



UNIVERSITY OF KWAZULU-NATAL

Recordkeeping for good governance in Tanzanian public universities

By

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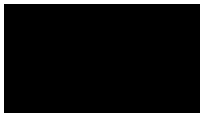
December, 2023

DECLARATION

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ABSTRACT

Recordkeeping is a key feature of any institution's corporate governance and is critical to its transparency and accountability. Public universities cannot operate without records because they provide the foundation for sound decision-making. Without records, it would be impossible to hold public universities accountable. Records in an institution help identify what has been done and how it was done. In other words, records serve as tools for creating trust through time and across societies. Therefore, an organization's lack of sound recordkeeping practices hinders good governance. Although recordkeeping is crucial, it is becoming a challenge in enhancing good governance in universities. The prevalence of poor recordkeeping practices in African universities raises doubts about how top management and administrators have been making informed decisions. There is a need to create awareness of the importance of recordkeeping in universities. University records should be properly maintained and secured. Unfortunately, this has not been the case in most African academic institutions, including Tanzania. Therefore, this study investigated the role of recordkeeping in promoting good governance in Tanzanian public universities. The overall objective of this study was to investigate recordkeeping for good governance in Tanzanian public universities. To achieve this objective, the present study sought to answer the following research questions: What systems and processes are used in recordkeeping in Tanzanian public universities? What recordkeeping skills and training do staff need in Tanzanian public universities? What is the role of records legislation in recordkeeping in Tanzanian public universities? What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities? What interventions required to be put in place in order to address recordkeeping in Tanzania public universities?

The population of this study was drawn from eight (8) Tanzanian public universities, namely Ardhi University, Mbeya University of Science and Technology, Moshi Cooperative University, Mzumbe University, Nelson Mandela African Institute of Science and Technology, the Open University of Tanzania, Sokoine University of Agriculture and University of Dar es Salaam. Purposive sampling was used to select these eight public universities. The study targeted a population of 105. Given that the population of this study is considered small, the study used a census sampling technique where all members of the population were included in the study. Questionnaires and interview guides were used to collect data. Questionnaires were administered to 89 records officers. To get in-depth information, a purposive sampling method

was employed thereafter to select respondents from the study population for them to be interviewed. Sixteen senior officials were targeted for interviews. The records continuum model and the Information Governance Reference Model underpinned the study. A pragmatic paradigm using Mixed Methods Research with a bias towards a quantitative dominant was adopted, complemented by a qualitative follow-up. The questionnaire was used to collect quantitative data, while the interview schedule was used to collect qualitative data. Quantitative data was analyzed using Statistical Package for Social Sciences version 23, while qualitative data was analyzed using NVivo software version 11.

The findings revealed that the level of digital recordkeeping in the surveyed public universities was below standard. The issue of funding for recordkeeping featured prominently; the budget allocated for recordkeeping activities was limited. This limited budget was prohibitive in managing records in all the universities. Recordkeeping activities such as records appraisal, storage, and access were found to be insufficient in all the universities. The study established that the university's recordkeeping laws still needed to be fully implemented. The present study also found that a shortage of recordkeeping space/storage was one of the challenges facing universities. The study findings revealed that universities faced numerous risk exposures concerning recordkeeping. They included pest infection, rodents, computer system failure, fire, unauthorized intrusion, water damage and theft.

The study recommends that Tanzanian public universities follow the proposed framework steps when managing their records from creation. The proposed framework addresses the challenges elaborated in this study and, if appropriately implemented, will help Tanzanian public universities perform recordkeeping effectively.

Keywords: Recordkeeping, public universities, digital recordkeeping, disaster management, records legislation, recordkeeping skills, records storage, records security

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DEDICATION

I dedicate this research to my beloved parents, Firmin George Kavishe and Josephine Magori Kuyenga. Thank you for giving me a proper upbringing. Without you, there is no me. I also would like to dedicate this work to my lovely wife, Dr. Irene Shubi Isibika, and our two lovely children: our daughter, Josephine Mwasi Kavishe, and our son, Jedidiah Isibika Kavishe, who supported, encouraged, and prayed for me during my studies. This could not have been possible without you. This achievement belongs to all of us.

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ABBREVIATIONS AND ACRONYMS

ARIS	- Academic Record Information System
ARMA	-Association of Records Managers and Administrators
ARU	-Ardhi University
ATI	- Access to Information
BBC	- British Broadcasting Corporation
BuSH	- Business Studies and Humanities
CHS	- College of Health Sciences
CoCSE	- Computational and Communication Sciences and Engineering
DRPS	- Directorate of Research, Publications and Postgraduate Studies
DUCE	- Dar es Salaam University College of Education
EDRM	- Electronic Discovery Reference Model
EDRMS	-Electronic Document/Records Management
ERMS	- Electronic Records Management Systems
ESARBICA	- East and Southern Africa Regional Branch of the International Council on Archives
FOI	- Freedom of Information
FoL	- Faculty of Law
FST	- Faculty of Science and Technology
FSS	- Faculty of Social Sciences
GARP	- Generally Acceptance Recordkeeping Principles
ICA	- International Council on Archives
ICT	- Information Communication and Technology
IDM	- Institute of Development Management
IDS	- Institute of Development Studies
IGMM	-Information Governance Maturity Model
IGRM	- Information Governance Reference Model
IRMT	- International Records Management Trust
ISO	- International Organization for Standardization
IT	- Information Technology
KARMA	- Kenya Association of Records Managers and Archivists
LISBE	- Life Sciences and Bio-Engineering
MEWES	- Materials, Energy, Water and Environmental Sciences
MJNUAT	- Mwalimu Julius K. Nyerere University of Agriculture and Technology
MMR	-Mixed Methods Research
MoCU	-Moshi Cooperative University
MU	-Mzumbe University
MUCE	- Mkwawa University College of Education
MUHAS	- Muhimbili University of Health and Allied Sciences
MUST	-Mbeya University of Science and Technology
NMAIST	-Nelson Mandela African Institute of Science and Technology
NRAMP	- National Records and Archives Management Policy of Tanzania
NUSTZ	- National University of Science and Technology in Zimbabwe
OUT	- Open University of Tanzania
OPRAS	- Open Performance Review and Appraisal System
OUT	-Open University of Tanzania
PARBICA	- Pacific Regional Branch of the International Council on Archives
PCCB	- Prevention and Combating of Corruption Bureau
PKI	- Public Key Infrastructure

PSRP	- Public Service Reform Programme
RAID	- Redundant Array Independent Disks
RAMD	- Records and Archives Management Department
RMIP	- Records Management Improvement Programme
RC	- Records Continuum
RMIP	- Records Management Investment Programme
RTI	- Right to Information
SACEM	- School of Architecture, Construction Economics and Management
SARIS	- Student Academic Register Information System
SAE	- Section on Archival Education
SASA	- South African Society of Archivists
SERBI	- School of Earth Sciences, Real Estates, Business and Informatics
SEST	- School of Environmental Sciences and Technology
SNV	- Stichting Nederlandse Vrijwilligers
SoB	- School of Business
SoPAM	- School of Public Administration and Management
SPSS	-Statistical Package for Social Science
SSPSS	- School of Spatial Planning and Social Sciences
SUA	-Sokoine University of Agriculture
SUZA	- State University of Zanzibar
TARESO	-Tanzania Records Society
TCU	- Tanzania Commission for Universities
TRA	- Tanzania Revenue Authority
TRAMP	- Tanzania Records and Archives Management Professionals Association
UCLAS	- University College of Lands and Architectural Studies
UDOM	- University of Dodoma
UDSM	-University of Dar es Salaam
UKZN	-University of KwaZulu-Natal
UNC	- University of North Carolina
UNESCAP	- United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	- United Nations Educational, Scientific and Cultural Organization
USA	- United States of America
ZIFA	- Zanzibar Institute of Financial Administration
ZIToD	- Zanzibar Institute of Tourism Development

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Background

Recordkeeping is a major feature of any institution's corporate governance and is significant to its transparency and accountability (Ngoepe 2012:24; Nengomasha 2018:257). Public universities cannot operate without records because they provide the foundation for good decision-making. Without records, it would be impossible to hold public universities accountable. Records in an institution are what help in identifying what has been done and how it was done (Ngoepe 2012:200; Ngoepe 2014:7). Depending on human memory is dangerous due to its elusiveness and the tendency of people to remember things that never occurred (Ngoepe 2014:7). If nothing is recorded, it is impossible to prove that it has occurred (Ngoepe 2014:7). In other words, records serve as tools for creating trust through time and across societies (Engvall 2019:224). Similarly, Osebe, Maina and Kurgat (2018:295) and New Era Live (2019:1) added that there can be no informed decisions, justice, or accountability without records. Good recordkeeping helps to protect the organization by providing proof of the actions taken when evidence is needed (Pacific Regional Branch of the International Council on Archives [PARBICA] 2017a). Therefore, proper management of university records enables institutions of higher learning to make informed decisions, promoting good governance.

The International Records Management Trust [IRMT], (2011:5) reported that in 2009, the Tanzanian government issued an important circular revealing the government's position in recognizing the importance of recordkeeping. The circular covered issues of digital recordkeeping. Specifically, it addressed guidelines on the disposition of government electronic information to people responsible for maintaining them. The staff were being reminded that they should properly store government information in a secured storage media, disposition of records should only follow retention schedules and they should adhere to government rules concerning security and confidentiality when using the Internet. The circular also reminded recordkeeping staff that any information that is confidential should not be sent through the Internet. The position of recordkeeping in Tanzania is also recognized through the establishment of the National Archives in 1962. After its establishment, the National Archives has been placed under several ministries and is currently under the President's Office. The resolution to put it under the Office of the President came after it was identified that it was

necessary to have a centralized organization that would monitor all records from initial stage to disposition (Magaya and Lowry 2012:4). By placing it in the President's Office, it is also an indication that recordkeeping in the country is a priority to the government. In other words, the National Archives receives a certain level of authority compared to being placed in another less powerful ministry.

The International Records Management Trust (2011:9) reported that Tanzania has been working hard to strengthen its recordkeeping systems for over fifteen years. The International Records Management Trust (2011:9) indicated that Tanzania has been doing so because it is aware that poor recordkeeping affects government operations regarding efficiency and accountability. Accordingly, Magaya and Lowry (2012:2) the most fundamental advancement in recordkeeping in Tanzania was the formation of the Records Management Improvement Programme (RMIP). They said that the programme brought several reforms, such as creating records professionals across the government sector, introducing recordkeeping certification courses and developing a records retention and disposal schedule, to mention a few. The programme was established in 1997 after the establishment of the National Archives (Magaya and Lowry 2012:2). Similarly, Lufinyo (2013:30) stated that during the year 2000, Tanzania launched a reform programme known as the Public Service Reform Programme (PSRP) whose main objective was about service delivery.

Olan'g and Msami (2017:1) indicated that although there are intensified efforts against poor governance that have produced notable gains in Tanzania, much needs to be done to motivate the participation of public officers in enhancing good governance. It is known worldwide that poor recordkeeping is bound to lead to corruption and maladministration. The lack of specific regulations on recordkeeping presents a limitation on the significance of recordkeeping as a tool for fighting and preventing corruption (Casadesus de Mingo and Cerrillo-i-Martinez 2017:257). In Africa, the ESARBICA region, in particular, some countries do not have national recordkeeping policies, records classification procedures and retention schedules (Keakopa 2018a:237). According to Newa and Mwantimwa (2019:121), lack of funds set aside for recordkeeping, absence of top management support, presence of weak recordkeeping laws, and low level of training for recordkeeping professionals are among the recordkeeping issues in Tanzania. Other problems, according to Mohamed, Rasheli and Mwagike (2018:54), revolve around the capture and creation of records, receipt of records, records description and arrangement, access, use, storage, protection and records disposal. Phiri (2016:259), who

conducted a study in South African and Malawian universities, echoed similar sentiments and reported that recordkeeping as a key component of good governance needs to be addressed in most public universities. According to Garaba (2018:146), the challenges of recordkeeping in universities include the absence of trained recordkeeping personnel, a university records manual, and inadequate equipment for recordkeeping. Universities that do not have recordkeeping policies and qualified records personnel means that those universities' recordkeeping resources will automatically face the danger of becoming inaccessible (Khumalo and Chigariro 2017:70). Therefore, top management should set recordkeeping policies, procedures and standards as part of the regulation mechanism in place, as well as practicing integrated long-term strategies to manage records to have effective and sound recordkeeping programmes and in doing so, corruption, fraud and maladministration will decrease.

Poor recordkeeping in an institution is a bad indicator of financial integrity and poor accountability (Keakopa 2018a:239). Ngoepe (2012:68) added that proper recordkeeping enhances information availability and retrievability, which are needed for auditing purposes. There is a need for better availability of information, which is essential, mainly in a situation where there is corruption. Institutions must maintain records for sustainability as well as to reduce risks associated with poor recordkeeping (Ngoepe 2014:6). Public institutions have obligations to account to the public, particularly in the use of public resources such as finances; therefore, proper recordkeeping in public institutions is important for ensuring financial management accountability (Keakopa 2018a:239). As learning institutions, universities should be accountable to society by creating and retaining knowledge through records. For a university to be accountable, developing a method of classifying records is vital. The classification of records is fundamental to all recordkeeping features. The efficiency of any classification scheme rests on its flexibility, the integration records schedule, and harmony with the recordkeeping practices (Cheng 2017:208). Freda (2014:23), in his study conducted at the University of Education, Winneba-Kumasi and Mampong campuses in Ghana, found out that most of the university's staff lacked proper training on recordkeeping laws elements, such as records retention, appraisal and records as well as maintaining access to information.

The main goals of any university are teaching and learning, carrying out research, and conducting community services and consultancy. Records are produced when these activities are being carried out. If such records are poorly maintained, the evidence will be lost, or

accessing them will consume much time. Proper recordkeeping facilitates the effective operation of the university. Therefore, it is essential for universities to properly maintain records to have a reliable institutional memory that serves as evidence of their activities. When recordkeeping is not done well, good governance is compromised, thus resulting in a loss of confidence and corruption in the public service. For records to support accountability, protection of rights and, uphold obligations and informed decision-making, they must be well organized, maintained and accessible (International Organization for Standardization [ISO] 2016).

According to Matangira, Katjiveri-Tjiuro and Lukileni (2014:107), an effective recordkeeping programme should include the setting up of standards and policies for recordkeeping systems as well as training staff about recordkeeping. Recordkeeping programmes involve adherence to the legislation, developing recordkeeping procedures, systems, policies and structures (Netshakhuma 2020:25). Recordkeeping procedures and systems should facilitate compliance with university policies (Freda 2014:16). In this regard, universities should effectively maintain their university records to make sure that they are accountable to the public and they progress sustainably. Funding obtained from the government and other donors is dependent on accountability. Therefore, a recordkeeping programme has to guarantee that reliable and valid records are generated and are made available and accessible whenever they are required (Khumalo and Chigariro 2017:71). This study covered vital university functions, such as human resources, student affairs and finance just to mention a few. Therefore, the focus was on both student records and staff records. These records include students' registrations, admission and examination and letters (appointment, admission, confirmation and sick leave) and financial records such as those dealing with students' fees.

Proper recordkeeping is one of the core components of good governance (Nengomasha 2018:257). Therefore, the lack of sound recordkeeping practices in an organization hinders good governance (Osebe et al. 2018:294). Records must be maintained well because they provide information which is the basis for promoting good governance and holding public offices accountable (Keakopa 2018b:3; New Era Live 2019:1). Proper recordkeeping will, therefore, enable organizations to make good and informed decisions, which in turn promotes good governance (Osebe et al. 2018:294). One of the administrative functions in the university system that involves records is the decision-making process (Atulomah 2011:4). Informed decisions can only be made when information is available. Records and archives are extremely

indispensable to university administration. Therefore, for the universities to take advantage of experience, proper recordkeeping is the foundation of planning for the future of the university system. It will be more difficult for staff to perform their duties if recordkeeping systems are improperly maintained.

Universities always strive to advance in their world rankings. To accomplish this, universities should produce evidence-based performances. This evidence-based performance can only be trustworthy if the information originates from properly maintained records. Universities that maintain their records properly can access and use all information resources available. The net effect of poor recordkeeping in universities is a decrease in effectiveness and efficiency in service delivery. Public universities in Tanzania are government-funded, as the bulk of the funds the government offers to universities go towards personnel remuneration and operation costs. Therefore, when there is proper recordkeeping in the universities, it will assist in demonstrating that the funds provided to these universities are well utilized. Universities that do not consider proper recordkeeping are at risk of promoting an impunity culture.

Universities must fulfill legal requirements and adhere to recordkeeping rules and regulations as specified by their governments. Institutions should manage records as governed by the national legislation, regulations and standards (Netshakhuma 2020:24). According to the Records and Archives Management Act, 2002, in Tanzania, any person who destroys any public record without proper authorization or misuses public records from a public office such as public universities, commits an offense and is liable to a fine or imprisonment or both fine and imprisonment. Similarly, as informed by the national archival legislation, the Universities Act 2005 (Chapter 346 of the Laws of Tanzania) states that any university that fails to comply with the Act, for instance, on the issue of records and information management such as transfer of students records, will be subject to a fine. Therefore, proper recordkeeping is a prerequisite for a university to comply with relevant legislative requirements. This is because universities could experience reputational damage if there are problems of inaccessible and unusable records (Phiri 2016:4). Universities are accountable to the government. As a result, a recordkeeping programme must be in place to ensure the university captures and keeps the evidence required for accountability (Khumalo and Chigariro 2017:71).

Effective recordkeeping is essential to improving economic efficiency and creating transparency to prevent corruption (Akotia 2016:127). Poor recordkeeping attracts corruption (Osebe et al. 2018:294; Transparency International 2018; New Era Live 2019:1). Corruption

is the inappropriate use of public or private offices for personal advantages (Keorapetse and Keakopa 2012:24). David (2017:11) indicated that lack of adequate legislation; weak financial auditing and accounting systems increase the chances of corruption. Similarly, McDonald (2014:238-39) reported that a lack of strong laws, policies, practices, and standards or weak regimes compromise effective recordkeeping. Without records, it is impossible to prove fraud and conduct meaningful audit operations (Keakopa 2018b:3). Similarly, Ngoepe (2012:1) noted that recordkeeping is a key enabler of the auditing process. Corruption, fraud and maladministration are now becoming well-known in many university offices. To enhance the effectiveness of good governance, there should be a close working relationship between internal auditing and recordkeeping (Ngoepe 2012:170). However, most institutions need help ensuring that reliable records are available for accountability in their financial operations (Keakopa 2018b:1). These records should be properly maintained as they play a crucial role in university financial operations and financial management.

Prudent recordkeeping in universities could be one of the solutions to address this scourge. In this regard, improved decision-making, policy, audit and investigations must be underpinned by accessible and usable records. Upward, Reed, Oliver and Evans (2013:40) noted that recordkeeping audit strategies should be developed to help reduce corruption and foster accountability and transparency for our actions. For instance, in 2018, it was reported that there were 19700 cases of ghost workers and exaggerated wage bills in the Tanzanian government (Masele and Kagoma 2021:166). Therefore, proper recordkeeping, such as financial records, may lead to suppressing corruption and fraud in universities. Strong auditing structures enhance institutions' economic development. They promote transparency, accountability, and good governance in financial management within institutions (David 2017:2). Nkebukwa's (2016) study established a lack of motivation among registry staff, inadequate equipment and skilled personnel, an insufficient number of records offices, and a lack of guidelines for managing digital records at the College of Business Education in Tanzania. Prioritization of recordkeeping practices within public universities should be considered. In other words, public universities should realize the benefit of recordkeeping. Since recordkeeping provides the operational foundation for effective transparency and accountability in public administration, quality documentation is thus a prerequisite. Furthermore, without proper recordkeeping, information can be manipulated, transparency becomes impossible and fraud flourishes (Casadesus de Mingo and Cerrillo-i-Martinez 2017:258).

With the aforementioned, some African universities, as public institutions, are experiencing problems concerning recordkeeping. According to Nengomasha (2018:257), some public offices still need to manage their records effectively, particularly in Africa. Lack of comprehensive recordkeeping policies, standards, and guidelines, and weak institutional capacity have been identified as hindrances to the development of recordkeeping in Africa (Nengomasha 2013:3; Nengomasha 2018:258). For example, in Malawi, recordkeeping is feeble in some universities because of the absence of top management support and weak and informal recordkeeping laws (Phiri 2016:230). The literature also established that prioritization of recordkeeping practices within African public universities is not highly considered. Several studies have shown that there is very little consideration in proper recordkeeping that African universities are giving for improved service delivery (Iwhiwhu 2005; Egwunyenga 2009; Coetzer 2012; Erima and Wamukoya 2012; Muhenda and Lwanga 2012; Asogwa 2013; Matangira, Katjiveri-Tjiuro and Lukileni 2013; Mwangangi 2013; Abdulrahman 2015; Nwaomah 2015; Moseti 2016; Musembe 2016; Phiri 2016; Khumalo and Chigariro 2017; Nyathi and Dewah 2017, Mohammed, Tetteh and Ahmed 2018; Nakato 2019; Rafoneke and Mnjama 2019; Ameyaw and Frempong-kore 2020; Giba-Fosu 2020; Netshakhuma 2020; Tsvuura and Ngulube 2020; Kiprono and Gichuhi 2021, Netshakhuma 2021 and Erima 2022).

Mazikana (2016:104) reiterates that the failure to change the culture of the people in the public service has also reduced the effectiveness and efficiency of new systems and processes as far as recordkeeping systems are concerned. Mazikana (2016:105) provides evidence of this conservatism by pointing to the prevalent "paper and pen-pushing culture" where the paper record held in the registry remains "king," with most transactions still being paper-based or paper preserved even if they have been computer-generated. In this regard, the need to overhaul recordkeeping and processes to reflect the changing times must be addressed. Satastlatten (2016:187) highlights that corruption can be decreased by introducing digital recordkeeping systems to track physical files. Kavuta and Nyamanga (2018:155) revealed that the failure to implement smooth digital recordkeeping in Tanzanian higher learning institutions is due to poor preparations for the change in technology, a lack of support from the information technology specialists, lack of training for users of the recordkeeping systems, lack of training to users of the recordkeeping systems and lack of top management support.

Recordkeeping principles provide standards that guide the government and private sectors. Furthermore, with proper recordkeeping, good governance can be attained. Implementation of

recordkeeping depends on the presence of appropriate legal frameworks for records. Szerletics (2011:2) defined good governance as a collection of several practices, which include policies against corruption, accountability and transparency, fair decision-making, human rights protection and the rule of law principles. This present study explored the correlation between good governance and recordkeeping in the following areas: anti-corruption and fraud measures, public university services delivery and accountability.

1.1.1 Archival legislative framework: the case of ESARBICA region

This section covers issues of archival legislation in the East and Southern Africa Regional Branch of the International Council on Archives (ESARBICA) region.

1.1.1.1 Overview of ESARBICA

ESARBICA was established in Kenya in 1969 (East and Southern Africa Regional Branch of the International Council on Archives [ESARBICA] 2019). Since its formation, it has been among the most active members of the International Council on Archives (ICA). ESARBICA has had conferences with high-quality presentations from around Africa (East and Southern Africa Regional Branch of the International Council on Archives 2019). It is dedicated to managing records and preserving archives so they can be available and accessible. In terms of publications, the body has been able to publish its newsletter and journal regularly (East and Southern Africa Regional Branch of the International Council on Archives 2019). This regional body is responsible for training and recordkeeping issues in eastern and southern Africa. It brings together institutions and individuals concerned with creating, preserving, using and maintaining records and archives within the East and Southern Africa region (East and Southern Africa Regional Branch of the International Council on Archives 2019). Membership in this regional body is open to all national organizations and interested individuals in the East and Southern African region. ESARBICA members include Angola, Botswana, Burundi, Kenya, Lesotho, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland; Tanzania, Uganda, Zambia, Zanzibar and Zimbabwe. This body provides a lot of opportunities and privileges to its members. For instance, it provides opportunities for its members to interact with one another within the East and Southern Africa region (East and Southern Africa Regional Branch of the International Council on Archives 2019). It also invites its members to training workshops, regular regional conferences that are organized biennially, and subscriptions to its publications such as journals and newsletters (East and Southern Africa

Regional Branch of the International Council on Archives 2019). Membership in this regional body is in two types: individual membership and organizational membership.

1.1.1.2 Archival legislative framework

Protecting the country's documentary heritage is the state's obligation, as public records are public property. National archives, as the central agency for official records in a country, ensure recordkeeping is done correctly to ensure continuous availability and access to information. In many countries, these regulatory frameworks relating to recordkeeping do exist as national archives act (Ngoepe and Saurombe 2016:24). Archival legislation is the foundation for recordkeeping (Mosweu and Simon 2018:70; Newa and Mwantimwa 2019:118). Archival legislative frameworks significantly impact how records are created and maintained in an office. An effective archival legislative framework enhances accountability and good governance (Netshakhuma 2019:220).

Despite the presence of national archival institutions in many African countries, it has been established that there needs to be comprehensive recordkeeping guidelines and practical standards (Netshakhuma 2019:219; Newa and Mwantimwa 2019:121). Similarly, Hamooya, Mulauzi, and Njobvu (2011:117) and Ngoepe and Saurombe (2016:24) asserted that some of the archival legislative frameworks in Africa have weaknesses. According to (Keakopa 2018a:240), despite the importance of the archival legislative framework, still many organizations in the ESARBICA region are using outdated legislative frameworks to maintain their records. Weak institutional capacity and weak implementation of recordkeeping regulatory frameworks cause a lack of accountability and good governance in many organizations (Netshakhuma 2019:211).

Implementation of the comprehensive and up-to-date archival legislative is a vital requirement for establishing an effective and integrated system for recordkeeping throughout their entire lifecycle. Hamooya et al. (2011:116) pointed out that if records and archives are not maintained well during their earlier stages, records with enduring values will not be easily identified. For proper recordkeeping, officers must make use of regulatory frameworks. Similarly, Hamooya et al. (2011:117) and Ngoepe and Saurombe (2016:24) indicated that an archival legislative framework gives organizations the authority to protect and preserve the public sector's records and archives.

A regulatory framework for recordkeeping plays a very important role (Nengomasha 2018:260; Netshakhuma 2019:213). A regulatory framework is a fundamental tool in recordkeeping as it provides the legislation framework in which the National Archives operates (Netshakhuma 2019:213). Besides, this archival legislation is one part of "access to information" (ATI), "right to information" (RTI), or "freedom of information" (FOI), which not only is a fundamental human right but forms the basis of trust in public discourse to enable accountable and good governance or open government (Shepherd 2017:248). As correctly noted by Shepherd (2017:248), the three terms commonly connected with the RTI are transparency, good governance, and accountability, which this study seeks to examine closely concerning Tanzanian public universities.

According to Kabata and Garaba (2019:118), only 21 of 54 African countries have legal and constitutional guidelines that guarantee public access to records. In Tanzania, the Access to Information Act was enacted in September 2016. Access to information means access to records. In this regard, there is a strong link between freedom of information and proper recordkeeping. Therefore, robust recordkeeping systems and practices should be in place to guarantee freedom of information (Ndenje-Sichalwe 2010:82). Institutions such as Tanzanian public universities should have effective organizational frameworks to enhance proper recordkeeping. Sound recordkeeping, as well as the use of appropriate legal frameworks, help institutions achieve transparency and accountability.

1.1.2 Link between recordkeeping and good governance

The correlation between recordkeeping and good governance does not need emphasis. At any workplace, it is a fact that information is a key public resource. Recordkeeping provides guidelines and standards against which an organization's workers can be held accountable. In other words, proper recordkeeping activities inform good governance. Nevertheless, without proper recordkeeping, an organization cannot be brought into account. Records provide the information needed by decision-makers. Therefore, proper recordkeeping of university records enables the university to make good and informed decisions, promoting good governance. There will be no accountability if there is no information. This is to say that there is a mutual responsibility and relationship between workers and the organizations where they work, which is expressed and measured through records. If organizations fail to ensure records integrity,

confidence and trust in workers is easily eroded. Good governance becomes a dream when recordkeeping systems are not working and there are no records (Osebe et al. 2018:294).

Failing to keep proper records can seriously impact others (Pacific Regional Branch of the International Council on Archives 2017b). Thus, an organization must manage its records properly, as they are essential for performing its work in serving the workers and patrons. In a nutshell, good governance is determined and achieved by proper recordkeeping. For records to be trusted, they should be authentic, reliable, accessible, and useable (Shepherd 2017:249).

1.2 Tanzanian public universities: a historical insight

Worldwide, a university is seen as a place where people go to get ideas, knowledge and skills to meet their economic needs (Dulle 2010:16). Alemu (2018:212) defined a university as a vital instrument that is used in providing leadership, critical support of national building and highlighting cultural adaptation as well as unity through training. According the Tanzania Commission for Universities [TCU] (2016:1), there are twelve (12) fully-fledged public universities: Ardhi University, Mbeya University of Science and Technology, Moshi Co-operative University, Muhimbili University of Health and Allied Science, Mwalimu Julius K. Nyerere University of Agriculture and Technology, Mzumbe University, Nelson Mandela African Institution of Science and Technology, Open University of Tanzania, Sokoine University of Agriculture, State University of Zanzibar, University of Dar es Salaam and University of Dodoma. A brief background of these universities will now be provided.

1.2.1 Ardhi University

In 2007, an act was signed by President Jakaya M. Kikwete to transform the University College of Lands and Architectural Studies (UCLAS) into Ardhi University (ArU). Before the change, UCLAS was a constituent college of the University of Dar es Salaam (UDSM). The University is located in Dar es Salaam near UDSM. The University offers both undergraduate and postgraduate programmes. It comprises three schools, namely: the School of Architecture, Construction Economics and Management (SACEM), the School of Earth Science, Real Estates, Business and Informatics (SERBI), the School of Environmental Science and Technology (SEST) and the School of Spatial Planning and Social Sciences (SSPSS) (Ardhi University 2019).

1.2.2 Mbeya University of Science and Technology

It started as a college called Mbeya Technical College and later was renamed Mbeya Institute of Science and Technology. In 2012, it became a fully-fledged university. It is located in southern Tanzania, in the Mbeya region. It comprises two colleges, one school, and one institute. The University has 15 programmes (Mbeya University of Science and Technology 2019).

1.2.3 Moshi Co-operative University

It was established in 1963 as a Co-operative College Moshi before its name changed to Moshi University College of Co-operative and Business Studies in 2004. In 2004, it became a fully-fledged university. The university is situated in Kilimanjaro, Moshi. The University offers programmes from certificate to postgraduate level (Moshi Co-operative University 2017).

1.2.4 Muhimbili University of Health and Allied Sciences

Before recognition by TCU as a fully-fledged university, it started as Dar es Salaam Medical School. The School was renamed the University of Dar es Salaam Faculty of Medical in 1991. It was later renamed Muhimbili College of Health Science, then Muhimbili University of Health and Allied Science in 2007. It is located in the Dar es Salaam region. It has five schools: the School of Nursing, School of Pharmacy, School of Dentistry, School of Public Health and School of Medicine. It offers ninety programmes at various levels, from diploma to postgraduate (Muhimbili University of Health and Allied Sciences 2018).

1.2.5 Mwalimu Julius K. Nyerere University of Agriculture and Technology

The University was established in 2014 and named after the first President of Tanzania, the late Mwalimu Julius Kambarage Nyerere. It is located in Butiama, the hometown of the father of the nation, Julius Nyerere. The university mainly focuses on agricultural programmes and the fields of science and technology. Eleven (11) programmes are offered at the undergraduate level (Mwalimu Julius K. Nyerere University of Agriculture and Technology 2019).

1.2.6 Mzumbe University

It was established in 2001 and is located in the Morogoro region. Before it became a fully-fledged university, it was known as the Institute of Development Management (IDM-Mzumbe). The University has seven academic units, namely, School of Business (SoB), School of Public Administration and Management (SoPAM), Faculty of Law (FoL), Faculty of Social Sciences (FSS), Faculty of Science and Technology (FST), Institute of Development Studies (IDS) and Directorate of Research, Publications and Postgraduate Studies (DRPS). It offers programmes from certificate to postgraduate level (Mzumbe University 2016).

1.2.7 Nelson Mandela African Institution of Science and Technology

The University is located in northern Tanzania, in the Arusha region. The University is a research-intensive institution mainly for postgraduate and postdoctoral studies and research in Science, Engineering, Technology, and Innovation. It comprises four schools: the School of Life Science and Bio-engineering (LISBE), the School of Material, Energy, Water and Environmental Sciences (MEWES), the School of Computational and Communication Science and Engineering (CoCSE), and the School of Business Studies and Humanities (BuSH). The University has partnerships with the following institutions: Penn State University, Washington State University, Glasgow University, Erfurt University of Applied Sciences, Jvaskyla University of Applied Sciences, Seoul National University and Stichting Nederlandse Vrijwilligers (SNV) Tanzania (Nelson Mandela African Institute of Science and Technology 2018).

1.2.8 Open University of Tanzania

It is located in Dar es Salaam, established in 1992. The University offers certificates, diplomas, degrees and postgraduate programmes. It uses an open and distance learning system. It is temporarily situated in the Kinondoni district, but its permanent headquarters is being constructed in the Coast region, Bungo in Kibaha District. The University has thirty (30) regional centers and ten (10) coordinating centers, of which two are in Kenya, one in Uganda, one in Rwanda, and one in Namibia. The University has five faculties and two institutes (Open University of Tanzania 2018).

1.2.9 Sokoine University of Agriculture

It started as a College of Agriculture offering a diploma in the field of Agriculture during the year 1965. The foundation of the University of Dar es Salaam in 1970 led to its being named the College of Faculty of Agriculture of the University Dar es Salaam. Therefore, degree programs in Agriculture were offered. In 1974, a forestry division was established and the Faculty changed its name to the Faculty of Agriculture and Forestry. In 1976, the Faculty was renamed to the Faculty of Agriculture, Forestry and Veterinary Science due to the introduction of the Bachelor of Veterinary Science programme. The Faculty in 1984 became a fully-fledged university known as Sokoine University of Agriculture. The University is named after the late Prime Minister Edward Sokoine, who died in 1984. It is in the Morogoro region (Sokoine University of Agriculture 2019).

1.2.10 State University of Zanzibar

The university was established in 1999 on Unguja Island in Zanzibar and became operational in 2001. In 2016, it was merged with the Zanzibar Institute of Financial Administration (ZIFA), the College of Health Sciences (CHS), and the Zanzibar Institute of Tourism Development (ZIToD). The university has seven campuses, one in Pemba (State University of Zanzibar 2019).

1.2.11 University of Dar es Salaam

It was established as the College of the University of London in 1961. Shortly after independence in 1963, it became the University of East Africa. In 1970, it was named the University of Dar es Salaam. Two constituent colleges have been established: Dar es Salaam University College of Education (DUCE) in Dar es Salaam and Mkwawa University College of Education (MUCE) in the Iringa region. It offers programmes for non-degree and postgraduate degrees (University of Dar es Salaam 2019).

1.2.12 University of Dodoma

The University is located in Dodoma region, Tanzania's capital city. It was established in 2007. It comprises seven colleges: College of Education, College of Humanities and Social Sciences, College of Information and Virtual Education, College of Natural and Mathematical Sciences,

College of Health Sciences, College of Earth Sciences and College of Business Studies and Law. It offers diploma, degree and postgraduate programs (University of Dodoma 2019).

1.3 Research problem

From previous studies, it has been established that there has been negligence in the management of records in several African universities and little to no improvements in the management of university records (Iwhiwhu 2005; Erima and Wamukoya 2012; Muhenda and Lwanga 2012; Mwangangi 2013; Usman and Udensi 2013). Although recordkeeping is crucial, enhancing good governance in public universities is becoming a challenge. This has been noted in the literature (Coetzer 2012:7; Akor and Udensi 2013:91; Abdulrahman 2015:49; McDonald 2014; Phiri 2016:275). Records in the public sector, such as universities, are prone to disasters, files need proper classification and disposal of records is not systematic. The prevalence of poor recordkeeping practices in African universities brings doubts as to how university top management and administrators have been making informed decisions (Iwhiwhu 2005; Egwunyenga 2009; Coetzer 2012; Erima and Wamukoya 2012; Muhenda and Lwanga 2012; Asogwa 2013; Matangira, Katjiveri-Tjiuro and Lukileni 2013; Mwangangi 2013; Abdulrahman 2015; Nwaomah 2015; Moseti 2016; Musembe 2016; Phiri 2016; Khumalo and Chigariro 2017; Nyathi and Dewah 2017, Mohammed, Tetteh and Ahmed 2018; Nakato 2019; Rafoneke and Mnjama 2019; Ameyaw and Frempong-kore 2020; Giba-Fosu 2020; Netshakhuma 2020; Tsvuura and Ngulube 2020; Kiprono and Gichuhi 2021, Netshakhuma 2021 and Erima 2022). There is a necessity to create awareness of the benefits of recordkeeping in institutions (Garaba 2018:153).

Like in other African countries, recordkeeping in Tanzania is at a crossroads. Despite the Tanzanian government's rigorous efforts to introduce a digital government, most records are not digitally maintained (Kamatula 2018:28; Newa and Mwantimwa 2019:116). For example, a lack of solid records legislation through which digital records are to be maintained is evident in Tanzania. For instance, the Records and Archives Management Act No. 3, 2002, is insufficient and ineffective, specifically on issues relating to digital records management (the Records and Archives Management Act No. 3, 2002). The Tanzania Electronic Transactions Act of 2015, which recognizes digital records, seems inadequate as it does not provide any specific guidelines for effective digital records management (The Tanzania Electronic Transactions Act of 2015:9). Several research studies have examined the state of management

of records in Tanzania (Kamatula 2010; Mikidadi 2013; Kijazi 2016; Nkebukwa 2016; Kavuta and Nyamanga 2018). However, these studies did not focus on how recordkeeping facilitates good governance in public universities, which is the thrust of this study.

Good universities depend on preserving the knowledge that they create to have a platform for further learning and research. Universities should value knowledge, for it defines their existence (Matangira et al. 2014:104). Leaving recordkeeping activities in the hands of recordkeeping officers does not give a robust platform for institutional accountability and good business operations. Therefore, universities need to establish a strong foundation for proper recordkeeping, covering guidelines and policies and raising awareness among staff on the responsibilities of recordkeeping. This has not been the case in most higher education institutions in Africa (Coetzer 2012:7; Akor and Udensi 2013:88; Freda 2014:34; Matangira et al. 2014:111; Abdulrahman 2015:49; Phiri 2016:55; Khumalo and Chigariro 2017:74; Garaba 2018:155; Garaba and Mahlasela 2018:243; Netshakhuma 2020:25). Evidence abounds of cases of neglect of recordkeeping in universities and other organizations in Sub-Saharan Africa. Recordkeeping must be addressed despite pronouncements that it forms the spine of governance, audit and risk management. This is a worldwide trend but can be seen as more dire in organizations in Africa as compared to those in developed countries (Phiri 2016:20)

There is a direct connection between the quality of university products and proper recordkeeping, on which the university's reputation is built. Unfortunately, this connection is not recognized. According to the Business Anti-Corruption Portal (2016), administrations in Tanzanian public offices that provide services are struggling due to weak capacities, lack of trained staff, political interference, and lack of resources. Public officials are poorly paid, which makes them even more susceptible to corruption.

1.4 Objective of the study

The main objective of this study is to investigate recordkeeping for good governance in Tanzanian public universities.

1.4.1 Specific research objectives

1. To establish the systems and processes used in recordkeeping in Tanzanian public universities.

2. To determine the recordkeeping skills and training recordkeeping staff need in Tanzanian public universities.
3. To assess the role of records legislation in recordkeeping in Tanzanian public universities.
4. To examine the level of security and confidentiality control in recordkeeping in Tanzanian public universities.
5. To identify the interventions required in order to address recordkeeping in Tanzanian public universities.

1.4.2 Research questions

Arising from the aforementioned objectives, the following research questions guided this study:

1. What systems and processes are used in recordkeeping in Tanzanian public universities?
2. What recordkeeping skills and training do staff need in Tanzanian public universities?
3. What is the role of records legislation in recordkeeping in Tanzanian public universities?
4. What is the security and confidentiality control level in recordkeeping in Tanzanian public universities?
5. What interventions are required in order to address recordkeeping in Tanzania public universities?

1.5 Rationale for the study

Ndenje-Sichwale (2010:319) advised that further research should be done in the Tanzanian public sector to determine the role of recordkeeping in fostering good governance. This provided the justification for this study because corruption, fraud, and maladministration are among the challenges to good governance. The findings of this study could help Tanzanian public universities and similar higher learning institutions in other African countries improve recordkeeping. The study has also developed a conceptual framework that will help to enhance recordkeeping in public universities. The results of this study may create awareness among records managers and archivists regarding the importance of recordkeeping and its usefulness in addressing corruption, fraud, and maladministration, as well as fostering accountability. Knowing the significance of recordkeeping as a strategic resource might influence the full implementation of recordkeeping laws. Therefore, the current study contributes to the existing knowledge concerning recordkeeping. The results of this study could aid public universities in

carrying out recordkeeping effectively and as a result, the public will benefit from service delivery that is free from corruption and fraud.

1.6 Originality of the study

The term originality is obscured and variegated in meaning (Phillips and Pugh 2015:75) as they put forward thirteen propositions as evidence that numerous interpretations are attributed to the term from a philosophical point of view. One of these, as also alluded to by Ndenje-Sichwale (2010:230) and Ambira (2016:30), is that the uniqueness of the study is chiefly concerned with the degree to which the research study makes a significant and novel contribution to existing theories and/or knowledge to the field of study in a way that has not been done before. Similarly, Silverman (2017:90) defined originality as making a synthesis that has yet to be made before. It conveys new evidence on an old issue (Silverman 2017:90). Sibomana (2016:206) stated that the benchmark of any research study is its capacity to impose an original impact on the knowledge of the research field. He further noted that originality is a requirement for a PhD research to be accepted within the research community.

Scholars have identified some features as characteristics that constitute originality in a research study. These, according to (Phillips and Pugh 2015:75; Ambira 2016:30), are as follows:

- i. Conducting research that has not been conducted before;
- ii. Use of new research methodologies;
- iii. Adding new knowledge in a way that has not been done before;
- iv. New theory;
- v. New and innovative use of data;
- vi. Using a particular approach in a different study area; and
- vii. Researching in understudied areas, to mention a few.

According to Onyancha, Ngoepe and Maluleka (2015:156), there is a scarcity of studies in recordkeeping in Africa. Onyancha et al. (2015:156) further indicated that as Library and Information Science progresses, the recordkeeping sub-discipline needs to be more researched. Similarly, Ocholla, Ocholla and Onyancha (2012:490) reported that the most explored subjects in East Africa in Library and Information Science were mainly on areas such as information seeking, information technology and information services. This is confirmed by Ngoepe, Maluleka and Onyancha (2014:120), who indicated that recordkeeping research needs more

attention in many African countries. Chigariro and Khumalo (2018:161) reiterated this and established that there is an underproduction of research on recordkeeping in the southern African region, particularly in digital recordkeeping. Scholarship on recordkeeping sources reveals that research has been conducted on recordkeeping in Tanzania (Ndenje-Sichwale 2010; Madulu 2016; Kamatula 2018). However, these studies did not focus on how recordkeeping facilitates good governance in public universities, which is the thrust of this study. Kamatula (2018:31) indicated that an understudied area refers to a research study done in a geographic region that has yet to be researched. Therefore, this study was unique because it was based on an understudied area. The understudied area was recordkeeping in Tanzanian public universities. In other words, the current study looked at the entire lifecycle of records as informed by the records continuum.

Unlike in previous studies, a combination of two models underpinned the anticipated study: the records continuum and the Information Governance Reference Model. Ndenje-Sichwale (2010:268) used the records lifecycle model in her research. She acknowledged that this was the model used for public records in Tanzania as records existed mainly in the paper format then. Madulu (2016:10) used archival theory, managerial fashion theory, technical knowledge and know-how theory and diffusion of innovations theory as her theoretical frameworks. Kamatula's (2018:39) study triangulated the IRMT electronic records readiness tool and the World Bank e-government handbook for developing countries as theoretical frameworks of the study.

1.7 Limitations and delimitations of the study

Limitations are weaknesses that a researcher cannot control. Similarly, Simon (2011:2) indicated that constraints or limits that are out of control in research, such as financial resources, time and access to information, to mention a few, are described as limitations. Researchers need to explain how they intend to deal with the limitations they know to avoid affecting the research study's results. This study investigated recordkeeping in twelve (12) Tanzanian public universities. Focusing on public universities rather than all the universities (public and private) was necessary due to the limited time and financial resources required to undertake this research.

Delimitations are the features that limit the study's scope and describe the boundaries of the study. They are in the researcher's control. Enslin (2014:276) indicated that parameters and

borders are fundamental for a researcher to focus on concepts, methods, literature and theories. The study mainly focused on corruption, fraud, and maladministration as among the challenges to good governance. The study also primarily focused on university records, as the study's main purpose was to identify the role of recordkeeping in promoting good governance in Tanzanian public universities. When describing the delimitations of a study, it is essential to spell out who the population is and give reason/s as to why the population is selected (Enslin 2014:276). The population for this study consisted of archivists, records officers, and senior university officials (directors of recordkeeping and human resource offices) from eight out of the twelve public universities in Tanzania. The population was selected based on the understanding that this would provide relevant information on the investigated issues. There were no time and financial resource limitations in collecting data from all eight universities.

1.8 Brief summary of the framework used in this study

It might be hard for readers to understand the investigation's theoretical foundation unless it has been isolated from the literature review (Ngulube et al. 2015:59). Therefore, this study used the conceptual framework to establish a logical connection in the research and clarify what the researcher intended to achieve and how it was accomplished, as indicated by Chaterera (2017:32). The main objective of a conceptual framework is to portray research results generalizable and meaningful. This study's conceptual framework focused on the current research, forming the foundation on which the data gathered was analyzed and interpreted. It also gave the researcher a more in-depth insight into the topic under investigation.

1.9 Research methodology

The study used a pragmatic paradigm to guide the researcher in obtaining information. A pragmatic paradigm was used in this study because it gives the researcher the freedom to use any of the research methods, techniques, and procedures related to qualitative or quantitative research. Davis (2014:78) points out that pragmatic research aims to solve a particular problem using mixed methods. Therefore, a mixed-method approach was used. A study is considered a Mixed-Method Research if the data is gathered, analyzed and interpreted using both quantitative and qualitative methods in a single study (Ngulube and Ukwoma 2019:2). Concurrent/parallel mixed design was deployed to seek convergence across quantitative and

qualitative approaches. Parallel mixed designs are those in which quantitative and qualitative research approaches run concurrently but independently in addressing research questions (Cohen, Manion and Morrison 2018:39).

The units of analysis were the twelve Tanzanian public universities, namely Ardhi University (ARU), Mbeya University of Science and Technology (MUST), Moshi Co-operative University (MoCU), Muhimbili University of Health and Allied Sciences (MUHAS), Mwalimu Julius K. Nyerere University of Agriculture and Technology (MJNUAT), Mzumbe University (MU), Nelson Mandela African Institute of Science and Technology (NMAIST), Open University of Tanzania (OUT), Sokoine University of Agriculture (SUA), State University of Zanzibar (SUZA), University of Dar es Salaam (UDSM) and University of Dodoma (UDOM) (Tanzania Commission for Universities 2016). The data was gathered from archivists, records officers and senior university officials. The study population was 166. Ideally, the researcher was to select a few public universities, but due to the small study population, the researcher had to select all twelve universities.

The researcher used purposive sampling to select respondents for interviews to get in-depth information. Heads of recordkeeping departments and directors of human resources and officers were interviewed as key informants. A structured interview guide and questionnaire were used in data gathering. SPSS was used to analyze quantitative data to create charts, figures and tables. Content analysis was used to analyze data from open-ended questions in the questionnaire and the structured interview schedule. A pre-test exercise was done to guarantee validity and reliability. Archivists from the Tanzania National Archives, National Records Center, and Jordan University College were involved.

1.10 Ethical considerations

The study followed the ethical standards stipulated in the UKZN's research ethics guide (UKZN research ethics policy 2014). For example, as a requirement for research proposal defense in the School of Social Sciences at the cluster level, the researcher submitted a Turnitin report to the research supervisor that did not reflect more than 15% similarity. Before going to the field, permission was obtained from UKZN's Research Office. Also, a letter of consent addressing confidentiality issues about the respondents was given to respondents. The respondents were

requested to read and sign the consent letter if willing to participate in the research. Due to the COVID-19 global pandemic, UKZN, through the Human and Social Science Research Ethics Committee, issued guidelines on 6 April 2020 directing researchers on how to carry out research in these unprecedented times punctuated by a raft of lockdown measures in a bid to contain the virus. Consequently, data collection complied with national guidelines, directives and laws during this COVID-19 pandemic as spelled out in the HSSREC protocol (University of KwaZulu-Natal Research Ethics Office 2020) as well as national guidelines and directives from the Tanzanian government (Deutsche Welle [DW] 2020).

1.11 Definition of concepts and key terms

Definitions are aimed at describing the meaning of a term or word to assist one in comprehending concepts, their use and applicability (Williams 2014:9). Definitions in records and archive management are fundamental for recordkeeping professionals for the aim of communication with others, as well as in making decisions at workplaces (Williams 2014:9). Consequently, in this section, concepts and key terms in the recordkeeping discipline are described in detail. The concepts and key terms include records, archives, recordkeeping, records management and good governance.

1.11.1 Archives

In recordkeeping, the term 'archive' is defined as a record with enduring value. In agreement with Ndenje-Sichalwe (2010:13), Schellnack-kelly (2013:16) defined archives as records with continuing value and should be preserved in proper archival conditions at a repository in accordance with the National Archives Act for heritage purposes. The Society of American Archivists Dictionary (2020b) defines archives as records worthy of permanent retention due to their continuing values as evidence or for research. From the above definition, not all records have enduring value, so one may conclude that archives are records and not all records are archives. For this study, archives were defined as records with continuing values preserved for use in an archival repository.

1.11.2 Good governance

Szerletics (2011:2) described the term governance in three ways. First, it is the political authority in a country; second, it is a way of exercising authority in the management of social and financial resources; third, it is the capacity of a government to exercise its obligations well and equally via sound policies. The United Nations Human Rights Office of the High Commissioner (2020) defined good governance as the process of exercising authority that is accountable and transparent and which includes public participation via political or institutional actions. International Bureau of Education (2020) described governance as how authority is demonstrated in managing a state's social and economic resources for development. Also, sound development management is synonymous with good governance. Features of good governance are transparency, accountability, participatory, responsiveness, effectiveness, efficiency and adherence to the rule of law (Kenosi 2011:20; Dikopoulou and Mihiotis 2012:135; Schellnack-Kelly 2013:17).

According to Dikopoulou and Mihiotis (2012:131), governance is exercising political or administrative authority to create and manage a sustainable and accountable organization that achieves its mission while demonstrating stewardship over resources. Good governance depends upon the introduction and maintenance of mechanisms to support the behavior and performance of management, which are in the interests of the stakeholders of an institution (Ngoepe 2012:50). Governance is how an institution arranges its processes and structure so that it can make decisions, carry out its work and monitor its progress (Pacific Regional Branch of the International Council on Archives 2017b).

For this study, good governance is exercising authority, including trustworthiness, accountability, openness, transparency, fast-tracked decision-making, anti-corruption policies, and effective and efficient service delivery. In other words, as noted by the Pacific Regional of the International Council on Archives (2017b), good governance is how an institution/organization does its work in a manner that complies with the relevant laws and regulations. If good governance is to be attained in an organization, there should be a solid records legislation framework that sets standards, policies, procedures, rules, and regulations for recordkeeping.

1.11.3 Recordkeeping

The main objective of recordkeeping is to ensure that the process of creating, organizing, managing, using, preserving and disposing of records is controlled. McKemmish (2017:122) stated that recordkeeping includes activities and processes carried out by archives and records professionals for current, historical and regulatory purposes. These purposes involve the role that records and archives management plays in and through space and time in accountability and governance (McKemmish 2017:123). Recordkeeping is organizing records to monitor and control the specific functions of creating, storing, and accessing them to protect their authenticity and reliability. Similarly, the Pacific Regional Branch of the International Council on Archives (2017a) defines recordkeeping as creating and managing accurate, comprehensive and reliable records for business transactions. Upward et al. (2013:38) defined recordkeeping as managing and processing recorded information derived from agents in action. These agents can be people or information and communication apparatuses. They further indicated that recordkeeping covers how records are captured, preserved and disseminated as evidence using Information and Communication Technologies. In the continuum concept, recordkeeping covers creating and managing records and archives (Frings-Hessami 2017:4; McKemmish 2017:123). Effective recordkeeping creates reliable records that are significant in accountability, decision making and transparency (Phiri 2016:144).

There is a difference between recordkeeping and records management regarding their application and usage in the records and archives community. In Australia, 'recordkeeping' is commonly used to indicate the unification of records management and archives preservation practices (Frings-Hessami 2017:4; McKemmish 2017:123). This conforms with the concept of the RC model, whose origins is Australia. Most ESARBICA member countries like Tanzania use the term 'records management' due to the lifecycle model philosophy. These two models will be discussed in detail in Chapter Two. This study focused on the continuum approach in managing records throughout their lifecycle in physical and electronic form. This approach provides a holistic approach to recordkeeping as recordkeeping is seen as a continuous activity where one feature of the continuum goes smoothly and continuously into another (Cumming 2010:42; Garaba 2010:291). The demarcation of functions between archivists and records managers in the continuum approach is seen as artificial and constrictive (Cumming 2010:41). Similarly, Upward et al. (2013:38) indicated that recordkeeping provides a bridge between archivists, information systems and records managers.

The continuum approach has also broadened the interpretation of records and records systems provided by the lifecycle model. In addition, of great significance in the modern digital era, the continuum approach is well adapted for managing records in electronic format (Garaba 2010:292). Moreover, this study was underpinned by the RC model, which does not distinguish records management and archives preservation by prioritizing one over the other. This justified why the study adopted recordkeeping and not records management. This study focused on the unification of records management and archives preservation practices, which is the concept of recordkeeping.

Therefore, this study's working definition of recordkeeping was adopted from the Pacific Regional Branch of the International Council on Archives (2017a). It covered aspects such as creation, organization, usage, disposition and preservation of records. Good recordkeeping makes records accurate, reliable, complete, authentic, usable and systematic. The quality of proper recordkeeping includes records being systematic, reliable, adequate, comprehensive, compliant, accurate, complete, usable and authentic.

1.11.4 Records management

Recently, there has been a reconceptualization of the term records management, hence the emergence of recordkeeping informatics (Australia) and records and information management (United States of America), all because of different perceptions of the lifecycle and records continuum models. This reconceptualization of the term records management shows trends in records management as a profession and where it is heading. Records management has now become hidden within other professional activities. For instance, these days, there are recordkeeping metadata registrars who are experts in metadata schema; these experts can identify and implement elements in metadata schemas to turn information into evidence (Oliver, Upward, Reed and Evans 2014:126). Renaming of professional associations worldwide to include the term information, which has a broader appeal than records, has also been done. For example, the Association of Records Managers and Administration (ARMA) now describes itself as the authority on information governance (Lueders 2014). Oliver et al. (2014:126) argued that records management is about managing records and the records management systems and processes in which they are created, captured, managed and used.

According to Warland (2020:8), organizations find it hard to go digital simply because many records management systems and practices have yet to evolve with the digital era. These

challenges of digital records management call for a rethink of what it means to be a records manager. Upward et al. (2013:40) indicated that without the presence of the single-minded concentration on the records management processes, which produce evidence of actions within the framework of broader information management, we would be left with information gap. Therefore, new standards for professional records management competencies and ways of expressing records management functions are needed. Records management falls under the umbrella of information governance (Hagmann 2013:230; Saffady 2015:39; Brooks 2019:7). Information Governance, which some critics insist, is a rebranding of records management (Lueders 2014 as cited by Yeo 2018:68). Information governance is a relatively new method to managing information within an institution. It combines features of legal, risk management, information technology and the more familiar records management. Information governance provides records practitioners with an increased strategic view of their role within an institution (Zimmerman 2019:1). There is still a place for the records manager regardless of this Information Governance paradigm shift, as Yeo (2018:68) argues.

This study is built on the concept of recordkeeping informatics. This is because recordkeeping informatics provides a bridge between archivists, records managers and information technologies. The study deals with managing and processing recorded information derived from agents in action. In this study, the records professionals and the recordkeeping systems are agents in action. This debate on the reconceptualization of the term records management will be explored in detail in Chapter Three.

