems do you foresee in the short and medium term that may hamper the effective management of risks in the institution?

17. Please give any additional information you feel is useful to this study

APPENDIX 3 - INTERVIEW SCHEDULE FOR DEANS AND HEADS OF DEPARTMENTS

SECTION A: BIO-DATA

Name of campus..

Designation of Officer…………………………………………………........

Department……………………………………………………….............

Years of service in the position…………………………………………...

Highest Academic Qualifications..

Gender…………………………………………………………………..

Nationality…………………………………………………………....

SECTION B:

1. What are the main business activities of your School/Department?

2. How are these core functions and activities carried out?

3. What records/information do you normally require in order to carry out these activities?

4. What kind of records/information is generated from the school/departmental activities?

5. What types of risks does the School/department face on a regular basis in the course of carrying out its activities?

6. What do these risks relate to?

7. How are these risks addressed?

8. Does the School/department have formal strategies of addressing these risks?

9. If yes, what are these strategies?

10. Is there an officially recognized records management programme, policy, procedures or guidelines for managing your records?

11. If yes, is the programmes supported by a documented official policy?

12. Is the policy known to all staff?

13. If no, what kind of risks is the School/department exposed to due to lack of a records management policy?

14. In your opinion, which groups of records are critical to the efficiency and continued existence of the School/department?

15. Please give any additional information you feel is useful in the implementation of records management and risk management in Moi University.

APPENDIX 4 - INTERVIEW SCHEDULE FOR RECORDS STAFF

SECTION A: BIO-DATA

Name of campus...

Designation of Officer……………………………………………………….........

Department…………………………………………………………………..............

Years of service in the position……………………………………………………...

Highest Academic Qualifications...

Gender……………………………………………………………………………..

Nationality…………………………………………………………………………....

SECTION B:

1. What is the core business/ core functions of the University registry?

2. How does the registry relate to other departments/ sections of the University?

3. What is the role of registry staff with regard to managing the records of the University?

4. What challenges does the registry face in the process of carrying out this role?

5. What support does the registry receive from the following: (a) University top management? (b) Other users – university staff?

6. What risks/threats/problems are the records in the registry exposed to?

7. What do registry staff do to deal with these risks?

8. Does the University have a formally recognized records management programme?

9. If yes, is the programme backed up by a formal University policy?

10. If yes, is the policy documented?

11. How would you describe the status of records in the registry?

12. Specifically comment on the following: a) Space b) Equipment c) Staffing d) Supplies e.g. file covers, files.

13. If poor, what risks does the institution face as a consequence of poor records management?

14. Which types of records are vital to the continued existence of the institution in the event of an emergency or disaster?

15. Does the registry have a risk management program or policy for records?

16. If yes, describe the strategies included therein.

17. Are there staff who have undergone formal training in records management and risk management?

18. Give some recommendations as to how records management can be strengthened in Moi University.

19. Please give any additional information you feel is useful on implementation of records management and risk management in Moi University.

APPENDIX 5 - INTERVIEW SCHEDULE FOR SECRETARIES

SECTION A: BIO-DATA

Name of campus...

Designation of Officer…………………………………………………….........

Department…………………………………………………………….................

Years of service in the position…………………………………………………...

Highest Academic Qualifications...

Gender…………………………………………………………………………..

Nationality…………………………………………………………………….....

SECTION B

1. What are the specific functions/activities of your office?

2. What records do you generate as part of your daily work?

3. How important are these records?

4. How are these records managed?

5. Do you have any role in managing the records of your office? Explain.

6. Is there any policy guiding the management of records in your department?

7. If not, what problems are experienced due to lack of a records management policy?

8. Do you or your department face any risks/problems associated with your work (e.g. loss of mail, etc.)?

9. If yes, how do you address such risks?

10. Do you think good records management would help avoid some of these risks?

11. Please give any additional information you feel is useful on implementation of records management and risk management in Moi University.