The National Archives United Kingdom (2010:4) defined records management as controlling records within an all-inclusive regime comprising rules and regulations, procedures, policies, systems and processes. Records management ensures decision-making and reliable evidence are preserved to remain available for future reference when needed. This definition identifies records management as a source of evidence and its role as the foundation of accountability and transparent governance. According to the Attorney General's Office in the United Kingdom (2013:4), records management is a theory and methodology established to ensure records are controlled systematically throughout their lifecycle. The International Organization for Standardization 15489-1 (2016) describes records management as a field of management that is in charge of effective and systematic control of creating, receiving, capturing, utilizing, and destroying records as well as maintaining evidence of business transactions and other activities done in the form of records. Since the records lifecycle concept is the core of most records

management programmes as mentioned by Msibi (2015:13); (Chaterera 2013:19), therefore, it is clear that the records management programme's activities are developed upon the lifecycle concept. Ndenje-Sichalwe (2010:55) and Msibi (2015:13) regarded this model as a basis for establishing an effective records management program as it is a foundation for the development of suitable procedures, tools, and systems that are needed to suitably manage each phase of the lifecycle of the records. In a nutshell, the lifecycle model establishes a structure for a records management programme to operate. Although the concept has influenced the development of records management, it has been criticized. For instance, changes in technology suggest that the management of records in the traditional environment is no longer fit for digital records (Cumming 2010:42; Ndenje-Sichalwe 2010:58; Upward et al. 2013:40).

1.11.4.1 Benefits of records management

East Renfrewshire Council (2018:2) stressed that when records management is properly done, it ensures easy retrieval and utilization of trustworthy, accurate and authenticated records. Evidence of accountability and enhancing efficient and effective service delivery is demonstrated in that case. The International Organization for Standardization 15489-1(2016) stated that authoritative evidence of business will be available when records are managed properly. The International Organization for Standardization 15489-1(2016) also outlined the following on the issue of the significance of management of records: accountability and transparency will be improved; risks on businesses will be managed; disaster will be managed to ensure business continuity; cooperate and personal memory will be protected; right and obligation of business and individuals will be protected; there will be improvement in decision making and effective policy formation.

In agreement with the International Organization for Standardization 15489-1(2016), Archives New Zealand (2016:4) pinpointed that managing records properly is vital as this will assist the public in holding government accountable, responsibility will be well outlined, creativity and growth will be facilitated and the public knowledge will be preserved for future use. Effective records management underpins reliable and trustworthy records (Archives New Zealand 2016:4). When records are effectively managed, as explained by the University of Northern British Columbia (2012), the cost of storing records will decrease, office space will increase and accountability, as well as timely access to records information, will be enabled.

1.11.5 Records

To define recordkeeping, the term record needs to be fully explored. The term 'record' has various definitions and these various definitions have created confusion, which has affected the creation of a theory that supports the field of archives management (Ndenje-Sichalwe 2010:11). A record can either be defined in terms of the information it has or in terms of the physical format in which it appears (Freda 2014:8). It should be known that records do differ in terms of size, format and content. The term record originates from the Latin word 'recordari', which means 'to recall,' 'to remember,' or 'to bring back to mind,' which is exactly the work of record (Freda 2014:8).

The usefulness of records is bound up with how they have been initially created, captured, organized and how accessible and available they are on a continuing basis. Yeo (2017:94) stated that records are proactive rather than simply descriptive and are preceded and shaped by their creator's plan, intentions, assumptions and goals. Records are seen as fragile and at risk during transmission; the greatest risks are at the level of capture and access because these two moments are outside the scope of most archival preservation models (Acker 2017:304).

A record is information, regardless of the medium, created, received, maintained and used by a public or private. It can be used to recall information events or to provide accountability for decisions or actions made (Millar 2010:3). A record is information received, created and maintained as evidence in a business transaction or the execution of legal obligations (Yeo 2017:92). Records comprise all books, papers, photographs, maps and other documentary resources despite the format created and received as evidence of the business transaction (Ambira 2016:2). Records include all the documents that an organization or an individual creates or receives during administrative and decision-making transactions (Yuba 2013:29). A record is an official written or printed work used for evidence or proof (The Society of American Archivists Dictionary 2020a). In circumstances where recordkeeping professionals fail to come to a consensus on common terminology, international bodies that deal with recordkeeping may be used to provide a solution (Garaba 2010:4). The working definition of a record for this study was adopted from the International Organization for Standardization 15489-1 (2016), which defines records as information created, received and maintained as evidence and as an asset by an institution or person, in pursuit of legal obligations or the transaction of business.

Records are categorized into two types: public and non-public records. Public records are those records created, received, and maintained by governmental bodies for official businesses, while all other categories fall under non-public records (Garaba 2010:4). The records of public universities of Tanzania are, therefore, public records. This study will focus on both student records and staff records. In view of the fact that taxpayers are funding public universities in Tanzania, these university records then qualify to be called public records. Examples of these university records include students' registrations, admission and examination, letters (appointment, admission, confirmation and sick leave), and financial records such as those dealing with students' fees.

This study focused on the continuum approach in managing records throughout their lifecycle in physical and digital form. In this regard, the study focused on all three types of records: active, semi-active and inactive.

1.12 Structure of the thesis

The study consists of seven chapters, as outlined below.

Chapter One – Introduction

The chapter provides the background to the study by introducing the research problem under investigation, the problem statement, the aim of the study, research questions, the significance and originality of the study, the scope and delimitations of the study, a summary of the methodology adopted, and an outline of the thesis.

Definitions of concepts and key terms were presented. The current recordkeeping situation in Tanzania was also presented in this chapter. A review of the archival regulatory frameworks in the ESARBICA region was also presented within the overall framework of ATI legislation. The site of the study was explored to contextualize the research. In addition, other issues presented are the problem statement,

Chapter Two – Conceptual framework

This chapter provides a detailed discussion of the conceptual framework that underpins the study. A discussion on the RC model and the IGRM is provided in this chapter.

Chapter Three - Literature review

This chapter unpacks concepts of recordkeeping and governance. It also evaluates previous studies and elaborates on how they interlink with the present study. This chapter aims to position the study within related and previous works and explore knowledge available in the records and archives discipline.

Chapter Four - Research methodology and methods

This chapter covers details of the research methodology and methods employed within the study, including the research design, study population, sampling procedures, and data collection methods. Other issues covered in this chapter are data reliability and validity and analysis methods. Ethical issues and evaluation of the research methodology are also highlighted.

Chapter Five - Data analysis and presentation

This chapter presents data using the order in which research questions were formulated. It presents results from the Tanzanian public university staff's questionnaires and interview schedules. The data are analyzed and presented according to the themes of the study. The theories and models informing this study are referred to in the organization of the results.

Chapter Six – Interpretation and discussion of research findings

The purpose of this chapter is to explain what the study's results mean to the investigator and the knowledge body to which the study contributes. Therefore, this chapter interprets, evaluates and discusses the study's results. The findings are compared with those of previous studies to understand the study problem better.

Chapter Seven - Summary of findings, proposed framework, conclusions and recommendations

This chapter provides a summary of the study findings, conclusions and recommendations. A diagrammatic representation of the proposed framework is also presented. It suggests how recordkeeping actively determines good governance in Tanzanian public universities. The conclusion is drawn from the results of the study. Recommendations and suggestions for further studies are provided.

1.13 Summary

The chapter gave insight into the background and outlined the research problem. The historical background was important as it provided useful information in understanding the general situation of recordkeeping in Africa and, particularly, Tanzania in an attempt to answer how recordkeeping will influence good governance in Tanzanian public universities. Although several studies have been done on recordkeeping in Tanzania, there was a need for a study as previous studies did not specifically focus on how recordkeeping facilitates good governance in public universities, which is the thrust of this current research. Therefore, this study attempted to bridge the gap by addressing the aspects of policies, processes, systems, and compliance issues with electronic and paper recordkeeping to facilitate good governance in Tanzanian public universities. Defining terminology is very important for best practice. This explanation of concepts adds precision to a study. The concepts explained in this chapter provided the context in which they were used to collect the data. The recordkeeping concepts in this chapter included records, archives, recordkeeping and records management.

The study investigated recordkeeping in twelve (12) Tanzanian public universities. Focusing on public universities rather than all the universities (public and private) was necessary due to the limited time and financial resources required to undertake this research. The study mainly focused on corruption, maladministration, and fraud challenges of good governance. The study also particularly focused on university records (student and staff records), as the study's main purpose was to identify the role of recordkeeping in promoting good governance in Tanzanian public universities. In view of the fact that taxpayers are funding public universities in Tanzania, these university records then qualify to be called public records. Examples of these university records include students' registrations, admission and examination, letters (appointment, admission, confirmation and sick leave), and financial records such as those dealing with students' fees. This thesis is organized into seven chapters. In the next chapter, the conceptual framework underpinning the study is presented.

CHAPTER TWO

CONCEPTUAL FRAMEWORK

2.1 Introduction

This study aimed to investigate recordkeeping for good governance in 12 Tanzanian public universities. The selected universities were Ardhi University, Mbeya University of Science and Technology, Moshi Co-operative University, Muhimbili University Health and Allied Sciences, Mwalimu Julius K. Nyerere University of Agriculture and Technology, Mzumbe University, Nelson Mandela African Institute of Science and Technology, Open University of Tanzania, Sokoine University of Agriculture, State University of Zanzibar, University of Dar es Salaam and the University of Dodoma. This chapter's main thrust is to communicate the researcher's conceptual framework in the current research.

Various models and theories of recordkeeping and records management have been developed and adopted to underpin various records and archives management studies. This chapter does not intend to extensively review all models and theories of records and archives management. Instead, it covers a few selected models for the study's purpose. Therefore, this chapter explains the models associated with this study and the justification for the model selection. Three models of recordkeeping are in this chapter. The chapter provides the study's conceptual foundation and the models used to guide this study. Thus, this chapter reviews and discusses models to develop a suitable conceptual framework for the study.

The chapter explains the following terminologies: theory, model, theoretical framework and conceptual framework. This is followed by a detailed discussion on using theories in research. The chapter also thoroughly reviews the records continuum and the Information Governance Reference Model. Finally, a summary of key features covered in the chapter is presented.

2.1.1 Theories

In contemporary times, the connotation and use of the word theory in research is very controversial (Ndumbaro 2016:24). In social science, the term theory could be described as a set of principles (that have been tested repeatedly and accepted widely) that explain an occurrence or a fact and sometimes can be used to make predictions of a natural situation (Dulle 2010:82). These might be may be in the nature of explanatory, descriptive or prescriptive based

on the objectives of the research or, (Ngulube 2020:25). In a similar view, Niemand and Bwalya (2020:45); Kivunja (2018:45) defined theory as a systematic view that assists in understanding facts. As Kemoni (2007:57) explained, a theory is a system that explains fact by asserting constructs and principles that connect concepts, definitions, and prepositions.

A theory is an assumption that guides and allows one to compare various approaches and thinking (Ambira 2016:79; Ngulube 2020:18). Kamatula (2018:38) defined theory as an explanatory scheme of related concepts via connected logical patterns. He further stated that theories are adopted in research to provide data interpretation approaches, provide focus, provide more in-depth explanations of what is being investigated, and prevent fragmentation of research knowledge. Similarly, Kemoni (2007:57) opined that the purpose of theory is to provide description, explanation, prediction, and control scientific research. Therefore, every research study must have a theoretical platform within the subject of study to develop thinking and draw a conclusion. Research studies without theories are flawed and lack a firm foundation (Ngulube 2020:18).

2.1.2 Models

Kemoni (2007:58) explained that models are a simplified representation of real circumstances. He continued by indicating that a model's validity will be measured on consistency, predictive power, and presupposition realism. Dulle (2010:81) defined a model as describing a system established to understand, explain, control, and predict a fact being investigated. Models describe a fact and incorporate a theory. According to Ambira (2016:82), a model is a description abstracted from a multifaceted and detailed actual condition. Ndenje-Sichalwe (2010:53) stated that models greatly assist in attaining clarity and providing pointers and directions for research, consequently leading to a deeper understanding of the situation. Models help in knowing how things have interacted concerning data analysis and interpretation (Hofman 2017:639). It is essential to use standards and models to maintain records in any context (Kavishe 2013:31). Apart from helping acquire a better insight into the various recordkeeping aspects, models also help develop approaches for tackling complex records issues (Upward 2000:115; Hofman 2017:634).

Like theories, models can help obtain clarity and focus on critical issues in the problem area. The terminology on models is not entirely consistent as sometimes it is referred to as a

theoretical framework (Nilsen 2015:4). There is not always a sharp dividing line between a theory and a model (Manyerere 2015:26). Similarly, Nilsen (2015:4) indicated that the difference between the two terminologies is not always clear. Although models, frameworks and theories are different terms, they are sometimes used interchangeably (Nilsen 2015:3). Models can be defined as theories with a more narrowly defined scope of explanation (Nilsen 2015:2). Models are partially representative of theories (Leijonhuvud 1997:194). Since models are partial statements of theories, several may belong to the same theory, designed to elucidate various aspects (Leijonhuvud 1997:194). In other words, a model is often used to define an application of a theory for a specific case. Likewise, in this study, 'model' and 'theory' play the same role. Therefore, a theory is deemed to emanate from a model scrutinized severally through repeated validation and tests to support an empirical generalization. The terms 'model' and 'theory' will be used interchangeably in the present study. The RC and the IGRM will be discussed as the theories underpinning this study.

The link between the models under study and the research questions is as follows: the first research question for this current study was to examine the influence of systems and procedures in recordkeeping in Tanzanian public universities. for this research question, the records continuum's aspect of standards guided the study. The Information Governance Reference Model's part of efficient and accurate retrieval and records continuum's aspect of collaboration engagement informed the second research question on the level of recordkeeping skills and training of Tanzanian public university staff. The third research question, the role of records legislation in recordkeeping, was informed by the Information Governance Reference Model's aspect of compliance with principles, while the fourth research question, level of security and confidentiality control in recordkeeping, was informed by the Information Governance Reference Model's protection level element.

2.1.3 Theoretical Framework

A theoretical framework is defined as a thread that provides coherence to each part of a research study (Ndumbaro 2016:25; Niemand and Bwalya 2020:44). Sife (2010:72) defined it as a set of concepts related together that guide research and determine what will be measured. Likewise, Ocholla and Le Roux (2011:1), Imenda (2014:189) and Kivunja (2018:48) stated that the theoretical framework provides a lens that enables a researcher to investigate a particular feature of the study. In other words, it explains the research study's justification,

rationale, or foundation. The theoretical framework informs the methods for a specific research study in addition to the research methods that determine how the studies are to be measured, conceptualized and interpreted (Ngulube, Mathipa and Gumbo 2015:55; Niemand and Bwalya 2020:44). Generally, the theoretical framework describes the link between the study variables that are considered integral to the dynamic of the context being (Ndenje-Sichalwe 2010:52). This partly explains why Ocholla and Le Roux (2011:3) suggested that theoretical framework is an essential part of the research plan.

An excellent theoretical framework recognizes and labels significant variables in the circumstances that apply to the research problem (Manyerere 2015:26). A theoretical framework facilitates both theoretical and practical aspects of research. A theoretical framework in a research study is regarded as the mark of research respectability and seriousness (Ndumbaro 2016:25). a theoretical framework should specify the crucial variables that influence the research focus. It directs the researcher to examine how those crucial variables may or may not differ and under what situations. It then aids the researcher in defining the research study's scope (Ocholla and Le Roux 2011:3). Whatever the choice researchers make, it should align with the theoretical framework chosen to facilitate guidance of the whole research process instead of forcing their data to fit into the theory they intend to adopt. Therefore, testable hypotheses can be developed from the theoretical framework to check if the model formulated is valid or invalid (Ndenje-Sichalwe 2010:52).

2.1.4 Conceptual framework

Some scholars have asserted that a literature review is enough to serve as a conceptual framework so long as it covers the essential issues in the field under investigation and provides the research study's focus (Ngulube et al. 2015:59). Contrary to such philosophy, this research study differentiated between a conceptual framework and a literature review. It might be hard for readers to understand the investigation's theoretical foundation unless it has been isolated from the literature review. Therefore, this study used the conceptual framework to establish a logical connection in the research and clarify what the researcher intended to achieve and how it was accomplished, as indicated by Chaterera (2017:32).

A conceptual framework is a logical orientation that forms the underlying thinking, plan, structure, practices and implementation of the entire research project (Kivunja 2018:47; Ngulube 2018:1). Therefore, a conceptual framework comprises thoughts on the identification

of the research topic, research problem to be investigated, research questions to be asked, theories to be applied, literature review to be reviewed, methods and methodology to be used and instruments, data analysis and interpretation of the findings to be done. The conceptual framework is the cement that sticks to the features of social science research. Without it, the research design will fall apart (Ngulube 2018:1). A conceptual framework gives researchers the capability to formulate improved theories and reach an informed conclusion (Chaterera 2017:32). In other words, the conceptual framework offers excellent assistance for researchers to conceptualize and conduct research studies (Antoneko 2015:11; Chaterera 2017:34; Ngulube 2020:20). Antoneko (2015:15) indicated that a sound conceptual framework sheds light on the connection between relevant models and concepts and helps identify the most appropriate approach to solve a research problem.

The main objective of a conceptual framework is to portray research results as generalizable and meaningful. This study's conceptual framework focused on the current research, forming the foundation on which the data gathered was analyzed and interpreted. It also gave the researcher a more in-depth insight into the topic under investigation.

2.1.5 The differences between conceptual and theoretical frameworks

A theoretical or conceptual framework gives focus and direction to research; therefore, research without either of the two is unthinkable (Ngulube 2018:1). Ngulube et al. (2015:51) indicated that scientific research cannot be done without having a theoretical or conceptual framework and that the most significant part of a research plan is the framework. Theoretical and conceptual frameworks, if used appropriately, enrich and enhance the research goals (Ngulube 2018:2). A conceptual or theoretical framework provides evidence of scholastic functions and academic standards.

When a single theory is used in a study, the outcome is a theoretical framework, while a mixture of more than one theory results in a conceptual framework (Ngulube 2018:11; Ngulube 2020:27). A theoretical framework in a study is based on an existing model or theory and a conceptual framework. On the other hand, you can develop as a researcher based on the existing theories (Imenda 2014:189). A researcher will use some, if not all, concepts in a given theory or model that operates within (Imenda 2014:189; Kivunja 2018:47).

The conceptual framework is mainly applicable to qualitative and mixed-method research (Ngulube et al. 2015:59). In short, in a conceptual framework, a researcher can add their constructs/concepts/variables that they think are relevant and then test or explore the relationship between them, unlike in the theoretical framework. Models are the primary paths to a conceptual framework, while theories are a pathway to a theoretical framework. (Ngulube et al. 2015:45). Multiple theories offer different perspectives on the same issue. Therefore, each researcher should decide which lens or blueprint to use to build an argument and establish the problem's context when explaining research findings (Grant and Osanloo 2014:16).

The current study used a conceptual framework as its foundation for the above explanations. The conceptual framework formed a framework for recordkeeping for good governance in Tanzanian public universities. This is because the current study adopted theoretical triangulation. The RC model and the IGRM were employed as a conceptual framework for the research study. As indicated, a conceptual framework only applies to qualitative and Mixed-Method Research. Therefore, another justification for adopting the conceptual framework for this study was that the current study used mixed approach methods to gather data. Thus, concurrent/parallel mixed design was deployed to seek convergence across quantitative and qualitative approaches. Parallel mixed designs are those in which qualitative and quantitative research approaches run concurrently but independently address research questions (Cohen, Manion and Morrison 2018:39). Mixed Methods Research was used in the present study to offset the weaknesses of qualitative and quantitative methods. More details on these approaches will be discussed in Chapter Four under research methodology.

2.1.6 The link between the conceptual framework and the research problem of the study

The current study adopted theoretical triangulation, in which the records continuum model and the Information Governance Reference Model were employed to serve as the conceptual framework. The research questions largely guided the conceptual framework used for this study. The concepts of standards, collaboration, efficient and accurate retrieval, compliance with principles, and information security developed by the records continuum and IGRM were adopted for the study.

The first research question examined the influence of systems and procedures in recordkeeping in Tanzanian public universities. Regarding this research question, the study was guided by standards, meaning that institutions holding records should ensure proper recordkeeping

regarding the part of the research problem, which indicates a prevalence of poor recordkeeping practices in African universities, records in the public sector, such as universities are prone to disasters, lack of proper file classification, and lack of systematic disposal of records. This indicates that records officers should cooperate and have the required professional records skills when practicing recordkeeping activities at the workplace. These issues are underscored in the second research question on skills and training.

One of the research questions of this study was to ascertain the role of records legislation in recordkeeping in Tanzanian public universities. The compliance aspect guided the current research study in meeting the third research question. The need for records professionals to adhere to records legislation is inherent in the compliance aspect. Public universities must have strong security measures to ensure that the record is protected and not accessed by unauthorized persons. The fourth research question intended to establish the level of security and confidentiality control in recordkeeping in Tanzanian public universities. Regarding this research question, the study was guided by information security, which means that public universities should ensure reasonable protection of any records that should be treated as private, confidential, secret, or fundamental for business continuity.

Therefore, when there are good recordkeeping practices, there will be proper recordkeeping. As mentioned in Chapter One, proper recordkeeping is one of the core components of good governance. Poor recordkeeping in an institution is a bad indicator of financial integrity and, in turn, poor accountability. When recordkeeping is not done well, good governance is compromised, resulting in a loss of confidence and public service corruption. For recordkeeping to support good governance, records must be well organized, maintained, and accessible. Table 2.1 below illustrates the relationship between the models and research questions.

Table 2. 1: Mapping research questions with models informing the study

Research question	Model	Relevance of the model
What systems and processes are used in recordkeeping in Tanzanian public universities?	RC	Broadness of the interpretation of records and recordkeeping systems (Chaterera 2013:21; Matasio 2017:28). It advocates standards in recordkeeping to enhance quality recordkeeping done by organizations (Chaterera 2013:21; Maseh 2015:30).
	IGRM	Facilitates discussion on how records should be maintained in a manner that ensures timely, efficient and accurate retrieval (Electronic Discovery Reference Model 2011).
What recordkeeping skills and training do staff need in Tanzanian public universities?	RC	Encourages collaboration engagements in the work of archivists and records managers where recordkeeping is concerned (Oweru and Mnjama 2014:147; Syard 2014:10).
	IGRM	Facilitates visualization and discussions on how best to apply the generally accepted recordkeeping principles (Electronic Discovery Reference Model 2011). The model also illustrates how it is necessary for collaboration with Information Technology professionals (Electronic Discovery Reference Model 2011).
What is the role of records legislation in recordkeeping in Tanzanian public universities?	RC	Gives advice on the development of laws and policies that unifies records and archives as a continuous process in recordkeeping managers (Matasio 2017:28).
	IGRM	Principle of compliances with applicable laws and other binding authorities as well as an organization's policies is depicted in the model (Electronic Discovery Reference Model 2011). Ensures that regulatory requirements for recordkeeping are met (Electronic Discovery Reference Model 2011).
What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?	RC	Establishes a smooth and continuous recordkeeping regime that involves multiple systems that manage records as long as they are required for business use (Cumming 2010:42; Garaba 2010:291).
	IGRM	Ensures a reasonable level of protection to records that are private, confidential, secret, or fundamental for business continuity (Electronic Discovery Reference Model 2011; Franks 2013:30).
What interventions need to be put in place in order to address recordkeeping in Tanzania public universities?	RC	The model recommends that recordkeeping should be practiced continuously as long as there is a need for records to be kept, used and provided access to (Garaba 2010:83).
	IGRM	The model is designed as a tool for communication with and in organization on responsibilities, processes and practices for recordkeeping (Electronic Discovery Reference Model 2011). The model covers the requisite infrastructure (personnel, finance, IT etc.) that should be in place for control and use of information (Electronic Discovery Reference Model 2011).

2.1.7 The use of theory in quantitative, qualitative and mixed methods research

In quantitative research studies, a deductive approach is used. A deductive approach is an approach whereby a theory is identified at the beginning of the research process and is used to formulate the research questions, followed by data collection and analysis (Cresswell 2009:55). Therefore, the research findings seek to confirm or reject the theory resulting in its revision (Ngulube et al. 2015:57). The researcher uses a theory, gathers data to test it and reflects on its rejection or confirmation by the results. Similarly, when quantitative research is conducted within the theoretical framework context, the theory is used as a foundation for generating predictions that can be tested through empirical research (Ndenje-Sichalwe 2010:54; Majinge

2014:41). In other words, in quantitative research, variables that are to be identified in advance and the theory become the entire study's framework. In quantitative studies, the main objective is to verify or test a theory rather than develop one.

On the other hand, in qualitative research studies, the inductive approach is used, whereby theories are derived from data and are the outcome of a research process. In qualitative research studies, theories are built on data and themes from the research process. The respondents' input is the initial point from which the researcher starts conceptualizing, seeking to explain commonalities, patterns and relationships established from researcher-respondents interaction. The researcher uses information from the respondents inductively to develop a firm theory based on the respondents' experiences. The researcher collects respondents' data and organizes the information into themes or categories. These categories or themes are then developed into broader generalizations or theories compared with the existing literature on the topic. The development of categories and themes in generalization suggests varied endpoints for qualitative studies (Majinge 2014:42).

Ngulube and Ukwoma (2019:2) indicate that a study is considered a Mixed-Method Research study if the data is gathered, analyzed and interpreted using quantitative and qualitative approaches within a single study. Since Mixed Methods involve the use of both qualitative and quantitative research approaches, mixed methods may both test and generate theories when it comes to the use of theory (Creswell 2009:49). Any mixed research methods combining qualitative and quantitative approaches like this current study have features of both inductive and deductive theories (Al-Qeisi 2009:201). The present study used mixed approach methods to gather data because the study's nature required a combination of quantitative and qualitative approaches to soliciting and analyzing data. Therefore, the current study considered both deductive and inductive approaches necessary.

In Social Sciences, researchers begin with models and then progress to concepts that represent an identified research problem within a subject matter and gather data to understand and establish the relationship between these concepts (Ngulube et al. 2015:47). The current research study used the conceptual framework to provide a broad explanation and a conceptual perspective that guided the study. The next section presents the lifecycle theory, the records continuum model and the Information Governance Reference Model of recordkeeping as discussed by different scholars.

2.2 Existing recordkeeping models

Although the records lifecycle and RC are dominant models in the field of recordkeeping, other various recordkeeping models have been established by different international recordkeeping organizations, recordkeeping scholars, and national archival institutions. These include but are not limited to the International Council on Archives [ICA] Electronic Records Management Models, the National Archives of Australia Records Management Model, the National Archives and Records Services South Africa Model, the Public Records Office Model and the Victorian Electronic Records Strategy (Kemoni 2007:59). Hybrid records lifecycle is another model developed by Chachage and Ngulube (2006) after blending the prenatal stage of the RC with the records lifecycle conceptual stage and Franks (2013; 2018) with her records and information management lifecycle in the USA. However, the International Records Management Trust (1999:23) proposed an integrated strategy for records management, combining the RC and lifecycle theory in an integrated recordkeeping system. The records lifecycle, records continuum and the Information Governance Reference Model are presented in the following discussion, including the key aspects and relevance to the present study.

2.2.1 The records lifecycle theory

The development of the lifecycle theory was from the work of archivists Margaret C. Norton and Theodore Schellenberg (Karabinos 2015:8). This lifecycle theory is regarded as a model that provides a framework for a records management programme's operation. Similarly, Msibi (2015:13), Kemoni (2007:64), Yusof and Chell (2000:136), and Chaterera (2013:19) regarded this theory as a basis for establishing an effective records management programme as it is a foundation for the development of suitable procedures, tools and systems that are needed to suitably manage each phase of the theory. All other recordkeeping models originated from this theory. The theory has influenced the development of recordkeeping in many parts of the world. The lifecycle theory is universally known to be the starting point of any successful recordkeeping program. This model was deemed essential in this light before discussing the records continuum and the Information Governance Reference Model.

This theory describes what will happen to records. It defines who will take care of the records during each phase (Garaba 2010:81). According to Ndenje-Sichalwe (2010:55), the theory enables records professionals to monitor records' progress in a progressive procedure and ensure that appropriate procedures are taken on at each stage of records' life. The development

and application of this theory in recordkeeping is a subject of discussion. The theory was developed after the World War in the United States of America by the National Archives and Records Administration and is one of the primary concepts in records management (Kemoni 2007:64). The idea was developed by Schellenberg, who wrote about the lifespan of a record, which included their current state and final destination (Shepherd and Yeo 2003:5). The model portrays that records have a defined life from the time they are created to the time they are disposed of. The theory is relevant in providing a framework for establishing records management functions (Yusof and Chell 2000:135). Karabinos (2015:8) indicated that this concept was developed by Theodore Schellenberg and Margaret Cross Norton, who stated that archivists should also be actively involved in the appraisal process that separates records to be maintained for the long term from those records that are to be disposed of. This was a response to the American agencies that could not preserve all their records and to establish which records should be preserved for the long term. (Karabinos 2015:8).

The International Records Management Trust (1999:17); Garaba (2010:81) indicated that the principle behind the theory is that a record is considered to have a life similar to a living biological organism in that it is born (creation phase), it lives (maintenance phase) and dies (disposition phase). Records are created and then used for as long as they have continuing values and later are disposed of (International Records Management Trust 1999:17). This theory was developed by the National Archives of the United States of America as there was an ever-increasing volume of inactive records it had to deal with (Maseh 2015:43). A majority of recordkeeping scholars identify it as a commonly used concept in recordkeeping (Shepherd and Yeo 2003:5).

Since the 1950s, many variants of the lifecycle theory have been modelled. Most theories target to show a progression of actions taken at different phases in the records lifecycle (Shepherd and Yeo 2003:5). These phases are creation and distribution, maintenance and use, appraisal and disposition (Ndenje-Sichalwe 2010:56). According to this theory, records are created and used actively, managed and at the end are disposed of. The disposal of records means that the record is destroyed since it is valueless, but it should be transferred into an archival repository if it still has value. According to Shepherd and Yeo (2003:5), the theory is based on the concept that records become less valuable as time passes. Recordkeeping professionals must be involved at each phase to achieve efficient and operational records management services (Chaterera 2013:19). This theory provides effective recordkeeping, mainly where records are

created in paper form. Figure 2.1 describes what happens to a record from the creation/active stage to an inactive phase.

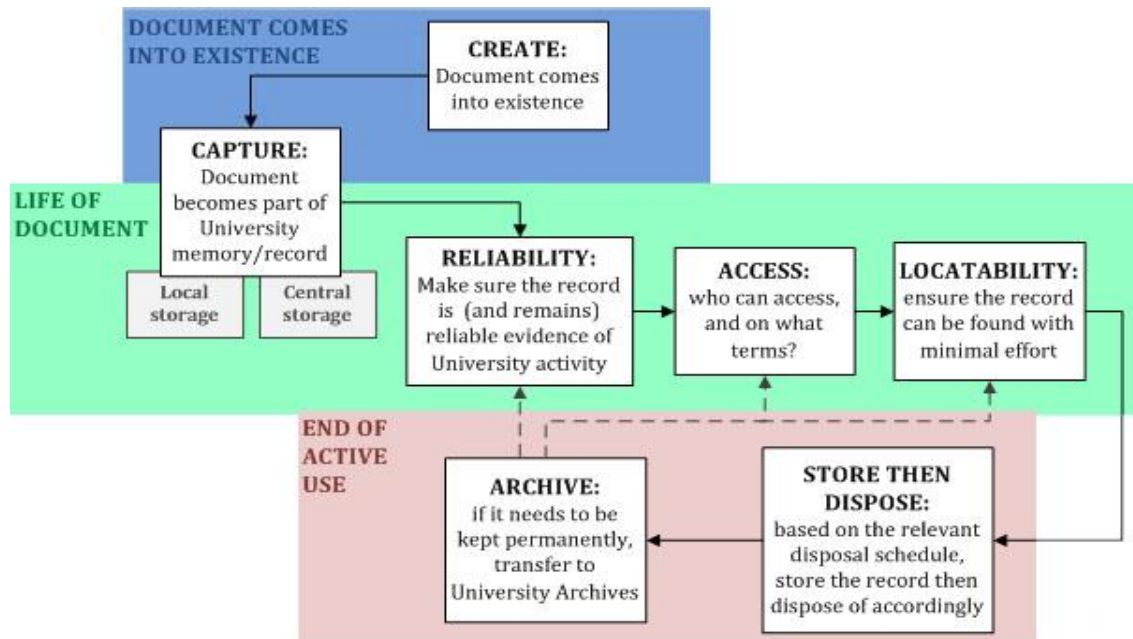


Figure 2. 1: Lifecycle of records (Source: University Archives and Recordkeeping 2017)

- i. **Creation/active stage:** at this stage, the records creator has primary responsibility for managing records (Garaba 20110:82). The record in this stage is created, presumably for a genuine reason and according to specific standards. At the creation stage, the record is frequently refereed by the action officer and other officers involved in decision-making (Ndenje-Sichalwe 2010:56). Records creation should be appropriately managed as this is where they are created to enter the recordkeeping system. At the end of this phase, records are reviewed, and records that may be determined to have no value, at which point, are disposed of, or they can enter the next phase where they become semi-active (Garaba 2010:81).

Every university creates and receives records on paper or digitally. There are several ways in which records are created within this phase. They include receipt of externally created records such as reports, forms, correspondences and directives. Likewise, records can be created internally when an individual writes a letter to management when an existing record is duplicated. However, at this stage, different levels of effort are involved in creating these university records. Therefore, before

creating a record, some thoughts should be given to the necessity of its existence. If the record is not necessary, creating it is unnecessary. Therefore, university records managers must guide the university in determining what information must be created and captured in what form. Once created or received, these university records should be placed near the origin of the records office. This is because they are the records that are regularly used to conduct the university's current operations.

As universities perform their mission, they create various records. It is well known that universities' main aim is learning, research, teaching and community development. In conducting these activities, records are created, and these records are produced to provide evidence that these universities are carrying out their statutory functions. Therefore, universities must pay attention to maintaining records in their custody for effectiveness and efficiency. This is because universities are information-sensitive institutions, and they produce a lot of records. Examples of records that universities create or receive are correspondences, payroll, accounting documents, minutes of meetings, personal files, students' registration, admissions, lists of courses offered and examination records, to mention a few. For a university to run its activities in an open, democratic, accountable and transparent manner, it should create teaching, students and administrative records.

- ii. **Semi-active stage:** The storage space becomes limited with the continuous accumulation of records in the office. This, therefore, calls for transferring records that are less used in the office to the records centre. It is at this stage that records managers have significant responsibilities in records management (Kamatula 2013:10). A record at this stage is regarded as semi-active because it is not frequently used for day-to-day business activities (Ndenje-Sichalwe 2010:56). Proper recordkeeping is a must in any university, even if the records are less used. Therefore, institutions such as universities maintain semi-active records to secure their information and are ever available whenever needed for decision-making. Examples of records that universities create and are not frequently used are letters of (appointment, admission, confirmation and sick leave). Universities will only retrieve these records for occasional use when referring to them to make decisions. They are kept in the university registry pending their ultimate destruction or transfer to archival storage. Therefore, the value of a registry to a university is beyond

question. Like other institutional assets, the record's value for business purposes tends to diminish as time goes by and at some point, records become valueless and may be disposed of (Ndenje-Sichalwe 2010:56). Therefore, at the end of this stage, the appraisal is usually on the record to determine whether to destroy the given records or to send it to the third stage, the in-active stage (Garaba 2010:81).

- iii. **In-active stage:** at this stage, an archivist assumes primary responsibilities in preserving archival records (Bantin 1998:19). Therefore, this stage is for records with long-term and continuous archival value. Specific activities such as preservation and description of records are done at this stage (Kamatula 2013:11). Valueless records are destroyed following procedures in place. The disposition of records at this stage is usually determined by the information contained in the records. For instance, information regarding part-time staff may be needed until the contract is over. At the same time, information regarding corporate strategy may be deemed essential for historical purposes and thus deserve permanent preservation (Kamatula 2013:11).

The importance of university archives cannot be denied. Universities generate a lot of records that are at the heart of their academic and administrative activities. Due to the importance of records in universities, universities worldwide have established university archives to preserve records that have long-term and continuous values. Proper recordkeeping could help universities maintain their archives efficiently, protect them from litigation, foster accountability and good governance, and preserve their corporate memory. Examples of university records termed to have long-term values are students' records and retired staff records. These university records are to be permanently preserved in the university archives due to their continuing information, legal, administrative and historical values as evidence of the work of the creating universities.

2.2.1.1 The weaknesses of the lifecycle theory

Even though the lifecycle theory has influenced recordkeeping development in many countries, it has weaknesses. In recent years, the lifecycle concept has been subjected to too much adverse criticism (Shepherd and Yeo 2003:7). First, critics have noted that lifecycle theory provides a

framework for efficient management of records in paper format only (Garaba 2010:81; Oweru and Mnjama 2014:145; Maseh 2015:45). With the current technological advances, the life cycle concept in records needs to be replaced by an appropriate theory that reflects digital records' unique features. Digital records do not reach a definite in-active point due to the migration technique; records are transferred into new formats following the change in new technologies. Digital records are distinct and hence may not follow the lifecycle sequentially from one stage to another, from creation to disposition, like paper records (Chaterera 2013:19).

Also, a digital record is dynamic and continuing in nature. Therefore, it exists simultaneously in more than one phase of the record's lifecycle (Maseh 2015:45). This is one of the weaknesses as it only applies to physical records and is thus inapplicable to digital records. This theory is not fit for digital records management; therefore, it should be substituted by a suitable theory that will accommodate the unique features of digital records. The literature shows that there are several ways in which the lifecycle theory concept has been remodelled over the past years to cover different segments of digital records (Yusof and Chell 2000:139; Chachage and Ngulube 2006:3; Ndenje-Sichalwe 2010:55; Chaterera 2013:19). This reveals how this lifecycle theory is unsuitable for electronic records.

The second weakness is that the theory does not allow coordination and cooperation between records managers and archivists, therefore undermining the concept that records management and archives preservation correlate (Ndenje-Sichalwe 2010:57). Viewing records in a linear progression and distinguishing the records manager's and archivist's responsibilities is misleading (Maseh 2015:44). These records professionals should be involved in all the three lifecycle phases of records. The perceived criticism led to the formulation of the RC model to replace the lifecycle model in a digital environment. Therefore, considering the foregoing, this theory, though relevant to the current study, could not be applied as an underpinning one.

2.2.2 Models underpinning this study

There are best-practiced models in recordkeeping, such as the RC model, that could help information professionals effectively promote acceptable recordkeeping practices in organizations. Models should aid researchers in understanding things. Therefore, selecting models to underpin a research study should chiefly rely on the model's applicability. This study was primarily anchored on the RC model and the IGRM. In Tanzania, a member of ESARBICA, massive technological evolution concerning digital records management has

challenged institutional performance. As a result, significant efforts have been made by the Tanzanian government to enhance digital recordkeeping practices.

Many organizations, such as public universities in Tanzania, use a hybrid approach to manage their records. This hybrid approach in Tanzania is growing due to the current development in Information Communication and Technology (Newa and Mwantimwa 2019:117). It is impossible to find an organization that manages only digital records in its custody without paper records (Mulati and Wasike 2017:1554). The paperless office is still far from reality (McEachreon 2012:10). Although the RC and IGRM have been developed outside Africa, they still fit this study's purpose within the African setting. For instance, the RC model was appropriate for the current study because it is applicable in the management of paper and e-records. Investigating the management of records and archives for good governance was the key subject under the spotlight in the present study, and the concept of recordkeeping as a process does not separate digital records from paper records. Kemoni (2007:5) indicated that the continuum model is universally accepted for maintaining paper and digital records. The present study regarded records managers and archivists as actively involved in managing active records. The applicability of the RC model in the recordkeeping for paper and digital records contributed to the model's adoption for this study.

2.2.2.1 The Records Continuum Model

This model was mainly influenced by the impact of digital records (Upward 1996:269; Upward 2000:123). Atherton (1985:47) argued that the records lifecycle theory is limited in its utility simply because of its strict adherence to its principles. For instance, the view of records in a linear progression and the distinction of the duties played by archivists and records managers are misleading (Maseh 2015:44). As a result, this situation undermines any progress toward greater coordination and cooperation of records managers and archivists. It rejects the many ways archives preservation and records management are interrelated. Archivists should actively be involved in the entire records lifecycle (Atherton 1985:43). Therefore, in its place, Atherton (1985:47) suggested a records continuum model. This model was considered a way of reconnecting the two features of a record that were separated in the lifecycle theory (Karabinos 2015:11). The RC Model was developed in Australia in the 1990s by theoreticians Peter Scott, Frank Upward and Jay Atherton (Soyka 2015:40; Frings-Hessami 2017:2; Frings-Hessami 2018:159).

Atherton introduced the model during the Association of Canadian Archivists conference in 1985, discussing the weaknesses of the life cycle theory. In other words, this model was proposed to overcome the records lifecycle model's weaknesses (Upward 1996:271; Flynn 2001:80; Frings-Hessami 2017:1). In the RC model, the argument is that the record does not necessarily need to pass through the three lifecycle phases. Instead, maintaining records is a continuous process where one continuum component gives seamlessly into another. Flynn (2001:80) regarded all three phases as interrelated. This model's development's driving force was the concern by the archivists not being involved in the recordkeeping process right from the creation stage (Oweru and Mnajama 2014:147; Kamatula 2018:40). Similarly, Cumming (2010:47); (McKemmish 2001:333) added that the introduction of digital recordkeeping prompted this model's development. This is because records generated in the digital platform are dynamic and continuing; thus, they exist in more than one lifecycle phase (Yusof and Chell 2000:140). To this effect, the lifecycle concept is argued to be inapplicable to digital records, and therefore, the lifecycle theory is no longer relevant to digital recordkeeping.

The model deals with the increasing plurality and complexity of records, particularly in the digital environment (Evans, McKemmish and Rolan 2017:5). Its establishment has gained international recognition as a foundation for recordkeeping both in digital and paper-based format (Kemoni 2007:65; Cumming 2010:49). This model's idea is that records managers and archivists should participate in recordkeeping activities in the entire records life cycle (Matasio 2017:27). Therefore, the model provides an approach for the best practice of maintaining records via an integrated mechanism where records manager and archivist are brought together to make sure that the authenticity, completeness and reliability of records are achieved (Oweru and Mnajama 2014:147; Svard 2014:10).

One of the model's strengths is the description, appraisal, and preservation of records from the time they are created. Records with continuous values can be easily identified by carrying out records description and appraisal. The model develops a structure by which records and recordkeeping are considered and seen as a coherent whole (Cumming 2010:41). The model does not distinguish records management and archives preservation by giving priority to one over the other (Garaba 2010:83; McKemmish 2001:334; McKemmish 2017:137). This is why it is called a unified model, as it ends the traditional division between the roles of records manager and archivist (Shepherd and Yea 2003:101). In the continuum model, the demarcation of functions between archivists and records managers is artificial and constrictive (International

Records Management Trust 1999:23). Archivists and records managers participate in all the recordkeeping phases. The model has also broadened the interpretation of record management systems and records provided by the records lifecycle theory. This is because it uses an integrated recordkeeping system structure that unifies the roles of records managers and archivists and assures a record's authenticity, completeness and reliability (International Records Management Trust 1999:23).

According to Xiaomi (2003:43), recordkeeping is proactive rather than reactive because of this model. Cumming (2010:42), Garaba (2010:291), and Xiaomi (2003:43) continued by indicating that all phases of records are correlated hence forming a continuum in which archivist and records manager are involved in recordkeeping. McKemmish (2001:352) stated that the records continuum perception is about the role of recordkeeping flowing in a unifying idea in five significant areas. First is the role of records in governance, maintaining the relationship between organizations and people and as a tool of authority. The second is the connection between recordkeeping and accountability. The third is the responsibility recordkeeping plays in constituting collective and corporation memory. Fourth is how recordkeeping can be used to provide evidence and lastly, how records function as a source of information. Upward, McKemmish and Reed (2011:202) indicated that continuum consciousness reflects the need for recordkeeping professionals to emphasize the capture of records and the reformation of archives.

The continuum concept was formulated by an archival theorist Frank Upward, based on the following principles (Upward 1996:276; Upward 2000:123):

- i. A concept of record that is inclusive of records of archives (records of continuing value), which puts much emphasis on their applications for evidentiary, transactional, and memory purposes, and which unifies methods to records management whether records are preserved for a split second or millennium;
- ii. Regardless of the records' format, be it in paper or electronic format, records should be considered logical and not physical entities;
- iii. Institutionalization of the recordkeeping profession's duties needs a specific emphasis on the necessity of fitting recordkeeping into societal and business activities and purposes; and

iv. Archival science is the basis for establishing knowledge about recordkeeping.

The presentation of the four principles as formulated by Upward is diagrammatically represented in Figure 2.2.

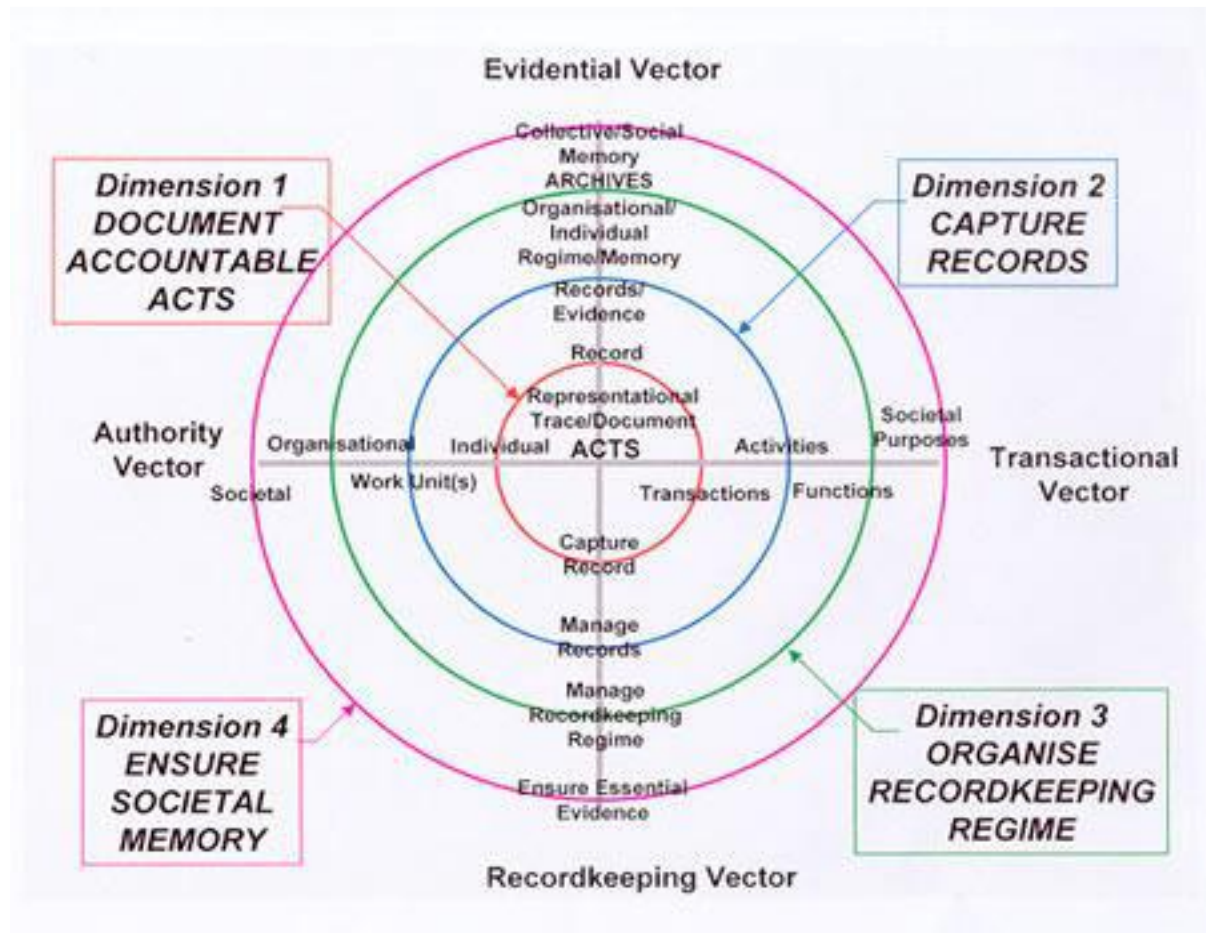


Figure 2. 2: Records continuum model (source: Upward 2000:123)

Figure 2.2 shows that the RC model has four significant themes recognized in recordkeeping practices. These are authority, evidential, transactional and recordkeeping vectors. Figure 2 shows these themes are linked circularly, indicating the continuum's dimensions linking the particular record to its context (Upward 1996:277). The continuum circular structure, as compared to that of the records lifecycle linear layout, reveals that the model is synchronicity in nature (Upward 2000:124), which means that the continuum dimensions are not boundaries and so activities may coincide across the dimension. The RC was built upon four primary dimensions of an information processing continuum: creation, capture, organization, and

pluralization (Upward et al. 2013:39). Below is a description of each continuum dimension (Upward 2000:122).

- i. **Dimension 1 - records creation:** represents the locus of all actions in recordkeeping. It represents the stage in which the record is initially created. It is the initial step of a process that leads to a record. It is the center of the diagram and represents the beginning of records. This dimension encompasses the actors who carry out the institution's decisions, acts and communications. As universities perform their duties, they receive and/or create many and different records, which provide evidence of university statutory business in the community, research and teaching work. University records such as timetables for lectures, students' and examination records, lists of courses offered, students' registration, sick leave, financial reports and so forth are created/ received. Actors creating these university records must have the needed recordkeeping skills and comply with the rules and regulations concerning records legislation. The effectiveness of service delivery in the universities lies in developing and adopting recordkeeping procedures to assist staff in recordkeeping. The document created/received at this position has a future to move beyond this creation position.
- ii. **Dimension 2 - records capture:** a document is communicated or connected via relations with other documents using sequences of actions. In other words, this dimension occurs when records are integrated into an organization's recordkeeping system. Records are captured as evidence of transactions and can be shared and accessed by other users involved in the business transactions. This dimension encompasses the work unit with which the creators are associated, the transaction's activity, and the institution's recordkeeping systems that capture records. The records created in the first dimension are placed into an institutional unit and are added to the office's filing system. University records such as sick leave, class lists, attendance lists, examination questions, student evaluation policy, staff evaluation policy, a sample of assignments given, teaching responsibility allocations, timetables and curriculum of the courses offered are captured as evidence of an activity. At this point, recordkeeping professionals create a master plan to maintain each university record effectively until its final disposal. Once these university records are received /created, the creator's work at this stage is to file the university

records into a recordkeeping system. The recordkeeping system should be robust regarding security level, not allowing unauthorized users to access university records. To enhance standards in recordkeeping, records officers should use proper procedures for filing records.

- iii. **Dimension 3 - records organization:** signifies a collection of records above individual instances of a sequence of actions. The dimension refers to how an institution or an individual defines its recordkeeping regime, constituting the archives' memory of its business operations. Thus, in this dimension, records are invested with explicit features that enable them to be available for evidential purposes whenever needed. In other words, the records are organized and maintained as evidence of their functions by placing them in the context of the corporate archive and maintaining them in frameworks that enable the records to function as corporate or individual memory. These records, therefore, inevitably become part of the accumulative corporate memory presented by this dimension. University records created and captured in the above two dimensions are brought together into the same place. This process is referred to as organizational memory. Records at this stage are considered as part of the cumulative corporate memory. Budget proposals and submissions, evidence of the establishment of units, governing board minutes and reports and unit committee minutes and reports, audit reports, performance appraisal, plan of facilities of the unit, maintenance of facilities and architectural drawings of buildings are examples of university records, which are evidence of university's corporate memory.
- iv. **Dimension 4 - records pluralization:** represents a broader social environment in which records operate. In other words, this dimension concerns how archives are brought into an encompassing framework to provide a collective social, historical and cultural memory of the organization. A record's capacity existing beyond the limits of a single creating entry is represented in this dimension. In this dimension, recordkeeping is perceived as protecting society's collective memory beyond jurisdictional and organizational limits. In other words, this dimension equates with taking records beyond the public university context into forms of societal totalities. It involves the use of records in a manner that is less controllable and predictable. Thus, the universities' recordkeeping systems fix the content and structure of

records and maintain records' integrity by ensuring they are not tempered by unauthorized personnel. With this, the security and confidentiality level of recordkeeping are controlled. Through this dimension, the model establishes a smooth and continuous recordkeeping regime that involves maintaining records as long as they are required for universities' business operations. Research projects undertaken by students, research proposals submitted by students, research grants management, annual reports of research output, and consultation are examples of university records and evidence of transactions between stakeholders.

2.2.2.1.1 Justification of the model of the study

This model's concept is that any archived information may be retrieved and retreated as an active record. As formulated in the 1990s by Australian archival theorist Frank Upward, this model's first principle demonstrates the concept of records as inclusive of the archives. This implies that records' usefulness for current activities and records for research use (historical) cannot be differentiated. It is crucial to maintain university records holistically from when they are created to the disposition stage, as this model advocates. This model also depicts that records management and archive administration are moving towards integration. This is why it has been noted by the International Records Management Trust (1999:16) and Garaba (2010:84) that the separation between archives administration and records management, as displayed under the lifecycle theory, is inappropriate.

The continuum provides a unifying and homogenous platform for archives administration and records management (Flynn 2001:83; Garaba 2010:83). This model means that archivists and records managers are involved in all the continuum phases (Garaba 2010:84). The model emphasizes the use of an integrated recordkeeping systems structure that unifies roles of records managers and archivists (International Management Trust 1999:23). Hence authenticity, completeness and reliability of records are assured. According to the International Records Management Trust (1999:23), when archival activities and records management activities are not integrated, archivists and records managers often will find themselves replicating each other's work or undoing work that may be could have been done and completed more effectively had the two worked as a unified whole. In other words, by maintaining records throughout their lifecycle, valuable records are kept and made available for use.

Moreover, the model emphasizes records being logical and not physical entities, regardless of the format. Content, structure and context are the essential features of records. Still, it is not a must that all these features should be physically present in a digital record but may logically be available to the users (Maseh 2015:33). This model advocates best practices criteria and collaborations in recordkeeping activities for maintaining digital and paper records and, therefore, efficiency, responsiveness, and user's needs, are met. In this regard, this model has been adopted into today's environment. In Tanzania, like any other African country, university records, such as student and staff records, are created and managed in digital and paper format. Therefore, there is a need for appropriate recordkeeping processes.

Another principle that this model demonstrates is the concept of societal obligations due to statutory requirements to the users of records both to the business (internal) or the society (external) (Flynn 2001:81). In line with this principle, it is significant for public universities to maintain records as long as they are needed to meet cultural, regulatory, business and social requirements. According to the International Records Management Trust (1999:20), the continuum model is considered a consistent and coherent recordkeeping structure from when the record is created until it is preserved as an archive (record with continuing value). Also, this model has been tested for its efficacy in recordkeeping (Piggott 2012; Frings-Hessami 2018; Frings-Hessami 2020). The outcome has been that the model could be adjusted to represent exceptional recordkeeping situations (Frings-Hessami 2020:62). It can reveal where special recordkeeping processes are needed to meet the needs of the individuals affected by the records. The results also showed that the model does not depend on the culture of openness and accessibility. This means that the model applies even to those records that have not been pluralized. Pluralization is when records function as accessible collective memory (McKemmish 2017:140).

The study's model's justification can also be seen in other related studies that have adopted its use as a theoretical perspective (Kemoni 2007; Cumming 2010; Garaba 2010; Chaterera 2013; Kamatula 2013; Svard 2014; Maseh 2015; Matasio 2017). For instance, in his study, Kemoni (2007:6) confirmed that the records continuum presents a better chance for developing a good recordkeeping programme. Cumming (2010:50) confirmed that the records continuum model has had a profound influence on recordkeeping practice and indicated that its impact would continue to resonate for some time to come. Chaterera (2013:21) confirmed that building a study upon this model is very appropriate since combining the efforts of archivists and records

managers in recordkeeping ensures that records are created at the right time, contain the correct information, and are in the appropriate format.

Likewise, Svard (2014:10) asserted that adopting the records continuum in a study is significant because RC promotes the integration of records management and archives preservation and leverages records to fit modern institutions. Maseh (2015:33) indicated that when used in a study, the records continuum recognizes digital records and provides for all records, irrespective of their formats, to be properly maintained. In their studies, Garaba (2010:86) and Matasio (2017:28) indicated that records continuum theory is critical because, when used, it broadens the interpretation of recordkeeping systems and records than offered in the lifecycle theory. Kamatula (2013:12) indicated that the development of the RC was due to the concern of the missing approach for the archivists to intervene in the records management activities from the initial phase, especially for digital records. The main objective of the RC is to ensure the authenticity, reliability and completeness of records.

2.2.2.1.2 Gaps in the use of the records continuum model

Though this model provides a structure for recordkeeping in Tanzanian public universities, it could not significantly address the requirements for good governance in Tanzanian public universities. For instance, this model does not emphasize achieving accountability, security, compliance, and responsibility. In this regard, the RC cannot be used as a stand-alone model for this study. Therefore, to address these particular principles, the study consequently adopted the Information Governance Reference Model as a second model to compensate for this deficiency.

2.2.2.2 The Information Governance Reference Model

Records managers have shifted from a world where they can monitor and manage information within an institution's boundaries to a world where they will create institutional records from beyond the institution's boundaries via Web 2.0 technologies (Lomas 2010:183). This shift includes moving from paper records management to management and appraising digital records from creation in line with the RC. As a result, this led to rethinking how information should be captured, created, audited and managed for business purposes, accountability and other uses.

This paradigm shift also raised questions about the ownership of information (information created and held in the Cloud may not be owned by the creator), information rights legislation and reuse of information (Lomas 2010:183). With this context, many key recordkeeping questions related to information security, risk management and access led to the emergence of information governance, enabling records managers to ensure that information is controlled to be timely available. Its security should not be compromised (Lomas 2010:184). To understand information governance, key aspects such as creating information, its use, storage, security, archiving and destroying, and the legal aspect of information within an institution need to be understood (Lomas 2010:184; Blair 2011:7).

The idea of information governance has quickly gained popularity. Information governance is becoming a significant aspect of institutional accountability (Williams 2007:57). Essentially, information governance encompasses integrity, risk management, including control and audit, as well as compliance. Iles (2013:1) defined information governance as an integrated approach that ensures appropriate behavior in creating, using, managing, preserving, and disposing of information. It includes the policies, roles, metrics, processes and standards that guarantee the effective use of information in assisting an institution in achieving its objectives (Iles 2013:1). Information governance provides effective records management and allows for proactive compliances and effective knowledge sharing (Kooper, Maes and Lindgreen 2010:193). It also controls and monitors an institution's growing volume of electronic mails and other digital communications, aiding institutions to control the growth of outdated information. Information governance manages the entire lifecycle of the information flow, from when the information is created, stored, utilized and preserved in the archive (Kooper et al. 2010:197; Dong and Keshavjee 2016:250).

There are various information governance models that are used to assess and measure governance maturity and information management. Examples of these models are the Information Governance Maturity Model (IGMM) and the Information Governance Reference Model (IGRM). The IGMM is regarded as a framework for accountability that includes the roles, standards, metrics, and processes that ensure efficient and effective use of information to ensure that institutions achieve their objectives. As a benchmark for progressive improvement, the IGMM enables measuring and assessing an institution's progress as it frequently enhances its overall information governance (Dong and Keshavjee 2016:251). The model requires that a senior officer oversees the recordkeeping programme and delegates responsibility to appropriate individuals (Mphunda and Mnjama 2022:105).

This model describes a pathway of improvements for institutional performance and is categorized by maturity level. The maturity level ranges from level one to level five, where the lower level means lack of maturity and the higher level means fully matured and self-optimizing (Hagmann 2013:233; Proenca, Vieira and Borbinha 2017:128). It describes the recordkeeping programme' features, with specific reference to the Generally Acceptance Recordkeeping Principles (GARP), using these five levels as a spectrum for measurement. Below is a brief explanation of the maturity levels.

- i. **Level 1 (Substandard)** – this level explains a situation where management of records concerns are either not addressed or addressed disorganizedly (Dong and Keshavjee 2016: 252; Proenca, Vieira, and Borbinha 2017:131). Institutions identified at this level should be concerned that their recordkeeping programs will not meet regulatory or legal scrutiny (Electronic Discovery Reference Model 2011).
- ii. **Level 2 (In development)** – this level explains a situation where there is a developing recognition that the management of records has an effect on the institution and that the institution may gain from a more defined information governance program (Dong and Keshavjee 2016: 252; Proenca, Vieira, and Borbinha 2017:131).
- iii. **Level 3 (Essential)** outlines the essential requirements to be addressed to meet the institution's regulatory and legal requirements (Dong and Keshavjee 2016: 252: Proenca, Vieira and Borbinha 2017:131). This level deals with procedures and policies applied to improve recordkeeping. Institutions at this level lack essential opportunities to control costs and streamline business operations.
- iv. **Level 4 (Proactive)** – institutions at this level are described as institutions initiating information governance program improvements through their business activities (Dong and Keshavjee 2016:253: Proenca, Vieira and Borbinha 2017:131). The institutions at this level are supposed to start considering the business benefits of the availability of information in transforming their institutions globally (Electronic Discovery Reference Model 2011).

- v. **Level 5 (Transformational)** – this level describes an institution that has incorporated information governance into its entire corporate infrastructure and business activities to such an extent that compliance with the program requirement is routine (Dong and Keshavjee 2016:253; Proenca, Vieira and Borbinha 2017:131). These institutions have recognized that efficient information governance plays a significant role in client service, cost containment and competitive advantage.

By combining operations between the IGRM and the IGMM, the institutions provide the collaboration needed to attain a transformational recordkeeping level (Electronic Discovery Reference Model 2011). The Maturity model defines effective recordkeeping levels in the institutions, with specific reference to the IGRM. The IGRM focuses on the GARP principles and provides essential context for the Maturity model. These principles offer guidelines on how universities can enhance appropriate recordkeeping programmes. In other words, the IGRM supports the GARP principles by recognizing the stakeholders that are cross-functional and then depicting their interconnecting objectives for the institution (Electronic Discovery Reference Model 2011). This illustration of the relationship between value, information asset and duty demonstrates collaboration among stakeholders to obtain effective information governance's anticipated maturity. As such, it supplements the metrics described by ARMA International's IGRM.

For instance, universities that incorporate information governance into their entire corporate infrastructure and business activities to such an extent that compliance with the program requirement is routine are considered level 5. These universities recognize that effective and efficient information governance plays a significant role in client service, cost containment and competitive advantage. When an institution such as a university recognizes key stakeholder roles concerning compliance, level 5 of Transformational Maturity is achieved. The presence of poorly maintained records is one of the contributing components to poor governance in an institution. These universities whose recordkeeping systems are feeble and whose recordkeeping concerns are disorganized or not addressed are at level 1. Using the first research question, this study sought to identify systems and processes used to maintain public university records.

As Chaterera (2016:116) indicated, poor recordkeeping in most African countries has made holding individuals accountable for their deeds impossible. Akotia and Balasu (2017:5) noted that specific skills and broad knowledge are required to maintain records. Consequently, in an

organization that prioritizes recordkeeping, there should be ongoing training programmes on recordkeeping for its staff to be provided with adequate skills and knowledge (Maseh 2015:189). For this reason, it is vital to prioritize recordkeeping to circumvent organizational problems that may come up due to poor handling of records. Institutions that prioritize recordkeeping are termed to be at level 5. Using the second research question, the study established the level of recordkeeping skills and training staff in public universities.

The absence of a proper regulatory framework for recordkeeping causes a significant risk to the quality of services offered by the government (Ambira 2016:24). Legislation provides guidelines on how records should be maintained in different formats (Msibi 2015:45). Other scholars on the same issue, Ndenje-Sichalwe (2010:289); Kamatula (2018:21) assert that effective recordkeeping is depending on solid records legislation as this provides a regulatory framework in which organizations will use to operate their recordkeeping activities. Therefore, institutions such as universities that do not use regulatory frameworks for recordkeeping to provide guidelines on maintaining records are termed to be at level 1 as they will not have effective recordkeeping practices. Recordkeeping legislation is the key factor and plays a major role in governing recordkeeping in government entities and employees under these entities (Malatji and Marutha 2023). Using the third research question, this study assessed the role of legislation in recordkeeping in public universities.

Ngoepe (2012:77) suggested that institutions should have strong risk management and recordkeeping systems because effective risk management and proper recordkeeping are a cornerstone of good governance. Control of access to records should be made strong by having tight physical security and tracking the movement of records. Thus, public universities should adhere to government rules and regulations concerning confidentiality and security in maintaining their records. Protecting records so that the information they contain is not lost or destroyed while still needed is achieved when institutions practice proper recordkeeping. Therefore, institutions that do not practice good recordkeeping practices are at level 1. Using the fourth research question, this study assessed the security and confidentiality control that public universities have implemented when maintaining their records.

Apart from a lack of archival legislation that specifically caters to the creation, use, maintenance, and disposal of digital records, insufficient staffing levels, professional training, backlogs of records to be appraised in public offices, and management of digital records are still issues that ESARBICA member countries are grappling with (Nengomasha 2018:258).

Mohamed, Rasheli and Mwagike (2018:53) indicated that recordkeeping in Tanzania faces significant challenges that affect good recordkeeping. The significance of recordkeeping does not need to be emphasized. Inappropriate recordkeeping, both in digital and paper form, affects an organization in offering effective and efficient information services, especially in this digital era. Due to poor recordkeeping practices, universities that do not provide effective and efficient information services are termed to be at level 1. Using the fifth research question, this study suggested remedies for maintaining records in public universities. Therefore, the IGRM, as indicated by the term, is a reference model to be consulted when designing an information governance strategy (Franks 2013:30).

This IGRM was developed in the United States of America in 2004 (Hagmann 2013:233). The model has recently added the elements of security, privacy and compliance. It displays a structure for unified information governance by an institution's key stakeholders and management (Hagmann 2013:233). Information governance produces standard policies for unstructured and structured information (Parapadakis 2018). The model provides institutions with a logical and systematic approach that enhances appropriate information governance. According to the Electronic Discovery Reference Model (2011):

IGRM is the specification of decision rights and accountability framework to encourage desirable behavior in the valuation, creation, storage, use, archival and deletion of information.

Franks (2013:30) elaborated that this model provides context to information management discussions, risk management and recordkeeping considerations. The information governance model manages both records and information (Franks 2013:31). The model also illustrates interrelationships among values, duties, and information assets, demonstrating cooperation among groups of stakeholders to attain effective information governance (Franks 2013:30). According to Brooks (2019:9); Zimmerman (2019:1), information governance combines risk management, legal management, information technology, and recordkeeping.

Brooks (2019:9) views information governance as adding value and strengthening recordkeeping. Information governance is the framework of the right decisions and accountability that motivates desirable information management (Electronic Discovery Reference Model 2011). When information management is done correctly, it enables institutions to meet their goals since utilizing the institutions' recorded information will be

effective. The model advocates the significance of unified information governance, which is why it is also known as a unified governance model.

Although recordkeeping emerged first, information governance now guides it (FileTrail 2016). Recordkeeping falls under the umbrella of information governance (Hagmann 2013:230; Saffady 2015:39; Brooks 2019:7). In other words, despite these technological and information governance paradigm shifts in recordkeeping practices, records managers and archivists in terms of managing records remain appropriate. Records managers in an organization will be more organized and stress-free if there is comprehensive and robust information governance (FileTrail 2016). Information governance is a framework that controls records (information) to promote the mitigation of legal risks, compliance and puts in order corporate governance policies (Saffady 2015:40; FileTrail 2016; Gillin 2018; National Archives of Australia 2019a).

Recordkeeping is about execution, while information governance is about strategy (Saffady 2015:40; Gillin 2018). In other words, records managers are the ears and eyes of information governance managers. Poor information governance has many consequences, such as out-of-date information, unavailability of information and information that is difficult to find (Nguyen et al. 2014:1). In this case, information governance comprises roles, processes, standards and systems that enable efficient and effective use of information in ensuring that an institution meets its goals. The model advocates the significance of unified information governance, which is why it is also known as a unified governance model.

2.2.2.2.1 Principles and the model diagram

This model demonstrates eight principles to guide information management and governance in creating records, organizing records, securing and maintaining records, and other issues used in supporting an organization's recordkeeping (Hagmann 2013:232). These principles provide benchmarks on how institutions can enhance appropriate recordkeeping programmes (Electronic Discovery Reference Model 2011).

These principles are (Hook 2017:22);

- i. Accountability;
- ii. Transparency;
- iii. Integrity;
- iv. Protection;

- v. Compliance;
- vi. Availability;
- vii. Retention; and
- viii. Disposition.

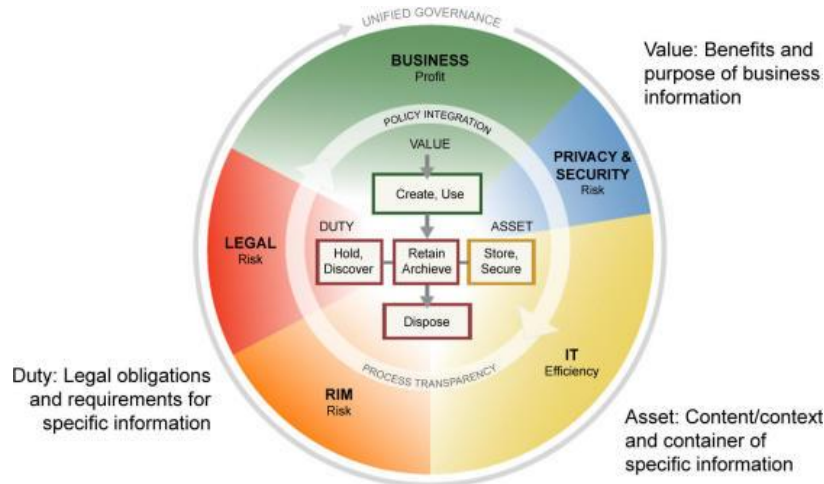


Figure 2. 3: Information Governance Reference (Source: Hagmann 2013:233)

Below is an elaboration on the IGRM principles that forms the basis of an effective recordkeeping programme.

- i. **Principle of accountability:** to achieve accountability in an institution, there should be consistency in providing reliable records. Poorly managed records can easily be corrupted or fragmented. Though all stakeholders are part of this principle, the main owner is the business representative of the institution's executives. Through this principle, the model guides senior executives to make decisions that are accountable for significant activities of an institution by providing an institution with a communication model. It assists organizations in assigning managers to oversee recordkeeping programs and delegating recordkeeping programs duties to the appropriate subordinate individuals, adopting procedures and policies to guide personnel and ensuring program suitability (Electronic Discovery Reference Model 2011).

One of the primary purposes of creating records in any institution is to provide evidence. Records are created and used for various purposes within universities. First, universities use records in current operations to enable decisions and actions to be taken. Second, universities create and use records to support accountability

when they must provide evidence that they have met their obligation or complied with best practices. Therefore, to guarantee accountability in public university management, recordkeeping professionals must develop, improve, and strengthen recordkeeping systems to produce the evidence needed to promote accountability.

- ii. **Principle of transparency:** at the center of this model is policy integration and transparency. Transparency in this model involves shared execution and ownership and encourages an understanding of the stakeholders' responsibility for information governance. It also postulates that one can only attain proper information governance by working with other institutions' members. Policy integration involves formalizing rules and goals for cross-functional teamwork, communication and optimization. As a result, the main stakeholders will have a greater realization of each group's responsibility, accountability and overall influence in providing cohesive and effective unified information governance (Electronic Discovery Reference Model 2011).

To guarantee transparency in public university administration, recordkeeping systems must facilitate disseminating, accessing and reusing public information. Poor recordkeeping diminishes transparency (Thurston 2020:8). In this regard, university records officers must organize records to be easily accessible, usable and understandable. When recordkeeping is improved and integrated into the day-to-day management of public universities, it will be easier to prevent irregularities that could avoid corruption cases. Recordkeeping should be used for internal purposes and provide the foundation for transparency (de Mingo and Cerrillo-i-Martinez 2018:256). This model ensures that recordkeeping activities are done in an understandable style and available to all appropriate stakeholders (business, RIM, IT, legal, privacy and security). The integration is designed to demonstrate transparency to stakeholders so that they can recognize the values and responsibilities against information assets at any time (Mack 2015).

- iii. **Principle of integrity:** preserving any information's integrity involves maintaining the comprehensiveness and correctness of that record. Information integrity is fundamental, as records play a significant responsibility in decision-making. In institutions such as public universities, where recordkeeping is not properly done,

poor decision-making due to incomplete information is rife. This model demonstrates integrity because it ensures that reliable and authentic information is generated from recordkeeping processes. The model also advocates the collaboration of records personnel with Information Technology experts to enhance integrity (Electronic Discovery Reference Model 2011). Using this model, aspects of accuracy and authenticity in records are achieved.

- iv. Principle of protection:** protecting information is fundamental in any institution. This involves preserving the integrity, availability and confidentiality of the information, which aids in mitigating the risk by applying an appropriate range of security controls (Chaterera 2013:24). There should be a proper level of security control for both paper and digital records. Universities could, for example, use user login passwords, locked doors, or even security procedures and policies. Protecting information in an institution helps an institution such as a university reliably disseminate its information. With this, the university builds trusting relationships with its stakeholders. This principle should prevail throughout the lifecycle of university records. For instance, confidential records such as staff files should be destroyed in an unrecoverable way. Amongst the ultimate benefits of this model is preserving valued information in a secure environment within an institution. There are a lot of untrustworthy people who compile and sell other people's information. This information is usually collected illegally from an electronic source. Therefore, university records officers must be extra careful when preserving records in their offices.

With this model, recordkeeping programmes are designed and created to guarantee a security level to information intended to be confidential, private, secret, or vital to business continuity (Electronic Discovery Reference Model 2011). The model advocates that information audits should be regularly done and improvements should continuously be undertaken in an organization. When senior management and executives demonstrate the institution's commitment to effective information protection, Transformational Maturity level 5 for the GRP Principle is attained. A level 5 institution meets its stated objectives related to information protection (Electronic Discovery Reference Model 2011).

- v. **Principle of compliance:** the model emphasizes that recordkeeping programmes designed should comply with laws, regulations and standards applicable to records management, the organization's policies, and other binding authorities (Electronic Discovery Reference Model 2011). This model emphasizes that records managers are to maintain rules and regulations when performing recordkeeping as specified by their governing body. For instance, in this study, the records professionals from Tanzanian public universities must comply with rules, regulations, standards and policies. They are to manage the university records governed by the national archives legislation, standards and regulations. According to the Tanzanian Records and Archives Management Act, 2002, one should not misuse any public record from public institutions such as a public university or destroy any public records without any permission from the responsible authority. Also, as informed by the national archival legislation, the Universities Act 2005 (Chapter 346 of the Laws of Tanzania) states that any university that fails to comply with the Act, for instance, on the issue of information management such as transfer of students records from university registry to university archive will be subjected to a fine. Therefore, complying with relevant legislative requirements is a prerequisite for proper recordkeeping in these universities. When an institution recognizes key stakeholder roles in relation to compliance, level 5 of Transformational Maturity is achieved.
- vi. **Principle of availability:** for institutions such as these Tanzanian public universities to preserve the availability of their information resources, they have to ensure that such resources are accessible and usable. Ensuring the availability of information on records is very important since, with timely information, an institution can continue normal operations. This is because having the right information at the right moment will enable these public universities to make well-informed decisions, allowing the institutions to gain competitive advantages over others. This model indicates that institutions should manage records to guarantee efficient, timely and accurate retrieval of needed information (Electronic Discovery Reference Model 2011).
- vii. **Principle of retention:** unless immediate destruction is needed, it may be necessary for records to be transferred to appropriate storage. This model provides guidelines on how institutions should maintain their information while considering regulatory,

operational, fiscal and legal requirements (Electronic Discovery Reference Model 2011). Not all records can be retained for a long-term period. Therefore, the university records officers' work is to assess their records to determine if the records are needed for long-term retention, short-term retention, or required to be destroyed. The retention period can be concise, for instance, a month, or it can be very long, sometimes permanent. This will be identified after the university records officers have performed records appraisals on the university records they manage. University records that are kept permanently are usually taken to the university archive. Assessing records' value and deciding retention periods is critical and should be done as early as possible. For instance, electronic records will not survive without active management right from the start. This will enable records officers to obtain useful information about the records' context and content from those who created or used them. This principle requires institutions such as universities to keep their records appropriately while considering regulatory, legal, operational, fiscal and historical requirements.

The university records officer should prepare a retention schedule to help with this assessment. The creation of retention schedules is influential towards obtaining sound recordkeeping practices (Chaterera 2013:38). When performing this records appraisal, university records officers must consider two things: first is how long the university should keep the university records for its accountability, legal or reference purposes and secondly is whether the university records should be destroyed or maintained permanently for archival purposes. In both cases, value is considered- an organizational value in the former case and an archival value in the latter case. These retention schedules are essential for meeting acceptable recordkeeping standards (Chaterera 2013:37). As stated by Chaterera (2013:37), amongst other benefits of retention schedules aid to;

- i. Provide standards and consistency across the organization's recordkeeping issues;
- ii. Identify unnecessary duplication, and encourage timely retrieval of records;
- iii. Promote effective recordkeeping and identify records for long-term values; and
- iv. Secure records from disasters and plan for their preservation.

viii. Principle of disposition: disposal is a significant part of information management. Disposition of records is the process of identifying the final fate of a record (Ndenje-Schalwe 2010:207). This may involve temporary retention, permanent destruction, or permanent retention. This activity should be performed immediately when records are no longer used for administrator purposes. The selection of records to be disposed of or maintained long-term depends on their values (Yusof and Chell 2000:136). This is determined by records appraisal. Therefore, it is advised that it is appropriate to regularly perform records appraisal instead of leaving records to accumulate in the office over a long time. When records appraisal is appropriately done, an institution retains its records for as long as needed. When they are not needed anymore, they are destroyed appropriately. Therefore, university records officers should know the value of university records to the university before they dispose of the records. In other words, these university records officers should be able to justify the absence of university records that were once managed and preserved in their universities. For these reasons, records officers must document disposal decisions in disposal policies and schedules.

This model explains that for an institution to dispose of its records, it needs to know the value of that record to organizational individuals before disposing of the record (Electronic Discovery Reference Model 2011). Then, there should be transparency and linkage across all departments before disposing of any information in an organization. Level 5 of Transformation Maturity for this principle is attained by an institution when the disposition activity covers all media records. This means that institutions should effectively apply this disposition activity.

2.2.2.2.2 Relevance of the model to the study

The justification for choosing this model is that it emphasizes achieving security, compliance, responsibility, and the principle of accountability, as it provides institutions with a communication model that aids in decision-making. With this model, recordkeeping programmes are designed and created to guarantee a security level to information intended to be confidential, private, secret, or vital to business continuity. As the literature mentions, effective and appropriate information and records management are crucial to good governance. Good governance in this study is characterized as being participatory, accountable, transparent, efficient, responsive, and inclusive. This model also provides an accountability framework that promotes necessary behaviour in institutions' creation, use, preservation, and disposition of information (Electronic Discovery Reference Model 2011; National Archives of Australia 2019b). The model relies upon comprehensive recordkeeping laws that emphasize best practices and can be used for almost any situation (Franks 2013:31).

The main aim of information governance is to define all features of how information is managed. The aim of recordkeeping is to manage some of the features of that information (Parapadakis 2018). An information governance programme built upon a sound and firm recordkeeping foundation can produce benefits that alleviate risks to the institutions (Franks 2013:48). Risks that can be reduced include those that come up from lost files, high cost for information management, potential charges of spoliation and storage audit and compliance violation (Franks 2013:48). To succeed ineffective information management, public universities such as those in Tanzania need recordkeeping done logically and systematically, as is emphasized by this model.

The IGRM was suitable for this study. It provides an appropriate framework that ascertains the level of accountability, security, compliance, and responsibility in Tanzanian public universities and establishes a concept that the universities can use to attain effective and appropriate recordkeeping. The model also emphasizes that recordkeeping programmes designed should comply with laws, regulations, and standards applicable to recordkeeping.

This model emphasizes that records managers maintain rules and regulations when performing recordkeeping as their governing body specifies. Lappin (2014) indicated that the changes taking place in approaches to recordkeeping are part of a new information governance technique to recordkeeping. Lappin (2014) identified several strengths in approaching

recordkeeping with an information governance lens, including an enhanced focus on accountabilities to external stakeholders. In a nutshell, it assists organizations in assigning managers to oversee recordkeeping programs and delegating recordkeeping programs duties to the appropriate subordinate individuals, adopting procedures and policies to guide personnel and ensuring program suitability. The combination of the two models addresses the four basic tenets of a recordkeeping governance framework: policies, systems, processes, and compliance issues that this study seeks to address in Tanzanian public universities. Therefore, as noted earlier, this study was underpinned by the RC and the IGRM.

The justification of the study's model can also be seen in similar studies (Franks 2013; Hagmann 2013; Iles 2014; National Archives of Australia 2019b). Hagmann (2013), for instance, confirmed that building a study using this model improves the speed and effectiveness of decision and efficiency, also helps in making maximum use of the information in terms of value creation, and even in assisting to minimize the costs and risks to the institution or business. The use of this model is widely accepted because of its effectiveness and simplicity (Iles 2014:4). The model illustrates interrelationships among values, duties, and information assets, demonstrating cooperation among groups of stakeholders to attain effective information governance (Franks 2013:30). The model has been developed to provide the basis for decisions and activities relating to information (National Archives of Australia 2019b).

2.2.2.2.3 Harmonization of deficiencies in the two underpinning models

The principle of achieving accountability, security, compliance, and responsibility is less emphasized when the RC is used as a stand-alone framework. Therefore, combining operations between the RC and IGRM emphasizes the principle of achieving accountability, security, compliance, and responsibility. This IGRM demonstrates eight principles to guide information management and governance in the records creation, organization of records, security and management of records and other issues in supporting the recordkeeping of an institution. These principles provide guidelines on how universities can enhance appropriate recordkeeping processes. Figure 2.4 illustrates the conceptual relationship between the key concepts under investigation. The research questions primarily guided the conceptual framework.

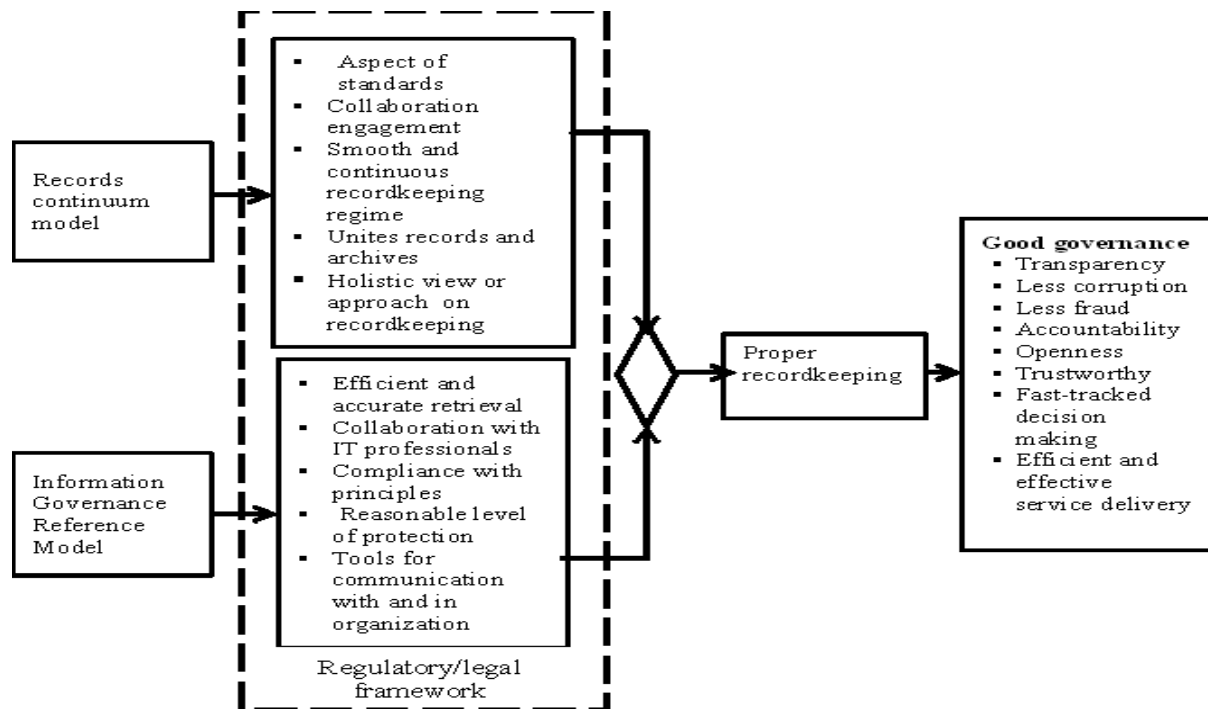


Figure 2. 4: Conceptual framework (Created by the researcher)

2.3 Summary

The main aim of this chapter was to create the foundation of the study in terms of the conceptual framework that undergirded this study. The chapter defined terms such as theory, models, and theoretical and conceptual framework to aid the readers in understanding the concepts used in this study. The difference between a conceptual and a theoretical framework was also presented in this chapter. Differentiating these two terms enables readers to understand the conceptual foundation of the study, which informed this study. The study used more than two theories as there was no single theory to underpin the study. A theoretical triangulation was adopted in this study in which the RC and the IIGRM were employed to serve as the conceptual framework for the research study. The records continuum model could not be used as a stand-alone model to underpin the study; hence, the joint use of the IRGM to compensate for the deficiency of the other triangulation of models was important as it improved the researcher's understanding of recordkeeping and good governance issues.

It was important for this study to be built on a conceptual framework, as research cannot be done empirically without a theory. The link between the conceptual framework and the research problem was also presented. In a nutshell, the conceptual framework used for this study was guided mainly by the research questions. Even though the records continuum and

the IGRM underpinned the study, detailed information on records lifecycle theory was also provided. The theory was deemed essential to be discussed first because it has influenced the development of recordkeeping in many parts of the world. The theory is universally known to be the starting point for intellectual engagement in the discourse of records and archives. Detailed information about the underpinning models was provided. Justification as to why the two models were selected was also provided. For instance, it has been shown that the records continuum model could not be used alone for this current study simply because it does not emphasize the principle of achieving accountability, security, compliance and responsibility. Therefore, to address the particular principles, the study consequently adopted the Information Governance Reference Model as a second model to underpin the study. In the next chapter, a review of the literature is presented.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

This chapter reviews previous studies and elaborates on how the studies interlink with the present study. Understanding the present situation of the body of knowledge in the given field or discipline area is an important step when conducting a study. As such, this chapter establishes what has been done in the earlier studies and then tries to relate those studies to the current research problem to provide a platform upon which the research outcomes will be interpreted. The significance of the literature review is to inform the readers what is current concerning the topic being investigated. Also, the literature review is fundamental as it provides a general perspective of a research body relevant to the study. Through it, researchers are informed and prevented from wasting time doing what has already been done by other researchers (Manyerere 2015:51).

In addition, through conducting a literature review, researchers get new ideas that can be used in their research (Maseh 2015:48). This is why literature review is regarded as a systematic method used in identifying, evaluating and synthesizing existing research works (Majinge 2014:60). Furthermore, the literature review helps researchers examine research problems from more than one angle as well as helps researchers to identify appropriate research instruments and methodology (Robson 2011:51).

This chapter reviews the existing literature on the role of recordkeeping for good governance in Tanzanian public universities. The aim of reviewing the current existing sources for this research study was to place the current study within other related research studies and to be conversant with the available knowledge in the research study area. This chapter is organized thematically by themes and topics associated with the study. The following are the themes as they connect to the research questions: systems and processes used for recordkeeping, recordkeeping skill and training of records staff, the role of records legislation in maintaining records, security level and confidentiality control in recordkeeping and the challenges affecting recordkeeping as well as efforts done on recordkeeping in Tanzania. Therefore, this chapter surveys and analyzes relevant and other credible information sources. The following are the

themes and sub-topics related to the research study as they connect to the research questions. Some brief historical insight that informs the management of records will first be undertaken.

3.2 Management of records

Management of records is an activity that is responsible for the effective and control of the creation, receipt, preservation, use and disposition of records (Yeo 2003:1). The first records were produced around 5000 BC in Egypt and the ancient Sumerian civilization (Penn, Pennix and Coulson 2016:8). These records dealt with business issues such as loans, taxes and inventories (Penn, Pennix and Coulson 2016:8). These records were made of clay tablets. They were managed and controlled by the temple priests, rulers and nobles (Penn, Pennix and Coulson 2016:8). The management of these clay tablet records was somewhat primitive. Still, the fact that they were created and maintained at all was a major advance for civilized society. These records were housed in the libraries (Cartwright 2019). Early libraries contained business records and later evolved to contain collections of literature and information on science, medicine and religion (Penn, Pennix and Coulson 2016:8; Cartwright 2019). As centuries passed, the media of records changed from clay tablets to papyrus and parchment and finally, paper (Penn, Pennix and Coulson 2016:8). Except for this change in media, improvements in records management techniques were slow to develop. It could be said that improvement had not yet become necessary (Penn, Pennix and Coulson 2016:8). The initial aim of records management was and is still to assist institutions in minimizing the quantities of records maintained and the periods for which institutions maintain them. The management of records is now a necessary part of the work of almost all employees within an institution (Yeo 2003:1).

In the middle of the 20th century, a lifecycle theory was developed to establish an effective records management programme as the theory is a foundation for the development of suitable procedures, tools and systems that are needed to suitably manage each stage of the records lifecycle (Msibi 2015:13). The theory was frequently used to explain the term records management to mean the control of records within the institutions where they were made (Chaterera 2013:19). With the development of the lifecycle theory, records management went from being a series of sporadic and unrelated efforts to an organized, structured and logically-based approach to creating, maintaining and disposing of records (Yeo 2017:19). Records management is thus a general managerial activity that deals with the supervision and

administration of records in records creation, receipt, maintenance, usage and disposition through the entire lifecycle to make records available for use.

This theory gave rise to records management as an independent discipline. In the late 20th century, most practitioners (records managers) came to see records management as a separate discipline; it acquired its literature, professional bodies and codes of ethics that were dissimilar to those of archivists (Yeo2017:21). Yeo (2017:21) further emphasized that in practice, records managers and archivists now often work in largely separate professional groupings. Despite what often seemed to be an increasing de facto separation between archivist and records manager, some scholars have continued to maintain that the records management field is whole and indivisible (Garaba 2010:83; McKemmish 2001:334; McKemmish 2017:137).

Advancement in records management triggered the development of the RC model, developed in Australia in the 1990s and early 2000s and rejected notions of a linear progression and a rigid boundary between records and archives (Upward 2000:123). The records that are being made currently are largely in digital form. As indicated in Chapter Two, under section 2.2.2.1, records lifecycle theory is limited in its utility simply because of its strict adherence to its principles. For instance, the difference between the duties played by the archivist and records manager and the view of records in a linear progression is misleading. To this effect, the lifecycle concept is argued to be inapplicable to electronic records; thus, the concept is no longer relevant for managing digital records. Therefore, in its place, the records continuum model was developed. This continuum concept provides a holistic approach to recordkeeping, a continuous activity where one continuum feature goes smoothly and continuously into another (Garaba 2010:291).

The general understanding of recordkeeping was referenced in archival literature in the 1950s by T. R. Schellenberg from North America and Ian Maclean from Australia (Duranti and Franks 2015:320). The term 'recordkeeping' generally indicates the unification of records management and archives preservation practices (McKemmish 2017:123). The introduction of information technology has caused a significant revolution in records and the structure of electronic business environments. Apart from being fixed and paper-based, records are now electronic, fragile and subject to multiple technological dependencies (Duranti and Franks 2015:320). While conceptually, it is more valid than ever before, the need to explain recordkeeping to multidisciplinary audiences has led to broad terms such as information

management and information governance frequently used as substitutes (Duranti and Franks 2015:322).

According to the Society of American Archivists Dictionary of Archives Terminology (2021a), recordkeeping is the systematic creation, use, maintenance and disposition of records to meet administrative, programmatic, legal and financial needs and responsibilities. McKemmish (2017:122) shows that recordkeeping includes activities and processes carried out by archives and records professionals for current, historical and regulatory purposes. Recordkeeping involves a continuum approach in the management of records throughout their lifecycle in both physical and electronic forms. McKemmish (2017:123) indicated that in the continuum concept, recordkeeping covers both the creation and the management of records and archives and that record managers and archivists are involved in the entire continuum phases (Garaba 2010:84). This means that the demarcation of functions between archivist and records manager in the continuum approach is seen as artificial and constrictive. Therefore, this study focused on the continuum approach in the management of records throughout their lifecycle in both physical and electronic forms.

Based on the above explanation, it means that there is a difference between recordkeeping and records management concerning their application and usage in the records and archives community. 'Recordkeeping' is commonly used to indicate the unification of records management and archives preservation practices (Frings-Hessami 2017:4; McKemmish 2017:123). This conforms to the RC model, whose origin is in Australia. For this study, recordkeeping comprises appropriate systems, processes, records legislation, and the adoption of the necessary security measures and approaches to ensure good governance. The study opted to use the recordkeeping term because the current study was looking at the entire records lifecycle in both physical and electronic forms as informed by the RC. Also, the current study does not distinguish records management and archives preservation by prioritizing one over the other. This study focused on the continuum approach to managing records throughout their lifecycle in electronic and paper-based records. In other words, the current study focused on the unification of records management and archives preservation practices, which are recordkeeping concepts.

From previous studies, it has been revealed that in several eastern and southern African countries such as Botswana, Kenya, Namibia, South Africa, Tanzania and Zimbabwe (Tshotlo and Mnjama 2010; Nasieku, Kemoni and Otiike 2011; Ndenje-Sichalwe 2011; Nengomasha

and Nyanga 2012; Ngoepe 2012; Sibanda, Sibanda and Mupfururi 2021) the lifecycle theory was popularly used as a framework for the management of records and up until the period between 2010-2019 most of the records in eastern and southern African countries were still created on paper, in the form of correspondence, minutes, reports and memoranda and they were usually filed systematically (Mojapelo 2021:22). The Covid-19 pandemic in 2019, however, brought changes in practice one of which is the way recordkeeping is now being practiced. During the spread of the COVID-19 pandemic, many institutions implemented lockdowns, shutting down their activities that needed human gathering and interaction. The lockdowns resulted in most individuals taking to the Internet and computer-based services to communicate and continue with their jobs and responsibilities from home. The pandemic led to an inevitable increase in the use of information technologies due to the social distancing norms and nationwide lockdowns in some countries. Due to COVID-19, the Eastern and Southern African countries have had to re-evaluate how the management of records practices ensures effective information exchange. For instance, due to the impact on the management of records, many organizations moved their services online to enable access to information. This is because the paper-based records in many organizations proved inaccessible during the COVID-19 pandemic lockdown (Griffin, Hotard and Fuller 2020).

Increasingly, there was this upsurge in going digital. Some organizations had started this process before the pandemic using Electronic Documents Management Systems and Electronic Records Management Systems to manage their records. Through these systems, employees could access records virtually, providing service delivery to the users. Most countries in Africa face several challenges in digital recordkeeping. For example, as highlighted by (Chigariro and Khumalo 2018:161), there is a challenge in digital recordkeeping in the ESARBICA region; hence, strategies are needed to be put in place to map the way forward for the management of digital records in the region. Some of the challenges include the absence of organizational plans for maintaining digital records, the absence of recordkeeping laws to guide the recordkeeping of both paper and digital records, the absence of migration strategies for digital records, and the lack of appropriate facilities for the storage and preservation of digital records (Kalusopa 2016:103).

The records generated in the digital platform are dynamic and continuing in nature and thus coexist in more than one lifecycle phase (Yusof and Chell 2000:140). This study is built on the records continuum concept in the management of records, which supports both paper-based and electronic forms of records in their lifecycle phases. Since the current study was not

underpinned by the lifecycle philosophy, which uses the term 'records management', this term was not used in the study.

Although the records lifecycle concept is the core to most records management programmes and although most of the East and Southern Africa Regional Branch of the International Council on Archives [ESARBICA] member countries like Tanzania use the term 'records management,' the researcher opted not to use the lifecycle model as in recent years the lifecycle concept has been subjected to much adverse criticism. This is because, firstly, since the current study investigated recordkeeping in both paper and digital formats in Tanzanian public universities, the lifecycle model concept provides a framework for the management of records in paper format only (Garaba 2010:81; Maseh 2015:45). Secondly, the concept does not allow collaboration between archivist and records manager, hence undermining the concept that management of records and preservation of archives correlate (Ndenje-Sichalwe 2010:57). Records managers and archivists should take part in all three phases of records concerning their lifecycle. The present study focused on the continuum concept in managing records throughout their lifecycle. The choice was made because the study focused on the unification of records management and archives management practices, which are the philosophy of recordkeeping.

Furthermore, it is also notable that effective recordkeeping standards in an institution improve good governance (Mosweu and Rakemane 2020:105). Isabella and Ibitoroko (2016:290) noted that a good administration foundation is established and strengthened when records are adequately maintained. They added further that if the management of records is done using required standards (standards on the physical storage, standards on full and accurate records, standards on counter disaster strategies), it facilitates continuity, evaluation of services of an institution and preservation of institutions' privacy. According to Franks (2018:43):

Standards provide records professionals with the codification of practice, explicit rules from implicit methodologies, development of a body of common knowledge, consistency in practice and quality, interoperability and, interconnectivity and efficiency.

Several standards have been established to guide the management of records to guarantee professionalism and uniformity worldwide. Below is the discussion on the standards often referred to by records professionals (Franks 2018:43):

De facto standards: some programs and practices are used so frequently and widely that they are considered de facto standards. US Department of Defense standard DoD 5015.2 STD Electronic Records Management Software Applications Design Criteria Standard is one example of this standard. This standard was initially established to provide implementation and procedural guidance on the management of records in the US Department of Defense. The standard was later endorsed by the National Archives and Records Administration (NARA) for use by all government agencies. Eventually, many private institutions turned to this standard when developing or evaluating records management systems (ERMS). To assist those outside of the federal government to understand better how to apply the de facto standard for their own needs, the Association of Records Managers and Administrators (ARMA) International published a technical report named 'Using DoD 5015.02-STD outside the Federal Government Sector'. Outside the US, guidance is provided through a similar de facto standard, Model Requirement for the Management of Electronic Records (MoReq). MoReq 2010 is the latest specification. Like the DoD 5015.2 STD, MoReq outlines the essential elements a records system requires to ensure that records are properly managed, accessible and available as long as needed and properly disposed of once the retention period has expired.

De jure Standards: these are usually adopted by an official standard-setting body such as the ISO. Therefore, professional associations must work with a national standards development body to establish a standard. An example of this standard is the Records Management (ISO 15489), developed by the International Organization for Standardization (ISO). The standard was developed based on the Australian AS 4390-1996 Records Management standard. It is the first global standard for records management published in 2001. The standard was adopted in more than 50 countries and translated into over 15 languages. In 2016, a revised version of ISO 15489 part 1 was issued. This standard guides managing records in all formats. ISO 32000-02:2017 Document Management – Portable document format is another example of this standard. This standard was primarily developed for software that creates PDFs (PDF writer) and software that reads existing PDF files (PDF reader). In

addition to setting out standards for the management of records, ISO TC 46 SC 11 also sets standards for the provision of processes and services that facilitate or support good records management. Another example of these standards is the ISO 9001:2015- Quality management systems. ISO 9001:2015 is a globally known standard for quality management. It helps institutions of all sizes and sectors to improve their performance, meet customer expectations, and demonstrate their commitment to quality (International Organization for Standardization 2015). ISO 9001:2015 is important because it has the support of national standards bodies from more than 160 countries, Tanzania inclusive, and it is, therefore, the logical choice for institutions such as universities.

From the foregoing, it is evident that recordkeeping standards enhance the effectiveness of managing records. This means that standards are important tools for the management of records as they intend to formulate an initial framework that stipulates how records should be managed within an institution (Newa 2017:23). Compliance with standards that have been established for the management of records such as ISO 15489 is advisable since these standards have an impact on how records are captured, created, retrieved, used, controlled and preserved (Chachage and Ngulube 2006:9). For instance, in Tanzania, the management of electronic records poses the greatest management challenge for records professionals. Tanzanian records professionals face many impediments in maintaining authentic, reliable, usable and trustworthy records (Newa and Mwantimwa 2019:120). This could be because Tanzania has no national standards for recordkeeping practices, as reported by (International Records Management Trust 2011:11). In 2013, Lowry (2013:31) stated that the Tanzanian national archives were yet to adopt the ISO standards on managing records. Years later, this situation remained the same, as Kamatula (2019:109) indicated that there were no government-wide official standards for managing digital records in Tanzania. This indicates that Tanzanian public organizations create and manage their records through their initiatives without common standards (Kamatula 2019:109). In this regard, it is essential to establish the interventions that must be implemented to address the issue of recordkeeping in the Tanzania public universities. The Sokoine University of Agriculture and the Muhimbili University of Health and Allied Sciences are known to have commenced the process of adopting the ISO 9001:2015 standard.

Therefore, records should be managed according to standards that ensure accuracy and reliability. Records' reliability increases when recordkeeping is appropriately done. Reliability in recordkeeping is how records are maintained systematically and easily trusted (Williams

2006:10). According to Msibi (2015:3), many African registries have failed to implement their recordkeeping responsibilities, thus affecting the progress of recordkeeping programmes in the public sector. It is essential to maintain records properly because records constitute an important feature in providing accountability and transparency. Poor recordkeeping reduces records integrity and usability. Record integrity denotes unaltered and complete records, while usability indicates that records are easily located, retrieved, presented, and interpreted (Williams 2006:10). Also, Maseh (2015:49) opined that when records are created, a master plan needs to be established to maintain every created record effectively until their disposition stage. The plan should have guidelines instructing how records are organized, accessed and preserved as long as they possess long-term value. Shepherd and Yeo (2003:101) noted that a records creation strategy is crucial as it ensures that records meet suitable quality standards and are managed into protected and effective management systems. Records created during this stage should be complete and accurate to provide evidence of the institution's functions, decisions, activities, procedures and transactions (Shepherd and Yeo 2003:101). It is vital to capture records in a manner that can be accessed and used in the present and the future. The next section discusses the systems and processes that are used in recordkeeping.

3.3 Systems and processes used in recordkeeping

This section covers issues related to the impact of information technology on recordkeeping systems and processes in the public sector.

3.3.1 Information technology and recordkeeping systems

Recordkeeping systems are systems that are used to maintain records. The Society of American Archivists Dictionary of Archives Terminology (2021b) defines a recordkeeping system as coordinated procedures and policies that facilitate records to be gathered and categorized to facilitate their management, preservation, retrieval, use and disposition. These systems are used for tracking movements of records to provide complete and accurate information on all transactions that occur about a particular record (Kamatula 2018:58). Although a slow response time may indicate an unwillingness to release records, feeble recordkeeping systems are a huge factor in the speed of response (Thurston 2015a:706).

The impact of weak recordkeeping systems can increase significantly in the electronic environment where a growing number of records are electronically created and held (Thurston

2015a:707). A recordkeeping system is important because it acts as a control system that strengthens other control systems, such as internal and external audits. Evaluating a recordkeeping system through strength, weakness, opportunity and threats analysis is always fundamental. Archivists and records managers should regularly evaluate the recordkeeping systems within the organization to ensure the effectiveness and efficiency of recordkeeping systems. For instance, assessing the effectiveness and efficiency of the systems will ensure that the recordkeeping systems are functioning effectively.

In modern universities, recordkeeping systems should be hybrid, meaning that they should incorporate both electronic and paper records. These recordkeeping systems should have tracking systems that will be used to locate and control records movements and make retrieval of records easy. To enhance transparency, recordkeeping systems must enable access to records (Casadesus de Mingo and Cerrillo-i-Martinez 2017:257). Recordkeeping systems should be used to provide the basis for transparency. Capturing and maintaining records in recordkeeping systems allow monitoring and controlling of all the transactions through which the records have passed (Casadesus de Mingo and Cerrillo-i-Martinez 2017:258). This means that through the recordkeeping systems, one can easily establish if there is unauthorized access to the records.

According to the Government Records Service (2011:8), for a recordkeeping system to serve its purpose, it should possess the following features:

- i. Reliability: the system should have the capability of being ongoing and have a regular operation in agreement with the already set rules and procedures;
- ii. Compliance: the system should be maintained to go along with all necessities arising from the legal and regulatory environment and expectations in which the institution operates;
- iii. Integrity: control procedures should be in place to block illegal access, damage and modification of records;
- iv. Comprehensiveness: the system should have the capacity to maintain both digital and paper-based records; and
- v. Systematic: it should be capable of capturing, maintaining and managing records in a systematic manner.

Records are essential litigation support tools; without records, there can be no litigation, as records provide information through which decisions are made and evidence is achieved. Almost all institutions, including public universities, will experience some litigation during their lifetime. Therefore, effective recordkeeping is among the many approaches institutions can use to ensure preparedness for litigation. The presence of recordkeeping systems in an organization entails working with standardized procedures and processes (Casadesus de Mingo and Cerrillo-i-Martinez 2017:258). Therefore, the recordkeeping systems must allow for authentic records to be facilitated; hence necessitating organizations to ensure that the records they provide are reliable. This means that the law on transparency and access to public records in Tanzanian public universities should be developed while considering the significance of having recordkeeping systems in public universities. The next section discusses issues on the impact of information technology on recordkeeping.

3.3.1.1 The impact of information technology on recordkeeping

There is no doubt that the introduction of information technology impacted recordkeeping organizations regarding the creation of records and the nature of the preservation, maintenance, and services they provide. The development of IT and the extensive use of digital devices to perform business operations have led to an exponential growth of electronically created records. In other words, introducing information technology has impacted how records are received, created and maintained. Information technology has become a critical aspect of success required to accomplish every institution's goals and tasks. Therefore, the importance of information technology cannot be emphasized, as it has become so common in every human sphere.

In short, information technology has transformed the recordkeeping landscape (Phiri 2016:74). Institutions worldwide are increasingly using information technology-based systems to improve recordkeeping and service delivery. Where these information technologies are applied, the retrieval and access of records is facilitated. Retrieving and accessing records are fundamental in ensuring accountability and transparency, boosting institutional governance. The introduction of information technology has revolutionized recordkeeping from its apparent dust back office to a clean, paperless front office. For instance, information technology has changed how records are created, accessed, shared, utilized, preserved, and disposed of.

Today, paper-based recordkeeping is being overtaken by digital recordkeeping. As Asogwa (2012:200) noted, proper management of records practices is increasingly emphasized and demanded to enhance government transparency, accountability, and performance. This technological advancement is making records professionals in many institutions converge. The major trends that have affected how records are managed come from the introduction of computers into the office environment. Since their introduction, information technologies, management of records systems and the Internet have revolutionized how activities in an organization are carried out and how archives and digital records are received, created, managed and accessed (Asogwa 2012:200). Due to the introduction of modern technologies in the organization, communications between individuals and between organizations and individuals outside the organization have improved (Phiri 2016:75). There is rapid feedback through the use of these modern technologies within an organization.

Although information technologies bring huge benefits, maintaining records housed in modern technologies presents challenges and risks. Implementing recordkeeping systems in the office is challenging because the adoption and use of technology depend on several factors. For instance, technology adoption at institutional and individual levels may be influenced by the area's features in which the recordkeeping system is implemented. These technologies are constantly changing. Therefore, technologies have affected and increasingly impacted how many African countries maintain records in their custody (Asogwa 2012:207).

In Africa, many governments plan to computerize their core functions, forcing most organizations to adopt information technology by adopting digital recordkeeping. The entrant of information technology into recordkeeping has revealed startling issues accompanying digital recordkeeping in Africa. For example, a study by Newa and Mwantimwa (2019:120) showed that among other challenges that records centers and archives face is the low uptake of digital storage. E-Systems pose a massive challenge in the management of records. This challenge, principally in Africa, is compounded by the absence of infrastructure, outdated archival legislation on electronic recordkeeping and very few higher learning institutions offering recordkeeping modules (Ngoepe and Keakopa 2011:150). In most African countries, records professionals lack basic skills that would help them manage digital records (Asogwa 2012:202). This is because even though the introduction of Information Technology has brought considerable benefits to institutions in maintaining records, it has also simultaneously brought some difficulties and challenges, consequently increasing the risk of losing records

due to loss of security and confidentiality and increased need for information technology personnel.

To enable proper digital recordkeeping, there is a need for modern records legislation to accommodate records in networked environments (Ngoepe and Saurombe 2016:25). It is also essential to have in place recordkeeping systems that will guarantee legal ownership of the records and custodianship. Therefore, up-to-date records legislation can provide a supportive environment where proper recordkeeping systems can be built (Ngoepe and Saurombe 2016:25). This updated records legislation would cater to the maintenance and storage of records in networked environments (Ngoepe and Saurombe 2016:25). Similar sentiments have been reported by Asogwa (2012:211), who indicated that the significant challenges of digital recordkeeping in Africa are managerial and technically induced challenges. The advantages of maintaining digital and paper-based records in Africa can only be realized if proper infrastructures, workable archival legislation, appropriate finance, and competent information technology specialists are available (Asogwa 2012:211).

IT, in combination with changes in methods of working and institutions, the structure has increased the number of recorded information and new forms of record created (Ndenje-Sichalwe 2010:87). These massive technological advances in digital recordkeeping have implications for an institution's performance (Newa and Mwantimwa 2019:118). Due to the large number of digital records being received and produced in the offices, there is an increasing concern about how these digital records will be maintained and preserved for a long time.

Furthermore, following the introduction of information technology, many institutions now create and maintain records electronically. Records are managed in computer systems using recordkeeping programmes. Such computer systems usually face threats such as sabotage due to system hackers, computer virus attacks, system failure and careless behaviours by the users. In this regard, preventive measures must be implemented to reduce the risk of losing information in electronic format. According to Kamatula (2013:43/44), the following measures are fundamental in securing electronic information in computer systems:

- i. Running of regular backups of electronic information as well as metadata;
- ii. The use of Redundant Array Independent Disks (RAID) for online fault tolerance storage devices as well as ensuring multiple routes, is essential;

- iii. Staff using computers should be trained not to expose passwords, shutting down computers when not in use;
- iv. The use of firewalls and regular updating of anti-virus software protection is highly recommended; and
- v. Acts, regulations, and policies, such as the Information Security Policy, should guide the use of computers in public offices.

With this introduction of information technology, there have been changes in organizational procedures concerning recordkeeping. According to Haag, Cummings and Dawkins (2000:9), Information Technology is a set of tools that helps provide the right people with the correct information at the right time. Government sector organizations worldwide are increasingly embracing Information Technology-based systems to enhance records and information management and delivery of services (Mosweu, Bwalya and Mutshewa 2016:97). Therefore, the role of Information Technology is to enable an organization to provide good services to customers when they want it (time), where the customer wants it (location), how the customer wants it (format) and in the way that it will guarantee customer's satisfaction (perfectly delivery). With the introduction of information technology in recordkeeping, there is an increasing concern about how digital records of enduring value will be retained, as it is very easy to erase a file (Mulauzi 2019:15).

Information technology developments have brought challenges and opportunities for recordkeeping (Kemoni 2007:87). Many organizations have introduced electronic records to replace paper records to save limited storage space. Information and Communication Technologies have altered business activities and revolutionized recordkeeping (Newa and Mwantimwa 2019:116). Apart from saving storage space, organizations have automated their records within their premises to accommodate the following objectives: provision of reliable and accurate information for quick and easy access; enhancing more accessible information sharing among users; creating a databank that influences necessary back-up (International Records Management Trust 2007:19). The rapid increase of digital services in organizations means that there is also an increase in a large amount of documentation and recorded information in digital form. Many institutions currently are managing their businesses digitally.

As noted by Asogwa (2012:200), sound management of records activities is being emphasized and needed to improve accountability, transparency and performance in government since there

is a lack of management of electronic records activities in many African countries (Asogwa 2012:200; Issa and Wamukoya 2018:31). This is because the responsibilities for maintaining digital records in African countries are not well defined. In Africa, records officers have yet to capture the basics of digital records management (Asogwa 2012:201). According to Adeola and Evans (2019:12), the current state of information technology infrastructure in most African countries is very poor. This could be one of the reasons that in some African countries, some recordkeeping specialists do not have the basic idea of managing digital records (Mosweu and Kenosi 2018:241).

Through the introduction of information technology, records professionals have moved from a situation in which they have been able to maintain records within an institution's boundaries to a situation in which the records officers may create institutional records from beyond that institution's boundaries through information technologies such as web 2.0 which is hosted within the Internet (Lomas 2010:183). This technological evolution in the digital management of records has raised questions on the issue of information ownership. For instance, information created and held in the cloud may not be owned by the creator of that information.

With the advancement in technology, it has become inevitable for many records professionals to agree that technology is the underlying infrastructure for the management of digital records (Mosweu, Bwalya and Mutshewa 2016:2). Advances in the development of software that support complex information flows and collaborative work have allowed more institutions the opportunities to adopt systems that not only process and store information, but also maintain the institution's records (International Records Management Trust 2007:19). Records are a major key to institutions in achieving their objectives and extracting knowledge for decision-making. Therefore, records should be retained to provide evidence of what activities have been carried out. These records should be managed systematically and effectively to avoid problems if institutions are involved in litigation cases and to reduce the risk of fraud and corruption associated with managing the records. Therefore, most organizations are now adopting information technologies-based systems to improve recordkeeping and service delivery (Mosweu, Bwalya and Mutshewa 2016:1).

Digital recordkeeping has now become the norm in many institutions and this has given rise to a range of electronic recordkeeping systems such as Electronic Documents and Records Management Systems (EDRMS), Electronic Records Management Systems (ERMS), Document imaging systems (DIS), Enterprise Knowledge Management system (EKMS) and

File management systems (FMS) (Kamatula 2018:57). The next section discusses Electronic Documents and Records Management Systems (EDRMS) and Electronic Records Management Systems (ERMS) as part of Information Technology's impact on recordkeeping.

3.3.1.1.1 Electronic Documents and Records Management Systems (EDRMS)

The National Archives of Australia (2011:5) defines EDRMS as a system that maintains digital information. EDRMS is a programmed system that supports the capture, usage and management of digital documents to improve an institution's workflow (Gelashvili 2010:24). EDRMS is a type of application software that combines the technologies of management of documents and management of records systems as an integrated system. EDRMS aims to enable institutions to manage documents and records throughout their life cycle, from creation to destruction (Nyampong 2015:128). The system provides a structure for the capture, maintenance and accessibility of records. Many higher learning institutions nowadays use digital systems for effective recordkeeping. EDRMS is presently the most popular application system for maintaining digital records (National Archives of Australia 2011:5). As indicated earlier on, this system integrates documents and management of records systems functionalities (National Archives of Australia 2011:5). The use of EDRMS increases business efficiency as it provides greater accountability and reduces business risk (Gelashvili 2010:25; National Archives of Australia 2011:6). Furthermore, the system ensures that records are properly maintained, protected and accessible (Gelashvili 2010:25).

3.3.1.1.2 Electronic Records Management Systems (ERMS)

An ERMS system allows organizations to assign a particular life cycle to the information created as records (Hawash et al. 2020:2). In other words, ERMS is designed to observe the principles of records management as much as possible. Many ERMS are designed with records management standards in mind (Ambira 2017:104). ERMS consists of software, hardware, policies, and processes to automate the preparation, organization, tracking and distribution of records regardless of format (Kamatula 2018:61). Unlike Electronic Documents and Records Management Systems, ERMS are purely dedicated to the management of records (Kamatula 2018:61). The main functions of ERMS are categorizing and locating records and identifying records due for disposition (Hawash et al. 2020:2). According to Ambira (2017:104), a key feature of Electronic Records Management Systems is the capability to sustain the fixity quality

of records. This means the systems do not allow records modifications once entered (Ambira 2017:104).

A distinguishing feature of ERMS from EDRMS is their lack of inbuilt workflows (Ambira 2017:104). This is because ERMS is not designed to allow the editing of documents; the workflow capability would ordinarily not reflect the principle of ERMS (Ambira 2017:104). For an Electronic Records Management System (ERMS) to function properly within universities, records managers and information technology professionals must work together to integrate the ERMS with other information content applications. Those institutions that successfully implement ERMS have established programs for managing changes in policies and procedures, standards and guidelines, business processes, technology and staff capacity (Nyampong 2015:129). The next section discusses recordkeeping processes.

3.3.2 Recordkeeping processes

A recordkeeping system aims to maintain records from the initial (creation) stage to the final (disposal) stage. Recordkeeping processes include records capture, records creation, records classification, records storage, access, tracking and records disposal (Government Records Service 2011:10). Even though the recordkeeping processes mentioned above are presented as if they are sequential, it should be known that some records systems, for instance, digital records systems, a few of the mentioned processes may take place simultaneously, for example, processes such as records capture and classification often carried out as a combined sequence of actions. The following sub-sections discuss in detail the six recordkeeping processes mentioned above.

3.3.2.1 Records capture

Regardless of the format they are received and created, all records should be captured and managed in a proper and robust records system. This aims to connect creators, records, and the business context that created it and connect it to other records. The captured records should be complete and have content, structure and contextual information essential to document an official activity as evidence of business. Suppose rules guiding records creation are correctly identified at the initial stage of the records lifecycle. In that case, records are easily accessible until their usefulness expires and is destroyed (Madulu2016:19). All institutions need recordkeeping systems to maintain complete and accurate records (Ndenje-Sichalwe 2010:117).

3.3.2.2 Records classification

The National Records and Archives Management Policy (2011a: vii) defines classification as the systematic arrangement of records into categories according to logical structure and rules. The process may involve physically organizing records or using a class code to index and retrieve records stored in a different order (The Society of American Archivists Dictionary of Archives Terminology 2021c). To enable activities such as capturing and retrieving records, security and access monitoring and disposal of records, records are to be arranged according to records classification schemes (Ndenje-Sichalwe 2010:259; Mampe and Kalusopa 2012:12). Types of records classification schemes include an alphabetical classification scheme, a numerical classification scheme, an alpha-numerical classification scheme, a subject classification scheme, a functional, a chronological classification scheme and a geographical classification scheme. A classification scheme must permit alterations such as new records series/groups to cater to varying situations. Having in place classification schemes in an organization ensures that there is a consistent organization of records and afterward forms the foundation for effective retrieval, preservation and disposal of records (Phiri and Tough 2018:51). The ability to locate and retrieve records effectively is one of the critical features of any recordkeeping programme. This can only be achieved when an organization has a classification scheme.

Classification of records allows actions such as naming, grouping, security protection, user permission and so on to be easily done (Mampe and Kalusopa 2012:13). The use of classification systems in an institution prevents unauthorized individuals from accessing confidential records (Newa and Mwantimwa 2019:130). The effectiveness of any classification scheme depends on its flexibility, the records schedule, and harmony with the recordkeeping practices (Cheng 2017:208). For a university to be accountable, it is essential to develop a method of classifying records and records classification is fundamental to all aspects of recordkeeping.

3.3.2.3 Storing records

Once records have been processed, disseminated, and utilized, they need to be well preserved for future use; hence, there is a need to have well-maintained records storage avenues (Ndenje-Sichalwe 2010:270). Records storage avenues and handling processes should be designed to protect records from unauthorized access (Ndemanisho 2014:494). Lack of proper records storing avenues can damage records (Nsibirwa 2012:218) and affect their availability, access

and use (Mampe and Kalusopa 2012:14). Nsibirwa (2012:218) further indicates that maintaining and storing records in an environmentally and physically stable area is significant in ensuring the longevity of their useful life. The environment under which records are stored can significantly influence their longevity. On this account, good records storage equipment such as filing cabinets, file boxes, document racks and hard disks for electronic records is a prerequisite.

3.3.2.4 Access

Access is the ability to retrieve relevant records through finding aids (Bulow and Ahmon 2011:6). Universities produce, manage and use a lot of records for their day-to-day activities. For effective and informed decisions and proper planning to take place, there must be timely access to records (Abdulrahman 2015:48). It is significant that records in the institution's custody are not only available but should also be made accessible to the users (Ndenje-Sichalwe 2010:81). Therefore, universities should ensure that their records are easily accessed. Also, it should provide access to sensitive information. Again, records should be classified according to their level of sensitivity at a particular time. Thus, institutions should lay down procedures and guidelines for protecting, processing and transmitting classified records. Depending on how records are created, security procedures such as access control and user confirmation must be implemented to safeguard records (Kamatula 2018:55). Access to records can never be assured except when appropriate procedures are done to protect the records (Msibi 2015:1).

3.3.2.5 Tracking

The National Archives (2004:6) defines tracking as capturing and managing information about the movement, use and transaction of records. In recordkeeping, tracking the movement and the use of records is very important. Tracking records within records systems is needed to enable records retrieval, monitor usage for the system maintenance and manage an auditable trail of records transactions (the National Archives 2004:6). Universities must decide the kind of records that must be managed to track records. For instance, for an institution to support the tracking of records in paper-based recordkeeping systems, it should prepare and maintain an accurate inventory of records that covers information such as file title, file reference number, date opened as well as a storage location (the National Archives 2004:7). To minimize the risk of losing records, universities must make proper arrangements to make sure that the relocation

process is properly conducted. Therefore, records officers should not rely on their memories to track records, which contributes to the delays in tracking requested files. This situation may lead to difficulties retrieving files and sometimes to loss of files.

3.3.2.6 Records disposal

Records disposal is the action taken regarding records as a consequence of their appraisal and the expiration of their retention periods (The National Records and Archives Management Policy 2011b: vii). An institution requires a programme to discard valueless records to monitor the records' growth. A retention schedule constitutes an institution's official policy for discarding and retaining records. Without a retention schedule, an organization may unnecessarily retain records for a long period or destroy records without considering their values (Ndenje-Sichalwe 2010:80). The lack of a disposal schedule may cause problems in the storage and tracking of records (Madulu2016:131). For this reason, an institution should initiate regular disposal of records in harmony with the approved records retention and disposal schedules.

To protect records from premature disposal and destruction of records that still do have archival value, disposal of records should be properly authorized by a senior records staff in the institution. Senior records staff should ensure that the retention and disposal requirements are specified in the disposal schedule and that the respective governing legislation has been complied with. These schedules are still significant tools as they ensure that records such as electronic records remain protected and reliable evidence (Kamatula 2018:75). All institutional records should be properly maintained in a secured storage platform for future records use; retention and disposal of records should follow the disposal schedule (Madulu 2016:3).

Without proper recordkeeping practices, good governance cannot be attained. The implementation of proper recordkeeping procedures depends on the appropriate legal framework for records. Poor recordkeeping practices undermine good governance, resulting in corruption; hence it is mandatory for organizations to possess strong recordkeeping systems to ensure accountability and transparency. The next section provided an overview of recordkeeping in public universities.

3.3.3 Management of university records

The main goals of a university are teaching and learning, conducting research, and carrying out community services and consultancy. Records are produced when these activities are being carried out. If such records are not properly maintained, the evidence will either be lost or accessing them will consume much time. Proper records management facilitates a university's efficient and effective running operation. Aspects of good governance such as transparency, rule of law, and accountability depend to a large extent on the management of records. Therefore, it is essential for a university to properly maintain records to have a reliable institutional memory that serves as evidence of its activity. To give a sense of management of records in Tanzanian public universities, it is fundamental first to present management of records trends in the international arena. Research studies on managing university records from outside and within Africa are reviewed in the section below.

3.3.3.1 Management of university records outside Africa

There are several related studies done outside Africa on the management of university records that posit the ongoing situation of management of records and inform further the current study. The following are some of the research studies done outside Africa (Schina and Wells 2002; Kaczmarek 2006; Kulcu 2009; Zachs and Peri 2010; Mukred et al. 2016; Toner 2016; Mukred, Yusof and Alotaibi 2019; Poolsatitawat 2019).

In her conceptual study, Kaczmarek (2006) indicated that the University of Illinois had never had a proper records management program. Since the establishment of the Illinois University Archives, in the absence of the program, efforts had only focused on the disposition of records activities, and this hindered the university's ability to preserve university records of enduring value. In an attempt to develop a records management program at the university, the University of Illinois took an approach of reframing the management of records toward a needs-based rather than a mandate-based perspective (Kaczmarek 2006). Unlike the present study, Kaczmarek's (2006) paper did not indicate the research design used. The study only focused on the establishment of records management programmes. Kaczmarek's (2006) study is specifically relevant to the present study as it demonstrates the dangers that records are exposed to in the absence of a records management programme which subsequently undermines the availability and access to records. The absence of a good records management programme bears on the quality and integrity of the institutional archives (Kaczmarek 2006:24). However,

there was no indication of the theory used in Kaczmarek's (2006) study. In every research study, it is very important to have a theoretical platform within the subject of study to develop thinking and draw a conclusion. Research studies done without theories do lack a firm foundation (Ngulube 2020:18).

In Turkey, in her empirical study, Kulcu (2009) noted that most dated records are transferred collectively to repositories without any assessment procedure. Although records in Turkish universities are classified according to priority, the university records are not scheduled for retention or disposal. He further states that retrieving necessary documents is difficult due to the ineffectiveness of record access tools and improper sorting of records since they are collectively transferred for storage purposes. Although the study assessed the records systems, it overlooked the issues of security measures and control of records and issues of skills in managing records. Protecting records is fundamental in any institution. This involves maintaining the integrity, availability, and confidentiality of the records. There should be a proper level of security control for both paper and digital records in any organization. Kulcu's (2009) quantitative study employed a literature review and questionnaires as data collection tools. Unlike Kulcu's (2009) study, the current study employed questionnaires and interviews. Kulcu (2009) should have also employed an interview guide to collect in-depth information from key respondents such as heads of the recordkeeping department. Despite Kulcu's (2009) study discussing the benefits of records lifecycle theory and continuum model in managing records as the current study has done, the study did not indicate the underpinning theory. Using a theory in a study is to explain and control scientific research (Kemoni 2007:57). Therefore, every study must have a conceptual or theoretical foundation.

Zachs and Peri (2010) conducted an empirical study in North America to provide a picture of the state of the field for archivists in colleges and universities. Zachs and Peri's (2010) study is similar to the current study because both studies adopted a mixed-methods approach to collect data. The study used an online survey and interview guide to collect data from records managers and archivists. These were appropriate because an online survey gives respondents adequate time to give well-thought-out answers and an interview guide enables the collection of in-depth information on respondents' opinions, thoughts, experiences, and feelings. The study recommended that cooperation from the Office of Information Technology is necessary. This is to say that records managers and archivists should build relationships with others in higher learning institutions to work and establish common values. Although information technologies bring huge benefits, there are also challenges and risks in maintaining records

housed in modern technologies. Electronic records are likely to pose serious challenges if not well managed. Though the study discussed the management of e-records practices, it overlooked the issues of security measures, control of digital records, and archival legislation. The study did not indicate the model, theory, or concept used to underpin the study. It is necessary to indicate the concept or theory used in a study. This is because when used in a study, they provide data interpretation approaches and in-depth explanations of what is being researched (Kamatula 2018:38).

Mukred et al. (2016) conducted an empirical study in Yemen to investigate the readiness of Yemen's higher professional education institutions to adopt the E-Records Management Systems (ERMS). The study used a semi-structured interview guide to collect data from 20 specialists managing digital records. The tool was appropriate because it allowed the interviewee to freely express their opinions regarding their readiness for ERMS adoption in their institutions. A thematic analysis approach analyzed the qualitative data obtained through the semi-structured interview. Despite Mukred's et al. (2016) study discussing electronic records management issues, the theory or concept used to underpin the study was not indicated. The study was relevant to the present study as it demonstrates the importance of implementing ERMS in universities, which could have a lasting and beneficial impact on the quality of management of electronic records, subsequently enhancing good governance. Mukred et al. (2016) developed a conceptual framework to examine electronic records management systems readiness in Yemen's higher professional education institutions. A conceptual framework offers researchers excellent assistance in conceptualizing and conducting research studies (Ngulube 2020:20). In the present study, the researcher developed a conceptual framework that gave the researcher a thorough insight into the topic under investigation.

In North America, Toner (2016) conducted a conceptual study and noted that most universities are recognizing the need to establish programs dealing with the management of records or universities are modifying the existing programs to meet the challenges of the 21st century in managing records. In addition, Schina and Wells (2002) conducted empirical research in 30 universities: 15 in the United States and 15 in Canada. The aim was to examine the management of university records and archives programs. The major results showed that the management of records and archives programmes were formalized and that a high-level committee monitored policies, procedures and activities. These two studies differ from the present study in the area of focus and methodology used. While the current study focuses on the recordkeeping concept, Toner's (2016) study focused on the records management concept and

Schina and Wells's (2002) study specifically focused on the university archives and records programs in both public and private universities.

Regarding methodology, Toner's (2016) study did not indicate the data collection tools used to collect data, while Schina and Wells's (2002) study used interviews and questionnaires, just like the present study. Using questionnaires and interviews to collect data in Schina and Wells's (2002) study was appropriate because quantitative and qualitative data were needed for the study based on what was being investigated. Both studies did not indicate the theory used to guide the study. However, the two studies were useful in providing solutions on what constitutes proper management of records in universities.

Mukred, Yusof and Alotaibi (2019) conducted an empirical study in Yemen to propose a model for ERMS adoption to support the productivity and performance of higher professional education institutions. Unlike the present study, Mukred, Yusof and Alotaibi's (2019) study was underpinned by the Unified Theory of Acceptance and Use of Technology (UTAUT). This model is not appropriate for the records and archives discipline. Mukred, Yusof and Alotaibi's (2019) study investigated the use of electronic records management systems in improving productivity in higher learning institutions. Some aspects significant to efficient and effective digital recordkeeping systems are the confidentiality of records, the need to protect the security of records, and the privacy of confidential records. For that reason, adopting the records continuum model would be ideal. This is because the records continuum model provides common, consistent standards, unified best practice criteria, interdisciplinary approaches and collaborations in managing records for both paper and electronic records (Kulcu 2009:87).

Like the present study, the study adopted a mixed approach to collect qualitative and quantitative data. This mixed approach was appropriate because it assists in obtaining adequate and complete information and generates confidence in the researcher's results and conclusions. The approach was also appropriate because the nature of the research study required a mixture of quantitative and qualitative techniques to solicit and analyze data. This study only collected data from lecturers holding PhD, master's, or bachelor's degrees. This was inappropriate as the targeted population was also supposed to include university archivists, records officers, and human resource officers. Including university archivists and records officers was appropriate because they would provide what was needed on the research question posed as they are involved in the day-to-day maintenance of records in higher learning institutions. Including the human resources officers was also necessary as they would provide information on policy-

related issues about the management of records in higher learning institutions. The study's use of the term records management indicates that it did not focus on the continuum approach in managing records throughout their lifecycle. Unlike Mukred, Yusof and Alotaibi's (2019) study, the current study focused on the continuum approach, which provides a holistic approach to recordkeeping as recordkeeping is seen as a continuous activity where one feature of the continuum goes smoothly and continuously into another.

Poolsatitiwat (2019) conducted an empirical study in Thailand intending to explain the relationship between the internal quality assessment and management of records in Thai higher educational institutions. Unlike the present study, which focused on the unification of records management and archives preservation practices, which is the concept of recordkeeping, Poolsatitiwat's (2019) study considered records management only. Despite discussing how records are managed to support internal quality assessment, the study did not indicate the underpinning theory or concept used to guide the study. Moreover, Poolsatitiwat's (2019) study used only an interview guide as a collection tool to collect data from the heads of university archives. More data could have been collected from practitioners using another data tool, for example, a questionnaire, because practitioners are involved in the day-to-day maintenance of records in Thai higher education institutions. However, the study was useful in providing the significance of quality assessment in the management of records to enhance the proper management of records in higher educational institutions.

Before analyzing literature that relates to the main themes of the study, it is essential to get a general picture of the management of university records from a global and African perspective. Indeed, this literature review is important as it positions the current study in the context of the extant literature on managing university records. Therefore, having discussed the management of university records globally, the next section provides an overview of the management of university records from the African perspective. Studies from North Africa, West Africa, East Africa and Southern Africa are reviewed.

3.3.3.2 Management of university records within Africa

This section examines the management of university records practices within Africa. Several studies on university records in Africa have been conducted at different levels; Mwangangi (2013) and Nakato (2019) at the undergraduate degree level, Coetzer (2012) at the master's degree level and Phiri (2016) and Netshakhuma (2020b) at the PhD level; conceptual papers

by Abuzawayda, Yusof and Abaziz (2013) and Khumalo and Chigariro(2017) and empirical papers by Iwhiwhu (2005), Egwunyenga (2009), Erima and Wamukoya (2012), Muhenda and Lwanga (2012), Matangira, Katjiveri-Tjiuro and Lukileni (2013), Usman and Udensi (2013), Asogwa (2013), Nwaomah (2015), Moseti (2016), Musembe (2016), Seniwoliba, Mahama and Abilla (2017), Mohammed, Tetteh and Ahmed (2018), Pereira (2018), Netshakhuma (2019a), Rafoneke and Mnjama (2019), Ameyaw and Frempong-kore (2020), Giba-Fosu (2020), Tsvuura and Ngulube (2020), Kiprono and Gichuhi (2021), Netshakhuma (2021), Mphunda and Mnjama (2022) and Ptsonyane and Mnjama (2022). All the above-cited studies focused on the management of university records. Their findings revolve around issues that hinder the proper management of university records, such as the lack of enough budgets allocated for recordkeeping activities, outdated archival legislation and unskilled records professionals. However, in the next paragraphs, a few studies have been selected for further discussion. The selection is based on the region since some studies were conducted in the same region but also on how current the research study is. For example, Iwhiwhu 2005 and Asogwa 2013 investigated the management of records in Nigeria, but Asogwa's 2013 study was selected as it is more current.

In Nigeria, an empirical study conducted by Asogwa (2013) investigated the readiness of universities to manage e-records. The study was carried out on selected employees in the registry departments in three universities located in three of the six geo-political zones in Nigeria, namely, the University of Abuja and the University of Ife (now Obafemi Awolowo University), and the University of Nigeria. The study population comprised three principal executive officers, three systems analysts and twenty-four data entry operators purposely selected from the three universities. It specifically examined the types of digital records being created; it established the level of professional training among records specialists and the extent to which staff is familiar with managing digital records. The study highlighted the potential problems and provided guidelines that records professionals should adopt for the successful implementation of the management of electronic records.

Although the issue of security is one of the challenges in managing digital records, the study did not have a specific objective to investigate aspects relating to security control in the management of records. The study used questionnaires, interviews and a checklist to gather data. These tools were appropriate because quantitative and qualitative data were needed for the study based on what was being investigated. Asogwa's (2013) study is similar to the present study in that both studies seek to assess the management of records practices in public

universities. However, whereas Asogwa's (2013) study focused on managing digital records, the present study addressed paper and digital records. Regarding the theoretical foundation, the International Records Management Trust of the e-records readiness tool was adapted and used as the analytical framework in Asogwa's 2013 study. The model was appropriate because the tool addressed essential aspects of the effective management of e-records.

In Libya, Abuzawayda, Yusof and Abaziz (2013) conducted an empirical study to determine if higher institutions in Libya have guidelines for managing digital records. The study population comprises staff members of the Institutions of Higher Learning in Libya. Unlike the present study, Abuzawayda, Yusof and Abaziz's (2013) study did not specifically indicate who were the staff members of the Institutions of Higher Learning. This quantitative study used a survey method employing a questionnaire to collect data. There was a need for an interview guide for the researcher to gather detailed information. Unlike the present study, the study did not focus on aspects relating to issues on security and staff training. Again, this study differs from the present one because it only focused on digital records. Abuzawayda, Yusof and Abaziz's (2013) study adopted the Designing and Implementing Recordkeeping Systems (DIRKS) Model. The model was relevant because it is widely used to review the existing recordkeeping system or to develop new recordkeeping systems. In other words, the model is largely used to improve the existing recordkeeping system.

In Kenya, Mwangangi (2013), in her bachelor's degree dissertation, investigated the challenges faced in managing records at Kisii University. The study used a case study design. A self-administered questionnaire and interview guide were used as the main instruments for primary data collection. Secondary data was collected through document review. The tools were appropriate because it was necessary to collect quantitative and qualitative data. Mwangangi's (2013) study is similar to the current study in several respects. Firstly, both studies investigated the management of records practices in public universities. Secondly, both studies used a Mixed Methods Research approach where the quantitative aspect was dominant. Thirdly, both research studies adopted a conceptual framework to establish a logical connection to enable readers to be clear about what the researcher intended to achieve and how the research was accomplished. In other words, using a conceptual framework in a research study makes research results generalizable and meaningful. Mwangangi's (2013) study differs from the present study in terms of area of focus. The current study seeks to establish the role of recordkeeping in enhancing good governance in Tanzanian public universities, while Mwangangi's (2013) study sought to establish the challenges faced in the management of

records at Kisii University and recommend a framework to enhance the management of these records in line with international best practice. However, Mwangangi's (2013) study was relevant to the present study as it helps the records professionals understand better recordkeeping and how to cope with challenges.

In her empirical research study, Nwaomah (2015) investigated how political factors affect students' records management in Nigerian universities. The target population for this study was all personnel dealing with students' records at the university's registries, academic departments/units/divisions and the university administrators such as Heads of academic departments/units, Deans of faculties, Bursars/their Deputies, Registrars/their Deputies, Director, Human Resources, Director, Information and Communication Technology department in South-South Nigeria. Data was collected through a self-administered questionnaire. Using only a questionnaire as a tool to collect data was not appropriate. The researcher should have also employed an interview guide to collect in-depth information from key informants such as the head and supervisor of the records management department. The study is similar to the present one in that both used conceptual frameworks. This means that the researchers added the constructs/concepts/variables they thought relevant and tested the relationship between them. In a nutshell, the conceptual framework gives the researchers more critical insight into the topic under investigation. However, whereas Nwaomah's (2015) study focused on student records management, the present study focused on the recordkeeping of university records such as students' registrations, students' admission and examination, as well as letters (appointment, admission, confirmation and sick leave) and financial records such as those dealing with students' fees.

In her bachelor's degree dissertation, Nakato (2019) assessed records disposal at an Islamic university in Uganda. The study used a qualitative research approach while adopting a case study research design. Literature research, observation and interview guide were used to gather data from the records and store managers. The tools used were appropriate because the size of the population was small. Nakato's (2019) study disregarded the active and semi-active records as it was dealing with the final stage of management of records in which the records are either destroyed or permanently preserved in archives, but the present study considered the entire lifecycle of records management as informed by the records continuum model that all the three lifecycle phases as interrelated. Therefore, they needed close collaboration between the records managers and archivists. This means that the present study considered that university records are holistically managed from when they are created to the disposition stage, as the records

continuum model advocates. The present study also considered that records managers and archivists are involved in all the continuum phases.

Phiri (2016) conducted a comparative PhD study between Malawi and South Africa to explore the relationship between recordkeeping and governance. A face-to-face interview was used to collect data. The tool was appropriate because it allows a researcher to probe more into the issue being investigated. Phiri's (2016) study is similar to the present study as both investigated the role of recordkeeping in enhancing governance in universities. However, this study differs from the present study's research design. Phiri's (2016) study used a case study research design to investigate the management of university records and documents in the world of governance, audit and risk in Malawi and South Africa.

In contrast, the present study used a cross-sectional research design to investigate the role of recordkeeping in public universities in enhancing good governance. Like the current study, Phiri (2016) used the records continuum model as the underpinning theory of the study. This concept provides a unifying and homogenous platform for archives administration and records management (Garaba 2010:83). Records managers and archivists are involved in all lifecycle phases. The recordkeeping systems in modern universities are mostly hybrid, meaning they incorporate both paper and electronic records (Phiri 2016:10). Therefore, this model was appropriate because Phiri's (2016) study focused on both paper and electronic records.

In Ghana, Mohammed, Tetteh and Ahmed (2018), in their empirical paper, investigated the challenges associated with managing records at Sunyani Technical University. The study was based on a quantitative research design. A self-administered questionnaire was used to collect data. The collection tool used was appropriate because it is free from the bias of the respondents. Even though improper management of records emerged as one of the challenges affecting the university in managing records, the study did not investigate aspects relating to records legislation, records systems and processes. Despite discussing the challenges facing the management of records, the study did not indicate the underpinning theory/model. Mohammed's et al. (2018) study differs from the present study. Firstly, whereas it focused on the aspects of records management, the present study focused on the aspects of records management and archives preservation (recordkeeping). Secondly, while Mohammed's et al. (2018) study sought to establish the challenges associated with the management of records at Sunyani Technical University, the present study sought to establish the link between the management of records and good governance in the following areas: anti-corruption and fraud

measures, the delivery of public university services and accountability. Mohammed's et al. (2018) study is similar and relevant to the current study in that both studies assessed the management of records in a public university.

In Mozambique, Pereira (2018) conducted an empirical study to ensure effective and efficient records and archives management within Eduardo Mondlane University. Although the study discussed the issues of access to records, the study overlooked the issues relating to security measures and disaster control, unlike the present study. The target population of this study comprised 59 units at Eduardo Mondlane University, consisting of academic, research, directorate and special units. The study used a quantitative research approach with triangulation of data collection instruments, a questionnaire and a document review. Pereira's (2018) study differs from the present study in one respect. Pereira's (2018) study utilized the life-cycle concepts as a framework to assess the implementation of the National Archives and Records Services Act at Eduardo Mondlane University, while the present study adopted continuum and the Information Governance Reference Model as underpinning models to investigate the role of recordkeeping in enhancing good governance in public universities. Pereira's (2018) study shows that the records professionals did not comply with the National Archives and Records Services Act. For instance, the university did not create any sectorial records appraisal, destruction and transfer committees to carry out the records appraisal and disposal processes. Most respondents indicated that the records appraisal and disposal activities for records were not carried out at all.

An empirical research study by Netshakhuma (2019a) investigated the positioning of archives and management of records at universities in South Africa to suggest the best organizational structure and placement of archives and records management functions within South African universities. This qualitative study used telephonic interviews with purposively selected archivists and records managers to collect primary data. Since the size of the population study was small, the use of an interview guide to collect data was appropriate. Netshakhuma's (2019a) study also established that a lack of standardization of the placement of recordkeeping functions led to recordkeeping not being seen as a fundamental function by other departments in the university. As a result, very often, the existence of archives at the universities is not known. Universities must have efficient administrative processes to manage recordkeeping functions. Recordkeeping functions are to be strategically located within the administrative structure, and this must be reinforced with the employment of qualified professional records officers and the availability of the recordkeeping advisory committee whose work will be to

provide advice on the functioning of recordkeeping activities. This study is similar to the present study because both used university records managers and archivists as respondents. Netshakhuma's (2019a) study is also similar to the present because both discuss issues related to managing records and archives. However, the study did not indicate the theory or the concept approach used to underpin the study.

Still, in South Africa, Netshakhuma (2020b) conducted a PhD study comparing records management between two universities. The study's main objective was to assess compliance with the existing legislative framework and examine archives and records management practices. Like the present study, Netshakhuma's (2020b) study employed quantitative and qualitative approaches. Unlike the present study, this study was informed by the interpretivism and constructivism paradigm. Data were collected through a document review, questionnaire, interview guide and observation. These tools were appropriate because quantitative and qualitative data were needed for the study. The records lifecycle theory and the ARMA International Information Governance Maturity Model underpinned Netshakhuma's (2020b) study.

Like the present study, Netshakhuma's (2020b) study used the Information Governance Model to assess governance and information management levels and maturity in universities. These information governance models (Information Governance Maturity Model and Information Governance Reference Model) emphasize that records professionals should maintain rules and regulations when performing recordkeeping as specified by their governing bodies. Therefore, using these models was relevant as they are widely accepted because they help provide frameworks that ascertain the level of compliance (Dong and Keshavjee 2016:251). In other words, they direct institutions dealing with recordkeeping practices to comply with regulations and standards related to the management of records and other binding authorities (Saffady 2015:41).

Unlike the present study that used the records continuum model, Netshakhuma's (2020b) used the records lifecycle theory. Even though the lifecycle theory has influenced recordkeeping development in many countries, it has weaknesses. For instance, based on the technological advancement and the nature of Netshakhuma's (2020b) study, the records lifecycle theory could not be used as a stand-alone theoretical framework. Therefore, Netshakhuma's (2020b) study consequently used the Information Governance Model as a second model to achieve compliance principles. The use of the records lifecycle theory as one of the underpinning

theories shows that Netshakhuma's (2020b) study considered that there is a demarcation of functions between records managers and archivists, while the present study focused on the continuum approach in the management of records throughout their lifecycle which implies that the demarcation of functions between archivists and records managers is artificial. However, Netshakhuma's (2020b) study was relevant to the present study as it demonstrated the significance of managing university records through the records lifecycle and suggested ways to improve university governance by strengthening effective Records Management systems.

In Ghana, Ameyaw and Frempong-Kore's (2020) empirical study aim was to ascertain the management of records practices in a public university. The population for the study comprised all senior staff and senior members at the admissions and university records offices. The study did not justify selecting this population. The total population of the study was nine. The study was a qualitative one and based on a case study design. An interview guide was the only tool used to gather data. The instrument was appropriate because the population study was small. Using an interview guide helped the researcher collect more in-depth information. Moreover, since it was qualitative research, collecting qualitative data was necessary. The underpinning model or theory was not indicated in this study. Ameyaw and Frempong-Kore's (2020) study differs from the present study in terms of scope. While it focused on a narrower scope of one case study institution, the present study focuses on all the Tanzanian public universities.

Tsvuura and Ngulube (2020) conducted an empirical study to assess the legal frameworks for maintaining the digitization of records and archives at the Zimbabwe Open University and Harare Institute of Technology. This study is similar to the present study because both used a Mixed-Methods approach, adopting a parallel research design and gathered data via questionnaires and interview guides. Mixing qualitative and quantitative data was appropriate because it provides a more complete understanding than either method on its own. In other words, the idea of using the two tools to collect data helped the researchers to explore evidence from both quantitative and qualitative data. Unlike the present study, Tsvuura and Ngulube's (2020) study did not indicate who the respondents were. Tsvuura and Ngulube's (2020) study did not indicate the underpinning theory or concept. As shown in Chapter Two, Section 2.1.6, a conceptual or theoretical framework gives focus and direction to a research study; therefore, doing research without either is unthinkable (Ngulube 2018:1).

From the literature review, it was established that the management of records in African universities was very poor and the situation had negatively impacted the provision of services (Chinyemba and Ngulube 2005; Iwhiwhu 2005; Coetzer 2012; Erima and Wamukoya 2012; Muhenda and Lwanga 2012; Mwangangi 2013; Usman and Udensi 2013; Moseti 2016; Musembe 2016; Seniwoliba, Mahama and Abilla 2017; Giba-Fosu 2020; Netshakhuma 2020a; Kiprono and Gichuhi 2021; Netshakhuma 2021). The findings from the above studies indicate that there has been negligence in the management of records in several universities on the continent and little to no improvements in the management of university records.

After providing this background on the state of recordkeeping outside Tanzania, the next section provides the state of recordkeeping from the Tanzanian perspective.

3.3.4 Recordkeeping: the Tanzanian perspective

The state of management of records in the Tanzanian public sector has been a subject of discussion by corporate bodies as well as records and archives scholars (Ndenje-Sichalwe and Ngulube 2009; Ndenje-Sichalwe 2010; The International Records Management Trust, Tanzania country report 2011; Magaya and Lowry 2012; Oweru and Mnjama 2014; Kamatula 2018; Mohamed, Rasheli and Mwagike 2018).

The International Records Management Trust, Tanzania country report (2011:12) reported that in 2009, the Tanzanian government issued an important circular revealing the government's position in recognizing the importance of recordkeeping. The circular covered issues of electronic recordkeeping. Specifically, it addressed guidelines on the disposition of government electronic records to people responsible for maintaining them. The staff were reminded to properly store government information in secured storage media. The disposition of records should only follow retention schedules and adhere to government rules regarding security and confidentiality when using the Internet. The circular also reminded recordkeeping staff that no confidential information should be sent through the Internet.

The development of recordkeeping in Tanzania was recognized by the establishment of the National Archive in 1962. Since its formation, the National Archives has been under several ministries and is currently under the president's office (Oweru and Mnjama 2014:140). Through Government Notice No. 289 of 1999, the National Archive was relocated from the Ministry of Education and Culture to the President's Office (Oweru and Mnjama 2014:140; Mohamed, Rasheli and Mwagike 2018:53). The outcome of this relocation was the

establishment of the Records and Archives Management Department (RAMD) in 1999 (Mohamed et al. 2018:53). The process of passing the Records and Archives Management Act No. 3 of 2002 gave the RAMD a new institutional and legal mandate to manage public records and archives throughout their lifecycle (Oweru and Mnjama 2014:140). Initially, the Records and Archives Management Act No. 3 of 2002 was passed to institutionally re-organize the RAMD and revoke the Records (Disposal) Ordinance of 1931 and the National Archives Act of 1965 (Mohamed et al. 2018:53). The replacement of these two Acts was due to the evolution of the recordkeeping profession and the change in the records and archives management technologies (Mohamed et al. 2018:53). In the year 2011, the National Records and Archives Management Policy of 2011 was launched. The policy primarily targeted providing a legal framework within which records and archives could be maintained by the legal requirements and standards to ensure authenticity, reliability and integrity for national development (Mohamed et al. 2018:53). The policy applied to all types of records received and managed by public offices.

The resolution to place it under the president's office came after it was identified that there was a necessity to have a centralized organization that would monitor all government records from creation to disposition (Magaya and Lowry 2012:50). Placing it in the president's office is also an indication that recordkeeping in the country is a priority to the government. In other words, the National Archive receives a certain level of authority compared to a situation it would find if placed in a different ministry. The International Records Management Trust, Tanzania Country Report (2011:9) reported that Tanzania has been working hard to strengthen its records management systems for over fifteen years. The report also reported that Tanzania acknowledges the influence of poor management of records on the efficiency of government operations, accountability and transparency in the public sector. In line with this, Ndenje-Sichalwe and Ngulube (2009:11) show that in 2000, Tanzania launched a reform programme known as the Public Service Reforms Programme (PSRP), whose main objective was to deliver high-quality public services.

The establishment of PSRP highlighted that the government aimed to transform public service into an efficient, effective, results-based institution. Therefore, proper recordkeeping is one component that influences a government to operate effectively. Establishing PSRP shows that the government was aware that poor records management affects the government's operations to provide quality services to the public and attain transparency and accountability (Ndenje-Sichalwe and Ngulube 2009:11). Magaya and Lowry (2012:48) opined that the most significant

development in recordkeeping in Tanzania after the establishment of the National Archives in 1962 was the Records Management Improvement Programme (RMIP). They said that the programme brought several reforms, such as creating records professionals across the government sector, introducing a recordkeeping certification course at the Tanzania Public Service College and developing a records retention and disposal schedule.

Despite rigorous efforts by the Tanzanian government to introduce a digital government, most public sector records are not digitally maintained (Kamatula 2018:28; Newa and Mwantimwa 2019:116). Paper-based records still dominate public offices (Kamatula 2018:28). Many constraints face the Tanzanian public sector in maintaining digital records. For example, a lack of solid records legislation through which digital records are to be maintained is evident in Tanzania. For instance, the Records and Archives Management Act No. 3, 2002, is insufficient and ineffective, specifically on issues relating to digital records management (the Records and Archives Management Act No. 3, 2002). The Tanzania Electronic Transactions Act of 2015, which recognizes digital records, seems inadequate as it does not provide any specific directives for effective digital records management (The Tanzania Electronic Transactions Act of 2015:9).

Kamatula (2018:158) showed that even though there is an indication of accessibility and use of e-records in Tanzanian public organizations, the e-records readiness and efficiency levels in support of electronic government were not high, the digital recordkeeping is not yet streamlined in many registries and electronic government implementation maturity level is low. Kamatula (2018:190) further indicated that the existing policies, legislation and regulations are inadequate, particularly on the issues of digital recordkeeping. The following section provides a review of empirical studies on recordkeeping in Tanzania.

3.3.5 Recordkeeping in Tanzanian universities: a review of related studies

Several research studies have examined the state of records management in Tanzania, providing a significant amount of theoretical information on the subject under study (Kamatula 2010; Mikidadi 2013; Kijazi 2016; Nkebukwa 2016; Kavuta and Nyamanga 2018). The discussion that follows presents these studies.

The main aim of Mikidadi's (2013) Master's degree thesis was to examine the efficacy of personnel records keeping in managing human resources in higher learning institutions. The study used both qualitative and quantitative approaches. Data was collected using a

questionnaire, interviews and documentation. These tools were appropriate because the study used a Mixed-Methods approach; therefore, collecting qualitative and quantitative data was necessary. Instead of including records managers and archivists as part of the population of the study, the study only collected data from human resources management officers, Heads of Departments, Deans of the various Faculties and Directors. This study differs from the present study in the following aspects. Unlike the present study, Mikidadi (2013) adopted a modified records life-cycle theory or hybrid records life-cycle model to guide the study. Secondly, Mikidadi's (2013) study only focused on managing personnel records. However, Mikidadi's (2013) study is similar to the present study in that both studies seek to assess the management of records practices in public universities. Mikidadi's (2013) study is relevant to the present study in that personnel records are among the university records; thus, the study's results on managing personnel records by the Open University of Tanzania apply to the present study.

Kijazi (2016) conducted a conceptual research study to enhance students' academic records management systems in academic institutions. Unlike the present study, Kijazi's (2016) population study comprised three systems from three academic institutions: the Student Academic Register Information System (SARIS) used in the College of Business Education, the Academic Record Information System (ARIS) used at the University of Dar es Salaam and flexcms used at the Nelson Mandela Institution of Science and Technology. Justification for selecting these three systems was not indicated. Despite discussing the management of students' academic records management systems in academic institutions, Kijazi's (2016) study did not indicate which theory or conceptual framework was used to guide the study. Kijazi's (2016) study is relevant to the present study because it provides background information on the existing records management systems available in three Tanzanian public universities name the three public universities here.

Nkebukwa (2016) conducted an empirical research study to investigate the status of the management of records at the College of Business Education. Unlike the present study, Nkebukwa's (2016) study employed the sequential methods research design that combined interviews and observation to collect data. Nkebukwa's (2016) study targeted human resources personnel, records management officers, a few students and a few heads of units. The study used structured interview guide interviews to understand the respondents' involvement, while a questionnaire was used to obtain quantitative data. The underpinning model or theory was not indicated in this study. In terms of focus, the study differs from the present study in that it focuses on the management of records in a college; the present study focuses on the

management of records within specific public universities. However, Nkebukwa's (2016) study is similar to the present one. Firstly, both studies adopted a Mixed Methods Research approach where data was collected using both qualitative and quantitative design. Secondly, both studies investigated the management of records in Tanzanian higher-learning institutions.

Kavuta and Nyamanga (2018) conducted an empirical research study to determine the factors affecting the smooth implementation of the Students' Records Management Systems in higher learning institutions. The study used a questionnaire, observation, interview guide and a review of archived documents to collect data. The tools used were appropriate because qualitative and quantitative data were needed for the study. Despite indicating that the study used more than one tool to collect data, Kavuta and Nyamanga's (2018) study did not indicate the method used to collect data. The present study used a concurrent research design to collect quantitative and qualitative data. The study used purposive and random sampling to select 202 student and staff respondents. Unlike the present study, Kavuta and Nyamanga's (2018) study used a case study research design to investigate the factors affecting the implementation of the Students' Records Management System in Tanzanian higher learning institutions. This study also differs from the present study in terms of scope. While Kavuta and Nyamanga's (2018) study focused on the implementation of the Students' Records Management System in higher learning institutions, the present study focuses on the general management of university records about good governance. This means the current study only considered students' and staff's records, whereas Kavuta and Nyamanga's (2018) study only focused on students' records. The study did not indicate the theory or concept used to guide the research study. Kavuta and Nyamanga's (2018) study considered only one higher-learning institution, while the present study considered eight higher-learning institutions.

Records are important assets that help institutions and individuals in meeting their objectives. Proper management of records provides evidence of business transactions between individuals, groups, or institutions; it guarantees transparency and accountability and, as a result, strengthens good governance. In this regard, it is essential to identify whether records professionals have adequate knowledge and skills in recordkeeping. The second research question of the current study sought to determine recordkeeping skills and training needed in Tanzanian public universities. Therefore, having provided an overview of empirical studies on Tanzania's public universities, discussing the skills and training needed in recordkeeping practices is essential. Skills and training are essential elements of modern recordkeeping.

Records professionals need appropriate training to obtain new skills and knowledge. The next section discusses skills and training needed to manage records practices.

3.4 Skills and training needed in recordkeeping practices

Records officers should have the required skills to perform their functions optimally. Today's world is dynamic, and individuals must move with the change. For public servants to perform their duties effectively, they must be well equipped with modern techniques that can only be obtained through training. These are elaborated below.

3.4.1 Recordkeeping skills and training

As indicated in Chapter One, under section 1.9.3, recently, there has been a reconceptualization of the term records management, hence the emergence of recordkeeping informatics (Australia) and records and information management (United States of America), all because of different perceptions on the lifecycle and records continuum models. This reconceptualization of the term records management shows trends in the world of records management as a profession where it is heading. In other words, records management professionals have had to shift their roles and responsibilities to remain relevant within their organizations. Therefore, new standards for professional records management competencies and ways of expressing records management functions are needed. Also, as indicated in Chapter Two under sub-section 2.2.2.2, records managers have shifted from a situation in which they have been able to monitor and manage records within an organization's boundaries to a situation in which they can create institutional records from beyond the institution's boundaries through Web 2.0 technologies. This shift includes moving from the management of paper records to the management of electronic records from creation in line with the records continuum model.

The Records lifecycle theory is perceived as a linear process less practically applicable in the digital environment. The introduction of digital records has exposed the shortcomings of the assumptions on which the lifecycle theory is based. In a digital environment, records are very dynamic and exist simultaneously in more than one stage of the lifecycle. Therefore, due to the introduction of the records continuum concept, records management professionals have had to shift their roles and responsibilities to remain relevant within their organizations. This is to say that the impact of the development of the records continuum model on the management of records has been notable both in terms of practices and standards that influence the

management of records (Gilliland 2018:220). In this form, the continuum model is a technologically driven paradigm shift within all management of records and systems practice (Upward 2000:115).

The continuum concept's introduction means that a collection of service providers and approaches must be brought together and integrated to achieve the best mix in a present context (Upward 2000:115). The collaboration of records managers and archivists in the continuum concept calls for the invention of new rules, resulting in a significant re-patterning of knowledge. These developments affecting the management of records show a need for reviewing the university curriculum that deals with the management of records and archives administration. For instance, advances in information technologies have brought about many changes in managing records and archives (Bulow and Ahmon 2011:1). This digital revolution has changed how information professionals work. In other words, developments in technology have affected the medium and format of records. This necessitates a new management strategy. Therefore, in this situation, the role of information professionals is becoming very challenging. The Internet, for example, has provided a platform to access and use information from databases. In this changing scenario of managing information, information professionals' role is crucial. Therefore, information professionals must acquire in-depth knowledge of digital records management, including hands-on practice.

Training is one of the essential elements of modern recordkeeping. Recordkeeping personnel need appropriate training to obtain new skills and knowledge (Dikopoulou and Mihiotis 2010:273). The training should comprise informal and formal approaches, such as on-the-job training. Egwunyenga (2009:113) indicated that African recordkeeping professionals lack the essential skills for maintaining records and archives in universities. It is, therefore, significant to provide on-the-job training for staff who participate in recordkeeping activities, from creation to disposition (destruction or preservation). The author further confirmed that specific training by recordkeeping professionals for recordkeeping processes is necessary for public servants at all levels. According to Mampe and Kalusopa (2012:17), the success of any integrated recordkeeping program hinges on the professional capacity and status of the recordkeeping staff in charge of the use, creation and maintenance of records. This is because the continuous recordkeeping process at any level of the record lifecycle should be done within an integrated structure with no limit to professional collaboration and development.

In Africa, most recordkeeping officers are not professionally trained particularly in digital recordkeeping. Lack of trained staff or experienced recordkeeping officers in the management and preservation of digital records is among the challenges that institutions in Africa continue to face when it comes to the management of digital records and archives (Erima 2022:112). What is challenging in most of the African offices, particularly the older employees, is technophobia. Due to a lack of skills in ICTs, many records professionals are very conservative and have a phobia of computers. This could be due to the generation gap between the new and old records professionals, which leads senior employees to see Information Technologies as a threat to their status as recordkeeping specialists. Staff members should have the knowledge and skills to maintain records to ensure the university recordkeeping systems are working properly (Phiri 2016:246).

Akotia and Balasu (2017:5) noted that specific skills and broad knowledge are required for recordkeeping. Consequently, in an organization that prioritizes recordkeeping, there should be an ongoing training programme on recordkeeping for its staff to be provided with adequate skills and knowledge (Rotich, Mathangani and Nzioka 2017:137). Most records staff have little or no recordkeeping training. This could be because records centers are sometimes perceived as dumping places for non-performing employees. To make matters worse, in some organizations, the office attendants and messengers are promoted to records posts (Kamatula 2013:29) and Kemoni (2007: 347); Luyombya (2010:61) noted that a lack of training opportunities for records specialists in developing countries is still a common thing in many developing countries.

Luyombya (2010:61) further noted that records personnel lacked the technical skills to maintain electronic recordkeeping systems. As a result, few records officers can contribute to information technology discussions, particularly in establishing electronic records solutions. Katuu (2015:107) noted that although various African institutions offer recordkeeping programmes, their impact on quality is questionable. The doubt about the quality of education in African universities on recordkeeping programmes is based on the low numbers of qualified recordkeeping staff (Katuu 2015:107).

Lack of recordkeeping staff and appropriate recordkeeping training hinders proper recordkeeping practices in Africa (Mosweu and Rekemance 2020:110). Nengomasha (2013:9) noted that despite remarkable efforts to train recordkeeping professionals, there are still problems. Proper recordkeeping hinges on trained records officers with the required

recordkeeping skills and knowledge to maintain records throughout their lifecycle. While it is a requirement for recordkeeping that records officer achieves a certain level of expertise in recordkeeping, it is generally accepted that education plays an important role in updating knowledge and skills, and it is an important feature in the lifelong development of skills and expertise (Kemoni 2007:346). Furthermore, Mosweu and Rekemance (2020:110) indicated that funding-related impediments highlight that records officers do not have the needed education in recordkeeping that allows them to perform best in maintaining records. Notably, recordkeeping professionals in ESARBICA lack information technology-related skills and capabilities such as digital curation, digital preservation, audio-visual and digital archiving, and digitization (Garaba 2015:3).

Recordkeeping has been defined as a constantly changing profession (Mulauzi 2019:47). Recordkeeping is one area in which information technology has become inevitable. Several recordkeeping activities, such as creating, distributing and storing records, can now be done using technological devices such as computers. With technology, nothing remains the same. Much has to be learned along the way, including new approaches to knowledge, new skills and undertaking courses or learning with new technologies (Ndenje-Sichalwe 2010:97). Therefore, training should be a continuous process for all recordkeeping staff involved, from the creation to their disposal or preservation. Unfortunately, those entrusted with the recordkeeping are not equipped with the essential skills and knowledge to make sure that records are maintained and they are preserved in a condition that will make them accessible in institutions (Justice 2016:43). Records personnel are the custodians of records created by their institutions; thus, they must have the right qualifications and competencies to maintain records. Lack of training could result in improper management of records, resulting in possible abuse of privacy and confidentiality (Ndabambi, Grand and Zulu 2014:11). Training records staff in the management of records will give them the ability to possess skills that will help them carry out their duties properly.

Some aspects that are significant to efficient and effective recordkeeping skills and worth imparting to recordkeeping staff are records appraisal and disposal. Williams (2006:36) defined appraisal as how records professionals evaluate records to establish if they have values so that they can be preserved or destroyed due to being valueless to the organization. As such, it is vital to maintain records as long as rules and regulations require (Williams 2006:36). Likewise, Garaba (2010:98) indicated that institutions should work by the established standards to ensure that the appraisal aspect serves to give instructions on which records should be destroyed and

which records are considered to have sufficient values to be preserved. Making decisions on what records are to be disposed of and what are to be kept for long-term preservation is very hard, as all records have some potential value (Ndenje-Sichalwe 2010:71). Therefore, records staff must have recordkeeping skills and training needed to ensure records' disposition takes place properly when records become valueless to use the limited storage capacity. This is to say that archivists are the ones who decide what will be forgotten and what will be remembered as far as recordkeeping is concerned. The next section discusses the role of records and archives professional bodies in providing the skills and training needed for recordkeeping practices.

3.4.1.1 The role of professional bodies concerning recordkeeping skills and training

Managing records in the contemporary environment is a major challenge and an increasingly strategic issue for institutions. A key factor in meeting the challenge and addressing strategic management is providing education and training for records professionals. In line with this, under training and education, the International Council on Archives (2015) reported that consultation with African scholars has repeatedly raised the need for support in developing university curriculum to reflect international good practice and recent developments in the recordkeeping field. ICA's Section on Archival Education (SAE) has worked with ICA members and partners to develop educational materials. The ICA calls on the SAE to make sure that these materials are made available and accessible to more African educators by making them available in languages other than English only and circulating them as widely as possible, including writing to relevant universities directly (International Council on Archives 2015). In 2019, the ICA Section on Archival Education supported a one-week workshop for archival educators from the ESARBICA region at the University of Botswana. The workshop aimed to address current issues in the management of digital records. The workshop was facilitated by James Lowry and Margret Cox

Similarly, the Australian Society of Archivists, the Association of Canadian Archivists in Canada, the Archives and Records Association in the United Kingdom and Ireland and ARMA International in the United States of America have a competency framework for records professionals emphasizing knowledge and skills. For instance, the Archives and Records Association in the UK and Ireland develops knowledge, skills and competencies for its members by supporting members with their professional development, offering a range of support and resources to help them identify and meet their career ambitions (Archives and Records Association 2022). The association has also set national competency standards in

managing records for the United Kingdom and Ireland. Some of the above-mentioned associations, such as ARMA International, have gone further by consistently offering certificate programs that help improve skills and knowledge in information governance. The following are the certificate programs that ARMA International has offered since 1995 to improve skills and impart knowledge among information professionals: the Essentials of Information Governance Certificate, the Essentials of Records and Information Management Certificate, the Essentials of the Principles Certificate and the Professional Leadership Certificate (Association of Records Managers and Administrators International 2022).

However, in Africa, there are very few countries with professional records and archives management associations, and the Section of Professional Associations International Council on Archives (2012:3-14), which is outdated, shows a few African records and archives associations. For the record, most professional records and archives bodies in Africa emphasize more on the knowledge component and less on the skills, whereas, in developed countries, professional associations have a competency framework for records professionals emphasizing knowledge and skills. Within ESARBICA, SASA and KARMA are active and visible in hosting workshops, conferences, training, and research dissemination through publications like journals.

Generally, one of the works of a professional association is to promote best practices and recognize high standards in professional ethics and competence through professional registration. In Tanzania, there is the Tanzania Records and Archives Management Professional Association. Despite the association being established, the association is as good as not being present. This is evidenced more by a static webpage on the association's website (<http://www.tramp-tz.org>). This also makes it hard for records professionals to use the website to get any information or events about the archives and records management profession locally. e. This could be why many institutions downgrade the management of records as a field that requires skilled personnel and investment in training personnel. According to the researcher's experience, many records professionals are not members of this association. This is why there was a time when some records professionals and, the researcher being one of them, wanted to start a new association called Tanzania Records Society. However, due to some challenges, such as a lack of enough financial resources, the process did not succeed. The next section discusses the effects of having poorly maintained records in an organization.

3.4.1.2 Impact of poorly maintained records

Making decisions in a university is a managerial activity and regularly needs records. Effective and efficient administration of any institution, such as a university, depends on solid recordkeeping practices that ensure that proper records are available when needed. A recordkeeping programme is essential to any institution's standard business operation. Therefore, the significance of recordkeeping cannot be over-emphasized. Records play a significant role in the operations of an organization. These include recruitment, training, promotion, transfer, appraisal, pension, and institutional development, to mention but a few. As universities carry out their activities, they create various records. Thus, records should be maintained as fully essential as other administrative operations since records are at the core of governmental functions. It is a fact that proper management of records is evidence of a good-governed institution. For instance, accountability and transparency can be obtained by giving individuals the right to access information obtained through accessible and proper recordkeeping.

Proper recordkeeping could assist universities in maintaining their records, efficiently fulfilling their objective, safeguarding them from litigation, maintaining their corporate memory, and enhancing good governance. All institutions, such as public universities, produce records to support and provide evidence of their business transactions. Therefore, sound records management has become a topical issue in Tanzania and globally. Bakare, Abioye and Issa (2016:53) concur that records document the decisions and activities of institutions as well, as they serve as points of reference against which they can measure their future actions and decisions. Without records, there can be no accountability or justice.

Accordingly, without good recordkeeping, institutions make ad hoc decisions without the benefit of organizational memory. Thus, efficient and effective recordkeeping aids the institution's administrators, who require records to enable accurate and timely decisions.. Recordkeeping in higher educational institutions is significant because records that are accurate, comprehensive and authentic store important information needed for administrative, historical and evidential purposes (Refoneke and Mnjama 2019:164). A study conducted by Major and Omenu (2016) established that inadequate or poor recordkeeping programmes in higher educational institutions may lead to decrease in institutional efficiency and an increase in operation costs. Therefore, proper records management can help universities to manage their

information efficiently, fulfil their role, protect them from litigation, preserve their corporate memory and foster accountability and good governance (Pitsonyane and Mnjama 2022:103).

As a fundamental activity of any public organization, recordkeeping has considerable benefits to public sector management. Management of records occupies a strategic position in the management of universities (Pitsonyane and Mnjama 2022:102). Records are the most durable evidence of an institution's activities and decisions. They are the necessary foundation for transparency and accountability and provide grounds for an organization's ability to deliver effective freedom of information (FOI). Poorly maintained records can make it very hard to find them when needed. Just as poor recordkeeping undermines freedom of information, it can also damage the effort to support openness (Thurston 2015a:708). Institutions, including public universities, create and receive a wide range of records daily. Public universities are lawfully bound to maintain and preserve records of their activities and proceedings like any other organization. Examples of records that institutions such as universities create or receive are correspondences, payroll, accounting documents, minutes of meetings, personal files, students' registration, students' admissions, lists of courses offered and examination records, to mention a few. These records will lack integrity when they are poorly maintained. Availability is attained when an institution protects and maintains its records to ensure efficient, timely and accurate retrieval. Integrity will be achieved when records are maintained through a consistent regulatory framework, enabling individuals to trust the evidence provided (Thurston 2015b). Thus, recordkeeping should be prioritized and considered as essential as other institutional resources, such as finance, materials and staff. Therefore, encouraging effective recordkeeping as an institutional and societal benefit is not an activity to be taken for granted. Improper recordkeeping can drain financial resources, which will invariably affect service delivery. Perhaps it would not be an exaggeration to say that recordkeeping problems are common in public organizations. For instance, a lack of comprehensive management of records policies, standards, and guidelines and weak institutional capacity have been identified as hindrances to the development of records management in Africa (Nengomasha 2013:3).

It has been identified in the literature that there is a considerable correlation between poor recordkeeping practices and corruption (Ndenje-Sichalwe 2010; Chaterera 2016; Phiri 2016; Casadesus de Mingo and Cerrillo-i-Martinez 2017; Osebe, Maina and Kurgat 2018). Corruption in Africa is a serious issue, particularly in the public sector. It weakens the government's capability to provide infrastructural development that could assure its service delivery mandate to the public. For instance, the number of ghost workers in public institutions

cannot be determined without proper, accurate and accessible records. In other words, corruption will continue to prevail if there is a lack of proper recordkeeping. Chaterera (2016:116) indicated that poor recordkeeping in most African countries has made it impossible to hold individuals accountable for their deeds. When accountability is lacking, good governance will not prevail, so effective service delivery will not be attained (Chaterera 2016:116). Phiri (2016:7) asserted that there should be sound recordkeeping systems to perform an audit effectively, as poor recordkeeping practices lead to corruption. For this reason, Chaterera (2016:131) advised that it is vital to prioritize recordkeeping to circumvent organizational problems that may come up due to poor handling of records. The absence of effective and good recordkeeping practices creates a fertile ground for corruption.

Usually, one should consider the level of security and protection when practicing effective recordkeeping. Effective recordkeeping practices are essential to ensure no loopholes for corruption in the system. It is a fact that good governance components such as accountability and transparency cannot be effectively achieved if records are not reliable or accessible. In a nutshell, transparency and accountability are crucial in enhancing service delivery. Proper recordkeeping helps enhance accountability, transparency and corporate governance. The absence of transparency and accountability demoralizes fairness and justice and gives room to mistrust of government institutions (Ambira 2015:61). Accountability and transparency are crucial features of good governance.

There are several impediments to the implementation of proper recordkeeping in universities. A limited budget dedicated to recordkeeping activities is one of the major impediments facing most African public universities. Lack of financial resources affects the provision of adequate records storage space, supply of filing equipment and the purchase of digital devices for digital recordkeeping. Previous studies have established that recordkeeping in public universities has always suffered low priority accorded to recordkeeping. For instance, Mphunda and Mnjama (2022:104) found that financial resources were among the issues affecting records management programmes at Chancellor College in Malawi. This finding is in line with the findings of previous studies such as Kamatula (2010), Seniwoliba, Mahama and Abilla (2017) and Mohammed, Tetteh and Azuma (2018). The lack of enough funds dedicated to recordkeeping activities limits training opportunities for recordkeeping staff (Mosweu and Rakemane 2020:110). Poor recordkeeping programmes in higher learning institutions result in decreased institutional efficiency and increased operating costs.

Having provided a discussion on the issues of recordkeeping skills and training, it is also important to discuss records legislation as one of the relevant issues to guarantee proper management of records. Notably, Millar (2019:112) indicates that there is no guarantee that any agency or individual will make a good record, store it safely and maintain it for as long as needed. Thus, as correctly noted by Millar (2019:112), legislating memory has proven to be a huge challenge for human civilization. Nonetheless, the third research question of the current study sought to establish the role of records legislation in recordkeeping in Tanzanian public universities. The next section discusses records legislation and its impact on the management of records.

3.5 Records legislation

Legislation related to the management of records should reflect the decisions made about how a nation intends to manage its records (Parer 2001:7). It is in this regard that records legislation becomes an important component of the broader regulatory framework of accountable and effective government. Recordkeeping should be guided by records legislation. Compliance with records legislation impacts how records are produced, disseminated, utilized, preserved, accessed, monitored and disposed of. The principle of achieving compliance was emphasized more when the Information Governance Reference Model was used in this study. The model demonstrates eight principles to guide organizations in managing records. This model is widely accepted because it helps provide a framework that ascertains the level of compliance. The model directs organizations that deal with recordkeeping activities to comply with laws, regulations and standards applicable to the management of records and other binding authorities. This means that institutions are expected to be transparent and open when they perform their duties. To be transparent and open, they must have records legislation regulating recordkeeping activities. In other words, it is impossible to have good governance in an institution such as a university when there is no proper recordkeeping in place.

One of the indications that there is proper recordkeeping in an institution is that retrieving records is not difficult. Accountability, transparency and openness depend on how easily records are retrieved (Thurston 2015a:706; Mosweu and Rakemane 2020:108). Hence, universities should have up-to-date recordkeeping policies, rules and regulations to enable proper recordkeeping. This is because records legislation greatly affects how records are maintained in an organization. Thus, the significance of records legislation in the successful

processing, storing and maintenance of records cannot be overemphasized. This means that records legislation is one of the core components of proper management of records.

Records legislation affects how recordkeeping is done. For records to be maintained effectively, institutions should ensure that they possess a robust recordkeeping legislative framework. This is why universities should formulate guiding principles on the activities of the record, such as the creation of records, records classification, appraisal of records, records disposal and preservation of records (Netshakhuma 2019b:25). Compliance with the requirements of records legislation means that the institutions such as universities must have comprehensive recordkeeping programmes that effectively store, control and maintain all their records efficiently and securely. A solid records legislative framework is needed for a trustworthy and reliable recordkeeping system. The next section discusses records legislation.

3.5.1 Records legislation: the global perspective

Most developed countries, such as Australia and the United States of America, have developed standards to manage all forms of records in their environment. For instance, discussing the management of records in Australia, Kamatula (2013:34) and Kemoni (2007:72) highlighted some developments in the management of records in the public sector. Kemoni (2007:72) further noted that Australia is the leading country in the world in developing public sector records management programmes. Among the achievements in Australia is the promulgation of information management legislation such as the Archives Act of 1983 and the Archives regulations, which aided in organizing a strong organizational structure for supporting recordkeeping systems in the Australian public sector (National Archives of Australia 2022). For instance, the Archives Act of 1983 gave the Australian National Archives the authority to advise and assist agencies on how they should maintain their records efficiently and economically (Stuckey 2004:105). Likewise, the National Archives and Records Administration established policies and procedures for maintaining government records in the United States of America. Some of the strategies developed by the National Archives and Records Administration include providing guidance and conducting inspection/evaluations of practices of management of records (National Archives and Records Administration 2022).

According to Mosweu and Rakemane (2020:109), out of the 54 African countries, only 42.6% have enacted freedom of information legislation permitting individuals to access government information. In the absence of this legislation in most African countries, good governance

remains a dream due to a lack of access to information (Mosweu and Rakemane 2020:109). Weak legislative, organizational and policy frameworks have also been reported in Africa (Ngoepe and Keakopa 2011:151; Asogwa 2012:798). One of the critical things in the management of records is for top management to guarantee the existence and implementation of a records legislative framework for proper management of records. Therefore, there is a need to review the existing records legislation to provide universities with more responsibility to maintain their records.

Scholarship or literature (Mutsagondo and Chaterera 2016; Khumalo and Baloyi 2017; Marutha 2018; Mosweu and Simon 2018; Tsvuura and Ngulube 2020) highlights issues associated with the ESARBICA region's archival legislation. Among the problems that the aforementioned scholars established is that records legislation in most of the southern African region has not been updated and revised. Effective and up-to-date records legislation is needed to ensure effective and efficient records and archives management at any university. Even though some Southern African countries have a records legislation framework (Marutha 2018:2), the problems still lie in implementing records legislation to ensure that recordkeeping is appropriately done. Having records legislation and not implementing it is equal to not having it in place. This is because records legislation is an important tool for institutions to ensure proper records and archives management. This means the existing records legislation in southern African countries does not comprehensively address recordkeeping issues.

For instance, in a study conducted in South African universities by Netshakhuma (2019a), it was noted that even though the archivists and community leaders were aware of the legislation regulating communities' archives, many of them had a low level of understanding of the legislation and its role. Another study conducted by Asogwa (2013) showed that lack of recordkeeping policies was among the challenges that constitute the problems of management of records in Nigerian universities. Rafoneke and Mnjama (2019:158) indicated that among the challenges affecting the capturing and preservation of records include the absence of organizational plans for recordkeeping, the absence of legislation, policies and procedures to guide recordkeeping. Therefore, recordkeeping professionals must have a solid understanding of the legislation available concerning recordkeeping practices. It is important to assess and check the university's compliance with recordkeeping policies, procedures and approaches by doing a recordkeeping system audit (Coetzer 2012:104).

The above discussion shows that out-of-date records legislation aggravates the problem of management of records within the ESARBICA region. Therefore, it is essential to update legislation to cover records created and managed in the modern environment. Table 3.1 below shows archival legislation within the ESARBICA region and the years when the Acts were last amended.

Table 3. 1: Archival legislation within the ESARBICA region

S/n	Name of the archival legislation	Country	Year gazetted	Year last amended
1.	The National Archives Act	Zambia	1969	1995
2.	The Lesotho Archives Act	Lesotho	1967	Not yet amended
3.	The Archives Act	Swaziland	1971	Not yet amended
4.	National Archives of Zimbabwe Act	Zimbabwe	1986	2001
5.	Archives Act	Namibia	1992	Not yet amended
6.	National Archives and Records Service Act	South Africa	1996	2001
7.	The Records and Archives Management Act	Tanzania	1965	2002
8.	Botswana National Archives and Records Service Act	Botswana	1978	2007
9.	Mozambican National Archives and Records Management Act	Mozambique	1975	Not yet amended
10	National Archives Act	Malawi	1975	Not yet amended
11	The Records and Archives Management Act	Zanzibar	1965	2002
12	Public Archives and Documentation Services Act	Kenya	1966	2012

The following section discusses records legislation in Tanzania.

3.5.2 Records legislation: Tanzanian perspective

The government initiated legal recordkeeping frameworks in Tanzania by formulating the National Archives Management Act of 1965, replacing the Records (Disposal) Ordinance of 1931. The Act led to the establishment of the National Archives Department, which was tasked

with acquiring and preserving public archives (Magaya and Lowry 2012:49). The initiative to put Act No.33 of 1965 was the starting point for improving recordkeeping in the country. However, the Act still faced many challenges. The gazetted Act left out current and semi-current recordkeeping and only focused on archives management. In 2002, the Records and Archives Management Act No. 3 of 2002 replaced the National Archives Act No. 33 of 1965 (Magaya and Lowry 2012:49). This changed the National Archives Department to the Records and Archives Management Department (RAMD), a body responsible for coordinating best recordkeeping practices in public offices. Later, the Records and Archives Management Regulations of 2007 were gazetted on the 30th March of the same year to implement Act No. 3 of 2002. The Government also later gazetted the National Records and Archives Management Policy of 2011 to offer new guidance on recordkeeping. Apart from these acts, others have been gazetted for other reasons and have sections guiding recordkeeping. These include the Evidence Act of 1967, as amended in 2002 and 2007 and the National Security Act No.3 of 1970. To the Evidence Act, Section 40 was added to address the usage of digital evidence in courts of law, while Section 5 was added to the National Security Act of 1970 to stress the need to protect confidential information (Kashaija 2019:9). Details on these various pieces of legislation will be briefly explored later in this section.

Public universities in Tanzania are government-funded and are accountable to the taxpayers. In this regard, when there is proper recordkeeping in the universities, it will assist in demonstrating that the funds provided to these universities are well utilized. Universities that do not consider proper recordkeeping are at risk of promoting an impunity culture. How they are administered, their rules and regulations and their decisions are public property and should be publicly accessible (Chinyemba 2011:4). Therefore, Tanzanian universities must fulfill legal requirements and adhere to recordkeeping rules and regulations specified by the Tanzanian government. Public universities must maintain records governed by the national archive's legislation, standards and regulations.

3.5.2.1 Legislations informing recordkeeping in Tanzania

Institutions such as Tanzanian public universities need effective institutional frameworks to enhance the proper management of records. Sound recordkeeping and appropriate legal frameworks help institutions achieve transparency and accountability. The following sections discuss the legislations that guide the management of records in Tanzania.

3.5.2.1.1 Records and Archives Management Act No. 3 of 2002

This Act ensures that public offices such as public universities create adequate records of their actions and transactions and that they are properly managed for as long as needed. Part III of the Act gives “guidelines on responsibilities for records and archives.” It provides that: “the director shall be responsible for the coordination of management of records work in public offices” (The Records and Archives Management Act, 2002). Part IV, on the other hand, articulates aspects of access to public records. The Act provides that “any person who removes any public records from a public office without proper authorization or who destroys any public records commits an offense and is liable on summary conviction to a fine or to imprisonment for a term not exceeding 12 months or both such imprisonment and fine”. The Act also specifies that the expiration of records is thirty years. After thirty years, any records classified as confidential or secret shall cease to be so classified.

3.5.2.1.2 The Tanzania University Act (CAP 346)

From a governance perspective, this Act provides the framework for regulating Tanzanian universities. Proper management of records is also critical in the Tanzanian University Act as it ensures transparency and accountability. Section 18.2 of the Universities Act (Chapter 346 of the Laws of Tanzania) states that any university that fails to comply with the Act, for instance, on managing records and information, will be subject to a fine. Therefore, proper recordkeeping is a prerequisite for a university to comply with relevant legislative requirements. This is because universities could experience reputational damage if there are problems with inaccessible and unusable records (Phiri 2016:4). Universities are accountable to the government. As a result, a recordkeeping programme must be in place to ensure that the university captures and keeps the evidence required for accountability purposes (Khumalo and Chigariro 2017:71). Further, Part IV, section 38 of the Act has a specific provision on good governance on admissions. It provides that: “Every university shall put in place systems to ensure that documents and information related to admissions are properly handled and managed. The Act is muted on the management of digital records.

3.5.2.1.2 The Evidence Act No.6 of 1967

The Act was enacted in 1967 by the parliament of the United Republic of Tanzania (The Evidence Act no. 6 of 1967:9). Since its enactment, the Evidence Act has undergone several

amendments to address several weaknesses, which posed challenges in criminal and civil proceedings (Hosea 2014:5). For instance, in 2019, the Act was amended to provide for the admissibility of electronic evidence. Electronic evidence in Tanzania is only admissible if a digital document is established for legal proceedings, and in doing so, the court has to consider the relevancy and authenticity of that digital document. The Act encompasses rules and legal principles that govern the proof of facts in a legal proceeding. These rules and legal principles determine what evidence must or must not be considered when making decisions (The Evidence Act no. 6 of 1967:10).

Section 137 of the Evidence Act provides that: “no one shall be compelled to disclose to the court any confidential communication which has taken place between him/her and their advocate or professional legal adviser unless he/she offers himself/herself as a witness, in which case he/she may be compelled to disclose any such communications as may appear to the court necessary to be known to explain any evidence which he/she has given, but no others.” Similarly, the Act “prohibits disclosure of the information on the grounds of public policy.” For example, ‘Section 132’ of the Act allows “public officers not to disclose the information if they feel that the disclosure would undermine the public interest.” The Act undermines access to information by “giving public officials wide discretion to decide whether to release public information that is in their custody and which could be prejudicial to public policy.”

3.5.2.1.3 The Access to Information Act, 2016 of Tanzania

The Act was enacted by the parliament of the United Republic of Tanzania in 2016. The aim was to provide access to information, define the scope of information that the public has the right to access, and promote transparency and accountability of information holders. For instance, the Act provides that all Tanzanians, regardless of their residence, must have an equal right of access to information from their governments and public authorities. Also, to ensure that there is no alteration, defacement and erasure of information, the Act provides that a person who alters, defaces, blocks, erases, destroys, or conceals any information held by the information holder to prevent the disclosure of such information holder, commits an offense to be liable to a fine or to imprisonment for a not exceeding 12 months or both. In other words, the Act intends to impose an obligation on every information holder to publish information to the public for easy access to such information by the public (The Access to Information Act 2016:13).

Having looked at the Access to Information Act, it is important to provide some explanations on access to information. This is important because it provides a picture of access to information and the connection between access to information and recordkeeping. Given this, below is a discussion of access to information related to recordkeeping spelling out the specific provisions that facilitate the right to access information.

Access to information means access to records. In other words, there is a relationship between recordkeeping and freedom of information. The right to access information is fundamental because (Roberts 1999:9):

- i. Aids individuals in making informed decisions based on correct data;
- ii. Contributes to a necessary condition that combats corruption and mismanagement of organization funds;
- iii. Contributes to the support of scientific research; and
- iv. Establishes and supports the democratic and participatory practice of governance.

Freedom of information is now identified as a key aspect of transparency, openness and accountability (Thurston 2015a:706). According to the United Nations Educational, Scientific and Cultural Organization [UNESCO] (2017), freedom of information can be defined as the right to access information held by public bodies. It is understood that governments have information on behalf of the public and therefore, public bodies such as universities should provide access to that information. That being the case, freedom of information legislation must reflect the fundamental premise that all information created and maintained by governments or governmental organizations is public and may only be withheld if there are genuine reasons, for instance, a confidential record.

Employees can only speak for their rights if an organization provides information access. Therefore, it is essential that records maintained in an organization are available and made accessible to every staff member in the given organization. When relevant information is readily available and easily accessible, it enables staff members to be effectively involved in decision-making and hold their organization accountable. Therefore, records officials should learn to recognize that their organizations own the records they maintain and that other staff members who are not directly involved in keeping records should have the right to obtain information. The right of access to information is of little use if there are no reliable records (Ndeje-Sichalwe 2010:82).

Organizations such as public universities should design access to laws to promote transparency and accountability by providing individuals with a legally enforceable right to obtain complete and accurate information about their organization's decisions. These laws have attracted the attention of a growing number of scholars globally, with the objective of how they should be constructed to ensure that individuals have access rights. For instance, the adoption of 'Freedom of Information' (FOI) laws allows individuals to request official information from administrations. One of the features that guarantee effective implementation of access to information law in an organization is the existence of a legal and regulatory framework for openness (Kabata and Garaba 2019:2). Freedom of information laws is intended to promote transparency and accountability in government by making sure that decision-making activities are more open (Ndenje-Sichalwe 2010:46). Various international bodies have recognized the legal nature of the right to freedom of information as the necessity for effective legislation to achieve respect for the right in practice (Ishabakaki and Gerald 2016:4). These bodies include the African Union, the United Nations, the Council of Europe and the Organization of American States.

This is to say that proper recordkeeping should allow easy access and retrieval of information for freedom of information to work. Over a decade, the right to information has been recognized by many countries, including developing countries, Tanzania being one of them. However, the extent to which such freedom is exercised is still unclear, especially in Tanzania's public universities. Regarding access to information status in Tanzania, the Tanzanian government has recently made various attempts to make public information more available and to allow the public to file queries, opinions and complaints and provide feedback to public bodies. The following are some of the examples of notable efforts that Tanzania has made regarding access to information: the Open government data portal, the Tanzania Government Portal, the central government portal and the e-government portal. However, the information provided through these efforts is not regularly updated. For instance, the Open government data portal was last updated in 2015, while the central government portal was last reviewed in 2017.

For this study, transparency, openness and accountability form the axes of free access to information. Public universities' failure to provide information would compromise the ideals of good governance as espoused in the Access to Information Act 2016. The right to access information is a pre-condition for good governance. To guarantee transparency in public university administration, recordkeeping systems must facilitate disseminating, accessing and

reusing public information. In this regard, the study used the Information Reference Governance Model to ensure that the management of records activities is understandable and made available to all stakeholders. This model demonstrates proper information governance by promoting an understanding of the stakeholders' roles in information governance.

3.5.2.1.4 Code of ethics and conduct for the public service

Accountability, ethics, stewardship and commitment are essential qualities in public servants (International Records Management Trust 1999a:16). These qualities are hoped to be found in records professionals working in both public and private sectors. However, the lack of ethical conduct by these professionals is still a subject of discussion, as pointed out by Hamer (2018:158), even though these professionals are obliged to adhere to the Code of conduct adopted by different professional bodies in their countries. This is because the introduction of contemporary recordkeeping has led to information professionals needing to change their duties. This involves records professionals changing how they accomplish their traditional practiced values inclusive of new ethical challenges. Computers have become such important tools for performing business that today people would have difficulty conducting their work without them (Ngoepe, Mokoena and Ngulube 2010:36). However, there are several compelling privacy, security and ethical dilemmas raised by computer systems (Ngoepe, Mokoena and Ngulube 2010:37). For example, with modern recordkeeping, this means that records professionals have less control over access to digital records than they did with paper records (Neazor 2007:48). This means that once information is published on the web, it becomes universally accessible.

The issue of trust in digital records is also crucial in getting a better understanding of ethical issues in the context of media technologies. Therefore, records professionals must act according to recordkeeping principles regarding the management of records, including digital records (International Council on Archives Code of Ethics 1996:2). Due to these ethical challenges posed by digital records, special guidelines are needed for their management. Also, professional bodies should revise their Code of ethics to continue being fit for purpose, considering the strides made in advanced technologies. For instance, the International Council on Archives' current Code of ethics is outdated, having been implemented in 1996 with no evidence of recent revisions; the Society of American Archivists serves the needs of more than 6,200 records professionals, both in America and abroad, its Code of ethics was most recently revised in 2012, and while it does demonstrate a level of consideration regarding the

management of electronic records, it still falls short of sufficiently addressing the complex nature of handling electronic records content and the resulting implications for ethical practice (Hamer 2018:160-61). Within ESARBICA, most professional associations do not have a code of ethics for records professionals, and those like Kenya and South Africa are outdated. For instance, a code of ethics for records professionals in Tanzania has yet to be established, as it is for other professionals in the country (Tweve 2016:30). Table 3.2 shows the Code of Ethics for records professionals within the ESARBICA region.

Table 3. 2: Code of ethics for records professionals within the ESARBICA region

S/n	Country	Year the code of ethics for records professionals was last reviewed
1.	Botswana	Has no code of ethics for records professionals
2.	Kenya	The Kenya Association of Records Managers and Archivists is using the ICA code of ethics, which was last reviewed in 1996
3.	Lesotho	Has no code of ethics for records professionals
4.	Malawi	Has no code of ethics for records professionals
5.	Mozambique	Has no code of ethics for records professionals
6.	Namibia	Has no code of ethics for records professionals
7.	South Africa	The professional code of ethics for South African Society of Archivists-1993
8.	Swaziland	Has no code of ethics for records professionals
9.	Tanzania	Has no code of ethics for records professionals
10	Zambia	Has no code of ethics for records professionals
11	Zanzibar	Has no code of ethics for records professionals
12	Zimbabwe	Has no code of ethics for records professionals

A Code of Ethics is provided as a guide to professional conduct. Without a proper professional code of ethics that embraces the management of electronic records, public universities could expose themselves to unnecessary financial losses due to litigations resulting from unethical behaviour. Compliance with these policies should be enforced. Records professionals should maintain high professional standards of conduct when performing their duties. Records

professionals should promote the highest possible standards in the management of records. The following are the key components found in many codes of ethics adopted by records professionals worldwide (International Records Management Trust 1999a:16).

Records professionals maintain, appraise, select, acquire, preserve and make available for use records and archives, ensuring their intellectual integrity and physical protection for the benefit of users both in the present and future;

- i. Records professionals perform their tasks without discrimination based on race, color, religion, sex, age, or national or ethnic origin;
- ii. Records professionals encourage and promote the greatest possible use of the records in their care, giving due attention to confidentiality, personal privacy, physical preservation and legislative or policy requirements;
- iii. Records professionals should carry out their duties according to accepted records and archives principles and practices, to the highest standard of conduct, and
- iv. Records professionals contribute to advancing records and archives knowledge and skills by sharing their knowledge with other professionals and the public in general, using their knowledge to benefit society as a whole.

The storage, preservation and retrieval of university records are also important areas of ethical concern. In addition to ethical issues surrounding the way university records are processed, the replacement of traditional paper-based university records with digital records and the movement to computer-based and ultimately paperless systems in institutions such as universities raise important ethical issues for those concerned with the care of confidential records and emphasize the need for protecting the security and the privacy of confidential university records. The development of information technologies and digital records management systems raises concerns regarding records security, privacy and confidentiality. This introduction of technologies means that recorded information is made more available and accessible.

In Tanzania, the public sector has been institutionalizing codes of ethics and conduct to enhance its practice and compliance (Anthony 2013:1). The primary responsibility for ethics in Tanzanian public service lies with the Ethics Division of the President's Office of Public Service Management. The first Code of Ethics and Conduct for Public Service was issued in

1961. In 2005, the Code was reviewed to counter all the shortcomings and a new code of ethics and conduct stipulating the standard of behaviour expected of public servants was developed. It enables public workers to participate fully in delivering quality services to Tanzanian citizens. The Code complements the existing regulations, directives, guidelines and laws to prescribe standard behaviour in the public sector. The Code has been issued under the Public Service Act, National Security Act and Prevention of Corruption Act. For the public service to be effective and respected, public staff must conduct themselves in a way that promotes transparency and accountability and, discharge duties with integrity and perform diligently. All public servants must obey and follow the Code of Ethics and Conduct; no one should be tolerated for breaching it. For instance, a public servant should not release any official information to the media unless authorized according to the procedures (Code of Ethics and Conduct for the Public Service 2005). For effective and efficient service delivery to the public, all public university workers must adhere to this Code.

Regarding secrecy and confidentiality, the Code prohibits any public servant from disclosing secrecy and confidential or official information that has been communicated to or has been availed while discharging official duties due to permission (Code of Ethics and Conduct for the Public Service 2005). When maintaining records in an organization, records professionals should respect both access and privacy and act within the boundaries of relevant legislation. They should ensure that corporate and personal privacy and national security are protected without destroying information, particularly in managing digital records where updating and erasure are common practices. They should also respect the privacy of individuals who created or are the subject of records. In a nutshell, balancing the requirement for access with those for maintaining the individual's privacy is a significant responsibility for records professionals. Hence, the Code of Conduct is an important way of promoting good behavior from employees. Therefore, the Code is important for encouraging discipline in public universities. It enables staff to manage their behavior and to challenge other people's behavior. In a nutshell, the Code of Ethics provides guidelines, rules and regulations for organizations. This is important in bringing about an efficient and effective administration as a foundation for enhancing confidence in the integrity and credibility of an organization.

The increased availability of records and information raises ethical questions about who should be authorized to access the information and whether particular types of records should be made available to every information professional. The potential for providing the general public

access to digital information via the web has emerged more recently and raises further ethical questions and issues regarding ownership and censorship of information. Therefore, for this study, there is a need for university information professionals to give the university staff and students greater autonomy and control over the information that is preserved and stored about them. For this study, Tanzanian public university records professionals should subscribe to the code of ethics promulgated by the code of conduct adopted by the appropriate professional body in the country. The following section discusses security and disaster management issues in recordkeeping.

3.6 Security, disaster management and access control in recordkeeping

Records are valueless unless they are used, and for them to be used effectively, they must be readily available and accessible to the users. In this context, many key recordkeeping questions related to information security, access, and risk management led to the emergence of information governance, enabling records managers to ensure that information is controlled to be timely available. To understand information governance, key aspects such as the storage and security aspects of information within an institution need to be understood. To cover more the aspects of security and responsibility, the study chose to use the Information Governance Reference Model. With the IGRM, management of records is designed and created to guarantee a security level to information intended to be private, vital, or confidential to business continuity. In other words, this model provides an appropriate framework that ascertains the level of responsibility in an organization. Amongst the benefits of the IGRM is maintaining valued information in a secure environment within an organization.

One of the main challenges to the safety and maintenance of records is the risk of disaster (Asamoah, Akussah and Musah 2018:219). Disasters, regarding the extent of damage, negatively impact staff, the public, and the institution, particularly life property and valuable records. Therefore, disaster management involves being prepared for the unexpected and dealing with disasters effectively should they occur (Asamoah et al. 2018:219). Disaster management includes planning, preparedness for the unexpected, and effective dealing with disasters after they have happened. One of the major threats to preserving records is the risk of records loss. In Tanzania, several scholars (Ndenje –Schalwe 2010; Kamatula 2013; Mikidadi 2013; Nkebukwa 2019) have highlighted the need for a disaster plan for records. The next

section discusses disaster management procedures and security measures as far as recordkeeping is concerned.

3.6.1 Security and disaster control

The increase in privacy needs and the resulting records legislation have made the storage of records a top priority for every organization (Records Nations 2019). Confidential records should be stored in secured storage. Records should be maintained in an environmentally controlled storage to protect them from fire, water, physical and chemical changes that might otherwise harm them (Williams 2006:180). Universities should provide enough storage and security facilities to prevent damage and loss of records (Abdulrahman 2015:54).

A disaster is any sudden calamity that can cause damage to properties, ecological disturbances, or loss of people's lives. It is classified into two categories: man-made and natural causes (Joseph and Joseph 2013:98). Those which occur due to natural causes are volcanic eruptions, earthquakes, tsunamis, or hurricanes, and those which occur due to man causes are floods, fire, buildings collapse, vandalism, and theft. Unauthorized access to records, misplacement, poor records handling and vandalism are also man-made hazards. To prevent disasters in offices, individuals are needed to ensure that there is a disaster management plan. Preventing records from disasters should be the main concern in all institutions. However, these records professionals should be supported by their top management by being provided with enough budget, facilities, and awareness training with regards to records disaster preparedness and management plan (Kamatula 2013:45). Every institution should have a disaster control plan so that they can control all types of disasters. According to the Tanzania Records and Archives Management Act, No. 3 of 2002, every government office is responsible for safeguarding information under their custody in digital and paper formats.

In addition, a lack of enough funding for managing facilities and staff training on recordkeeping and disaster management may lead to most institutions being vulnerable to disasters and security. Thus, it is fundamental for institutions to perform risk assessments to know when they are weak regarding disasters and security and find the right solutions to alleviate them (Asamoah et al. 2018:219). Risk assessment includes a systematic and effective way of gathering, organizing and analyzing risk information while developing approaches that will help to control and alleviate risk. Institutions such as public universities must conduct a risk assessment to know where they are vulnerable to disasters and find proper ways to alleviate

them. Planning in anticipation of disasters is significant in protecting records against damage or theft (Asamoah et al. 2018:228).

Many records professionals are not knowledgeable about digital records' storage, security, retrieval and dissemination. Similarly, Chigariro and Khumalo (2018:170) indicated that most records professionals in the ESARBICA region lack ICT skills in managing digital records. Among the challenges is the lack of knowledge among records officers and government authorities on digital recordkeeping issues such as data security (Chigariro and Khumalo 2018:170). As a general rule, most of the records for which public institutions such as universities are responsible are public, which means that the public needs and future researchers' needs should be considered when making decisions that influence recordkeeping. So, the protection of potentially sensitive records is essential. This is why, in his study, Daneshmandnia (2019:19) emphasized that higher education institutions should manage their records in such a way as to enable user access as well as make sure that the records are secured from unauthorized access or protected from destruction. Records might be confidential for national security, personal integrity, official secrecy and crime prevention (Klareld 2018:102).

An ideal recordkeeping framework needs to help institutions effectively maintain records. Such a framework should include a recordkeeping system, records safety and security measures, backup techniques and a file-tracking function (Marutha and Ngoepe 2018:189). Security measures should be implemented in the recordkeeping systems beyond using a password to log in and anti-viruses. This will enable institutions to generate reliable, authentic, and trustworthy records to be accepted as evidence (Mosweu and Kenosi 2018:248). It is meaningless to maintain digital records without taking into consideration issues of security, privacy and ethics (Ngoepe, Mokoena and Ngulube 2010: 38).

Protecting records against disasters is a very crucial role of any records officer. This is because each information center must safeguard records under its custody. There are several security dilemmas in recordkeeping. Among them, these include unauthorized access and use of records, records modification and destruction, to mention but a few (Ngoepe et al. 2010:47). However, numerous protection strategies could be used to protect records. For instance, digital records can be protected by using firewalls, updating virus software, authenticating access and through the use of Public Key Infrastructure (PKI) to protect and privately exchange information through the use of public and private cryptographic key pairs (Ngoepe et al. 2010:47). To secure paper records, lockable doors to storage areas and lockable steel cabinets

should be used (Mampe and Kalusopa 2012:14). Therefore, the need for institutions and recordkeeping officials to maintain the security and privacy of records are matters that cannot be left unattended.

No institution is immune from disaster. Therefore, many organizations develop business continuity plans to protect themselves and their assets, such as records. Such plans are based on the concept that an institution should identify its assets, such as critical information sources and then establish procedures to protect them. A business continuity plan seeks to protect business information and other assets and ensure that in the event of an emergency, action is taken immediately to reduce the damage incurred and institute recovery procedures right away (International Records Management Trust 1999b:1). The main concern in all business continuity planning is to protect human life and safety. The second concern is ensuring the institution can recommence its operations and secure resources such as records and other assets. The records profession's priority is to secure the institution's records. Not all records can be secured equally in an emergency. Therefore, it is best to plan what will receive priority for protection in the event of a disaster (Przybyla and Huth 2004:6). It is possible to identify those records important to the university's business and ensure they are secured first. Those records are called vital records. In general, vital records support the vital functions of the institution (Shepherd and Yeo 2003:211). Without those records, universities would have difficulty performing their core business activities. This is why some institutions store vital records in locked areas accessed only by authorized individuals (Rotich, Mathangani and Nzioka 2017:131). The effective management of records can help eliminate or reduce the impact of threats or risks such as security risks, reputational or image risks and operational risks.

Records usually contain vital and often confidential information. Securing records can be challenging. The challenge is to provide control to prevent the potential abuse of recordkeeping systems. Without a high-level security framework, confidence in electronic systems is challenging to build, as digital records can easily be deleted or modified at any time (Asogwa 2012:207). Therefore, universities need to categorize those vital records and then plan procedures to safeguard those records from damage. Accreditation documentation, administration records for grants or contracts, institutional policies, insurance information, official signed copies of minutes of meetings of committees of the university, students' assessment records, the university's business plan, payroll records and emergency operating records are examples of vital university records (University of Washington 2022).

As well as identifying vital records, it is worthwhile to identify other assets held by the institution, including those that affect the work of recordkeeping (Shepherd and Yeo 2003:212). For instance, it is important to identify and describe equipment, mainly those machines providing a vital service to the institution. Once vital records have been identified, procedures should be established for managing and storing them to secure them in normal situations and during dangerous circumstances (Shepherd and Yeo 2003:212). These vital records can be stored on-site or moved to safe storage such as an offsite vault, another office within the institution with good environmental controls, or the records center. The emergency store should be equipped with items that will be needed quickly in the event of a disaster. The items include protective clothing and footwear, emergency lighting and mobile communication equipment, trolleys, and cleaning supplies (Shepherd and Yeo 2003:212).

Since the present study focused on digital and paper records, it is essential to specifically explain how vital digital records are protected from disaster. There are various types of methods for dealing with vital digital records. The type of information technology system the institution uses and its dependency upon that system will influence the type of storage site or facility to choose. For instance, if a university produces only word-processed documents, it might consider printing copies of vital records and not keeping the digital version. Ideally, the best way to protect vital electronic records is to make backup copies regularly and store these copies in locations separate from the original. It is essential to consider how to access and use digital records in an emergency. Therefore, due to the constant technological change, it is important to review regularly the availability of necessary technologies to maintain access to the information (Shepherd and Yeo 2003:213). Universities should establish procedures for copying digital records daily.

With the fast rate of technological development, more records are created in electronic form. Therefore, information professionals must ensure that electronic records are still accessible and usable in their original formats. Although records professionals deal with day-to-day duties, they must also scan through the horizon for emerging technologies that may impact their recordkeeping activities in the future. One way to keep well-informed of emerging technologies is to identify trends, which can be done through reading newspapers, journals and the Internet (Franks 2018:210). One of the emerging technologies is blockchain technology. This technology is the newest innovation for accountable recordkeeping (Millar 2019:119). Blockchain is an electronic ledger of economic transactions that can be programmed to record virtually everything of value (Franks 2018:207). An example of blockchain technology is

Factom (Franks 2018:207). This Factom uses a blockchain-based software system to record, maintain and share records while ensuring that sensitive information is properly shared and privacy is respected (Franks 2018:207).

Organizations worldwide are increasingly deploying modern technologies in their activities, and they have come to rely on the growth of these technologies to manage their records. As one of the emerging technologies, blockchain technology is being discussed as a solution to a system of record problems, such as the need for trusted electronic records. The versatile characteristics of blockchain technology, such as transparency, security, reliable information exchange, immutability, and decentralization, aid in extending the applications of this technology (Alnafrh and Mouselli 2021). Enthusiasm for the potential of this new technology has been spreading fast among records professionals. Given the spread of this technology, there is an urgent need for recordkeeping professionals to understand the implementation of relying on this technology for the long-term preservation of trusted digital records. Blockchain technology has broad implications for securing and authenticating intellectual property at a higher efficiency and a lower cost. With this technology, people who do not know each other can engage in trusted transactions with full confidence in the integrity of the records being disseminated. It does this by embedding authentication into the records and using a closed-up tracking system to safeguard against alteration or modification. Therefore, tracing people who accessed digital records with blockchain technology is possible. Ensuring digital records in integrated systems are accurate and secure is also possible. In this regard, electronic records can be accessed anywhere in the world, leaving a digital trail for a system that can be trusted inherently. Institutions can, therefore, consider using this technology, especially for the security of their digital records, as with this technology, it is impossible to modify records without leaving a digital trail. Blockchain technology is well-known for its data integrity and security features.

Digital recordkeeping has become popular in the present era because storing and retrieving the records is easy. However, the risks of manipulation without identification have become a serious issue. In this regard, blockchain technology creates a digital trail to verify the current state of the digital records, including all the alterations or modifications made along the way (Franks 2020:292). With this, it is possible to see exactly when the information was changed, by whom, and what approach was used. Institutions can use this digital trail to trace any changes made or see if their digital records have been tampered with in an unauthorized manner. Another major concern is the confidential management of digital records. Records

should be easily shared between staff in any institution by integrating digital technologies. In this respect, there are queries about the records' storage, the provision of authorization to access the records, and security and immutability. This technology aids organizations in managing records within a secure infrastructure. In blockchain technology, once records are created, they are permanently stored, and it is impossible to hack. The system has a tracking system to guarantee the integrity of the information (Masenya 2020:70). Although encryption methods may not be 100 % safe, blockchain technology can make similar breaches more difficult. Many institutions are using centralized methods to save records in their offices. In a centralized system, information can be leaked or exploited. To deal with these problems, a decentralized system using blockchain technology is ideal. Decentralization blockchain means that the network operates on a peer-to-peer basis and works by linking all participants without intermediaries so that each transaction is transparent to all the participants in the network (Masenya 2020:69).

When considering the adoption of blockchain technology, an institution's first decision is whether a blockchain solution is necessary. This is because most institutions are far from being ready to jump into the use of blockchain technology, but it is clear that using this technology in the management of records is gathering momentum and therefore records professionals should be prepared (Franks 2018:210). Notably, blockchain is an exciting concept, but like other technologies, there is never a guarantee that the concept will be sustainable (Millar 2019:119). Therefore, blockchain may not be the ideal solution to a complex problem such as evidence management (Millar 2019:119). Millar (2019:121) continued by noting that records professionals should think more carefully about the impact of information technologies on evidence and the environmental impact of digital technology. As the records professionals continue using digital technologies to manage their records, electric power dependency increases. However, access to power is not a given; therefore, records professionals should think carefully about how to guarantee continuous access to records when there is a power system failure (Millar 2019:121).

Meanwhile, there are two mechanisms for the preservation of electronic records: active and passive preservation (International Records Management Trust 2009:10; Government Records Service 2013:34). Active preservation is the process of making sure that there is continuing accessibility of digital records over time by actively intervening in how records are managed and preserved while passive preservation seeks to ensure the continued integrity of and controlled access to electronic records along with their related metadata (International Records

Management Trust 2009:10; Government Records Service 2013:34). Both mechanisms require that the integrity of the original electronic records be protected. The integrity can be protected by preserving the original record or by recreating the record using a different technology from that originally used (International Records Management Trust 2009:10; Government Records Service 2013:34). The passive mechanism includes refreshing, replication and emulation while an example of the active mechanism is migration (International Records Management Trust 2009:10; Government Records Service 2013:34). Each of these strategies is described below.

Refreshing records—is the process of copying records from one medium to another medium of the same type (Ismail and Affandy 2017:5; Matlala 2019:101). During the process, one should ensure the bits of the records are copied exactly as they are and no changes are made to the underlying records (International Records Management Trust 2009:10). The essence of performing this process is to replace records in one medium with a copy that is sufficiently the same so that records continue to be accessed without any difficulties (Ismail and Affandy 2017:5). An example of this process is copying records from CD-ROM that has been continuously having bit errors onto another new CD-ROM so that the records can be accessed using the same database management software. This process is necessary because storage media deteriorate and the hardware needed to access and use records may change, meaning the storage media can no longer be used (International Records Management Trust 2009:10). There will be no long-term access to the records stored.

Replicating records – this process is somehow similar to refreshing, but with replicating, the location where the record is stored is different when a record is replicated (International Records Management Trust 2009:10). For instance, moving records from CD to hard drive disk. During the process, one should ensure the bits of the records do not change. This process helps ensure the survival of records by storing the records in several different locations (Matlala 2019:101). Records that exist in only one location are highly vulnerable to damage.

Migration - is the process of translating records from one format to another format to ensure users can still have access to the records using another technology (International Records Management Trust 2009:10; Shimray and Ramaiah 2018:51). This process deals explicitly with the content of electronic records and it usually maintains the content over some time by making records accessible and usable on new hardware and

software (Harvey 2010:211). Migration involves a change in the configuration of the original record without changing its intellectual content information (Deegan and Tanner 2006:18). In other words, the bits of records may change in migration. The rapid change in technologies means that electronic records will need to be moved periodically into new hardware or software (International Records Management Trust 2009:12). This process is time-sensitive, which means that it needs to be done as soon as there is a change in technology before the current format becomes obsolete and records become unreadable (Deegan and Tanner 2006:20; Ismail and Affandy 2017:4). A good example of a migration strategy is the transformation of records from MS office to Portable Document Format (PDF).

Emulation - is the process of using one device or software program to imitate the behaviors of another device or program, thereby obtaining the same results when accessing or using electronic records (International Records Management Trust 2009:16; Ismail and Affandy 2017:5). This process involves creating software or hardware that are compatible with modern technologies, that is, software or hardware emulates the software or hardware components of older hardware or software. During the process, the bits of data are replicated and are not exactly as they originally were (International Records Management Trust 2009:16). However, emulation does allow access to the original record as though it were still housed in its original environment (International Records Management Trust 2009:16).

3.6.2 Availability and access to information

A classification scheme for maintaining records should be identified and established when creating and capturing records. To enable access to records, retrieval systems such as file classification systems, shelf labelling and file tracking tools must be implemented (Maseh 2015:50). Features of records creation include the availability of adequate systems to document business activities, accuracy to enable an audit of any element of the business and to ensure employers' and organization's rights are protected (Ndenje-Sichalwe 2010:66). Being able to locate records is fundamental to making sure that records are reliable and accurate. It is also crucial for organizations to properly maintain electronic records as it influences long-term access to information. It is also vital to provide backing-up strategies to ensure the information in the electronic records is ever available and accessed whenever needed. Availability and access to information are significant to accountability and decision-making.

All issues regarding records storage should be implemented before records are created, as this will aid in determining how records will be captured in recordkeeping systems (Msibi 2015:15). Ensuring records are stored properly will ensure that records are protected from disasters. The most important issues records professionals need to consider in storing records are the storage environment and location quality. Thus, it is important to examine whether such quality storage environments and locations exist in the public universities in Tanzania. Organizations are being called upon to be accountable and transparent in maintaining their public affairs. Components of good governance, such as transparency, the rule of law and accountability, depend mainly on the free flow of information (Mutula and Wamukoya 2009:333). Transparency and openness when making decisions help develop staff's trust in an institution.

3.7 Interventions required to be put in place to address recordkeeping issues

Wamukoya and Mutula (2005:75) noted challenges facing recordkeeping in Africa that include poor records storage facilities, absence of management of records policies, a failure to implement the recordkeeping policies, failure to follow procedures and guidelines involved in the management of both paper and digital records and lack of enough budgets dedicated for management of records just to mention a few. Following these challenges, ESARBICA has taken a move to prepare a strategic plan to aid in resolving the identified challenges in the recordkeeping sectors in member states. A strategic plan for the ESARBICA region (2018-2021) was developed to provide the region with a strategic direction in recordkeeping and implement resolutions that have been passed over the years during ESARBICA conferences (East and Southern Africa Regional Branch of the International Council on Archives 2018:4-5). A summary of some of the key areas to be addressed from 2018 to 2021 and the resolutions are provided in Table 3.3.

Table 3.3: ESARBICA Strategic Plan 2018-2021

Area to be addressed	Resolutions
Review of legislation	ESARBICA should develop a model of the legislative framework to be used by members. This should take into account the new advancements concerning the impact of information technologies.
Capacity building	Capacity building in the ESARBICA region should be prioritized. The centre of attention should be on the requirement of skilled professional staff, increase number of staffing levels and development of schemes of service for career development to motivate and retain professionals.
Partnerships and collaboration	There is a need to develop partnerships and collaborative strategies with stakeholders to help in exchange of experience, sharing of expertise, sourcing of funds and networking.
Raising awareness on the importance of archives and records	National Archival institutions should create awareness on the importance of records and archives so that they get support and make sure that their role in national development becomes relevant.
Electronic records management	ESARBICA member countries should be guided on requirements for procurement of EDRMS. This will reduce the number of computerization projects that are failing in the member states. This should also consider ICT infrastructure development in different countries.
Disaster management strategies	There is a need to develop a disaster management plan which members can use in preparing their own, taking into consideration local environments.

Source: East and Southern Africa Regional Branch of the International Council on Archives (2018:5-10)

Years later, Wamukoya (2021) found the same challenges still existing. Even after several decades, most African countries continue to be afflicted with the scourge of poor records and archives management (Wamukoya 2021:39). The poor state of records and archives management that continues to exist in African governments is however puzzling considering the measures that have been taken to improve the situation (Wamukoya 2021:40). The records and archives management in many African countries is largely characterized by disorganized and congested filing units, frequent loss of files and piles of non-current records (Wamukoya 2021:46). From the literature review there are a number of research studies that have been conducted on recordkeeping in the ESARBICA region (Coetzer 2012; Erima and Wamukoya 2012; Mwangangi 2013; Phiri 2016; Tsvuura and Ngulube 2020; Netshakhuma 2021), the conclusion drawn from these research studies indicates that the problems facing management

of records are continuing to increase (Nengomasha 2013:4). More details on the challenges facing management of records have been reported in section 3.4.1.2 in Chapter Two. Based on the poor state of records and archives management in Africa, the present study proposed a framework to manage university records in Tanzanian public universities. The study is of the view that the current situation can be mitigated by the presence of a framework that will ensure and establish a strong recordkeeping system. As a result, recordkeeping practices will be enhanced, promoting good governance in Tanzanian public universities.

When it comes to recognition of recordkeeping activities in the ESARBICA region, ESARBICA is concerned that recordkeeping professionals have not been accorded the status and recognition that they deserve so that they carry out their duties effectively (Mnjama 2007:26). Tanzania has recognized the impact of proper management of records in the public sector and in that regard; it has been working hard to improve its recordkeeping systems (Mohamed, Rasheli and Mwangike 2018:52). In this regard, there are various interventions that the Tanzanian government has introduced so that to enhance recordkeeping in the public sector. These interventions include the introduction of the Public Service Reform Programme (PSRP) during the year 2000, where management of records was identified as one of the areas that had affected public service delivery (Ndenje-Sichalwe and Ngulube 2009:11). The amendment of the National Records and Archives Management Act of 2002 was another intervention that the Tanzanian government did. This amendment was done to integrate the management of digital records (Newa and Mwantimwa 2019:117). Another intervention the Tanzanian government did was launch the National Records and Archives Management Policy 2011, issued in September 2011. This policy aimed to set a framework within which recordkeeping could be done in harmony with the legislative requirements and international standards (Mohamed et al. 2018:53). Another significant improvement was the establishment of the Records Management Improvement Programme (RMIP). This programme brought some reforms, such as creating records professionals across the Tanzanian government, introducing a recordkeeping certification course at the Tanzania Public Service College and developing a records retention and disposal schedule (Magaya and Lowry 2012:48).

Regardless of all these deliberate initiatives done by the government on recordkeeping practices, there were and still are significant challenges facing recordkeeping practices that need attention (Mohamed et al. 2018:53). For instance, despite the efforts done to introduce e-government, most of the records at in the Tanzanian public sector are not digitally managed (Kamatula 2018:28; Newa and Mwantimwa 2019:116). Experience shows that the

management of paper records still dominates in public offices. When seeking services in these public offices, the records officers must go through piles of files to find a particular file. Mazikana (2016:105) provides evidence of this conservatism by pointing to the prevalent “paper and pen-pushing culture” where the paper records held in the registry remain “king,” with most transactions still being paper-based even if they have been digitally generated. This situation could be attributed to various factors, including a limited budget allocated for recordkeeping in the country, the need for more recordkeeping strategies, priority to recordkeeping issues and unawareness of the importance of digital recordkeeping in the country. Recordkeeping in Tanzania faces significant challenges that affect proper recordkeeping (Mohamed et al. 2018). Inappropriate recordkeeping, both in digital and paper form, affects an organization in offering effective and efficient information services, specifically in this digital era. The next section discusses the research gaps established from previous empirical studies.

3.7 Research gaps

Scholarship on recordkeeping revealed that several research works have been conducted on the management of records in Tanzania (Ndenje-Sichwale 2010; Kiyabo and Mnjama 2011; Oweru and Mnjama 2014; Mikidadi 2013; Kamatula 2018; Kavuta and Nyamanga 2018; Nkebukwa 2019). However, these studies did not focus on recordkeeping in public universities except for the study by Kamatula, which is the thrust of this current research. In other words, the current study looked at the entire lifecycle of records as informed by the records continuum. The records continuum provides a unifying and homogenous platform for archives administration and records management. This concept means the study considered that records managers and archivists should be involved in all continuum phases, which was not the case in the previous studies. The use of the term ‘recordkeeping’ in the title also shows that the current study considered that the demarcation of functions between archivists and records managers in the continuum model is artificial and constrictive, as noted by (International Records Management Trust 1999c:23). Secondly, although issues of security control, compliance and accountability are among the challenges affecting records management in Tanzania as revealed in the mentioned previous studies, the studies did not investigate aspects relating to security control in recordkeeping as in the present study. Protecting records is an essential role of any records professional. For this reason, universities are obliged to safeguard records that are kept under

their custody. Therefore, the need for institutions and recordkeeping officials to maintain the security and privacy of records is a matter that cannot be left unattended.

Regarding security, compliance and accountability, the current study was also underpinned by the IGRM. Scholarship on recordkeeping reveals that research has been conducted on recordkeeping in Tanzanian public higher learning institutions (Mikidadi 2013; Nkebukwa 2016; Kavuta and Nyamanga 2018). However, these studies did not discuss the issues of security, compliance and accountability in the public higher learning institutions in detail. The use of IGRM emphasizes aspects of security, compliance, responsibility, and the principle of accountability as it provides institutions with a communication model that aids in decision-making. With IGRM, recordkeeping programmes are designed and created to guarantee the security of information intended to be confidential, private, secret, or vital to ensure business continuity. The next section provides a summary of the chapter.

3.8 Summary

This chapter has reviewed the literature connected to the present study. The chapter began by providing information on the aim and the significance of the literature review. The chapter was arranged thematically by themes and sub-topics associated with the study. It was important for this study to establish what has been done in the previous studies and then relate those studies to the current research problem to provide a platform upon which the research outcomes would be interpreted. The literature review revealed that the recordkeeping in most African universities is poor and has, arguably, caused serious impediments in providing service. The findings from most of the previous studies also indicate that there has been negligence in the management of records in several universities on the continent and little to no improvements in the practice of management of university records.

Further, the various elements contributing to the proper management of records about the records continuum model and the Information Governance Reference Model (IGRM) were also discussed. The research gap that the study sought to fill was highlighted. These include issues of security control, compliance with records legislation, skills and training, systems and procedures. In particular, records legislation was discussed in detail, given that it forms the backbone of proper recordkeeping practices. Compliance with records legislation impacts how records are produced, disseminated, utilized, preserved, accessed, monitored and disposed of.

Previous related empirical studies were critically reviewed. Given this, a global and African perspective on the management of university records and extant literature on the management of university records in Tanzania were provided. The chapter also discussed the code of ethics and conduct for the public service and its impact on the management of records.

A philosophical narrative on records management and recordkeeping was provided. The justification for using recordkeeping as a term for records management was also provided. The mechanisms for preserving electronic records and the issues of emerging technologies, such as blockchain technology, concerning recordkeeping were also discussed. The literature review also established that several research works have been conducted on the management of records in Tanzania. However, these studies did not focus on records and archives management in public universities, which is the thrust of this current research. The next chapter presents the research methodology and methods utilized for this research.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter discusses the research paradigm, mixed methods research, research design, study area and population, sampling technique and data collection tools. The chapter also discusses the validity and reliability, pretesting of the data collection tools data analysis, problems faced during data collection, evaluation of research methods and methodology, and ethical considerations. The main objective of this chapter was to show how the present study was done concerning research methodology and which tools were used to collect data. What follows next is a discussion of the research, research methodology and research methods.

4.1.1 Research

The term research is made up of two syllables, ‘re’ and ‘search’, which means to examine, inquiry, investigate, test, try and search again, among others (Kumar 2011:7). Kumar (2011:1) further indicated that research is a way of analyzing the different parts of the routine work of the professional; understanding as well as formulating guiding ethics that represent a specific process and creating and investigating recent theories that add to the development of the researcher’s reputation and profession. Research is investigating human society and individual relationships in and to society, acquiring new knowledge or correcting and integrating previous knowledge (Leedy and Ormrod 2010:4; Magigi 2013:21; Pandey and Pandey 2015:577). According to Hassani (2017:1), research is designed to discover and interpret new knowledge through a careful investigation, which should be guided by a range of beliefs or thoughts. It gathers data via observation, questionnaires, focus group discussions and interviews (Magigi 2013:21).

A research study must be objective, logical, comprehensive, unbiased and based on reliable, valid data (Aityan 2022:6). Therefore, good researchers should be very critical about their research and should be open to facts and logical constructs that do not only support the research findings but also may contradict them (Aityan 2022:7). Epistemologically, the current study adopted a pragmatism paradigm. Epistemology is concerned with the knowledge assumptions and how this knowledge can be created, acquired and communicated to others (Polit and Beck

2012:29; Scotland 2012:9). More details regarding the paradigmatic position of this present research will be discussed in Section 4.2.

There are three basic research purposes (Aityan 2022:13):

- i. Exploratory research studies aim at helping researchers to understand and define a problem that was not previously clearly understood or defined;
- ii. Descriptive research studies, also known as statistical research, can be characterized as collecting factual data to describe objects, subjects, situations, behaviors, relationships, events and phenomena that exist in the real world. The main aim of descriptive research studies is a description of the state of affairs as it is at present; and
- iii. Explanatory research studies are based on assessing a problem or a situation to explain the connection between variables.

With the above mentioned in mind, the research purpose of this study was both exploratory and descriptive, where the purpose was to comprehensively understand the recordkeeping situation in Tanzanian public universities. The present study adopted a pragmatic research paradigm. The choice of this paradigm as a philosophical foundation led to the adoption of quantitative and qualitative research methods to investigate recordkeeping for good governance in Tanzanian public universities (more on research philosophy will be discussed in Section 4.2). The main objective of this study was to investigate recordkeeping for good governance in Tanzanian public universities.

The following research questions were addressed:

1. What systems and processes are used in recordkeeping in Tanzanian public universities?
2. What recordkeeping skills and training do staff need in Tanzanian public universities?
3. What is the role of records legislation in recordkeeping in Tanzanian public universities?
4. What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?
5. What interventions are required to be put in place to address recordkeeping in Tanzanian public universities?

4.1.2 Research methodology

The term research methodology refers to the methods, activities and processes engaged in research, how to proceed with research and how to make research successful (Aityan 2022:27; Antwi and Hamza 2015:220). Research methodology refers to researchers' choices in planning and executing a research study. In other words, research methodology is how one will study any phenomenon. Govender (2018:357) defined research methodology as the total nature of the procedures that are conducted in the research. Hassani (2017:5) defined research methodology as a logical strategy that explores, compares, distinguishes and explains various strategies by which research could be conducted with the use of various methods.

Reflection on the research methodology includes questioning the correctness and capability of the methodology one would have employed to do a study against the available options (Ngulube 2015:132). Therefore, research methodology is central to the research procedures; it is a mirror image through which the researcher looks when deciding to acquire knowledge about social phenomena and get solutions to the research questions (Ngulube 2015:130). In other words, it specifies the types of research designs and methods that may be used to get knowledge about a phenomenon (Ngulube 2015:130). The underlying theoretical paradigm determines the choice of a research methodology, the purpose of the research and the research questions (Ngulube 2015:131). The significance of research methodology cannot be overstressed - the results, conclusions and recommendations put forth by a research study have to be critically assessed and aligned with the research methodology (Ngulube 2015:125).

4.1.3 Research methods

Research methods involve how the researchers collect, analyze and interpret data (Creswell 2014:16; Neuman 2014:2). Walliman (2011:7) indicated that research methods are the techniques used to do research. Researchers gather data on an instrument or collect information on a behavioral checklist (Creswell 2014:16). Research methods involve data-gathering techniques such as observations, interviews, questionnaires and document reviews (Ngulube 2015:132). Proper research methods are necessary to conceptualize research problems and describe the phenomena being researched (Ngulube 2015:126). Suppose researchers use the right methods for a particular type of research, in that case, they should be able to convince other people that their conclusions have some validity and that the new knowledge they have

created is soundly based (Walliman 2011:7). The nature of the research problem is determined by the kinds of research methods. Without proper research design and use of research methods, researchers have a higher chance of collecting data that are not of quality, creating an unstable foundation for any review (Creswell 2014:295).

Research methodology and methods influence how research studies are conceptualized, measured, and interpreted. Therefore, there should be a connection between the research questions, methodology, and methods. Describing the research methodology and methods used by a researcher in a research study is essential as it helps other scholarly researchers adopt and test the techniques used in the study. This chapter, therefore, outlines the methodology and methods adopted in collecting data to answer the earlier-mentioned research questions. What follows next is a discussion of the research paradigm.

4.2 Research paradigm

Scholars do research studies with several particular philosophical assumptions about the nature of reality, the manner in which they view the social world and approaches to the understanding of such reality (Cohen, Manion and Morrison 2018:34). Creswell (2014:6) refers to a research paradigm to a general philosophical orientation that a researcher brings to the study. Generally, the research paradigm comprises not only a set of assumptions about the nature of reality but also principles and methods that are used to determine such reality (Cohen, Manion and Morrison 2018:34). Commenting on the benefit of the research paradigm, Babbie (2011:33) indicated that it provides the foundation on which research studies may be built, shapes how the researcher tackles research problems and the method used to gather and analyze data. Similarly, the paradigm dictates how research studies should be done and how results should be interpreted (du Plooy-Cilliers 2014:19). Therefore, by following a particular paradigm, researchers adopt and follow a particular way of researching phenomena relevant to their fields.

Rehman and Alharthi (2016:51) noted that without selecting a research paradigm as the initial step, there would be no basis for subsequent choices regarding methodology and methods. A research paradigm not only provides ways for clearly articulating the research findings but also lets researchers quickly comprehend the context of the research study (Rehman and Alharthi 2016:51). Different types of research paradigms are used in scientific research (Creswell 2014:36). Given that there are different research paradigms, the choice of what philosophical

stance to be used largely depends on the components such as research questions, the nature of the research problem as well as the philosophical orientation of the researcher (Creswell 2014:36). This current study incorporated a pragmatic research paradigm, however; it is equally significant to provide a detailed explanation of various types of the philosophical stances that are commonly used in social science research studies. Some of the more common research paradigms, as referred to by various researchers (Pickard 2013; Creswell 2014; Ambira 2016; Cohen, Manion and Morrison 2018) include positivism, post-positivism, pragmatism and interpretivism. Next is a summary of each paradigm with the underlying philosophies to understand why the pragmatic paradigm was suitable for this study.

4.2.1 Positivism

A paradigm is regarded as an approach based on the ontological principle and doctrine that truth and reality are objectively free (Aliyu et al. 2014:81). Antwi and Hamza (2015:218) posit that positivism is sometimes referred to as scientific methods or science research and is based on the rationalistic, empiricist philosophy that originated with Aristotle, Francis Bacon, John Locke, August Comte and Emmanuel Kant. This paradigm reflects a deterministic philosophy in which causes probably determine effects or outcomes (Creswell 2014:7).

Normally, researchers that use this paradigm tend to examine hypotheses and put into consideration quantifiable measures of variables and include generalizations concerning a phenomenon from a sample to the entire study population (Scotland 2012:10). Due to positivism's objectivity, researchers adopting this paradigm in their research studies often use a quantitative research method (Olusegun 2014:115). Positivist researchers prefer accurate quantitative data and regularly use surveys, experiments and statistics (Scotland 2012:10). The researchers search for precise measures and examine hypotheses by wisely analyzing figures/numbers from the measures. However, the paradigm is criticized for separating the researcher from what is being investigated (Pickard 2013:20). The methodology of the positivism paradigm is a quantitative method (Rahi 2017:1; Ngulube 2015:130). Since the positivism paradigm is quantitative and manipulative, therefore, it was not appropriate for the current study. The current study employed Mixed Methods Research (MMR).

4.2.2 Post-positivism

This paradigm was as much a response to the weakness of positivism (Panwar et al. 2017:253). Post-positivism signifies the philosophy that became predominant after positivism and has in common most of the basic principles of the positivist paradigm, but it differs from positivism since it deals with research that relates to the collecting of qualitative data (Taylor and Medina 2011:3). Ndumbaro (2016:114) indicated that unlike positivism, which embraces theory validation, this paradigm insists on theory falsification where theories are regarded to be provisional and open to revision. Indirectly, it can be noted that the post-positivism paradigm is located between the positivism and interpretivism paradigms, as it shares the positivist view that there is a reality that is external and independent of the researcher but recognizes that understanding of reality is confined to the theoretical way of thinking of the researcher (Polit and Beck 2012:30). Post-positivism offers another paradigm that can shift positivism from a narrow perspective to a more comprehensive way of looking at real-world problems (Henderson 2011:342). Methodological duality in the adoption of both quantitative and qualitative methods is accepted in post-positivism research studies (Cohen, Manion and Morrison 2018:16). In the present study, this paradigm was also found to be supportive in understanding the relevant regulations/policies and structures guiding the management of records in the Tanzanian public universities.

4.2.3 Interpretivism

The term ‘interpretivism’ refers to the philosophical position of idealism and is used to mix different approaches such as phenomenology, social constructivism and hermeneutics; these approaches prevent the objectivist view that meaning resides within the world independently of consciousness (Di lorio 2015:11). Szyjka (2012:112) emphasized that interpretivism, in general, reflects the values, experiences and biases of the researcher. Using an interpretive research paradigm has the intention of understanding the world of human experience (Wahyuni 2012:71). According to Bryman (2012:30), the interpretivism paradigm is more concerned with the position of participants and perceptions concerning the situation being studied and recognizes the impact on the research of their background and experiences.

Constructivists do not generally begin with a theory (as with post-positivists); rather, they develop a theory of meanings throughout the research process (Rahi 2017:1). However, the constructivist researcher is most likely to rely on qualitative data collection methods (Ngulube 2015:130). This research paradigm also insists that there is no complete reality as individuals perceive and interpret social realities differently (Creswell 2014:37). A person's perceptions of social reality may differ from one context to another. This constitutes multiple interpretations of reality. This paradigm was suitable for this study because the study also used an interview schedule to collect data. Equally, Rahi (2017:1) stressed that the mixture of positivism and interpretivism is pragmatism.

4.2.4 Pragmatism

As explained by Feilzer (2010:8) and Ngulube (2015:130), this paradigm aims to bridge the gap between positivism and interpretivism or the gap between quantitative and qualitative methods by accepting that there are singular and multiple realities that are open to empirical research and that orient themselves towards resolving practical problems in the real world. Pragmatism also allows solving research problems in a way that suits the condition that presently exists and not in a way that obeys fixed theories, ideas and rules (Creswell 2014:39). This paradigm dictates how research studies should be done and how results should be interpreted (du Plooy-Cilliers 2014:19).

The present study adopted a pragmatic paradigm to guide the researcher to collect data from the study population. This paradigm dictates how research studies should be done and how results should be interpreted (du Plooy-Cilliers 2014:19). Therefore, by following a particular paradigm, researchers adopt a particular way of researching phenomena relevant to their fields. The researcher opted to use a pragmatic paradigm because it allows the researcher to use any research methods, techniques, or procedures associated with qualitative or quantitative research. The present study investigated recordkeeping for good governance in Tanzanian public universities. For the research problem to be addressed entirely, quantitative and qualitative data were needed, hence the choice of pragmatism. Moreover, the paradigm also allows solving research problems in a way that suits the existing condition and not in a way wedded to fixed theories, ideas and rules. This paradigm determines the purpose and the methods of a research study to a very large degree (Davis 2014:78). It provides an underlying philosophical framework that is fit for MMR.

Similar studies can also show the current study's research paradigm's justification. For instance, a study conducted by Garaba (2010) investigating the management of the records and archives of the former liberation movement in East and Southern Africa held by national and private archival institutions also adopted pragmatism. The pragmatic paradigm was also selected by (Majinge 2014) to inform her study. Her study examined library services provision for people with visual impairment and in wheelchairs in academic libraries in Tanzania. In another recent study in Library Sciences, the paradigm was adopted to inform the study (Maseh 2015). The study investigated records management readiness for open government in the Kenyan judiciary.

4.3 Mixed Methods Research

Scholars should ensure their research is methodologically and conceptually strong to enhance the chances of such research making positive contributions to the existing body of knowledge (Ngulube 2020:18). Thus, explaining the methodology used in a study is necessary as it helps scholars to test the methods used (Ngulube 2015:125). When planning a research project, a researcher must establish which method s/he will employ. The decision about the research methodologies is influenced by the research problem and the issues being investigated. There are three research methodologies, which are qualitative, quantitative and MMR (Creswell 2014:152). The qualitative methodology is where a researcher presents data obtained from interpretivism perspectives, while the quantitative methodology is where a searcher uses the positivism paradigm to adopt strategies of inquiry such as surveys, develop knowledge and gather data on pre-conceived tools that produce statistical data (Creswell 2014:152).

In the current study, MMR was adopted. For that reason, this section will inform how this study was done under MMR and provide justification for selecting MMR. MMR is one in which the researcher tends to base knowledge claims on a pragmatic foundation by adopting inquiry strategies that gather qualitative and quantitative data either parallel or sequentially to best understand the research problem (Creswell 2014:152). There is a difference between MMR and multi-methods research. Therefore, MMR should not be confused with multi-methods, a term that is at times incorrectly used interchangeably with MMR (Romm and Ngulube 2015:158). Ngulube (2020:431) and Alatinga et al. (2022:87) explain that MMR includes collecting, evaluating, assimilating and interpreting qualitative and quantitative data sequentially or simultaneously in a single study, despite which research methodology is given

priority. MMR can be described as a blending of aspects of quantitative and qualitative methods in formulating the research question and identifying research methods employed in the research process (Ngulube 2013:11). On the other hand, multi-method research is defined as the process of research where researchers combine multiple qualitative methods, multiple quantitative methods, or multiple quantitative and qualitative methods (Clark and Ivankova 2016:59). The similarity between the two terms is that they both aim at the mixing of quantitative and qualitative methods in one study.

MMR has emerged from the paradigm wars that were premised on the assumptions that realism and constructivism were different and incompatible when addressing research questions (Hall 2013:72; Pasipamire and Masuku 2022:88). Thus, between the 1980s and 1990s, there was a call for “a truce” between the two major paradigms (Pasipamire and Masuku 2022:88). As a result of such continued calls for the termination of such a war, in 1988 a major relief to the paradigmatic war via the publication against such wars was witnessed. The publication was by Howe, in which the author declared the war as an imaginary phenomenon that does not exist and propagated an end of the discussion of qualitative versus quantitative research, presenting pragmatism as a solution to the war. In 1990, another publication by Stanovich titled “A call for an end to the paradigm wars in reading research” was published, confirming Howe’s call for the termination of the war. These publications and those of other researchers such as (Leech 2010; Creswell and Plano Clark 2011; Terrell 2012) indeed had a “cooling effect” on the paradigmatic war, marking the birth of MMR. According to Williams (2020:83):

Mixed Methods as a model for research is emerging and has been lauded by modern-day scholars. This movement appears to have diluted tensions of the paradigm wars concerning pragmatism.

Similarly, Terrell (2012:255) indicated that mixed methods research is a product of paradigm wars between qualitative and quantitative methods and has grown into extensively used methods of investigation. MMR is gradually gaining popularity due to its capability to allow researchers to explore complex issues and give a relatively complete picture in cases where a single research method cannot address the phenomenon (Ngulube 2020:425). It seems logical to conclude that MMR is now a recognizable and institutionalized strand of research with its own identity and profile within the social science field (Timans et al. 2019:197). Apart from the preceding, the following are other reasons why MMR has exploded in popularity within social research (Creswell and Plano Clark 2011:12):

- i. The existing examples of successful research studies that do not follow the quantitative–qualitative divide;
- ii. The acceptance that employing both qualitative and quantitative methods so that the strengths of both methods are combined results in an improved understanding of research problems than when only one method is used; and
- iii. The rise of a generation of researchers that questioned the conventional ways of thinking about research procedures.

Consequently, many scholars from different disciplines are now embracing it (Ngulube 2020:425). The increased enthusiasm for MMR puts it on a solid base as the third major research method, along with purely qualitative and quantitative research (Alatinga et al. 2022:87). MMR is appropriate for complex research problems that comprise many contextual factors or components that cannot be fully addressed by using only one methodology. MMR is in the realm of multi-paradigms as it employs both the positivism and interpretivism paradigms (Ngulube 2015:130). It is essential to note that MMR goes beyond the boundaries of triangulation, which employs several research techniques in the same research design (Ngulube 2015:130). In other words, it encompasses all the phases of the research procedures, including the philosophical assumptions and research questions (Romm and Ngulube 2015:158). This methodology attempts to bring together techniques from different paradigms.

Another essential issue is how MMR is conducted. One of the decisions in MMR that a researcher needs to make is the question of the level of interaction between the qualitative and quantitative methods (Ngulube and Ukwoma 2021:4; Hands 2022:2). Interaction is the extent to which quantitative and qualitative methods are kept independent or interact with each other (Hands 2022:2). There are two levels of interaction in MMR namely (Cohen, Manion and Morrison 2018:38-42);

- i. Independent interaction occurs when quantitative and qualitative methods are implemented individually. That is, the researcher separates the quantitative and qualitative research questions, data collection and data analysis and only mixes the two methods when concluding the final interpretation.
- ii. Interactive interaction occurs when there is a direct interaction between the quantitative and qualitative methods before the final interpretation.

In the present study, independent interaction was adopted. The integration of data was done at the interpretation stage.

Another decision that a researcher needs to make relates to the priority to be given to the quantitative and qualitative methods (Molina-Azorin 2016:37). With priority; the researcher can give equal importance to both qualitative and quantitative methods or put more emphasis on the quantitative method or laying more emphasis on the qualitative method (Molina-Azorin 2016:37). This emphasis may be due to the nature of the research question, practical constraints on data collection or the necessity to understand one form of data before going on to the next (Molina-Azorin 2016:37). Therefore, in this method, data can be collected concurrently or sequentially. In collecting data concurrently, the researcher may try to compare data to search for matching results (Cohen, Manion and Morrison 2018:39). When the data are gathered sequentially, for instance, when quantitative data is collected before qualitative data, the aim could be to test variables with a big sample and then to explore in-depth with a few cases during the qualitative phase (Molina-Azorin 2016:37). As discussed in Section 4.4, gathering of qualitative and quantitative data was done concurrently.

The following are three possible weighing options for mixed methods research (Alatinga et al. 2022:90);

- i. Equal priority: both qualitative and quantitative methods play an equally significant role in addressing the research problem;
- ii. Quantitative priority: a study places greater emphasis on the quantitative method, with the qualitative method playing a subordinate role; and
- iii. Qualitative priority: a study places greater emphasis on the qualitative method, with the quantitative method playing a secondary role.

The present study employed quantitative priority, with the qualitative method playing a subordinate role. Adopting a largely quantitative method helped the researcher engage fairly large numbers of respondents, thus obtaining an accurate generalization of the results. Cohen, Manion, and Morrison (2011:161) indicated that qualitative methods are normally used to engage a smaller number of respondents.

4.3.1 Justification for using MMR

The general objective and central premise of MMR studies are that the adoption of quantitative and qualitative methods in a blend provides a better understanding of research problems and multifaceted phenomena than when one method is used alone (Denscombe 2014:147; Kumar 2014:16; Ngulube and Ngulube 2022:4). It was important to use MMR because adopting a single research method was not sufficient to investigate the complexity of recordkeeping issues involved in the present study. A comprehensive understanding can be achieved by triangulating one set of findings with another, thereby improving inference validity (Denscombe 2014:160).

Mixing quantitative and qualitative methods in the same study assists in overcoming underlying weaknesses in either of the methods, improves data accuracy and contributes to a more comprehensive and holistic perspective of knowledge (Baskarada and Koronios 2018:3). In other words, MMR assists in obtaining adequate and complete information and generates confidence in the researcher's results and conclusions (Cohen, Manion and Morrison 2018:33; Ngulube and Ngulube 2022:4). Therefore, the use of this MMR led to a better understanding and gave a broad perspective of the existing recordkeeping state in Tanzanian public universities. This MMR entails gathering data in many ways and from diverse sources (Denscombe 2014:160). This quality empowers researchers to have a correct understanding of a phenomenon by approaching it from different angles (Garaba 2010:149). In other words, MMR aids the researcher in answering research questions that cannot be solved using only a qualitative or quantitative method.

The justification of the MMR for the current study was also emphasized because it was adopted in similar previous studies. Ndenje-Sichwale (2010), in a study on the significance of records management in fostering accountability in the public service reform programme of Tanzania, adopted this methodology. Maseh (2015) also used this methodology in her study on the readiness of records management for open government in the Kenyan judiciary. Lastly, the methodology was used in Kamatula's (2018) study on the framework for e-records in support of e-government implementation in Tanzanian public service. It can also be further indicated that MMR has been accepted by well-known research methodology scholars such as Creswell, Denscombe, Onwuegbuzie, Mogan and Ngulube, as witnessed by their publications on the subject (Pasipamire and Masuku 2022:98). On the other side, however, despite making great strides in terms of being popular and applicability in practice, is still suffering from a paradigmatic dilemma (Pasipamire and Masuku 2022:98). It can be concluded that mixed

methods research is a relatively nascent methodology, and there is still potential for meaningful and progressive debates about its paradigmatic position (Flick 2018:74). Therefore, the development of really combined quantitative/qualitative methods remains an issue to be solved and globally accepted suggestions for how to mix both methods in a single method are still awaited for (Flick 2018:74). The next section provides details on the research design that was used for the present study.

4.4 Research design

Research design comprises the whole research process from conceptualization of a problem to writing research questions, gathering of data, analysis, interpretation and the final report writing (Creswell 2014:295). Researchers need to explain the research design that they are employing clearly; this constitutes methodological transparency (Ngulube and Ukwoma 2021:3). There are different research designs that relate to philosophical assumptions and research methods (Ngulube and Ukwoma 2021:3) for instance. Creswell (2014:44) identified the following three research designs associated with MMR:

- i. The convergent parallel research design involves the gathering of qualitative and quantitative data concurrently and the data analysis is done separately, although the mixing of the data takes place at the interpretation stage. The researcher merges quantitative and qualitative data to comprehensively analyze the research problem. In this type of research design, both data are gathered simultaneously and results are combined and interpreted to produce the overall results;
- ii. Explanatory sequential research design: in this research design, data is gathered quantitatively and explained using qualitative data. The term ‘sequential’ is used because the qualitative phase follows the quantitative phase; and
- iii. Exploratory sequential research design: in this research design, the researcher investigates a topic qualitatively and then begins the quantitative phase based on qualitative data.

An MMR design can either be a partially MMR design or a fully MMR design (Ngulube and Ngulube 2022:4-5). Fully MMR design is defined as the mixing of qualitative and quantitative methods and their related features throughout the study, whereas partially MMR design requires that both methods be undertaken separately, either sequentially or simultaneously,

before being mixed during the final data interpretation stage (Ngulube and Ngulube 2022:4-5). In this respect, it is significant that when deciding to employ MMR, a researcher should consider the basic principle of MMR that demands a researcher to thoughtfully mix the two research methods and other paradigmatic features to produce an overall strong research design with non-overlapping weaknesses.

A researcher should evaluate his or her proposed research design to determine its suitability before going into the field for data collection. This is because research design will define the procedures undertaken throughout a research study. In the present study, qualitative and quantitative data were collected concurrently and the analysis was done separately, although the data was mixed during the interpretation stage. Therefore, the present study employed a convergent parallel MMR design. The weighting for the methods was partial, whereby a dominant-less-dominant design was applied, with aspects of quantitative and qualitative strands being mixed and used simultaneously during the interpretation stage, although with a quantitative methods priority (QUAN + qual).

4.4.1 Survey design

The survey design is the social science's most widely used data-gathering technique (Neuman 2014:316). The following could be the reasons why this design is widely used in data collection (Johnson 2010:251):

- i. It allows one to gather large amounts of data within a short period;
- ii. It is a cheap method of conducting research; and
- iii. It can be used to gather information on a wide range of issues.

Under survey design, there are two main research designs, namely longitudinal and cross-sectional survey design. Longitudinal studies employ continuous or repeated measures to follow particular individuals over ten years (Cohen, Manion and Morrison 2018:334). Longitudinal research design assesses development or describes change over time (Cohen, Manion and Morrison 2018:347). Cross-sectional research design is a type of research design in which you gather data from different persons at a single point in time and analyze the data to establish patterns of association (Cohen, Manion and Morrison 2018:348).

For the current study, the researcher applied a cross-sectional survey design. The researcher was able to gather a large amount of data from a large pool of participants within a short time. The design was considered appropriate for this study because it has also been adopted by several previous studies from the records and archives management field, such as Kemoni (2007), Garaba (2010), Ndenje-Sichalwe (2010), Coetzer (2012) and Makgahlela (2021) just to mention but a few. Their data collection methods included interviews and questionnaires. Figure 4.1 summarizes how qualitative and quantitative data was collected and when it was mixed.

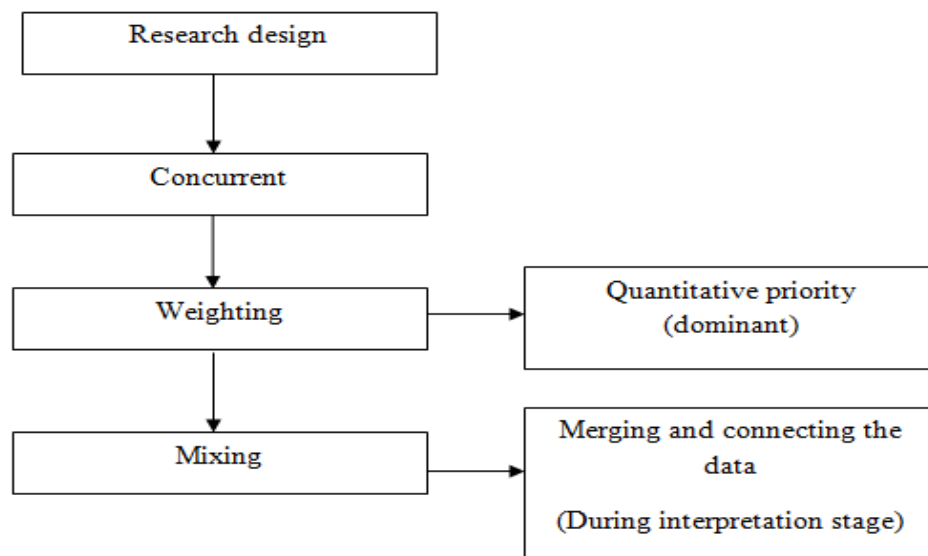


Figure 4. 1: Mixing of qualitative and quantitative methods (synthesized by the researcher)

The next section briefly outlines the current study population.

4.5 Population and area of the study

A population is an entire group of people or elements from whom information is required to be collected (Banerjee and Chaudhury 2010:60; Denscombe 2014:21). Initially, the plan was to survey twelve (12) public universities, but the number dropped to eight (8) public universities due to the problem explained in Section 4.8 of this Chapter. Therefore, the population of this study was drawn from eight (8) Tanzanian public universities, namely; Ardhi University (ARU), Mbeya University of Science and Technology (MUST), Moshi Cooperative University (MoCU), Mzumbe University (MU), Nelson Mandela African Institute of Science and

Technology (NMAIST), the Open University of Tanzania (OUT), Sokoine University of Agriculture (SUA) and University of Dar es Salaam (UDSM) (Tanzania Commission for Universities 2016). The selection of these public universities was based on the fact that government institutions in Tanzania are enforced by rules and regulations that mandate them to adopt an organized and systematic strategy when managing records, unlike private institutions

The study's targeted population for the current study comprised records officers and senior university officials. Senior university officials were targeted as they would provide information on policy-related issues about recordkeeping. This included the role of recordkeeping in meeting the university's vision, mission and core values, recordkeeping policy, funding of recordkeeping activities and training of recordkeeping staff. In this study, the heads of the recordkeeping sections and the director of the human resource office were considered senior officials. This population of the study was selected based on the understanding that they were appropriate in providing what was needed on the research question posed as they were involved in the day-to-day maintenance of records in public universities. They were, therefore, in a position to provide relevant information relating to how recordkeeping was being done in the universities. The study targeted a population of 105. The population study information was obtained from respective responsible officers working in public universities when the researcher made calls to them¹. Table 4.1 shows the relative population of each of the eight public universities under study.

¹(Alphonse, A. 2019. 10 Mar.; Chausiku, M. 2019. 27 Feb.; Imani, C. 2019. 19 Feb.; Florida, M. 2019. 25 Feb.; Iwata, J. 2019. 20 Feb.; Mgeni, M. 2019. 10 Mar.; Mushi, G. 2019. 8 Mar.; Nicholas, M. 2019. 9 Mar.; Oswald, I. 2019. 10 Mar.; Rose, T. 2019. 18 Feb.; Shubi, I. 2019. 18 Feb.; Sife, A. 2019. 18 Feb.)

Table 4. 1: Distribution of targeted study population

s/n	Name of the public university	Records officers	Senior officers
1	ARU	11	2
2	MoCU	6	2
3	MU	13	2
4	MUST	13	2
5	NMAIST	5	2
6	OUT	6	2
7	SUA	15	2
8	UDSM	20	2
	Total	89	16

4.6 Sampling procedure

There will be times when there are so many people or elements from which you can be provided answers to your research question that it is impossible to include all of them in the study, especially if the number is too huge. In this case, the researcher needs to be selective and find a technique that will be used to choose those who will be included in the research. Therefore, selecting a sample from the entire population is sampling (Cohen, Manion and Morrison 2018:202). The selection of sampling techniques and identification of the sample size is crucial to researchers who want to draw a valid and precise conclusion that is generalized. The sampling technique is an essential factor in any research study. The main aim of sampling is to gather particular cases, events, or actions that can elucidate and expand understanding at minimal time and cost as well as high accuracy (Cohen, Manion and Morrison 2018:202).

There are two types of sampling (Bryman 2012:187):

- i. Probability sampling is when a sample is selected randomly so that each population unit has an equal chance of selection, producing a representative sample. Examples of probability sampling are stratified, simple, systematic, cluster and multi-stage sampling; and

- ii. Non-probability sampling is when some units in the population stand a higher likelihood of selection than others. Examples of non-probability sampling are convenience, purposive, quota and snowball sampling.

MMR has its sampling techniques. Therefore, sampling in mixed methods research will be concerned with whether to have the whole independent sample in the qualitative and quantitative method, different members in each sample, or whether to have any overlap of members (Cohen, Manion and Morrison 2018:45). In this regard, there are four common categories of sampling designs (Ngulube and Ukwoma 2021:4):

- i. Identical sampling design is the use of the same participants in both the qualitative and the quantitative components of a study, bearing in mind that probability sampling techniques are for the quantitative component;
- ii. In parallel sampling design, the participants in a study are drawn from the same study population, but a different sample is used for each component of the study;
- iii. In nested sampling design, a subset of the sample used in the first quantitative component of a study is used in the second strand of the study; and
- iv. In a multilevel sampling design, multiple samples are drawn from different target population levels.

As mentioned in Section 4.5 of this chapter, the targeted population for the current study comprised the records officers and senior university officials. In this study, the heads of the recordkeeping sections and the director of the human resource office were considered senior officials. Therefore, quantitative data was collected from records officers, while qualitative data was collected from the heads of the recordkeeping sections and the director of the human resource office. The current study used a parallel sampling design whereby the quantitative and qualitative data collection occurred concurrently. After discussing the mixed methods sampling design above, the sampling method for both qualitative and quantitative phases is next.

In terms of selecting the study area, purposive sampling was used to select the eight public universities in the current study. These universities were purposively selected because government institutions in Tanzania are enforced by regulations that mandate them to adopt an organized and systematic strategy when maintaining records. Sometimes, leaving some units from your sampling would be like working on incomplete research with some obvious features missing (Laerd dissertation 2012). For that reason, as directed by Etikan, Musa and Alkassim

(2015:3), the best sampling technique to use is census sampling; census sampling technique is a method whereby the entire population of the study meets the needed conditions and is included in the research study. This sampling technique is commonly applied in a study where the number of populations that are being considered for investigation is relatively small (Etikan, Musa and Alkassim 2015:3). Given that the population of this study is considered small (see Table 4.1), the study used a census sampling technique where all members of the population were included in the study.

To get in-depth information, a purposive sampling method was also employed to select respondents from the study population to be interviewed. In this study, the purposive sampling technique was used to access knowledgeable respondents, for instance, those with in-depth knowledge about a particular issue, maybe by their professional role, power, access to network, expertise, or experience (Cohen, Manion and Morrison 2018:214-220). For the current study, the criterion of purposive sampling was employed as follows:

- i. For the top management in each university, one director of human resources was selected; and
- ii. Administrative staff in each university working as head of the records management section was selected.

The above criteria were necessary to confine the study within manageable margins and ensure that key informants were selected. The next section provides details of the data collection procedure.

4.7 Data collection

Data collection is a process of gathering data using defined techniques to answer the research question of a research study (Dulle 2010:120). Selecting the type of tool for data collection depends on the research method used in a research study. While deciding on the data collection method for a study, researchers should know that there are two types of data: primary and secondary. Primary data are those collected for the first time and hence happen to be original, while secondary data have already been collected by someone else and passed through the statistical process (Cohen, Manion and Morrison 2018:183). Therefore, the researcher will have to decide which type of data would be used for the study before deciding on the data

collection tool. The next sub-sections discuss the instruments adopted in gathering data to answer the research questions.

4.7.1 Questionnaire

Onodugo, Ugwuownah and Ebinne (2010:75) defined a questionnaire as a list of questions designed to solicit information suitable for analysis from indicated target respondents. The key factor in the construction of questionnaires is the relevance of the questions to the objectives of the research study and the individual respondents. Therefore, this tool is commonly used to collect important information about the study population, and each question is developed to address a specific objective of the study. The tool should be designed in such a way that it motivates the respondents to provide the information being sought. The selection of a questionnaire as one of the data-gathering tools for the current study was informed by the fact that the targeted group of respondents was large. Questionnaires allow using large population samples to describe phenomena (Babbie 2011:294).

No matter how carefully the researcher designs a questionnaire, mistakes are always possible. There could be ambiguous questions or questions that respondents cannot answer. Therefore, it is essential to conduct a pre-test to test the questionnaire. Pre-test, when conducted, brings to light the tools' weaknesses (if any). Every questionnaire should contain instructions and introductory comments where appropriate. It is very important to begin every self-administered questionnaire with basic instructions for completing it. When asking questions, researchers have two options. They may ask closed-ended questions or open-ended questions. Open-ended questions are questions when the respondents are asked to provide their answers to the questions, while with close-ended questions, the respondent is asked to select answers from among a list provided by the researcher (Cohen, Manion and Morrison 2018:475-476). The advantage of open-ended questions is that they permit the researcher to obtain answers that were not anticipated, while the disadvantage is that the respondents may sometimes give answers that are not analytically useful (Cohen, Manion and Morrison 2018:475).

The tool was classified into seven sections to reflect the area covered in the research questions. Many of the questions required very specific responses and were close-ended. However, where necessary, some questions that required the respondents' opinions on recordkeeping practices in public universities were open-ended (see Appendix 1). Section A sought information on the demographic variables of the respondents. The section aimed to gather data on the name of the

university, gender, age category, years of experience, job role, the highest level of education, area of expertise, and the ideal number of dedicated employees for recordkeeping. Section B addressed the recordkeeping practices. The questions asked were close-ended. The questions aimed to know the processes and practices used in the management of records in public universities. Respondents were to tick as many options as possible in this section. Section C investigated electronic recordkeeping. The aim was to investigate ICT skills amongst the records officers and the accessibility and availability of electronic records. Section D of the questionnaire addressed issues on staff capacity building. The section aimed to determine the staff's level of knowledge and skills regarding recordkeeping practices. Section E investigated issues in policy, legal and regulatory frameworks regarding recordkeeping. This section aimed to establish the role of policy, legal and regulatory framework in recordkeeping practices in public universities. Questions in Section F addressed disaster management, security and confidentiality control. Questions in the final Section G dealt with the challenges facing the records officers in recordkeeping practices. With the aid of an assistant researcher, the researcher administered the questionnaire to the participants. The questionnaire was administered between March 2021 and July 2021.

The main advantages of using a questionnaire to collect data are as follows (Cohen, Manion and Morrison 2018:334-335);

- i. There is low cost even when the study population is large;
- ii. It is free from the bias of the respondents; and
- iii. Respondents have adequate time to give well-thought-out answers.

Given the advantages enumerated above, it was evident that a questionnaire would be the most appropriate tool to use in this current study, considering the geographical distribution of the targeted population of the study. The present study used a self-administered questionnaire to collect quantitative data from archivists, records managers and heads of sections. The advantage of using a self-administered questionnaire to collect data is that it permits more anonymity. Respondents are more likely to be truthful and honest in self-administered questionnaires than in the presence of a researcher (Cohen, Manion and Morrison 2018:502). The questionnaire was adapted from previous studies (Kemoni 2007; Garaba 2010; Phiri 2016). When adapting the questionnaire from the previous studies, the researcher ensured that the language used was simple and that the tool was clear. A good questionnaire should use simple

language and be clear (Neuman 2014:326). Additionally, the researcher avoided using emotional language, leading questions, and unbalanced responses.

The appropriateness of this collection tool is further underscored by the fact it has been used successfully in other previous studies such as Garaba (2010), Ndenje-Sichwale (2010), Nwaomah (2015), Phiri (2016), Mohammed, Tetteh and Ahmed (2018). Garaba (2010) used this data collection tool to collect data on the East and Southern Africa National and private archival institutions. Ndenje-Sichwale (2010) used the questionnaire to collect data on the Tanzanian ministries. Nwaomah (2015) used a questionnaire to collect data from heads of academic departments/units, Deans of faculties, bursars/their deputies, registrars/their deputies, Human Resources, directors, and the Information and Communication Technology department in South-South Nigeria. Similarly, Mohammed et al. (2018) use this tool to collect data on the management of records at Sunyani Technical University in Ghana.

4.7.2 Interviews

An interview is a conversation between the researcher and the participants and aims to gather information with the purpose (Onodugo, Ugwuonah and Ebinne 2010:77; Saunders et al. 2012:372). The interview method is appropriate when there is a need to collect in-depth information on people's opinions, thoughts, experiences and feelings (Cohen, Manion and Morrison 2018:506). In other words, this method is useful when the topic of inquiry relates to issues that require complex questioning and considerable probing. The current study was descriptive and explanatory. In this regard, the interview guide tool was meant to serve a subsidiary role in explaining and improving the questionnaire findings.

This study employed face-to-face structured interviews to solicit data on the issues of the management of records in Tanzanian public universities. The interview session involved the head of the department of recordkeeping and the director of the human resource office from the Tanzanian public universities. The interviews were held in the offices of the head of the recordkeeping department and in the offices of the director of human resources. To ensure confidentiality, no personal details of the participants beyond the researcher's name and contact number were provided on the participant's information sheet. In a structured interview, the interviewer asks a set of standards and predetermined questions about particular topics in a specific order (Cohen, Manion and Morrison 2018:509). This type of interview made the interview process efficient as all the interviewees answered the same questions, allowing for

easy comparisons and observations of trends and helping to guarantee the data's reliability. Notes were taken during the interviews. Data was then saved in a safe place and kept confidential. Each interviewee was provided with a typed interview transcript to ensure an accurate reflection of what they said and that the data had been interpreted accurately.

In this study, two interview schedules were designed for the different categories of participants (see Appendix 2 and Appendix 3). One schedule was directed at the director of human resources, while the other was for the heads of the recordkeeping section. The interview guide was classified into six sections to reflect the area covered in the research questions. Section A sought information on the demographic variables of the respondents. Section B addressed the recordkeeping practices. Section C investigated electronic recordkeeping. Section D investigated issues in policy, legal and regulatory frameworks concerning recordkeeping. Section E addressed issues on skills and competencies among the recordkeeping staff. Questions in the final Section F dealt with the challenges facing the records officers in recordkeeping practices. The interviews were conducted between March 2021 and July 2021.

Based on the aforementioned benefits, the researcher employed this type of interview in the present study. The interview was conducted in a conversational style, with the researcher leading the conversation. To avoid biases, the interviewer is expected to read the questions just as they have been written. Through the interview session, the researcher can explain questions not understood in the interview guide and where necessary. The appropriateness of using interviews in this study is further supported by the fact that other previous recordkeeping-related studies have used interviews as a data collection tool (Zachs and Peri 2010; Mwangangi 2013; Phiri 2016; Mukred, Yusof and Alotaibi 2019; Nakato 2019; Poolsatitiwat 2019; Ameyaw and Frempong-kore2020).

4.8 Problems faced during data collection

In the course of data gathering, some issues were experienced. Despite having a gatekeeper's permit (see Appendix 4), research authorization had to be sought from the human resources office in some of the universities before conducting the data collection exercise. In one university, despite having the letter, research endorsement was denied by the director of human resources. In another university, a research permit was denied because the permit for the research ought to have been obtained from the office of the Second Vice President of Zanzibar

(see Appendix 5). A letter was issued to the Vice President's office, but there was no reply. In the other two universities, after the gatekeeper's letters were sent, there was no reply. After a month or so, efforts to see the officer in charge and establish if the gatekeeper's letters had been received were not successful. Despite the problem encountered during data collection, a survey of recordkeeping practices in 8(67%) of the targeted 12 public universities was conducted. Sufficient data were collected from records officers and senior officers (records department and human resources office) who adequately addressed the research questions and provided the basis for the processing and analysis of the data gathered. Data analysis is discussed in the next section.

4.9 Data analysis

The aim of performing data analysis is to enable data description, discussion, evaluation, and explanation in the context of data that has been gathered for the research study to conclude (Matthews and Ross 2010:317). Data analysis is categorized into two categories: quantitative data analysis and qualitative data analysis (Flick 2011:133).

- i. Qualitative analysis:** content analysis is a method that is used in analyzing qualitative data (Javadi and Zarea 2016:33). In other words; it is a method for examining social research data without transforming them into a numerical format. Therefore, the present study used NVivo software version 11, content and thematic analysis to analyze qualitative data that was obtained from open-ended questions in the questionnaire as well as the structured interview. NVivo software was used since it is efficient for managing data as it allows for an enhanced focus by considering the meaning of recorded data (Bazeley and Jackson 2013:2).
- ii. Quantitative analysis:** statistical analysis is a technique that enables a researcher to examine quantitative data with the help of computer software packages data analysis (Matthews and Ross 2010:407). To conduct this type of analysis, researchers often must engage in coding process data have been gathered. Statistical Package for Social Science (SPSS) version 23 was used to carry out a descriptive analysis. SPSS is described as powerful, complete and flexible general-purpose data analysis software (Pickard 2013:304). In the present study, variables were summarized using tables. Validity and reliability are discussed in the next section.

4.10 Validity and reliability

If a researcher conducts research and, let's say, the same results are obtained every time the research is repeated under the same situations. It can be confirmed that the research's findings are reliable (Cohen, Manion and Morrison 2018:268). Thus, reliability can be defined as the degree to which data collection tools precisely and consistently measure whatever they measure. In a nutshell, reliable data collection tools are reasonably free from measurement inaccuracy. To ensure the consistency of the measures in the results obtained, it is important for researchers to test their questionnaires before using them for data collection (Davies and Hughes 2014:158). Additionally, instructions had to be clear to eliminate any components of uncertainty and the pretesting exercise improved the reliability of data collection tools.

The present study ensured validity and reliability for the trustworthiness and credibility of the research tools and results. Therefore, the validity and reliability of data collection tools are features that determine one's trust and trustworthiness in research (Creswell 2014:201). On that point, when a data collecting tool is selected to gather data, it should be critically inspected to know to what extent it will be valid and reliable. Every researcher aims to capitalize on validity and reliability as these two are indicators of quality data. Combining qualitative and quantitative data may strengthen the validity and reliability (Cohen, Manion and Morrison 2018:43).

Validity is the extent to which the data gathered truly reflects the situation being investigated (Dulle 2010:134). In the present study, the data collection tools were evaluated in terms of how relevant and comprehensive the questions posed to participants were concerning the research topic. Pretesting instruments was also employed as a tool for content validation. Content validity inspects the relevance of the content of the test to the characteristic being measured (Cohen, Manion and Morrison 2018:257). In addition, the questions covered in the data collection tools had that completeness as they covered all features that comprised the records and archives management programme. In the present study, the data instruments were adapted from previous studies (Kemoni 2007; Garaba 2010; Phiri 2016) on the management of records with the assumption that they have been tested already, thereby ensuring the validity and reliability of the instruments. In addition to adapting questions from previous studies (Kemoni 2007; Garaba 2010; Phiri 2016), the researcher also developed new questions related to the research questions to consider the change in technology concerning the management of records. To improve the reliability and validity of the data instruments, apart from conducting a pretest

described in Section 4.10.1 of this chapter, the researcher also requested the supervisor review the tools and ensure important information was captured.

In the current study, validity and reliability were also ensured through the triangulation of data collection methods, whereby questionnaires and interviews were used to collect data. The aim of using triangulation was to provide a foundation for convergence on the truth. By using more than one data collection method and perspectives, researchers strive to sort out "true" information from "error" information, thereby enhancing the credibility of the results (Cohen, Manion and Morrison 2018:33). Denscombe (2014:147) supports this view by indicating that researchers can improve their confidence in the accuracy of results through the use of more than one method to investigate the same phenomenon. The appropriateness of the measures undertaken in this study to achieve validity and reliability is further underscored by the fact the same measures have been used in other previous studies successfully. For instance, Ndenje-Sichwale's (2010) and Maseh's (2015) studies achieved validity and reliability through pretesting and triangulation. Cohen, Manion and Morrison (2018:749) noted that the most broadly used method of evaluating internal consistency is the coefficient alpha (Cronbach alpha), whose normal range of values is between 0 and 1. Notably, higher values indicate high internal consistency. In the present study, the reliability of the questionnaire administered to records officers was also determined by calculating the coefficient alpha values. The coefficient alpha value of 22 items in the questionnaire administered to records officers was established to be 0.86, thus indicating that the questionnaire had a high internal consistency. The results of the reliability test using Cronbach's Alpha method are shown in Table 4.

Table 4. 2: Reliability test using Cronbach's Alpha method

Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Level of agreement that records are vital for good governance	65.7849	25.626	.275	.860
Level of agreement that without properly managed records there can be no accountability	65.6401	24.587	.274	.869
Method used to request file	65.5480	26.162	.511	.851
Finding aids available in registry	65.4480	26.109	.559	.850
Filing system used in the university	65.3770	27.118	.324	.855
Current file classification system in the university	65.2954	27.473	.225	.857
Purpose of tracking records	65.7224	25.269	.641	.847
Method of tracking records	65.5717	25.725	.601	.849
Coverage of tracking system	65.5533	25.342	.556	.848
Methods used to determine information needs	65.3737	27.018	.370	.854
Aspects considered in measuring the quality of services by registry	65.4658	26.379	.300	.855
Problem of missing files	65.5375	26.556	.286	.855
Actions taken when opening incoming mails	65.7704	25.794	.586	.849
Information recorded in incoming mails	65.6967	26.002	.494	.851
Actions taken on ongoing mails	65.6099	25.426	.547	.849
Information recorded in outgoing mails	65.7914	25.903	.491	.851
The ways staff are made aware of the records management programme existence	65.2553	27.280	.200	.856
Guide to records disposition in the university	65.3336	26.998	.218	.856
Methods used to destroy confidential records	65.3309	27.267	.235	.856

In qualitative research studies, validity and reliability refer to trustworthiness, which includes four criteria: credibility, transferability, dependability, and conformability. The trustworthiness of data refers to the degree of confidence in the data, interpretation, and methods used to ensure the quality of a study. It is the work of qualitative researchers to ensure that their findings are trustworthy (Koonin 2014:258).

In the present study, trustworthiness was ensured in the following ways:

- i. The researcher ensured the trustworthiness of the qualitative data by clarifying ambiguities in the responses to interview questions and by following up on incomplete answers;

- ii. Notes were taken during the interviews. Once the interviews were transcribed, each participant was given a typed interview transcript. This ensured trustworthiness and that the transcription was an accurate reflection of what each respondent had said;
- iii. The researcher spent adequate time (5 months) in the field with the participants to understand the participants well. Koonin (2014:258) and Vicent (2014:276) note that the researcher's extended time in the field improves the trust of the participants as well as provides a greater understanding of the participant's context and culture; and
- iv. The triangulation method was employed to ensure the dependability and reliability of the data gathered (see Section 4.7).

4.10.1 Pretest

The present research not only adapted and modified already existing instruments to ensure validity and reliability but also performed a pretest exercise. Pretesting of the instruments was done between 4 July 2019 and 30 August 2019. Pretest helps to identify errors that a researcher may not have foreseen while designing a collection tool (du Plooy-Cilliers 2014:15). The present study made full use of archivists from UKZN Archives, Alan Paton Centre, Struggle Archives and Gandhi-Luthuli Documentation Centre Archives and archivists from Tanzania National Archives and five academic staff for Records and Information Management from the Sokoine University of Agriculture in Tanzania. Participants were asked to give suggestions about the adequacy of questions, the presence of ambiguous and misspelled words, and clarity. The participants were chosen as they were considered the best fit for giving the right answers to what the researcher was looking for. Moreover, they were aware of the terminology used in recordkeeping. In testing the data collection tools, for instance, the researcher realized how long it takes to complete an interview. It was also established that all questions and instructions were clear and could produce usable data. Therefore, no problems were identified and no suggestions regarding the data collection tools were made during the pretest. Given this, no changes were made to the data collection tools.

4.11 Ethical considerations

Adherence to research ethics is a must for any researcher. Researchers are obliged to be aware of any code of ethics applied to their research and need to consider the main risks to research

participants, such as breaches of confidentiality. Ethics concerning research is a code of conduct that a researcher must adhere to while conducting research (Dulle 2010:146). When ethical issues are considered in research, honest research findings are ensured and the integrity of a researcher is protected. It is, therefore, true to say that researchers have a legal and moral responsibility to abide by moral values and ethical principles. The present study adhered to the University of KwaZulu-Natal ethical guidelines. In line with the existing research policy of the government of Tanzania, the eight public universities sought and were granted research permits. Before conducting the research, permission was obtained from UKZN's research office (see Appendix 6). It is a must that a researcher should gain formal approval from a research committee before embarking on research (Denscombe 2003:176). Due to the COVID-19 global pandemic, the Human and Social Sciences Research Ethics Committee (HSSREC) at UKZN issued guidelines on 6 April 2020 on how to conduct research in these unprecedented times punctuated by a raft of lockdown measures in a bid to contain the virus (see Appendix 7). Consequently, in the current study, data collection complied with national guidelines, directives and laws during the COVID-19 crisis as spelled out in the HSSREC protocol (University of KwaZulu-Natal Research Ethics Office 2020) as well as national guidelines and directives from the Tanzanian government (Deutsche Welle [DW] 2020).

Ethical consideration in research is all about avoiding any risk of harm and ensuring the right to privacy and informed consent (Gravetter and Forzano 2016:99). Confidentiality of collected data from public universities was considered by providing anonymity to sources of information. A letter of consent addressing the confidentiality issues of the respondents was offered to respondents (see Appendix 8). As Anderson (2019:1) notes, one of the major aspects of protecting individuals participating in research is assuring participants concerning how their personal information will be protected. This includes protecting participants' privacy, keeping information confidential, and/or allowing the participant to remain anonymous. As a consequence, when applying the concepts of privacy, confidentiality and anonymity in research, researchers must always consider what will be best for their research and what is best for the participants who make the research possible. In the present study, the researcher adhered to the UKZN's research ethics policy and code of conduct throughout the study. Fabrication, forgery of data, plagiarism and copyright abuse are unethical issues that a researcher should always avoid when conducting research. Plagiarism was avoided by citing all the sources consulted in the study. The research work was subjected to anti-plagiarism software called Turnitin. The collected data was aggregated to reflect categories of responses rather than

individual responses to ensure the confidentiality and privacy of respondents. In a nutshell, all sources used in this study were acknowledged.

Informed consent forms were introduced to the participants to obtain their consent to participate in the present research. Informed consent is generally considered a vital requirement for ethical research in minimizing any risk of harm (Curtis and Curtis 2011:15). The respondents were requested to read and sign the consent letter if they were willing to participate. No participant was forced to participate in the study. Participants were notified that participation was voluntary and they were free to refuse to answer any questions. An evaluation of the research methodology is provided in the next section.

4.12 Evaluation of research methodology

An evaluation of the research methodology is based on the idea that not all research designs are perfect and that no research design can fit all research purposes (Leedy and Ormord 2010:285). Therefore it is important to evaluate the research methods employed in the study to determine what could be done differently to produce better results in future research. The current study used a pragmatic paradigm where quantitative aspects were dominant while qualitative aspects were less dominant. Accordingly, open-ended questions from questionnaires and structured interviews were used to gather qualitative data. On the other hand, questionnaires were used to collect quantitative data. This triangulation of data collection methods played a significant role in enhancing the reliability and validity of the data gathered. This was the significance of adopting mixed methods research. The main aim of adopting MMR in the current study was to attract strengths and reduce weaknesses in a single research study. In this regard, the use of MMR helped the researcher to have a clear understanding of different phenomena of his interest that could not have been fully established by adopting only one method. The adoption of MMR allowed the researcher to blend quantitative and qualitative research methods. A convergent parallel MMR design was employed in the present study. The weighting for the methods was partial, whereby a dominant-less-dominant design was applied, with aspects of quantitative and qualitative strands being mixed and used simultaneously during the interpretation stage, although with a quantitative methods priority (QUAN + qual).

The researcher faced several challenges in the data gathering, including a lack of willingness by the participants to complete the questionnaires in the selected public universities, delay in

retrieving data from participants and refusal by some respondents to return the questionnaires, among others. These challenges prolonged the duration of data gathering, where the researcher had to engage in several follow-ups through telephone calls and personal visitation. With consistent follow-ups, the researcher overcame some of these challenges as 79 copies of the questionnaire were retrieved, which produced a response rate of 88.7%, while all 12 interview schedules were also retrieved. The present study used NVivo software version 11, content and thematic analysis to analyze qualitative data obtained from open-ended questions in the questionnaire and the structured interview. Statistical Package for Social Science (SPSS) version 23 was used to conduct a descriptive analysis. The present study ensured validity and reliability for the trustworthiness and credibility of the research tools and results. Therefore, the researcher adapted questions from previous studies, as earlier noted and developed the questions in line with the technological changes impacting the recordkeeping landscape.

Apart from conducting a pretest, the researcher also requested the supervisor review the tools and ensure important information was captured. The researcher also used a triangulation method to ensure validity and reliability. The aim of using triangulation was to provide a foundation for convergence on the truth. The reliability of the questionnaire administered to records officers was also determined by calculating the coefficient alpha values. The researcher ensured the trustworthiness of the qualitative data by clarifying ambiguities in the responses to interview questions and following up on incomplete answers and notes taken during the interviews. Once the interviews had been transcribed, each participant was given a typed interview transcript. The whole data collection exercise lasted for a period of five months (March to July 2021).

In terms of the methodological choice employed for the current study, the researcher observed the following areas as indicated by (Creswell and Plano-Clark 2011:268):

- i. Improves the credibility of data before the audience who will receive and use the findings;
- ii. Facilitate the flexibility of the evaluation to facilitate change or redirection to avoid procedures logjam;
- iii. The resources at the researcher's disposal (in terms of funding, time, equipment and assistance);
- iv. Easy comprehension of the data so gathered which allows the researcher to gain confidence; and

- v. The trustworthiness of the findings comes from the research methods selected.

In the current study, the research evaluation was based on the research method and research design used. The research design was shaped by the nature of the research problem under investigation against the research tools, framework and the time available for the project. From experience, the researcher would prefer to use a questionnaire only if given another chance to conduct the same research study. This was because of some challenges the researcher encountered with using the interview guide. When the researcher was writing the research proposal, it was hoped that the selected public universities had heads of department for recordkeeping, but after the researcher had visited the universities, only to find that this was not the case. The universities had heads of section only. These were actually in charge of managing the records activities. The plan was to interview the heads of departments in charge of recordkeeping, but the researcher interviewed section heads.

Further, although the study had planned to investigate the management of records in all the twelve public universities, four universities were not included since the researcher did not get permission to undertake research. Each university was provided with a research clearance letter from the office of the Vice-Chancellor, Sokoine University of Agriculture, the researcher's employer, introducing the researcher and the study's objective. The letter was addressed to the Vice-Chancellor of each university. Once data had been gathered, the quantitative data were analyzed using SPSS and presented in tables, frequencies, percentages, bar charts and pie charts. The qualitative were analyzed using content analysis and presented in the narrative discussion. The next section provides a summary.

4.13 Summary

This chapter focused on the methodological triangulation procedures employed to investigate the role of recordkeeping in enhancing good governance in Tanzanian public universities. The chapter presented the research methodology and methods used for the current study. The chapter discussed three research paradigms commonly identified in the social sciences. The significance of the pragmatic paradigm as the philosophical stance for the present study was provided against the positivism, post-positivism and interpretivism paradigms. This accordingly informed the decision to employ MMR for the study. Also, the chapter gave insight into the research design for the study and provided the rationale for choosing a cross-sectional

survey design; the present study employed a convergent parallel mixed-method research design. The weighting for the methods was partial, whereby a dominant-less-dominant design was applied, with aspects of quantitative and qualitative strands being mixed and used simultaneously during the interpretation stage, although with a quantitative methods priority (QUAN + qual).

An explanation of the data collection methods adopted in the current study was provided, explaining why the triangulation approach was essential. The instruments adopted in gathering data to answer the research questions were a questionnaire and an interview guide. The questionnaire tool was classified into seven sections to reflect the area covered in the research questions. With the aid of an assistant researcher, the researcher administered the questionnaire to the participants. The current study was descriptive and explanatory. In this regard, the interview guide tool was meant to serve a subsidiary role in explaining and complimenting the questionnaire. Therefore, the study used structured interview schedules to gather data concerning the management of records in Tanzanian public universities. The interview sessions involved the head of the department of recordkeeping and the director of the human resource office from each Tanzanian public university. Two interview schedules were designed for the different categories of participants. One schedule was directed at the director of human resources from each university, while the other was for the heads of the recordkeeping section.

Further, the chapter discussed the procedures undertaken to attain the validity and reliability of the data. It also described the techniques employed to analyze the two sets of quantitative and qualitative data separately and combine them into one final interpretation stage. The chapter also explained the significance of adherence to research ethics in research before and during the data collection exercise. The chapter concluded with an evaluation of the research methodology and methods. The next chapter presents the empirical findings of the current study.

CHAPTER FIVE

DATA ANALYSIS AND PRESENTATION

5.1 Introduction

The previous chapter presented the justification and procedure followed in applying Mixed Methods Research to address the research questions relevant to the current study. This chapter presents the study's empirical results derived from qualitative and quantitative methods from eight of the targeted 12 Tanzanian public universities. The conceptual framework developed for this study justified the Mixed Methods Research analysis used to conduct the empirical study. In this study, questionnaires and interviews were used to gather data. The questionnaires were distributed to the records officers and the interviews were conducted with the senior university officials. In this case, the senior officials were the heads of the sections of recordkeeping and the director of the human resource office from each university.

Therefore, this chapter aims to showcase the empirical results in an attempt to answer the research questions addressed by a research study. Analysis and presentation of data in research aim to answer the empirical results and summarise the research questions as addressed by the study (Perron and Gillespie 2015:30). In other words, in this chapter, data is analyzed and presented to conclude the research questions of interest. The study sought to examine recordkeeping for good governance in Tanzanian public universities. The following research questions were addressed using the RC and Information Governance Reference Model.

1. What systems and processes are used in recordkeeping in Tanzanian public universities?
2. What recordkeeping skills and training do staff need in Tanzanian public universities?
3. What is the role of records legislation in recordkeeping in Tanzanian public universities?
4. What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?
5. What interventions are required to be put in place to address recordkeeping in Tanzanian public universities?

In research, results will be precisely understood if presented in a definite arrangement (Annesley 2010:1066). Accordingly, this chapter is structured following the themes of the research questions. Table 5.1 shows how research questions were addressed according to the records continuum theory and the Information Governance Reference Model.

Table 5.1: Research questions mapped with the underpinning model

Research question	Theme	Model
What system and processes are used in recordkeeping in Tanzanian public universities?	Digital recordkeeping; Storage and preservation for digital records	Records continuum model
	Budgetary allocation for recordkeeping; Records for good governance; Storing of records Management of vital records; Methods used to request files; Tracking of records; Recordkeeping programme; Records appraisal; and Control of temperature, light and relative humidity in the storage area.	Information Governance Reference Model
What recordkeeping skills and training do staff need in Tanzanian public universities?	Level of professional training in recordkeeping; and Recordkeeping professional associations.	Information Governance Reference Model.
What is the role of records legislation in recordkeeping in Tanzanian public universities?	Awareness of legislative and regulatory frameworks for recordkeeping; Recordkeeping policy; Aspects covered by the recordkeeping policy; The need for a registry procedures manual; Internal disciplinary actions faced when violating issues concerning recordkeeping issues; and Recordkeeping audit.	Information Governance Reference Model
What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?	Availability and access to information; Storage facilities used in the registry	Records continuum model
	Security classification of records in the office; Methods used to ensure the security of digital records; and Disaster management.	Information Governance Reference Model
What interventions need to be put in place in order to address recordkeeping in Tanzania public universities?	Problems faced in providing services/access to records.	Records continuum model
	Support offered by the top management toward recordkeeping activities	Information Governance Reference Model

The current study used SPSS version 23 to analyze quantitative data. The quantitative data was presented in tables and figures to display the values of findings in numerical form. Qualitative data obtained from the heads of the recordkeeping sections and the director of the human resource office from each university was transcribed, scanned, and organized, after which the data was fed into a Computer–Assisted Qualitative Data Analysis Software. The present study used NVivo software package version 11 to analyze qualitative data. The qualitative data was presented in the form of a descriptive narrative using texts in the form of phrases and direct

quotes from participants. In no prearranged order, the findings of this study were presented as an analysis of the qualitative data obtained from interviews. A total of 8(67.0%) public universities were surveyed (see Section 4.8 of Chapter Four). Table 5.2 shows the type of analysis that was done on each research question.

Table 5.2: Mapping research questions to the type of analysis done

S/N	Research question	Type of analysis done
01	What systems and processes are used in recordkeeping in Tanzanian public universities?	Descriptive statistical analysis employing frequencies and percentages, and Chi-square analysis using cross-tabulations for comparisons of variables across universities and questions employing <u>Likert</u> scale, content analysis using NVIVO for open-ended questions
02	What recordkeeping skills and training do staff need in Tanzanian public universities?	Descriptive statistical analysis employing frequencies and percentages, and Chi-square analysis using cross-tabulations for comparisons of variables across universities and for questions employing <u>Likert</u> scale, Cramer's' V and Phi were generated by cross-tabulations to find out the magnitude of associations among recordkeeping skills with other demographic variables, content analysis using NVIVO for open-ended questions
03	What is the role of records legislation in recordkeeping in Tanzanian public universities?	Ordinal regression modeling was used to determine the way recordkeeping staff perceive the contribution of recordkeeping practices on good governance, and content analysis using NVIVO for open-ended questions.
04	What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?	Descriptive statistical analysis employing frequencies and percentages, and Chi-square analysis using cross-tabulations for comparisons of variables across universities and questions employing <u>Likert</u> scale, content analysis using NVIVO for open-ended questions
05	What interventions are required to be put in place to address recordkeeping in Tanzanian public universities?	Content analysis using NVIVO software

Table 5.3 shows the mapping of research questions to the cross-tabulated variables and Chi-square analysis. The variables were compared against each university by cross-tabulations.

Table 5. 3: Mapping research questions to the cross-tabulated variables and Chi-square analysis

S/N	Research question	Cross tabulated variables and Chi-square analysis
01	What systems and processes are used in recordkeeping in Tanzanian public universities?	The following variables were compared against each university by cross tabulations: Storing of records; Place vital records are stored; Methods used to request files; Finding aids; Presence of various features on records management; Filing system used in the universities; Reasons for record tracking; Aspects of file tracking and the procedures covered in their universities; Problems attributed to missing files; Performance measurement of registry services; How records staff are made aware of the presence of the recordkeeping programme; Disposition of records; Information included in the records disposition certificate; Methods used for destroying confidential records; Methods used to control temperature and relative humidity in the records storage area; Reasons for the choice of the digital recordkeeping system used; Storage device used to provide backup for digital records; Formats used to create digital records; Strategies used for long-term preservation of digital records; How confidential records are stored; Storage facilities used in the registry.
02	What recordkeeping skills and training do staff need in Tanzanian public universities?	The following variables were compared against each university by cross tabulations: Aspects covered by the recordkeeping policy; Reason should recordkeeping be guided by records legislation; Need for a registry procedure manual; Items the internal audit checklist covers; Relevant Acts and policies.
03	What is the role of records legislation in recordkeeping in Tanzanian public universities?	The following variables were compared against each university by cross tabulations: Internal disciplinary actions faced when violating issues concerning recordkeeping issues.
04	What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?	The following variables were compared against each university by cross tabulations: Methods used to ensure the security of electronic records; Equipment used to control disaster; Fire suppression systems available in the university.
05	What interventions are required to be put in place in order to address recordkeeping in Tanzania public universities?	Not applicable

In research, the significance level means how sure a researcher is that the results found in a research study are not by chance (accidental) (Agresti 2018:162; Chireshe 2020:365). Therefore, **statistically significant at a 1% level of significance denotes that there is a 99% probability that the results found in this study are the results of a true relationship among universities being compared. It also means that there is a 1% chance that the results were found by chance and that no true relationship exists among the universities. In the same way, *statistically significant at a 5% significance level signifies a 95% probability that the results found in this study are the results of a true relationship among the universities being compared. It also means that there is a 5% chance that the results were found by chance and that no true relationship exists among the universities. The next section provides information on analyzing data in MMR.

5.1.1 Mixed Methods Research data analysis and presentation

The mixing of both quantitative and qualitative methods is established by linking the findings of qualitative and quantitative research in the same research, one after the other or at the same time (Flick 2010:30). Analysing data in Mixed Methods Research consists of analyzing independently the qualitative data using qualitative approaches and the quantitative data using quantitative strategies (Creswell and Clark 2018:314). It also involves mixing both quantitative and qualitative data using approaches that combine the qualitative and quantitative data and results—the Mixed Methods analysis (Creswell and Clark 2018:314). Therefore, in MMR, a researcher will need to decide which tools to use for analysis, what kind of analysis is most suitable for what kind of data, how to present different kinds of data analysis, how to analyze qualitative and quantitative data, which data in the analysis have greater priority and why and how to combine data if they derive from different sample type and people (Cohen, Manion and Morrison 2018:45). MMR asks for the integration of, and connection between qualitative and quantitative data (Creswell and Clark 2011:219). Therefore, there is a need for a combination of analytical techniques on the two datasets.

The following, as highlighted by (Cohen, Manion and Morrison 2018:45), are the two topologies of MMR analyses:

- i. Parallel-tracks analysis; this is the type of analysis where analyses for the quantitative and qualitative methods are conducted separately concerning the norms of practice until conclusions are reached, following which the results are combined or brought together; and
- ii. Crossover-tracks analysis; is the type of analysis whereby findings from quantitative and qualitative methodological strands are connected in such a way that they inform one another during the study.

For the present study, crossover-tracks analysis was employed. The next section presents the questionnaire and interview response rate.

5.2 Response rate

In a research study, the actual response rate will not be wholly known before a research study begins (Yin 2016:98). The response rate of any research study is calculated as the size of the

total number of returned questionnaires divided by the overall questionnaire distributed multiplied by 100. The acceptable response rate for research should not be less than 60% (Johnson and Wislar 2012:1805). As indicated in Chapter Four, out of 89 questionnaires, 79 were returned, which produced a response rate of 88.8%. With the interviews, 12 of the 16 senior officers participated (a response rate of 75.0%). The issue of anonymity may become problematic when you conduct research with several participants in a specific setting (Flick 2010:42). Readers should not be able to identify which organization or people were involved in the research study. For this reason, a researcher should encrypt the specific details such as names, addresses and organization names to protect identities (Flick 2010:42). Therefore, in this study, to protect the identity of the respondents, the names of universities have been coded for confidentiality and anonymity. Therefore, Ardhi University will forthwith be referred to as A, Moshi Cooperatives University as B, Mbeya University as C, Mzumbe University as D, Nelson Mandela African Institute of Science and Technology as E, the Open University of Tanzania as F, Sokoine University of Agriculture as G and University of Dar es Salaam as H.

A review of past studies on managing records in Tanzania showed that different scholars obtained a response rate of 60% and above. Ndenje-sichwale (2010) achieved a response rate of 67% in her research study investigating the importance of promoting accountability in the public service reform programme. Kamatula (2018) achieved a 60% response rate in a study investigating electronic records supporting e-governance implementation in the Tanzanian public service. From the abovementioned, it is clear that different research studies have varying response rates depending on the prevailing circumstances. Tables 5.4, 5.5 and 5.6 show the response rate for the current study.

Table 5. 4: Response rate from the questionnaires (n=79)

Name of the university	The total number of questionnaires administered	The total number of questionnaires returned	Response rate (%)	Percentage of questionnaires returned
University A	11	11	100.0	13.9
University B	6	6	100.0	7.6
University C	13	11	84.6	13.9
University D	13	9	69.2	11.4
University E	5	3	60.0	3.8
University F	6	5	83.3	6.3
University G	15	14	93.3	17.7
University H	20	20	100.0	25.3
Total	89	79	88.7	100.0

Table 5.4 shows that 89 copies of questionnaires were administered, while 79 copies were found to be valid and usable. Out of 79, 11(13.9%) each was obtained from respondents from University A and University C. 6(7.6%) were validly filed by records officers at University B, 9(11.4%) from University D, 3(3.8%) from University E, 5(6.3%) from the University F, 14(17.7%) from University G and 20(25.3%) from University H. Table 5.4 further shows a response rate of over 80% in all the selected Tanzanian public universities except University D and University E which had 69.2% and 60.0% response rate respectively. Out of eight-nine copies of the questionnaire, seventy-nine were found usable, representing a response rate of 88.8%. This is supported by Bryman (2012:235) and Johnson and Wislar (2012:1805), who indicated that the acceptable response rate for a research study should not be less than 60%. It can, therefore, be concluded that the response rate for the current study was acceptable.

Table 5. 5: Response rate from the interviews (n=12)

Name of the university	Number of targeted senior officials for interview	The number of senior officials interviewed	Response rate (%)	Percentage of senior officials interviewed
University A	2	2	100.0	16.7
University B	2	2	100.0	16.7
University C	2	2	100.0	16.7
University D	2	2	100.0	16.7
University E	2	1	50.0	8.3
University F	2	1	50.0	8.3
University G	2	1	50.0	8.3
University H	2	1	50.0	8.3
Total	16	12	75.5	100.0

For the interview schedule, Table 5.5 shows that 12 of the sixteen targeted senior officials participated in the interview, resulting in a 75.0% response rate. As Johnson and Wislar (2012:1805) noted, the threshold of an acceptable response rate as a measure of research quality is 60.0%. Therefore, the response rate obtained for the current study was considered appropriate. Table 5.6 presents the response rate for the entire study.

Table 5. 6: Response rate for the study (n=105)

Target group	Targeted number	The actual number of respondents	Response rate (%)
Quantitative data	89	79	88.7
Qualitative data	16	12	75.0
Total	105	91	81.8

5.3 Demographic profile of respondents

It is fundamental to check significantly the degree to which demographic dimensions need to be considered in every research study (Flick 2010:131). Table 5.7 shows the representation and analysis data on the background information of the sampled records officers in terms of gender, age, work experience, highest education qualification, professional role and area of expertise.

Table 5. 7: Demographic profile of respondents (n=91)

s/n	Variables	Category	Frequency	Percentage (%)
1	Gender	Female	59	64.8
		Male	32	35.2
		Total	91	100.0
2	Age	20-29 years	24	26.4
		30-39 years	38	41.8
		40-49 years	19	20.9
		50+ years	10	11.0
		Total	91	100.1
3	Work experience	Less than a year	9	9.9
		One year	6	6.6
		Two to five years	37	40.7
		Six to ten years	18	19.8
		More than ten years	21	23.1
		Total	91	100.1
4	Highest education level	O-level	2	2.2
		Certificate	13	14.3
		Diploma	54	59.3
		Undergraduate degree	10	11.0
		Postgraduate level	12	13.2
		Total	91	100.1
5	Professional ranks	Assistant registry officer	64	70.3
		archivist	4	4.4
		Registry officer	9	9.9
		None of the above	14	15.4
		Total	91	100.0
6	Area of expertise	Management of records	77	84.6
		Librarianship	3	3.3
		Information technology	2	2.2
		Human resources management	9	9.9
		Total	91	100

Table 5.7 shows that most respondents were female, 59 accounting for 64.8%. Males were 32, representing 35.2%. The age distribution shows that 38(41.8%) respondents were between 30 to 39 years old and below 30 years 24(26.4%). Nineteen (20.9%) respondents were between 40 and 49 years old. Ten (11.0%) of the respondents were 50 years and above. Table 5.7 also shows that the majority, 37, have worked between two to five years, which accounts for 40.7%, while 21(23.1%) have worked for ten years and above. Respondents who have worked for six to ten years account for 18(19.8%). Respondents who have worked for less than a year were 9(9.9%), while 6(6.6%) have worked for a year. Table 5.7 also presents that most of the respondents, 54(59.3%), have diploma qualifications as their highest education level. There were 13(14.3%) with a certificate qualification as their highest education level and 10(11.0%)

with an undergraduate degree qualification as their highest education level. Two (2.2%) respondents have O-level qualifications as their highest education level, while there was one postgraduate holder, representing 1.3% of the respondents. Table 5.6 also presents the cadre of respondents in the selected public universities in terms of professional ranks. The respondents were categorized into assistant registry officers, archivists and registry officers. The findings show that 64(70.3%) respondents were assistant registry officers. Registry officers were 9(9.9%) while 4(4.4%) were archivists. However, 14(15.4%) respondents indicated none of the above. Table 5.7 also shows that 77(84.6%) respondents are recordkeeping professionals. Librarianship and information technology account for 3(3.3%) and 2(2.2%) respectively.

The researcher had to interview the senior participants to obtain in-depth information concerning professional ranks. Interviews with participants revealed mixed feelings about the expertise and qualifications of the records staff. The following explanations from the participants were noted:

Participant in University B: According to the scheme of service, we recruit from certificate level up to bachelor.

Participant in University E: According to the scheme of service, we are supposed to have an officer, but in reality, we don't.

Based on the respondent's competencies, skills, areas of expertise and working experience, the researcher was confident enough that the information respondents provided would give rich data that would be significant in answering the current study's research questions.

The study also investigated whether each university had the ideal number of recordkeeping staff. Participants were asked to state what they perceive to be the ideal number of recordkeeping staff in their universities. Figure 5.1 shows that the majority, 26(32.9%), perceived the ideal number of recordkeeping staff in their university should be 7 to 10. However, this may depend on the institution's size and, hence, the number of activities related to recordkeeping in the institution. 24(30.4%) indicated the ideal number should be 4 to 6 staff. Sixteen (20.3%) of the respondents indicated that the ideal number should be above ten staff, while 13(16.5) indicated the number of staff should be one to three.

However, when asked about the ideal number of recordkeeping staff, participants noted the following comments:

Participant in University C: The number of staff is enough according to government guidelines, government policy for recordkeeping and government scale.

Participant in University E: According to the staff requirement in our registry, we need at least five staff, but right now, we have more than five, so at least we have a good number of staff.

In contrast, question 134 in the questionnaire required respondents to provide suggestions for improving university recordkeeping. The majority of the respondents recommended that their universities employ more recordkeeping staff.

The next section presents gathered data from the questionnaire based on the themes of research questions aligned with the study's main objective, which was to establish the role of recordkeeping in promoting good governance in Tanzanian public universities.

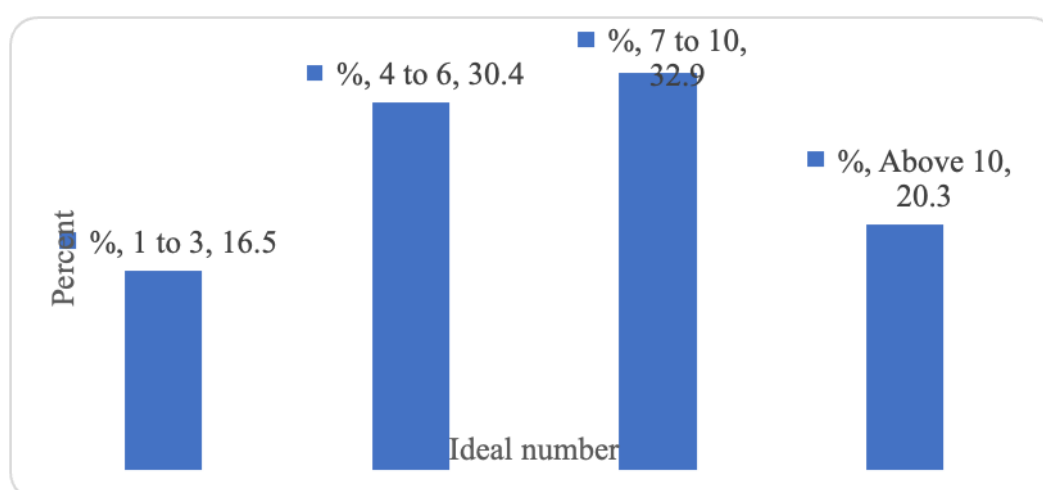


Figure 5.1: Number of dedicated employees for recordkeeping (n=79)

5.4 Systems and processes used in recordkeeping in Tanzanian public universities

The first research question sought to establish Tanzanian public universities' recordkeeping systems and processes. As Chapter Two of the present study discussed, the Generally Acceptance Recordkeeping Principles established in the IGRM were applied to determine the state of recordkeeping practices in the eight public universities. These principles offer guidelines on how universities can enhance appropriate recordkeeping programmes. Therefore, the IGRM principles were used to determine the state of recordkeeping in Tanzanian public universities under the following sub-themes;

- i. Budgetary allocation for recordkeeping;
- ii. Records for good governance;
- iii. Storing of records;
- iv. Management of vital records;
- v. Methods used to request files;
- vi. Tracking of records;
- vii. Recordkeeping programme;
- viii. Records appraisal; and
- ix. Control of temperature, light and relative humidity in the storage area.

5.4.1 Budgetary allocation for recordkeeping

Effective and efficient administration of any institution, such as a university, depends on solid recordkeeping practices that ensure that proper records are available when needed. Therefore, the significance of recordkeeping cannot be over-emphasized. Records play a very important role in the management of an organization. Various questions were asked relating to best recordkeeping practices, and the results of each were presented. Records officers were first asked if their universities set aside a budget for recordkeeping activities. Figure 5.2 displays the findings.

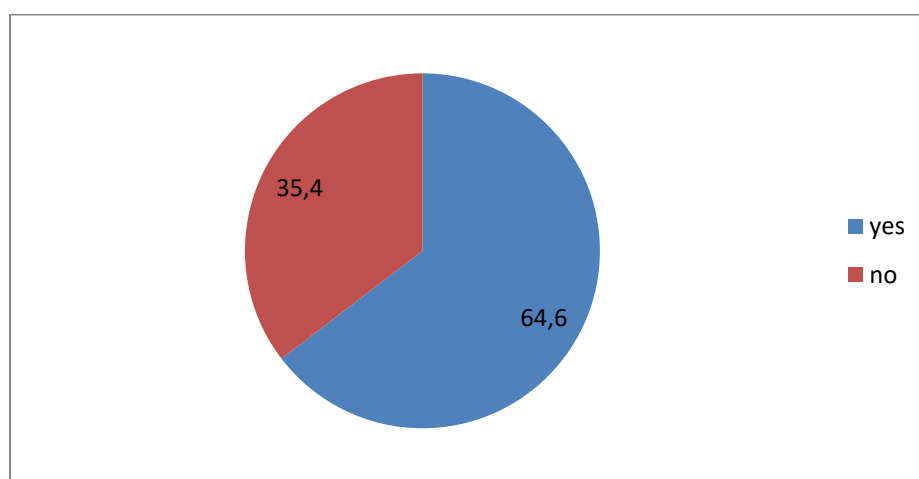


Figure 5. 2: Budgetary allocation for recordkeeping functions (n=79)

Figure 5.2 shows that the majority, 51(64.6%), indicated that their university set aside a budget for recordkeeping functions. That is to say, this aspect (setting a budget for recordkeeping) was practiced in all eight universities.

When asked if they experience any problems due to the current state of registry funding, 58(73.4%) indicated that they do experience problems. Table 5.8 presents the problems encountered due to inadequate registry funding.

Table 5. 8: Problems encountered due to the current state of registry funding (n=79)

Problem	Frequency	Percentage	p-value
Inability to purchase appropriate storage equipment	33	41.8	0.540
Inability to purchase sufficient supplies	19	24.1	0.217
Inability to educate and train records staff	41	51.9	0.002**
Inability to produce adequate registry services	17	21.5	0.003**

Note: ** Statistically significant at 1% level of significance.

From Table 5.8, it can be seen that the inability to train and educate staff and the inability to purchase appropriate storage equipment were highly reported by recordkeeping staff to affect their performance at 51.9% and 41.8 %, respectively. Others could not purchase sufficient supplies, which indicated 19(24.1%) and 17(21.5%) indicated an inability to produce adequate registry services. Of these problems, the inability to educate and train records staff and to produce adequate registry services had statistically significant differences at 1% level ($p=0.002$ and 0.003 , respectively). This means that these problems were experienced at differing degrees across the surveyed institutions and are, therefore, unique problems to be solved in the respective institutions.

The successful implementation of any project is determined by the amount of dedicated funds (Taiwo 2019:26). Subsequently, recordkeeping activities in institutions such as universities will survive only if enough budgets are allocated. With this understanding, heads of recordkeeping departments and directors of the human resources office in each university were asked whether the recordkeeping functions in their universities were allocated enough budgets to fulfill their mandate. Interviews with the participants revealed that universities A, B, C, E, F, G, and H had budgeted for recordkeeping functions and activities. However, in University D, the budget for recordkeeping functions and activities was not set aside.

During interviews, participants were also asked whether the budget set aside for recordkeeping activities was enough for recordkeeping functions. The findings revealed that the budget set aside for recordkeeping activities was moderate.

In contrast, during interviews with the participant in University D, the respondent had this to say:

Sometimes, we experience difficulties due to the current state of registry funding. The records office has been engaging with top management on this budget issue. Plans are underway for the university to set aside enough budgets to manage records activities, which will help eradicate some problems facing the records office.

5.4.1.1 Records for good governance

It is useless to practice recordkeeping if the records officers are unaware that records are vital for good governance. Therefore, the participants were asked to state if they agree records are vital for good governance. The results are shown in Table 5.9.

Table 5. 9: Demographic characteristics and influence on the level of agreement that records are vital for good governance (n=79)

Variable	Response category	N	Percentage
Level of agreement that records are vital for good governance	Agree	54	68.4%
	Neutral	7	8.9%
	Disagree	18	22.8%
Gender of respondent	Male	26	32.9%
	Female	53	67.1%
Age group (years)	20-29 years	24	30.4%
	30-39 years	36	45.6%
	40-49 years	13	16.5%
	50+ years	6	7.6%
Number of years has been working in a recordkeeping office	Less than a year	8	10.1%
	One year	5	6.3%
	Two to five years	31	39.2%
	Six to ten years	16	20.3%
	More than ten years	19	24.1%
Highest level of education	O-level	2	2.5%
	Certificate	13	16.5%
	Diploma	53	67.1%
	Undergraduate degree	10	12.7%
	Postgraduate level	1	1.3%
Area of expertise	Recordkeeping	75	94.9%
	Librarianship	2	2.5%
	Information Technology	2	2.5%
Total		79	100.0%

When asked if, without proper recordkeeping in their universities, there can be no accountability, the majority of respondents 54(68.4%) agreed that records are vital for good governance, 18(22.8%) did not agree, and 7(8.9%) reported that they were neutral. It was also hypothesized that some demographic characteristics of respondents, such as gender, age, number of years one has worked in the records office, experience, and level of education, influence how recordkeeping staff perceive the contribution of recordkeeping practices on good governance. This was done using ordinal regression modeling, with the level of agreement on good governance being a dependent variable while the other variables were treated as independent (explanatory) variables. The results indicate that all the variables influenced the

perception of contribution to good governance. However, none of the factors had a statistical significance difference at a 5% level (all p values were greater than 0.05).

Table 5. 10: Factors influencing the level of agreement that records are vital for good governance

Parameter Estimates								
	Variable	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	Governance	-0.080	5998.888	.000	1	1.000	-11757.685	11757.525
Location	Gender	-0.343	0.662	.268	1	0.605	-1.640	.955
	Age	-0.351	1.258	.078	1	0.780	-2.817	2.115
	Number of years working in the records center	0.332	1.098	.092	1	0.762	-1.819	2.484
	Education level	-19.124	5998.888	.000	1	0.997	-11776.730	11738.481
	Area of expertise	0.565	4054.589	.000	1	1.000	-7946.284	7947.414

Table 5.10 indicates that several factors influenced the level of agreement that records are vital for good governance. They include gender, age, work experience, education level, and area of expertise. However, all the factors had a similar relationship with the dependent variable (level of agreement), and none of them had any statistically significant relationship with the dependent variable at 1% and 5% levels of significance ($P_s > 0.01$ and 0.05, respectively).

Regarding accountability, 72(91.1%) majority agreed that there can be no accountability without proper recordkeeping. Two (2.5%) indicated they were neutral, while 5(6.4%) disagreed. Figure 5.3 presents the level of agreement that there can be no accountability without proper recordkeeping.

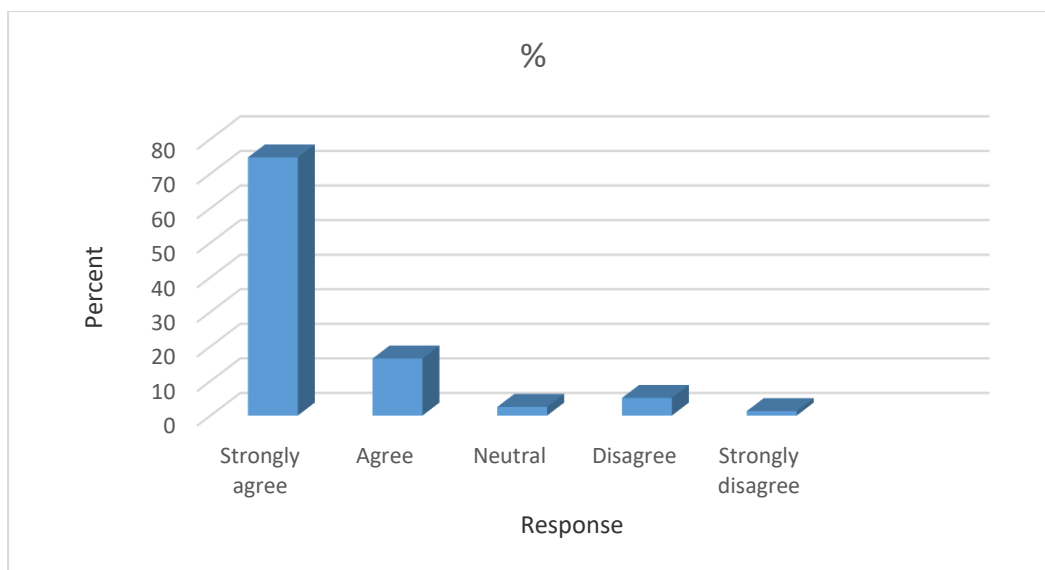


Figure 5.3: Level of agreement that without proper recordkeeping there can be no accountability (n=79)

Proper recordkeeping is a key enabler for fostering good governance in any office and is an important indicator of an institution's readiness to eliminate corruption. Respondents were asked whether proper recordkeeping is key to fostering good governance in public universities. Participants were required to comment on the importance of proper recordkeeping as an enabler for good governance in their universities. Findings revealed that poor recordkeeping practices undermine good governance, resulting in corruption; hence, universities must possess strong recordkeeping systems to ensure accountability and transparency. A Participant from University B had this to say:

Management of records is an important activity because, without proper management of records, one cannot make good and informed decisions.

5.4.1.2 Storing of records

The most important issues records professionals need to consider in managing records are the storage environment and location quality. Thus, examining whether such quality storage environments and locations exist in Tanzanian public universities is important. Organizations should provide enough storage space to prevent damage and loss of records. All issues concerning records storage should be implemented before records are created, as this will aid in determining how records will be captured in recordkeeping systems. Therefore, to establish how the respondents preserve their semi-active and inactive records, they were asked to state if their universities had semi-active records centers and archival repositories. The respondents

were also asked if their universities had enough records space, and if not, they were requested to indicate if their universities used commercial records centers or the Cloud to preserve their records. The findings are presented in Table 5.11.

Table 5.11: Storing of records (n=79)

University	Semi-active records center		Archival repository		Enough records storage space		Uses commercial records center		Uses the cloud	
	F	%	F	%	F	%	F	%	F	%
University A	6	7.6	3	3.8	1	1.3	3	3.8	8	10.1
University B	0	0.0	0	0.0	0	0.0	0	0.0	6	7.6
University C	9	11.4	3	3.8	5	6.3	7	8.9	4	5.1
University D	7	8.9	3	3.8	3	3.8	1	1.3	8	10.1
University E	3	3.8	3	3.8	3	3.8	3	3.8	0	0.0
University F	5	6.3	5	6.3	1	1.3	0	0.0	5	6.3
University G	9	11.4	4	5.1	0	0.0	6	7.5	8	10.1
University H	5	6.3	2	2.5	3	3.8	1	1.3	18	22.8
p-value	0.000**		0.001**		0.001**		0.007**		0.007**	

Note: ** Statistically significant at 1% level of significance.

Most universities surveyed had a number of recordkeeping practices, as shown in Table 5.11. For instance, participants from University A, university C, university D, university E, university F, university G and University H indicated that their universities have semi-active records centers and archival repositories. Regarding records storage space, University B and University G participants indicated that their universities do not have enough storage space. When asked if the university uses a commercial records center, University B and University F participants indicated that their universities do not use a commercial records center. In terms of using the cloud to store records, University E's respondents stated that they were not using it to store e-records. The differences in practices have a statistical significance difference at a 1% level of significance ($P=0.001$ and 0.007). University B had almost none of the listed practices except storage using cloud services. This indicates varying degrees and levels of recordkeeping practices across the eight universities.

In the questionnaire, participants were asked to give suggestions for improving current university recordkeeping practices. The participants recommended that the universities have

more storage facilities.

5.4.1.3 Management of vital records

According to the Society of American Archivists Dictionary of Archives Terminology (2023), a vital record is any record necessary to begin business recovery after a disaster. It is necessary to protect an institution's assets, obligations and resources. It is important to identify records that are important to the university's business and ensure they are secured first. In the absence of those records, universities would have difficulties in performing their core business activities. Those records are called vital records, which support the vital functions of the institution. Participants were asked if their universities had specific procedures for identifying and protecting vital records. Results show that all universities had specific procedures for identifying and protecting vital records. The participants were then asked to indicate where they stored their vital records. The findings are presented in Table 5.12.

Table 5.12: Place where vital records are stored (n=79)

University	In a server		Offsite		Commercial storage		Other means	
	F	%	F	%	F	%	F	%
University A	0	0	7	8.9	2	2.5	2	2.5
University B	6	7.6	0	0	0	0	0	0
University C	2	2.5	3	3.8	6	7.6	3	3.8
University D	3	3.8	3	3.8	0	0	3	3.8
University E	0	0	3	3.8	0	0	0	0
University F	1	1.3	4	4.1	0	0	0	0
University G	2	2.5	2	2.5	4	4.1	6	7.6
University H	0	0	9	11.4	0	0	11	44
TOTAL	14	17.7	31	39.2	12	15.2	25	13.9
p-value	0.000**							

Note: ** Statistically significant at 1% level of significance.

Most surveyed universities indicated that their vital records are stored offsite. University B had one place where records were stored on a server. University A, University E, and University H did not report storing their vital records on servers. The results also show that 12(15.2%) indicated that their universities used commercial storage to store their vital records. The above results indicate that all eight public universities have a dedicated place to store their vital records. However, there were variations in the types of places records are stored, which was

statistically significant at a 1% level ($p=0.000$). For instance, universities B, D, E and F have no commercial storage practices; universities A and H have no dedicated servers for records storage and university B does not have offsite storage practices.

5.4.1.4 Methods used to request files

Records are managed and made available to authorized users when needed. Universities produce, manage, and use many records for their day-to-day activities. Therefore, an institution should ensure that records are easily accessed. The study investigated the types of methods used to request files in each university. Because of this, participants were requested to reveal how their university retrieved records. As illustrated in Table 5.13, most universities have several procedures used to request records.

Table 5. 13: Methods used to request records (n=79)

University	Subject index		Registry staff		Registers		Telephone calls		Personal visit by action officer	
	F	%	F	%	F	%	F	%	F	%
University A	8	10.1	3	3.8	7	8.9	6	7.6	8	10.1
University B	5	6.3	1	2.5	4	5.1	0	0.0	3	3.8
University C	4	5.1	3	3.8	3	3.8	0	0.0	1	1.3
University D	4	5.1	3	3.8	5	6.3	6	7.6	2	2.5
University E	0	0	0	0.0	0	0.0	3	3.8	3	3.8
University F	2	2.5	3	3.8	5	6.3	3	3.8	2	2.5
University G	6	7.6	5	6.3	9	11.4	8	10.1	4	5.1
University H	13	16.5	18	22.8	12	15.2	6	7.6	13	16.5
TOTAL	42	53.2	36	45.6	45	57.0	32	40.5	36	45.6
p-value	0.144		0.001**		0.085		0.002**		0.007**	

Note: ** Statistically significant at 1% level of significance.

The findings revealed that registers and the subject index were the most common methods used to request files. Notably 45(57.0%) used registers and 42(53.2%) used subject index. The least cited method was telephone calls. The differences in methods used to request files have a statistical significance difference for (registry staff, telephone and personal visits) at a 1% level of significance ($p=0.001$, 0.002 and 0.007 , respectively) except for subject index and registers, which had a p-value greater than 0.05 ($p=0.144$ and 0.085 respectively). Respondents were asked if their registries must find aids to help users search records or archives. The majority of

respondents, 65(82.3%), are aware that their institutions have to find aids for searching records. When 65(82.3%) respondents indicated being aware of their institutions having finding aids, they were further requested to cite the finding aids present in their registries. Participants were provided with a multi-response list of finding aids. Their answers are shown in Table 5.14.

Table 5. 14: Finding aids available in the registry (n=65)

University	<u>Catalogs</u>		Subject staff		Subject list		Subject register		Subject index	
	F	%	F	%	F	%	F	%	F	%
University A	3	4.6	3	4.6	7	10.8	8	12.3	10	15.4
University B	0	0.0	0	0.0	0	0.0	1	1.5	5	7.7
University C	1	1.5	1	1.5	0	0.0	4	6.2	0	0.0
University D	2	3.1	0	0.0	1	1.5	5	7.7	4	6.2
University E	0	0.0	0	0.0	0	0.0	3	4.6	3	4.6
University F	0	0.0	3	4.6	2	3.1	2	3.1	2	3.1
University G	0	0.0	5	7.7	6	9.2	8	12.3	8	12.3
University H	0	0.0	7	10.8	17	26.2	16	24.6	14	21.5
TOTAL	6	9.2	19	29.2	33	50.8	47	72.3	46	70.8
p-value	0.077		0.072		0.000**		0.047*		0.000**	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Registries use a variety of finding aids to access records upon request. Therefore, the records officers needed to comment on the findings aids available in their registries. Respondents to questionnaires were presented with a multi-response list of finding aids considered essential for recordkeeping and requested to tick against those available in their universities. As shown in Table 5.14, most universities surveyed use several finding aids in their registry. Among the five finding aids, subject registers 47(72.3%), subject lists 46(70.8%) and subject index 33(50.8%) were the most commonly used for all the institutions. University H had the highest ranking in using the three aids among the institutions. The availability of the subject list and index had a statistical significance difference at a 1% level ($p=0.000$). University B, C and E had no subject lists at all. Similarly, universities B, E, F, G and H did not have catalogs as finding aids.

Table 5. 15: Procedures and guidelines for maintaining records (n=79)

University	Written classification scheme		University-wide retention/disposition schedule		Metadata set in a registry		Uses a standardized file plan to create and file records	
	F	%	F	%	F	%	F	%
University A	5	6.3	3	3.8	2	2.5	4	5.1
University B	5	6.3	2	2.5	6	7.6	6	7.6
University C	10	12.7	6	7.6	6	7.6	10	12.7
University D	3	3.8	4	5.1	3	3.8	4	5.1
University E	3	3.8	1	1.3	3	3.8	3	3.8
University F	3	3.8	2	2.5	5	6.3	5	6.3
University G	1	1.3	3	3.8	2	2.5	4	5.1
University H	0	0.0	1	1.3	1	1.3	7	8.9
TOTAL	30	38.0	22	27.8	28	35.4	43	54.4
p-value	0.000**		0.133		0.000**		0.000**	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

For proper recordkeeping practices, institutions should lay down procedures and guidelines for protecting, processing and transmitting classified records. Table 5.15 shows that all the universities 43(54.4%) use standardized file plans to create and file records. The findings also show that 30(38.0%) indicated that their universities had written classification schemes. Even though a retention/disposition schedule is a significant tool that ensures that records such as digital records remain protected and reliable, Table 5.15 shows that 22(27.8%) respondents indicated that their universities had a university-wide retention/disposition schedule. Of all the features present in the management of records in the surveyed institutions, the university-wide retention/disposition schedule was widely available uniformly across the institutions. It was, therefore, not statistically significant at a 5% level (=0.133). All the other features of the management of records were statistically significant at a 1% level (p=0.000).

Table 5.16: Filing system used in the universities (n=79)

University	Organizational/ (departments/section names) based classification		Subject-based classification		Functional classification		Document type classification	
	F	%	F	%	F	%	F	%
University A	5	6.3	5	6.3	3	3.8	0	0.0
University B	0	0.0	1	1.3	1	1.3	4	5.1
University C	7	8.9	0	0.0	0	0.0	2	2.5
University D	5	6.3	5	6.3	2	2.5	1	1.3
University E	0	0.0	0	0.0	3	3.8	0	0.0
University F	2	2.5	2	2.5	0	0.0	3	3.8
University G	8	10.1	5	6.3	7	8.9	4	5.1
University H	13	16.5	0	0.0	7	8.9	0	0.0
TOTAL	40	50.6	18	22.8	23	29.1	14	17.7
p-value	0.091		0.004**		0.013*		0.001**	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Having classification schemes in an organization ensures a consistent arrangement of records and subsequently forms the foundation for effective retrieval, preservation and disposal of the records. Therefore, each university should have a classification scheme. Given this, participants were requested to state the types of filing systems their universities use. The findings indicated that organizational(departments/section names) based classification 40(50.6%), functional classification 23(29.1%) and subject-based classification 18(22.8%) were the most commonly used for all universities except for university C and university H. The participants were further questioned to indicate the state of the file classification system in their universities. The majority of the respondents, 52(65.8%), indicated that the file classification systems were easy to understand and 49(62.0%) cited that the file classification systems were easy to use. The findings in classification systems used across the institutions were also found to be different statistically across the institutions except for organizational-based classification, which had a probability greater than 5% ($p=0.091$).

5.4.1.5 The influence of demographic characteristics on recordkeeping practices

This was measured by examining the strength of relationships among the respective demographic variables and selected recordkeeping practices (using Phi and Cramer's V

coefficient values) indicated as 1-13. This indicates that age, experience, and education had strong relationships with some of the awareness statements (indicated by an asterisk).

Table 5. 17: The influence of demographic characteristics on recordkeeping practices

Statement	Sex		Age		Experience		Education		Expertise	
	phi	Cramers 'V	phi	Cramers 'V	phi	Cramers 'V	phi	Cramer s'V	phi	Crame rs' V
1	-0.135	0.135	0.053	0.053	0.406*	0.406*	0.174	0.174	0.182	0.182
2	-0.093	0.093	0.197	0.197	0.253	0.253	0.143	0.143	0.128	0.128
3	0.116	0.116	0.240	0.240	0.476*	0.476*	0.120	0.120	0.116	0.116
4	0.280	0.280	0.262	0.262	0.443*	0.314	0.161	0.114	0.143	0.101
5	-0.034	0.034	0.164	0.164	0.102	0.102	0.333	0.333	0.264	0.264
6	0.151	0.151	0.285	0.165	0.413*	0.238	0.500*	0.289	0.393	0.278
7	-0.152	0.152	0.212	0.212	0.169	0.169	0.144	0.144	0.217	0.217
8	-0.046	0.046	0.361	0.361	0.258	0.258	0.206	0.206	0.211	0.211
9	-0.098	0.098	0.070	0.070	0.378	0.378	0.235	0.235	0.141	0.141
10	-0.139	0.139	0.170	0.170	0.229	0.229	0.168	0.168	0.191	0.191
11	-0.262	0.262	0.138	0.138	0.237	0.237	0.157	0.157	0.177	0.177
12	0.256	0.256	0.566*	0.327	0.633*	0.316	0.429*	0.214	0.339	0.242
13	0.250	0.250	0.524*	0.303	0.540*	0.374	0.307	0.172	0.116	0.082

Note: * denotes that the pair of variables somehow has a strong relationship with those having phi and Cramer's V equal or above 5 having a strong relationship.

Key:

1= Awareness of the presence of semi-active records center

2= If the university has an archival repository

3= If the university has enough records space

4= If aware of methods used to deal with surplus records

5= If the university has specific procedures for identifying and protecting vital records

6= Aware of the place where vital records are stored

7= If the subject index is used to request records

8= If registry staff are used to request records

9= If the register is used to request records

10= If a telephone call is used to request records

11= If personal visits by the action officer are used to request records

12= If aware that finding aids are available in the records center

13= If aware of the filing system

The findings from Table 5.17 reveal a strong relationship between the age of the participants and awareness of filing systems and finding aids available in the records office. The findings also revealed that there is a strong relationship between participants' experience and awareness of the presence of semi-active records, awareness of whether the universities have enough storage space, awareness of where the vital records are stored and awareness of the filling systems as well as finding aids available in the universities. Also, findings revealed a strong relationship between participants' education and awareness of where vital records are stored and of finding aids available in universities.

5.4.1.6 Tracking of records

In recordkeeping, tracking the movement and using records is very important. Through recordkeeping systems, records officers can track records retrieval, monitor usage for system maintenance and manage an auditable trail of records transactions. To minimize the risk of losing records, universities must make arrangements to ensure the relocation process is properly conducted. Because of this, respondents were asked whether their universities track the use of records. The majority, 67(84.8%), indicated that their universities do track records use. Participants were further asked to state why they tracked the use of records, and the findings are illustrated in Table 5.18.

Table 5.18: Reasons for record tracking (n=67)

University	Knowing the location of records		Monitoring records use		Ensuring action is taken		Ensuring records return to the registry	
	F	%	F	%	F	%	F	%
University A	8	11.9	9	13.4	8	11.9	8	11.9
University B	5	7.5	3	4.5	4	6.0	5	7.5
University C	5	7.5	3	4.5	3	4.5	3	4.5
University D	5	7.5	4	6.0	4	6.0	4	6.0
University E	3	4.5	0	0.0	0	0.0	0	0.0
University F	5	7.5	2	3.0	5	7.5	5	7.5
University G	11	16.4	5	7.5	8	11.9	9	13.4
University H	20	29.9	15	22.4	20	29.9	19	28.4
TOTAL	62	78.5	41	61.2	52	77.6	53	79.1

Table 5.18 shows that the most indicated reason for tracking records was to know the location of records, while the least indicated reason was to monitor records use. Respondents were also asked to indicate the methods used to track records use. Therefore, respondents were provided with a multi-response list of tracking tools. The study's findings showed that 59(88.1%) respondents indicated that the file tracking register was the tool commonly used in their universities. Other tools cited include physical checking of files on shelves 40(59.7%); computer system 37(55.2%); file tracking cards 37(55.2%) and subject index 30(44.8%).

When asked if their universities had procedures to govern file tracking, 60(75.9%) respondents indicated they did. Respondents were requested to cite the aspects of file tracking and the procedures covered in their universities. Participants were provided with a multi-response list of aspects of file tracking and the procedures covered. Their responses are shown in Table 5.19.

Table 5. 19: Aspects of file tracking and the procedures covered in the universities (n=60)

University	Who has the authority to use files		Recording circulation of files		Movement of files among action officers		How long action officer may retain files		Responsibility for documentation	
	F	%	F	%	F	%	F	%	F	%
University A	8	13.3	8	13.3	10	16.7	9	15.0	6	10.0
University B	5	8.3	4	6.7	2	3.3	0	0.0	0	0.0
University C	3	5	2	3.3	4	6.7	2	3.3	2	3.3
University D	1	1.7	1	1.7	3	5.0	1	1.7	1	1.7
University E	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0
University F	2	3.3	2	3.3	5	8.3	2	3.3	5	8.3
University G	6	10	7	11.7	9	15.0	6	10.0	4	6.7
University H	15	25	16	26.7	16	26.7	16	26.7	12	20.0
TOTAL	40	66.7	40	66.7	50	83.3	36	60.0	30	50.0

The study's findings indicated that 50(83.3%) respondents cited the movement of files among action officers as the common procedure used in file tracking. Responsibility for documentation 30(50.0%) was the least common procedure used in record file tracking.

When asked if they experience any missing file issues as they perform their work, 63(79.7%) respondents indicated they experienced them. Respondents were further asked to state the problems attributed to missing files. A list of options was provided and respondents provided multiple responses, as illustrated in Table 5.20.

Table 5. 20: Problems attributed to missing files (n=63)

University	Poor recordkeeping		Inadequate recordkeeping staff		Poorly trained recordkeeping staff		Lack of proper storage equipment		Reliance on manual recordkeeping strategies	
	F	%	F	%	F	%	F	%	F	%
University A	4	6.3	1	1.6	7	11.1	9	14.3	9	14.3
University B	0	0.0	3	4.8	3	4.8	1	1.6	5	7.9
University C	3	4.8	2	3.2	3	4.8	1	1.6	2	3.2
University D	6	9.5	6	9.5	3	4.8	3	4.8	3	4.8
University E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
University F	0	0.0	3	4.8	3	4.8	0	0.0	0	0.0
University G	4	6.3	7	11.1	4	6.3	8	12.7	6	9.5
University H	16	25.4	16	25.4	16	25.4	18	28.6	11	17.5
TOTAL	33	52.3	38	60.4	39	61.8	40	63.5	36	57.1

The findings from Table 5.20 show that the most cited problem attributed to missing files was lack of proper storage equipment, while the second most cited problem was poorly trained recordkeeping staff. The least cited problem was poor recordkeeping.

In contrast, during interviews with participants in the eight universities confirmed that file tracking was not a problem. This sentiment was echoed by respondents in the following statements when they were asked if they experienced any problems in tracking files in their universities:

Participant in University A: Staff who are not authorized are not supposed to enter into the registry, and if they enter, they should have special permission and be closely followed up, and anyone who takes the file must register to be responsible for any misplacement of file.

Participant in University B: No, because we have several controls that ensure records are available to respective offices. There is maximum security because we have well-strengthened doors that prohibit people who are not supposed to enter the registry. We have access and track controls because before the record moves from one office to another, the record must be recorded. Once the records reach the action offers, the action offers should sign, declaring they have received the file. This is why there are very few cases of misplacement of files. And through our tracking system, it's very easy to access the records.

Participant in University H: We have some mechanisms and some restrictions. We do not allow unauthorized personnel to access records, the doors and windows are always closed, and we treat our materials regularly.

5.4.1.7 Recordkeeping programme

In any institution, the management of records should be a strategic activity, with a continuing programme that is effective across the institution. In an organization where there is no recordkeeping programme in place, researchers often reveal a variety of challenges, such as poorly organized records and difficulty retrieving records (Ngoepe and Keakopa 2011:148). Universities are accountable to the government and as a result, a recordkeeping programme must be in place to make sure that the university captures and keeps the evidence required for accountability purposes (Khumalo and Chigariro 2017:71). It is important to assess recordkeeping capacity so that to establish and address the potential weaknesses of a recordkeeping programme. Therefore, institutions such as public universities should implement strong recordkeeping programmes to guarantee effective recordkeeping for effective decision-making and control. Because of this, respondents were asked to indicate how they were made aware of the recordkeeping programme in their universities. Respondents were presented with a multi-response list of channels of communication. Their responses are shown in Table 5.21.

Table 5. 21: How records staff are made aware of the presence of the recordkeeping programme (n=46)

University	Circulars		Notices		Workshops		Orientation	
	F	%	F	%	F	%	F	%
University A	2	4.3	1	2.2	0	0.0	4	8.7
University B	0	0.0	0	0.0	0	0.0	5	10.9
University C	1	2.2	2	4.3	2	4.3	1	2.2
University D	4	8.7	2	4.3	5	10.9	4	8.7
University E	0	0.0	0	0.0	1	2.2	0	0.0
University F	5	10.9	2	4.3	0	0.0	2	4.3
University G	1	2.2	0	0.0	3	6.5	4	8.7
University H	0	0.0	1	2.2	0	0.0	4	8.7
TOTAL	13	28.3	8	17.4	11	23.9	24	52.2

This result can be explained as follows. The researcher established that records officers were aware of the recordkeeping programme's presence. The most cited way to inform the records officers about the programme's presence was orientation, accounting for 24(52.2%) respondents. Circulars were the second most used, 13(28.3%). The least cited method was notice 8(17.4%).

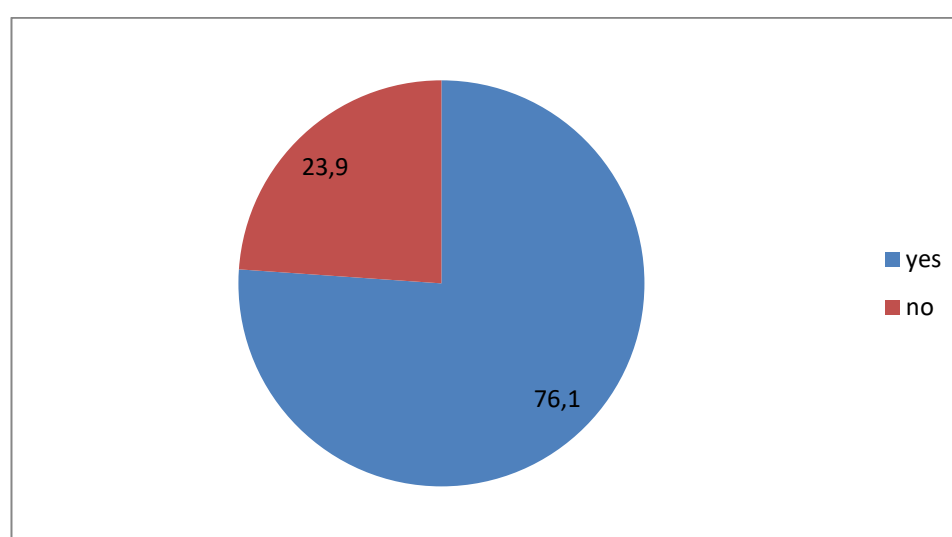


Figure 5. 4: University's recordkeeping practices (n=46)

The 46(58.2%) were further asked to indicate if the present recordkeeping programme was consistent with their university's recordkeeping practices 35(76.1%) gave a 'yes' response while the rest recorded a 'no' response, as shown in Figure 5.4.

5.4.1.8 Records appraisal

Records appraisal evaluates records to determine which ones must be kept and which must be destroyed (Kamatula 2013:48; Ngoepe and Nkwe 2018:131). Institutions such as universities should work following the established standards to ensure that the appraisal aspect gives instructions on which records should be destroyed and which are considered to have sufficient value to be preserved. Questions 61 to 67 were asked to produce data relating to records appraisal and retention schedules. When asked if records appraisal was conducted in their universities, Figure 5.4 shows that 33(41.8%) gave a 'yes' response while 46(58.2%) recorded a 'no' response. Those who gave a 'yes' response were asked to state the procedures their universities used to do records appraisal. A list of options was provided and the multiple responses were that 29(87.8%) respondents cited a retention schedule as a tool used to appraise records, while 12(36.4%) indicated standing instructions.

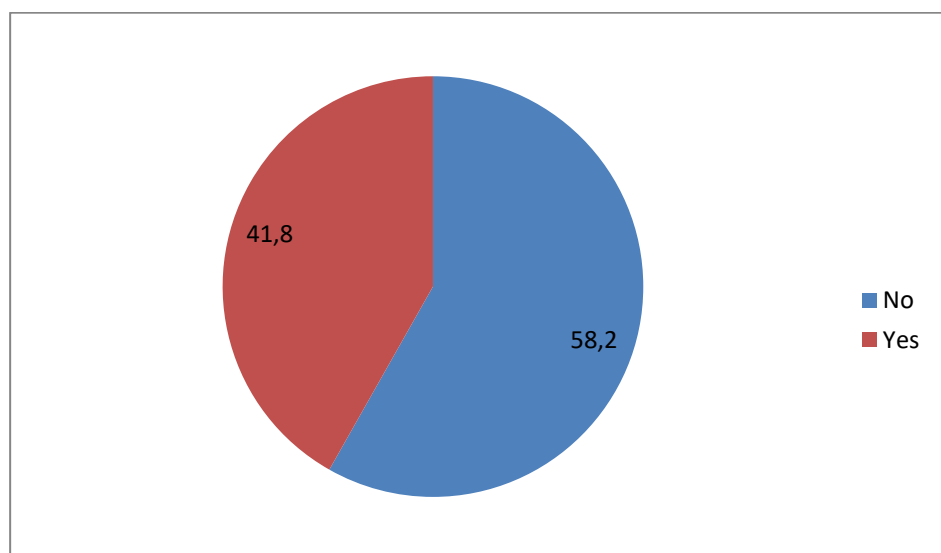


Figure 5. 5: Conduct of records appraisal (n=79)

Records disposition is an action taken concerning records due to their evaluation and the expiration of their retention period (Kamatula 2013:61). The action of disposal takes place as specified in a disposal schedule. There are two basic disposal options: destroy or transfer to archives. Records should be destroyed based on the appraisal if they have no continuing secondary value and records should be transferred to archives for archival preservation at the expiration of their primary value if they have continuing secondary value (Kamatula 2013:61). When asked if their universities have a records disposition programme, respondents' views were as shown in Figure 5.6.

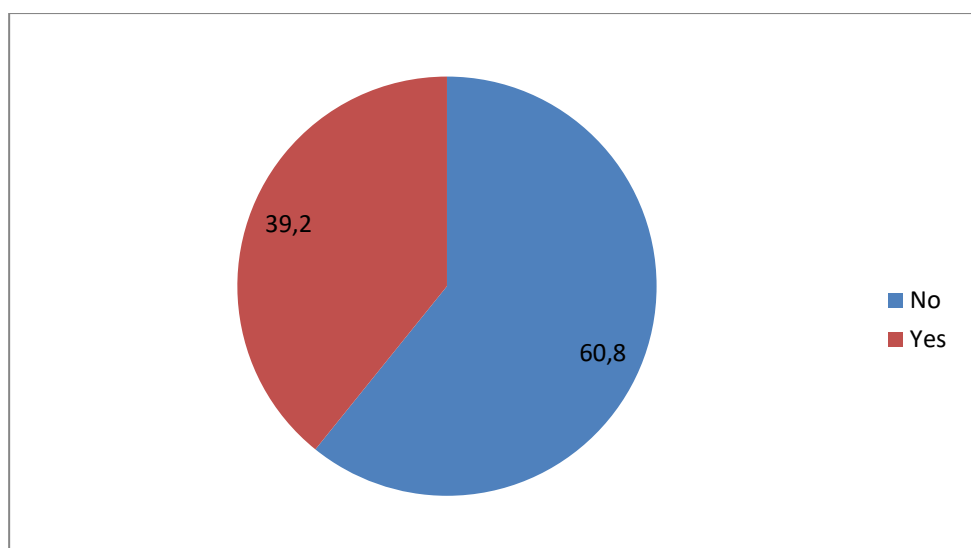


Figure 5. 6: Records disposition programme (n=79)

Figure 5.6 shows that 31 (39.2%) indicated 'yes,' while 48 (60.8%) said 'no.' The respondents were also asked to indicate what guided their disposition of university records. A list of options was provided, and the multiple responses are shown in Table 5.22.

Table 5.22: Disposition of records (n=79)

University	Retention schedule		University policy		Records and Archives Management Act, 2002	
	F	%	F	%	F	%
University A	0	0.0	2	2.5	1	1.3
University B	2	2.5	0	0.0	0	0.0
University C	0	0.0	6	7.6	1	1.3
University D	3	3.8	0	0.0	3	3.8
University E	3	3.8	2	2.5	0	0.0
University F	2	2.5	3	3.8	5	6.3
University G	4	5.1	7	8.9	8	10.1
University H	4	5.1	4	5.1	3	3.8
TOTAL	18	22.8	24	30.4	21	26.6

Table 5.22 shows that the most commonly cited guideline used in guiding the universities for records disposition was the University policy 24(30.4%). Although the records retention schedule would normally guide records disposition, the findings show that 18(22.8%) retention schedule was the least. When asked if they prepare a certificate of disposition once records are destroyed, Figure 5.7 shows that 19(24.1%) said 'yes' while 60(75.9%) indicated 'no.'

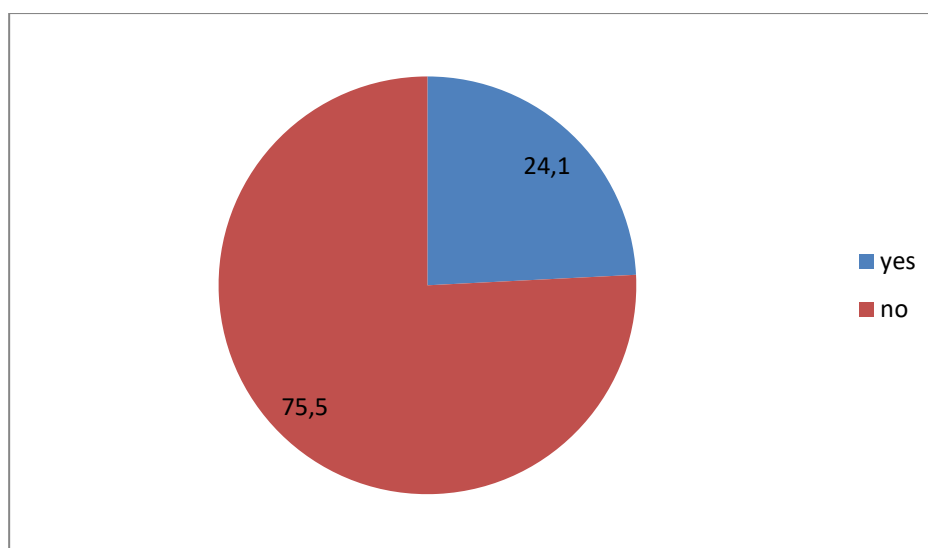


Figure 5. 7: Preparation of a certificate of disposition of records

The 19(24.1%) respondents who indicated ‘yes’ were asked to indicate the information in the certificate. A list of information options was provided and respondents provided multiple responses, as shown in Table 5.23.

Table 5. 23: Information included in the records disposition certificate (n=19)

University	Record group		Records series		Destruction method		Date of destruction		Name of the officer carrying out the destruction		Name of the officer witnessing the destruction	
	F	%	F	%	F	%	F	%	F	%	F	%
University A	0	0.0	2	10.5	0	0.0	1	5.3	1	5.3	0	0.0
University B	0	0.0	1	5.3	1	5.3	1	5.3	1	5.3	1	5.3
University C	1	5.3	0	0.0	1	5.3	0	0.0	0	0.0	0	0.0
University D	2	10.5	2	10.5	0	0.0	0	0.0	0	0.0	0	0.0
University E	3	15.8	3	15.8	0	0.0	3	15.8	3	15.8	3	15.8
University F	2	10.5	2	10.5	5	26.3	5	26.3	5	26.3	5	26.3
University G	3	15.8	3	15.8	3	15.8	4	21.1	4	21.1	3	15.8
University H	1	5.3	1	5.3	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	11	57.9	13	68.4	10	52.6	14	73.7	14	73.7	12	63.2

The findings in Table 5.23 show that all the important information was recorded in the records disposition certificate. The date of destruction and the name of the officer carrying out the

destruction were cited by the majority of respondents 14(73.7%) as being included in the records disposition certificate. When asked to reveal the methods used to destroy confidential records, the following are the multiple responses, as depicted in Table 5.24.

Table 5. 24: Methods used for destroying confidential records (n=79)

University	Shredding		Destruction using chemicals		Pulping		Burning	
	F	%	F	%	F	%	F	%
University A	1	1.3	0	0.0	0	0.0	4	5.1
University B	0	0.0	0	0.0	0	0.0	1	1.3
University C	6	7.6	0	0.0	0	0.0	4	5.1
University D	6	7.6	1	1.3	0	0.0	3	3.8
University E	2	2.5	0	0.0	0	0.0	3	3.8
University F	4	5.1	0	0.0	0	0.0	2	2.5
University G	7	8.9	0	0.0	1	1.3	8	10.1
University H	19	24.1	2	2.5	2	2.5	9	11.4
TOTAL	45	57.0	3	3.8	3	3.8	34	43.0

Table 5.24 shows that shredding is the method most commonly cited for destroying confidential records, accounting for 45(57.0%) respondents. The least common methods were destruction using chemicals and pulping, with three (3.8%).

5.4.1.8.1 Appraisal of digital records

Maintaining records for as long as rules and regulations require is vital. Institutions should work following the established standards to ensure that the appraisal aspect gives instructions on which records should be destroyed and which are considered to have sufficient value to be preserved. Respondents were asked to state if they have procedures for appraising digital records. Figure 5.8 shows that 25(75.8%) respondents recorded a 'yes' response, while 8(24.2%).

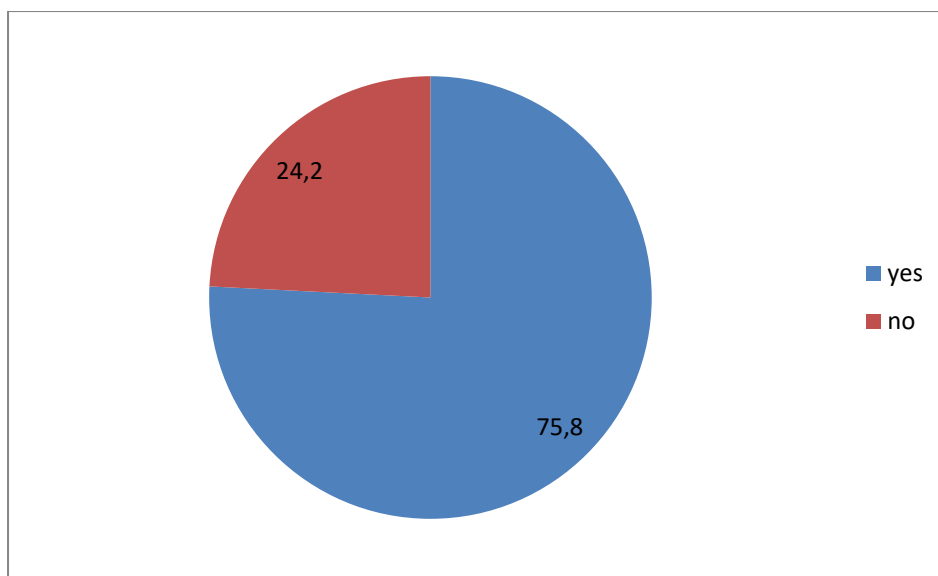


Figure 5. 8: Procedures for appraising digital records (n=33)

The 33 respondents were asked if they had procedures for destroying digital records. Figure 5.9 shows that thirty (90.9%) said they had procedures for destroying digital records.

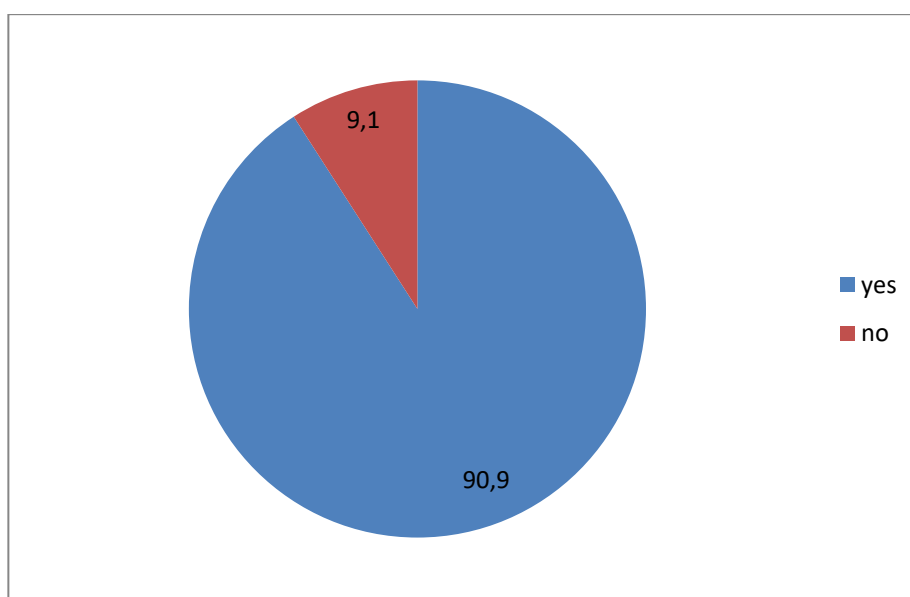


Figure 5. 9: Procedures for destroying digital records (n=33)

The 30 (90.9%) who replied that they had procedures for destroying digital records were asked to name the procedures they use to dispose of digital records. Their multiple responses were as follows: twenty-two (66.7%) cited deleting as the procedure used to dispose of digital records, 16 (48.5%) cited reformatting procedure, 3(9.1%) recorded rewriting disk procedures, while two (6.1%) indicated crushing disk as the procedure used to dispose of digital records.

5.4.1.9 Control of temperature, light and relative humidity in the storage area

When ensuring that there is continuous availability of records and long-term accessibility to records, records staff should make sure that records storage is properly maintained. Therefore, control of environmental conditions is important to recordkeeping and preservation. The most significant factors affecting the physical quality and stability of records material are fluctuating or excessively high or low temperatures and, relative humidity and excessive exposure to light. The study sought respondents' views regarding controlling temperature and humidity in the storage area. When asked if they controlled temperature and humidity in the storage area, Figure 5.10 shows that thirty-nine (49.4%) recorded a 'yes' response while 40(50.6%) did not control temperature and humidity in the storage area.

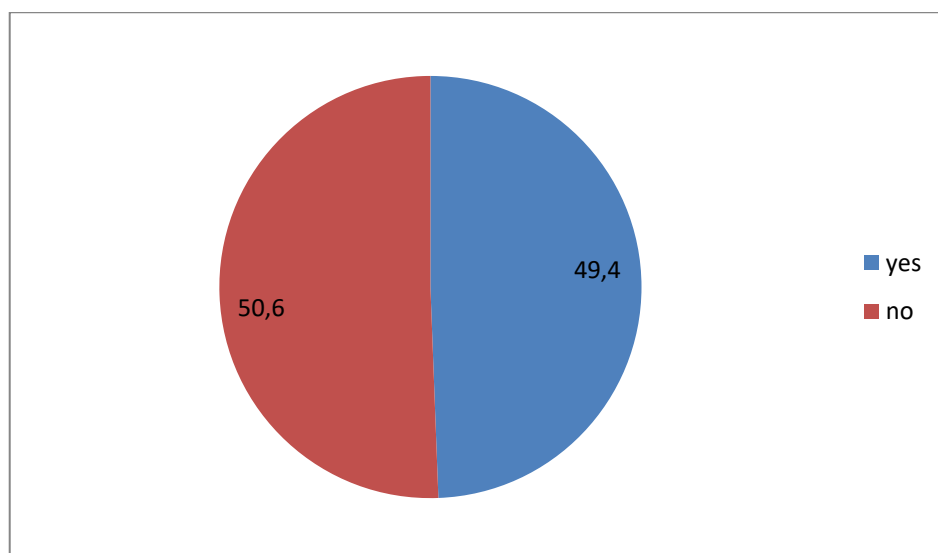


Figure 5. 10: Control of temperature and humidity in the storage area (n=79)

The 39(49.4%) respondents who said that they controlled temperature and humidity in the storage area were then asked to reveal the methods they used to control temperature and humidity in the record storage area. Their responses are given in Table 5.25.

Table 5. 25: Methods used to control temperature and relative humidity in the records storage area (n=39)

University	Fans		Use of dehydrating agents		Use of dehumidifier		Air conditioning	
	F	%	F	%	F	%	F	%
University A	8	10.1	2	2.5	0	0.0	5	6.3
University B	0	0.0	0	0.0	0	0.0	0	0.0
University C	1	1.3	1	1.3	1	1.3	5	6.3
University D	0	0.0	0	0.0	0	0.0	4	5.1
University E	0	0.0	0	0.0	0	0.0	3	3.8
University F	3	3.8	2	2.5	0	0.0	5	6.3
University G	2	2.5	0	0.0	0	0.0	11	13.9
University H	7	8.9	0	0.0	0	0.0	8	10.1
TOTAL	21	26.6	5	6.3	1	1.3	41	51.9
p-value	0.001**		0.027*		0.510*		0.007**	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.25 shows that air conditioning was the most cited method used to control temperature and relative humidity in the records storage area, accounting for 41(51.9%) respondents. One (1.3%) of the respondents cited using a dehumidifier to control temperature and relative humidity. University A, University C and University F used dehydrating agents, whereas University C reported using dehumidifiers. Respondents were further asked to reveal if their universities control the light in the records storage. Twenty-nine (36.7%) recorded ‘yes’ while 50(53.3%) indicated ‘no’. Those respondents who indicated ‘yes’ were asked to explain how their university controlled light in the storage area, but none responded. Dehumidifiers were not widely used across the universities and had no significant difference at a 5% level (p=0.510).

5.4.1.10 Digital recordkeeping

The records continuum model, one of the underpinning models for the current study, provides an articulate and consistent regime for maintaining records in all formats, from creation to disposal. Section 3.3.1 of Chapter Three of this study discussed information technology and recordkeeping systems. Guided by the records continuum model, the current study investigated

how digital records were identified and managed in the selected Tanzanian public universities. When respondents were asked to state if they maintain digital records, Figure 5.10 shows that 33(41.8%) gave a 'yes' response while 46(58.2%) recorded 'no.'

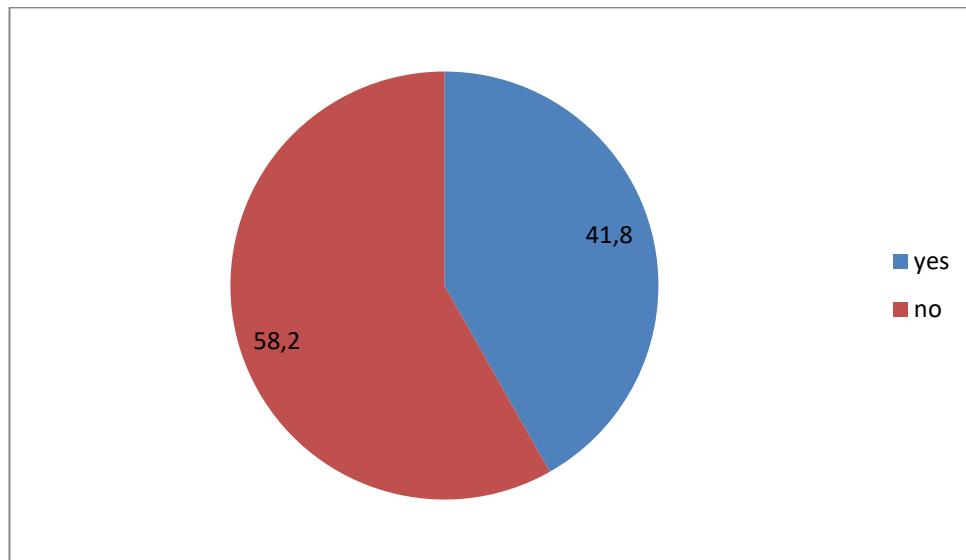


Figure 5. 11: Management of digital records (n=79)

The 33(41.8%) respondents were further asked if digital recordkeeping is part of their job description. Of 33 respondents, 31(93.9%) cited that digital recordkeeping was part of their job description. Many records professionals are unaware of digital records' storage, security, retrieval and dissemination. For instance, in Tanzania, Kamatula (2018:135) revealed that training on digital records was inadequate due to insufficient curriculum for the recordkeeping programme, especially on modules on the management of digital which was reported to be more theoretical than practical. This could be due to most public organizations having insufficient funds to support recordkeeping programmes and staff training on recordkeeping. In the same way, Kamatula (2018:135) indicated that an insufficient budget allocated to managing records is a challenge to effectively implementing digital records in Tanzania. The thirty-three respondents were then asked if they received any training in digital recordkeeping. Figure 5.12 shows that 27(81.8%) respondents cited 'yes' while 6(18.2%) recorded 'no.'

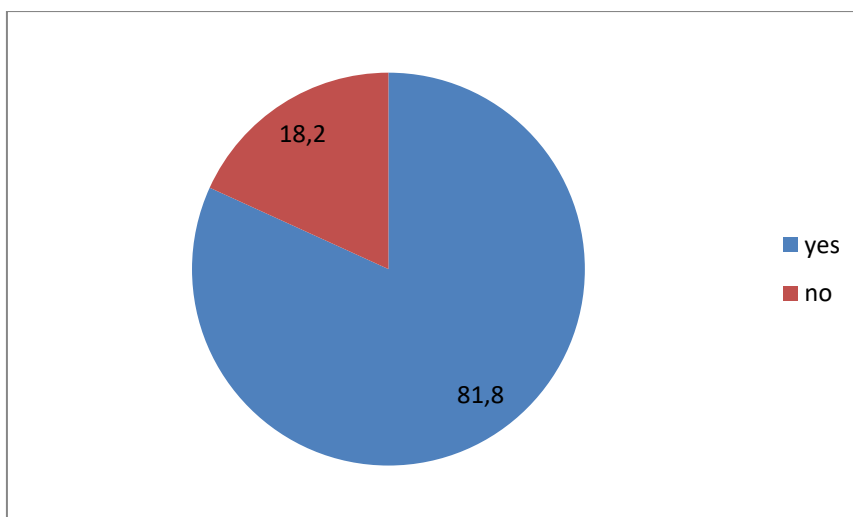


Figure 5. 12: Training on digital recordkeeping (n=33)

The impact of weak recordkeeping systems can increase significantly in the digital environment, where a growing number of records are electronically created and held. Many higher learning institutions nowadays use specific software applications for their effective recordkeeping. Electronic Document/Records Management (EDRMS) is the most popular application system for maintaining digital records. When respondents were asked to state if their universities have an Electronic Document/Records Management (EDRM) system, out of the 33 respondents, 26(78.8%) gave a 'yes' response, while the rest said 'no.' The results are presented in Figure 5.13.

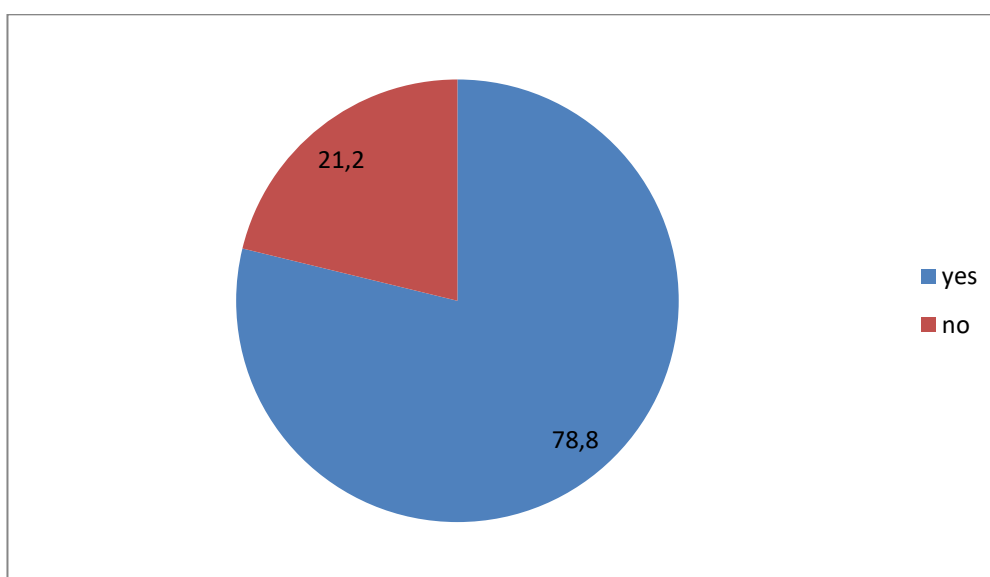


Figure 5. 13: Possession of Electronic Document/Records Management system (n=33)

Those who said that their universities had an Electronic Document/Records Management (EDRM) system were asked to state the reasons for choosing the electronic recordkeeping system used in their universities. Their multiple responses are given in Table 5.26.

Table 5. 26: Reasons for the choice of the digital recordkeeping system used (n=26)

University	Cost-benefit		Requirement by top management officials		Easy to use		Based on performance comparison		Compliant with a specific standard	
	F	%	F	%	F	%	F	%	F	%
University A	2	7.7	1	3.4	2	7.7	1	3.4	1	3.4
University B	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
University C	4	15.4	0	0.0	3	11.5	0	0.0	0	0.0
University D	3	11.5	1	3.4	2	7.7	1	3.4	2	7.7
University E	0	0.0	0	0.0	1	3.4	1	3.4	0	0.0
University F	0	0.0	2	7.7	3	11.5	0	0.0	0	0.0
University G	1	3.4	1	3.4	7	29.9	0	0.0	1	3.4
University H	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	10	38.5	5	19.2	18	69.2	3	11.5	4	15.4
p-value	0.040**		0.078		0.012**		0.117		0.298	

Note: **Statistically significant at 1% level of significance

Implementing recordkeeping systems in the office is challenging because the adoption and use of technology depend on several factors. Table 5.26 shows that the majority 18(69.2%) cited easy to use-as the reason for choosing the digital system used in their universities. Based on performance comparison, it was the least reason, accounting for 3(11.5%). The 26 respondents were asked how often the digital recordkeeping system migrated to new software and hardware. Out of the 26 respondents, 6(23.1%) cited every two years, 4(15.4%) indicated every one year, while 3(11.5%) said more often than once. Cost-benefit and easiness of use had a strong statistical relationship across the universities. University B and H did not report using any of these two criteria.

The need for digital records was also supported by the participant in University B, who had this to say:

Those digital records are useful because we need to have records that are easily accessed, so now if you have too many records, which are not even used in a business

transaction, then you're not likely to have a well-arranged document that can be easily accessed but also we need to make sure that the records are kept in a place where they are required to be kept for example; the records which are used frequently are supposed to be in the registry and those records which are not used frequently they supposed to be kept somewhere else (Records Centre) and those are not needed for the business transaction then supposed to be in an archival repository. All these have been made simple with migration to digital platforms.

If recordkeeping is done using required guidelines and standards, it facilitates continuity, evaluation of services of an institution and preservation of institutions' privacy. Respondents were asked to state the storage device their universities used to provide backup for their digital records. Their multiple responses are given in Table 5.27.

Table 5. 27: Storage device used to provide backup for digital records (n=33)

University	External hard drives		Magnetic tapes		Optical disks		Flash memory	
	F	%	F	%	F	%	F	%
University A	1	3.0	0	0.0	0	0.0	1	3.0
University B	5	15.2	0	0.0	0	0.0	5	15.2
University C	1	3.0	0	0.0	0	0.0	6	18.2
University D	2	6.1	0	0.0	0	0.0	0	0.0
University E	0	0.0	2	6.1	0	0.0	0	0.0
University F	5	15.2	0	0.0	2	6.1	2	6.1
University G	4	12.1	1	3.0	1	3.0	4	12.1
University H	0	0.0	0	0.0	0	0.0	0	0.0
Total	18	54.5	3	9.1	3	9.1	18	54.5
p-value	0.000**		0.000**		0.004**		0.000**	

Note: ** Statistically significant at 1% level of significance.

Results from Table 5.27 show that most of the respondents, 18(54.5%), indicated external hard drives and flash memory as storage devices to provide backup for electronic records. Magnetic tapes and optical disks scored the least 3(9.1%). Magnetic tapes and optical disks were reportedly used at (University E and University G) and (University F and University G), respectively. University H did not report using any device to back up digital records. University D reported using an external hard disk for backup. There is an obvious high variation across the universities, making them differ statistically at a 1% significance level.

Further, the study sought to establish how often the respondents backed up the digital records. The findings revealed that a backup of the digital records was being done. The 33 respondents were asked to specify how often the backup of digital records was being done and their responses indicated that they backup the digital records daily 16(48.5%), 6(18.2%) recorded weekly, while 4(12.1%) and 2(6.1%) cited monthly and quarterly respectively.

Choosing a stable file format is one of the essential preservation considerations for managing digital records (Thurston 2015:33). Therefore, institutions should use file formats that are popular on the World Wide Web in the hope that the file formats will survive in the change of technology. For instance, Adobe PDF is one of the file formats that keep all of the fonts, formatting, colors and graphics of any source of document, irrespective of the application and the platform used to generate it.

Table 5. 28: Formats used to create digital records (n=33)

University	Word processing format		Image format		PDF	
	F	%	F	%	F	%
University A	0	0.0	0	0.0	1	3.0
University B	6	18.2	0	0.0	4	12.1
University C	5	15.2	0	0.0	1	3.0
University D	4	12.1	0	0.0	0	0.0
University E	3	9.1	0	0.0	0	0.0
University F	2	6.1	2	6.1	5	15.2
University G	8	24.2	0	0.0	3	9.1
University H	0	0.0	0	0.0	0	0.0
Total	28	84.8	2	6.1	14	42.4
p-value	0.000**		0.000**		0.000**	

Note: ** Statistically significant at 1% level of significance

When asked to state the file formats that are used when digital records are created, results in Table 5.28 indicate that two formats are used prominently across the institutions, these are word processing 28(84.8%) and PDF 14(42.4%) except for University A and University H cited non-response. Image format was reportedly used at University F 2(6.1%). There is an obvious high variation across the universities, making them differ statistically at a 1% significance level.

When respondents were asked to state the strategies used to ensure the long-term preservation of digital records, multiple responses from those 33(41.8%) who said they manage digital records are depicted in Table 5.29.

Table 5. 29: Strategies used for long-term preservation of digital records (n=33)

University	Migration		Emulation		Printing to paper	
	F	%	F	%	F	%
University A	0	0.0	0	0.0	1	3.0
University B	0	0.0	0	0.0	5	15.2
University C	1	3.0	0	0.0	6	18.2
University D	1	3.0	0	0.0	2	6.1
University E	3	9.1	0	0.0	0	0.0
University F	5	15.2	2	6.1	2	6.1
University G	4	12.1	4	12.1	4	12.1
University H	0	0.0	0	0.0	0	0.0
Total	14	42.4	6	18.2	20	60.6
p-value	0.000**		0.003**		0.001**	

Note: ** Statistically significant at 1% level of significance

From the results in Table 5.29, migration and printing to paper are the major strategies used to preserve digital records, accounting for 14(42.4%) and 20(60.6%), respectively. None of the respondents from University H cited any strategy. There is a high variation across the universities, making them differ statistically at a 1% significance level.

Security and confidentiality of confidential records should be of the greatest importance to an organization. Therefore, every records staff should understand the basics of identifying and handling confidential records. The researcher asked the respondents how they stored confidential records. A list of options was provided. Table 5.30 represents their multiple responses.

Table 5. 30: How confidential records are stored (n=79)

University	Electronically regardless of sensitivity		Prohibited from being stored		In a separate repository		In the same storage as other normal records	
	F	%	F	%	F	%	F	%
University A	0	0.0	1	1.3	6	7.6	1	1.3
University B	5	6.3	1	1.3	0	0.0	0	0.0
University C	5	6.3	0	0.0	0	0.0	1	1.3
University D	2	2.5	3	3.8	1	1.3	0	0.0
University E	0	0.0	1	1.3	0	0.0	2	2.5
University F	3	3.8	0	0.0	2	2.5	0	0.0
University G	5	6.3	0	0.0	7	8.9	0	0.0
University H	1	1.3	1	1.3	1	1.3	12	15.2
Total	21	26.6	7	8.9	17	21.5	16	20.3

The most cited criterion was electronically regardless of sensitivity 21(26.6%), while the least was prohibited from being stored 7(8.9%). When asked to reveal how records are kept in their universities, 39(49.4%) respondents cited exclusively in paper format, 16(20.3%) in the digital format, while 22(27.8%) indicated both in paper and digital format. Digital records are either born-digital or converted into digital format from analogy formats. Given this, the respondents were asked whether email was considered a record. When asked if they consider email a record, Figure 5.14 shows that 32(40.5%) said ‘no’ while 47(59.5%) recorded ‘yes.’

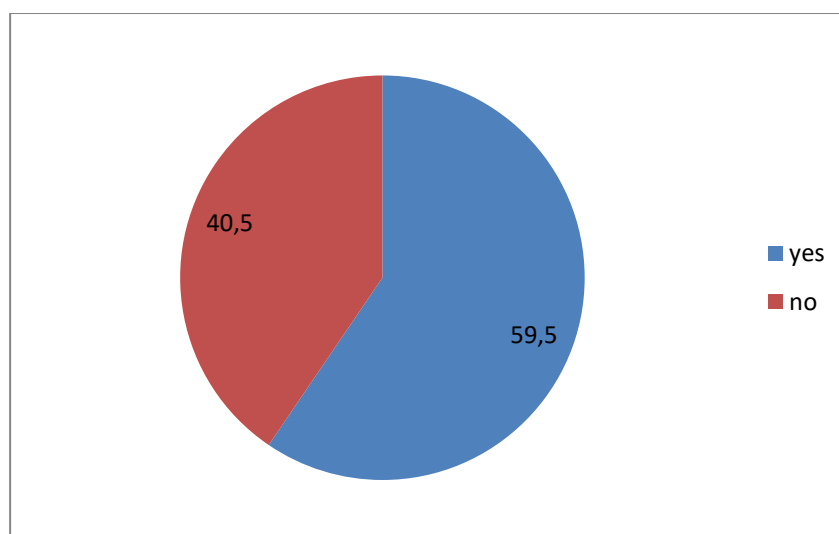


Figure 5. 14: E-mail as a record (n=79)

5.5.2 Skills and training needed in recordkeeping practices

The second research question sought to establish skills and training needed in recordkeeping practice in Tanzanian public universities. The findings for this research question were derived from questions 84-89 of the questionnaires for records officers. The themes of this research question are:

- i. Level of professional training in recordkeeping; and
- ii. Recordkeeping professional associations.

5.5.2.1: Level of professional training in recordkeeping

Records personnel are the custodians of records created by their institutions; therefore, they must have the right qualifications and competencies to maintain records. Lack of recordkeeping staff and appropriate recordkeeping training is one factor that hinders proper recordkeeping practices (Akotia and Balasu 2017:5). Therefore, the study sought to find out from respondents their level of professional training in recordkeeping. The findings reveal that the majority of the respondents, 48(62.0%), cited a diploma as the level of professional training in recordkeeping, 21(26.6%) said a certificate, while nine (11.4%) cited an undergraduate degree and postgraduate as the level of professional training in recordkeeping.

It is a requirement for recordkeeping that the records officer achieves a certain level of expertise in recordkeeping. It is generally accepted that education plays an essential role in updating knowledge and skills and it is an important feature in the lifelong development of skills and expertise (Mosweu and Rekemance 2020:110). When asked if they did consider themselves sufficiently skilled in maintaining records, 38(48.1%) recorded a 'yes' response, while 41(51.9%) cited a 'no' response. This means that over half of respondents consider themselves not sufficiently skilled in maintaining records. The findings are depicted in Figure 5.15.

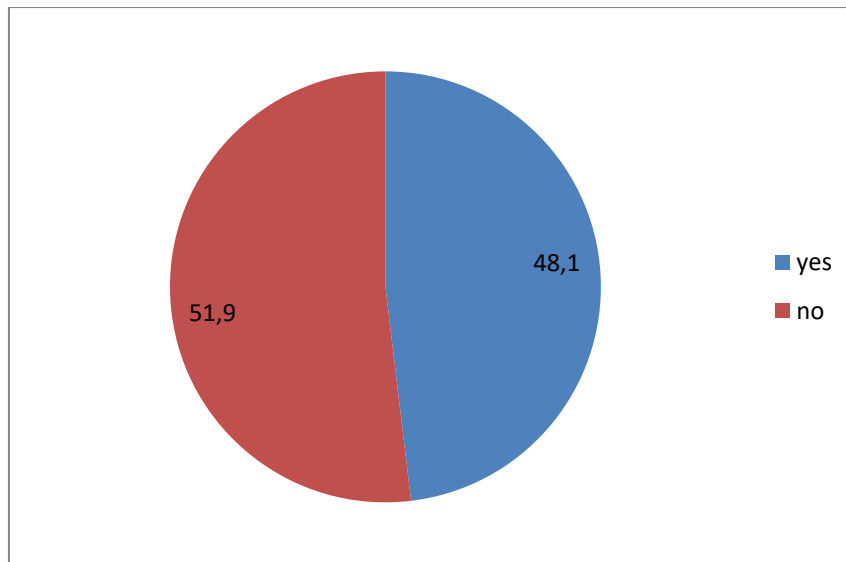


Figure 5. 15: Respondents' skills and competencies in recordkeeping (n=79)

The 38(48.1%) respondents who considered themselves sufficiently skilled in maintaining records were asked to indicate how often their universities trained them. Ten (26.3%) of the respondents cited every two years, while 7(18.4.2%) recorded more than once a year. Seven (18.4%) indicated every three years, the rest stated that they didn't know.

Records officers should have the required skills to perform their functions optimally. Specific skills and broad knowledge are required to carry out recordkeeping. Consequently, in an organization that prioritizes recordkeeping, there should be an ongoing training programme to provide its staff with adequate skills and knowledge (Rotich, Mathangani and Nzioka 2017:137). When asked if their universities organize training programmes and courses on recordkeeping for records staff, Figure 5.16 shows that twenty-four (30.4%) cited a 'yes' response while 55(69.6%) said 'no.'

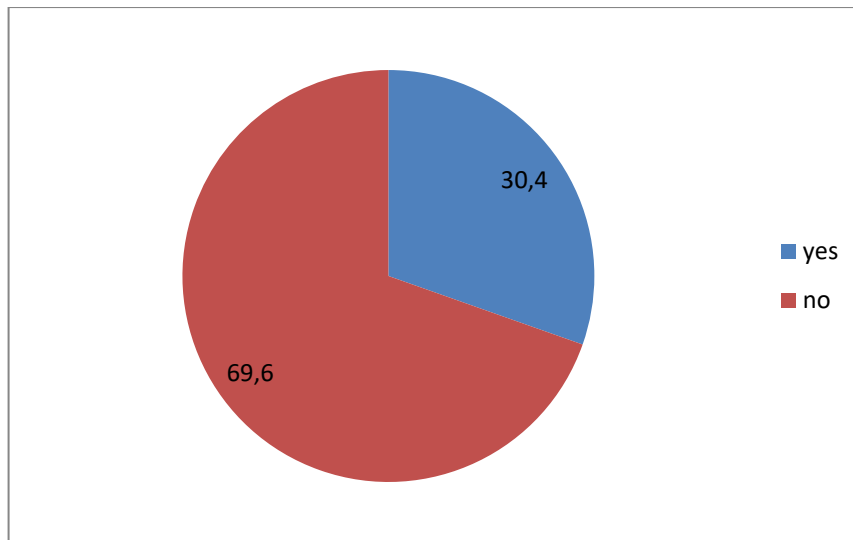


Figure 5. 16: Training programmes and courses on recordkeeping (n=79)

Further, respondents were asked if they had attended any recordkeeping courses their universities ran in the last five years. Despite the majority not being sufficiently skilled in maintaining records, Figure 5.17 shows that 65(82.3%) informed that they did not attend any course run by their universities, while the rest recorded a ‘yes’ response.

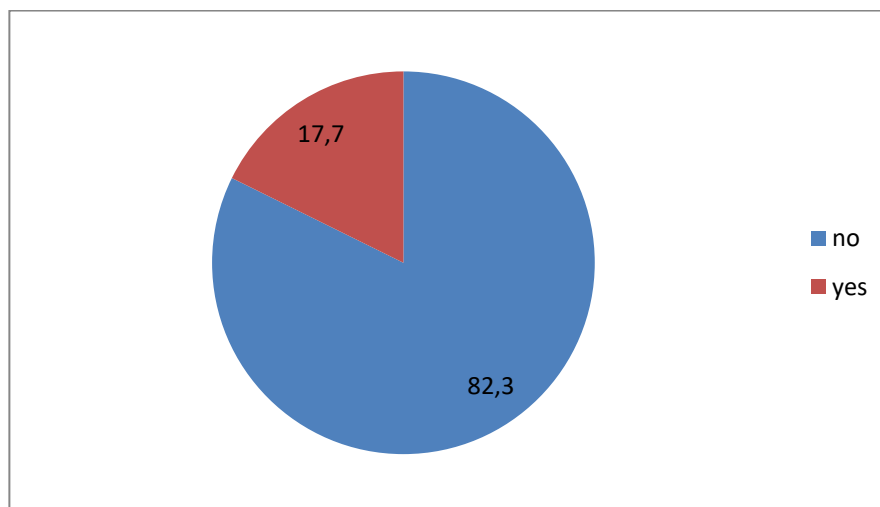


Figure 5. 17: Course attendance by recordkeeping staff (n=79)

Follow-up interviews with participants concerning training in recordkeeping yielded the following feedback:

Participant in University A: Training opportunities for records staff are not regular. This is because we do not have training needs assessment programmes for records staff.

Participant in University C: Staff training is not done often since insufficient funds are allocated.

Participant in University E: We struggle to ensure staff attend training, workshops, conferences, and in-house training. For example, last year, we provided an opportunity for two staff members to attend various conferences regarding record management (the conference called Trump) and other training organized with Tanzania record management colleges.

Participant in University G: Training for our recordkeeping staff does not occur often enough. Therefore, we need support from our top management.

Similarly, on training on recordkeeping staff, question 134 required respondents to provide additional information that would improve current university recordkeeping practices. Most respondents recommended that top management establish a records training program for the recordkeeping staff.

Regarding recordkeeping training needs, respondents were asked to indicate the areas they thought needed the greatest additional training. Multiple responses are shown in Table 5.31.

Table 5. 31: Training needs on recordkeeping (n=79)

Training need	Frequency	Percent
Management of paper records in their entire continuum	22	27.8
Management of digital records in their entire continuum	51	64.6
Computer skills	39	49.4
Computer application in recordkeeping	35	44.3

The results show that the most cited training need was the management of digital records in their entire continuum 51(64.6%), while the least cited training need was the management of paper records in their entire continuum, accounting for 22(27.8%).

During interviews with participants, participants were asked if their university had training needs assessment programmes for recordkeeping staff. Some of the participants had this to say:

Participant in University A: No, but staff must indicate their training needs on OPRAS forms each year.

Participant in University C: No, but it's in progress.

5.5.2.2 Recordkeeping professional associations

One objective of a professional association is to promote best practices and adherence to high standards in professional ethics and competence through professional registration. Therefore, records officers must be members of at least one local association and one of any international professional associations. These associations help set national competency standards in the management of records. In line with this, records officers were first asked if they were members of any local or international professional association. The findings are presented in Table 5.32.

Table 5. 32: Membership in the international and local recordkeeping professional associations (n=79)

Association	Frequency	Percent
International Council on Archives (ICA)	6	7.6
ARMA International	3	3.8
A member of ESARBICA	2	2.5
Not a member of any of the international association	54	68.4
TRAMP as the local association	49	62.0
TARESO as the local association	5	6.3
Not a member of a local association	26	32.9

Table 5.32 above shows that the majority, 54(68.4%) of the respondents, indicated that they were not members of any international professional association, while 26(32.9%) indicated that they were not members of any local association. Of those who indicated they were members of a local association, 49(62.0%) of the respondents indicated TRAMP, while 5(6.3%) indicated TARESO. And for those who indicated that they were members of an international association, 6(7.6%) indicated being members of the International Council on Archives and 3(3.8%) indicated as members of ARMA International. Two (2.5%) indicated that they were members of ESARBICA.

5.5.3 Policy, legal and regulatory framework

The Information Governance Maturity Model (IGMM) is regarded as an accountability framework that includes the roles, standards, metrics and processes that ensure the efficient and effective use of information in making sure that institutions achieve their objectives (Proenca, Vieira and Borbinha 2017:128). This model incorporates five levels of organizational information governance. Level three of the model outlines the essential requirements to meet the institution's regulatory and legal requirements. In the current study context, legal and regulatory frameworks constituted recordkeeping legislation, standards, policies and procedures. Therefore, the study sought to establish the effectiveness of the identified recordkeeping legislation in public universities. The third research question sought to establish the role of legal and regulatory frameworks governing recordkeeping in Tanzanian public universities. The findings for this research question were derived from questions 90 to 108 of the questionnaire. The themes under this research question included the following:

- i. Awareness of legislative and regulatory frameworks for recordkeeping;
- ii. Recordkeeping policy;
- iii. Aspects covered by the recordkeeping policy;
- iv. The need for a registry procedures manual;
- v. Internal disciplinary actions faced when violating issues concerning recordkeeping issues; and
- vi. Recordkeeping audit.

5.5.3.1 Awareness of legislative and regulatory frameworks for recordkeeping

To begin with, the study sought to determine whether respondents have a recordkeeping policy. Figure 5.18 shows that 52(65.8%) recorded a 'yes' response while 27(34.2%) cited a 'no'.

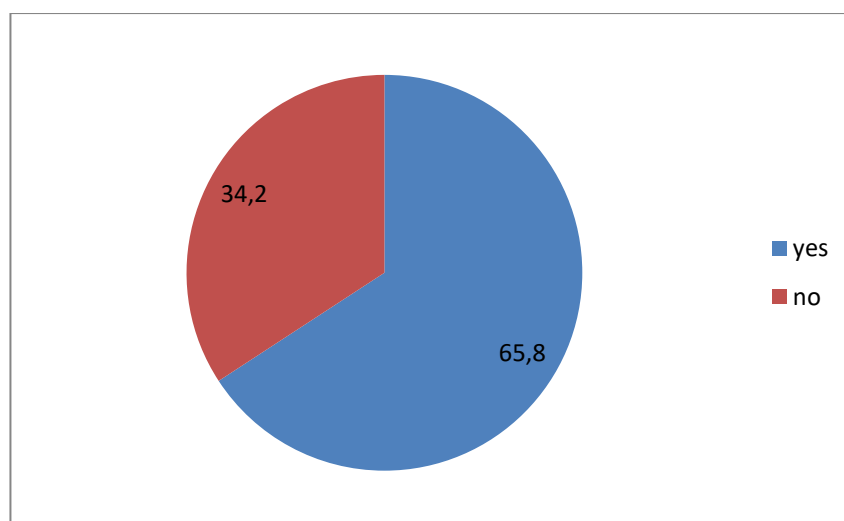


Figure 5. 18: Presence of recordkeeping policy (n=79)

The 52(65.8%) who cited that their universities have a recordkeeping policy in place were further asked to state the aspects covered in the recordkeeping policy. Their multiple responses varied, as shown in Table 5.33.

Table 5. 33: Aspects covered by the recordkeeping policy (n=52)

Item covered	Frequency	Percent	P value
Provides guidelines on how records should be managed	49	94.2	0.073
Management of digital records	29	55.8	0.026*
Clearly outlines the responsibilities of each recordkeeping staff	35	66.3	0.044*
Allows for penalties for staff who do not comply with policy	23	44.2	0.073
Makes references to recordkeeping standards	31	59.6	0.007**
States aims and scope of the recordkeeping policy	31	59.6	0.083
Defines technical terms	31	59.6	0.206

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.33 shows that the most cited aspect was the provision of guidelines on how records should be managed, with a score of 49(94.2%), followed by the description of responsibilities of each recordkeeping staff, which scored 35 (66.3%). The least cited was allows for penalties for staff who do not comply with policy and management of electronic records, accounting for

23 (44.2%) and 29 (55.8%), respectively. Out of 79 respondents, 71(89.9%) recorded a ‘yes’ response when asked to reveal if they have a registry manual. Compliance with records legislation impacts how records are produced, disseminated, utilized, preserved, accessed, monitored and disposed of. Public universities must maintain records governed by the national archives legislation, standards and regulations.

Participants were further asked whether their universities needed a recordkeeping procedure manual. Table 5.34 illustrates multiple responses.

Table 5. 34: The need for a registry procedure manual (n=71)

University	Ensures the security of records		Ensuring records accessibility		Ensuring efficient records retrieval		Ensuring disposal of records with no value		Meeting government statutory requirements		Ensuring long-term preservation of records	
	F	%	F	%	F	%	F	%	F	%	F	%
University A	10	14.1	8	11.3	8	11.3	6	8.5	8	11.3	8	11.3
University B	3	4.2	5	7.0	5	7.0	3	4.2	0	0.0	1	1.4
University C	11	15.5	6	8.5	6	8.5	5	7.0	3	4.2	5	7.0
University D	6	8.5	6	8.5	6	8.5	3	4.2	5	7.0	5	7.0
University E	3	4.2	3	4.2	3	4.2	3	4.2	3	4.2	3	4.2
University F	5	7.0	2	2.8	2	2.8	2	2.4	2	2.4	3	4.2
University G	8	11.3	5	7.0	7	9.9	1	1.4	2	2.4	5	7.0
University H	19	26.8	10	14.1	19	26.8	18	25.3	12	16.9	11	15.5
Total	65	91.5	54	76.1	56	78.9	41	57.7	35	49.3	41	57.7
p-value	0.009**		0.010**		0.049*		0.000**		0.004**		0.213	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.34 above shows that the most cited need for a registry procedure manual was ensuring the security of records, with a score of 65(91.5%), followed by ensuring efficient records retrieval, with a score of 56 (78.9%). The least cited was meeting government statutory requirements, accounting for 35(49.3%).

Follow-up interviews with participants revealed that there was awareness of policies regarding recordkeeping across all eight universities. The general responses provided by all the

participants in the eight universities made it clear that their universities had a recordkeeping policy. One of the participant's responses from University A was as follows:

We have policies, but they have not been fully implemented.

The participant's views implied that although recordkeeping policy existed, lack of implementation was a major contributor to the problems experienced in recordkeeping in the universities. The study also sought to establish whether the eight universities have systems to control and monitor the performance of their recordkeeping systems. When asked if university recordkeeping practices are audited for compliance with international standards (ISO), Figure 5.18 shows that 24(30.4%) cited 'yes' while 55(69.6%) recorded 'no.'

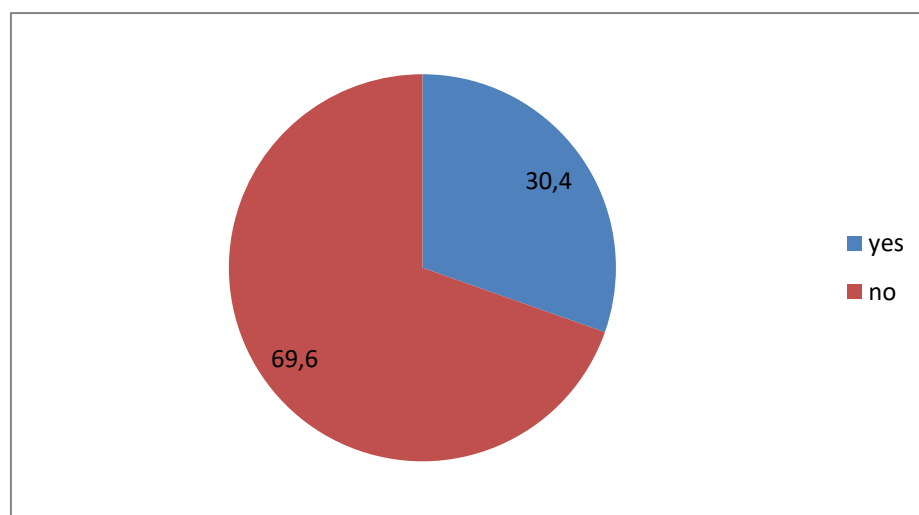


Figure 5. 19: Recordkeeping audit (n=79)

Further, respondents were asked to rate the storage conditions and equipment specifications in terms of complying with the international standards by stating whether 'poorly,' 'below average,' 'good,' 'very good,' or 'excellent.' Table 5.35 shows that most respondents, 35(44.3%), do not know how storage conditions and equipment comply with international standards. Of those aware, 18(22.8%) rated the storage condition and equipment as 'good,' 16(10.2%) cited 'poorly' and 'below average.' Six (7.6%) rated the storage condition and equipment as 'very good,' and four (5.1%) said 'excellent.' Of the four participants who cited 'excellent,' 3(3.8%) are from University E. There was a high statistical significance difference across the institutions at a 1% significance level ($p=0.000$).

Table 5. 35: Storage conditions (n=79)

	Poorly		Below average		Good		Very good		Excellent		Do not know	
	F	%	F	%	F	%	F	%	F	%	F	%
University A	4	5.1	5	6.3	1	1.3	0	0.0	0	0.0	1	1.2
University B	0	0.0	1	1.3	5	6.3	0	0.0	0	0.0	0	0.0
University C	1	1.3	0	0.0	2	2.6	0	0.0	0	0.0	8	10.2
University D	1	1.3	1	1.3	1	1.3	1	1.3	1	1.3	4	5.1
University E	0	0.0	0	0.0	0	0.0	0	0.0	3	3.8	0	0.0
University F	0	0.0	0	0.0	1	1.3	4	5.1	0	0.0	0	0.0
University G	0	0.0	1	1.3	4	5.1	1	1.3	0	0.0	8	10.2
University H	2	2.6	0	0.0	4	5.1	0	0.0	0	0.0	14	17.7
Total	8	10.2	8	10.2	18	22.8	6	7.6	4	5.1	35	44.3
p-value	0.000**											

Note: ** Statistically significant at 1% level of significance.

In Tanzania, there are several relevant laws and regulations that guide the management of records. These are the Records and Archives Management Act of 2002, the Tanzania Access to Information Act of 2016, the National Security Act of 1970, the Public Service Act of 2002, the National Information Communication and Technology Policy of 2003 and the Tanzania Electronic Transactions Act of 2015. Unfortunately, the Tanzania Electronic Transactions Act of 2015 was mistakenly overlooked in this study. Public sector staff, including recordkeeping professionals, should be aware of the laws and regulations about their work to demonstrate compliance in their business operations. Therefore, it was important for the researcher to establish if respondents were aware of the relevant legislation that guides the management of records in Tanzania.

Table 5. 36: Relevant Acts and Policies (n=79)

University	RAM Act of 2002		Tanzania Access to Info Act 2016		National Security Act 1970		Public Service Act 20 of 2002		National ICT policy 2003	
	F	%	F	%	F	%	F	%	F	%
University A	6	7.6	5	6.3	6	7.6	7	8.9	6	7.6
University B	5	6.3	0	0.0	0	0.0	0	0.0	6	7.6
University C	10	12.7	9	11.4	9	11.4	9	11.4	9	11.4
University D	9	11.4	6	7.6	9	11.4	9	11.4	5	6.3
University E	3	3.8	3	3.8	3	3.8	3	3.8	3	3.8
University F	2	2.5	0	0.0	1	1.3	2	2.5	2	2.5
University G	12	15.2	9	11.4	11	13.9	9	11.4	8	10.0
University H	14	17.7	7	8.9	2	2.5	7	8.9	2	2.5
Total	61	77.2	39	49.4	41	51.9	46	58.2	41	51.9
p-value	0.068		0.002**		0.000**		0.002**		0.000**	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.36 shows that the most cited Act was the Records and Archives Management Act of 2002, accounting for 61(77.2%), followed by Public Service Act 20 of 2002, 46(58.2%), whereas the least cited Act was Tanzania Access to Information Act 2016, with a score of 39(49.4%). Respondents were further asked if they were aware of the penalties for not complying with the records legislative instruments in Tanzania. Sixty-two (78.6%) recorded a ‘yes’ response, while 17(21.5%) said ‘no’. Respondents were further asked to state the disciplinary actions they faced when they violated issues concerning recordkeeping regulations and laws, such as illegal access and not adhering to security and privacy issues. A list of options was provided and their multiple responses are shown in Table 5.37.

Table 5. 37: Internal disciplinary actions faced when violating issues concerning recordkeeping issues (n=79)

University	Internal fines		Internal demotions		Both	
	F	%	F	%	F	%
University A	2	2.5	1	1.3	8	10.1
University B	0	0.0	1	1.3	5	6.3
University C	4	5.1	2	2.5	5	6.3
University D	4	5.1	1	1.3	4	5.1
University E	3	3.8	0	0.0	0	0.0
University F	0	0.0	3	3.8	2	2.5
University G	6	7.6	3	3.8	5	6.3
University H	2	2.5	4	5.1	14	17.7
Total	21	26.6	15	19.0	43	54.4
p-value	0.028*					

Note:* Statistically significant at 1% level of significance

Table 5.37 shows the majority of 43(54.4%) recorded both internal fines and internal demotions as internal disciplinary actions faced when violating issues concerning recordkeeping issues. 21 (26.6%) cited internal fines, while 15(19.0%) said internal demotions. Respondents were further asked to reveal if there were any cases of adverse consequences of not using records and archives in their day-to-day activities in their offices; the majority, 58(73.4%), cited that there were no cases of adverse consequences of not using records and archives in their day to day activities in their offices.

5.5.4 Disaster management, security and confidentiality control

To understand information governance, key aspects such as the storage and security aspects of information within an institution need to be understood. The Information Governance Reference Model (IGRM), one of the underpinning models, is designed and created to guarantee a security level to information intended to be private, vital, or confidential to business continuity. In other words, this model provides an appropriate framework that ascertains the level of responsibility in an organization. Amongst the benefits of the IGRM is maintaining valued information in a secure environment within an organization. Guided by the IGRM, the present study investigated the security and confidentiality control level in recordkeeping in

Tanzanian public universities. The findings for this research question were derived from questions 109 to 127 of the questionnaire. The themes under this research question included the following:

- i. Availability and access to information;
- ii. Storage facilities used in the registry;
- iii. Security classification of records in the office;
- iv. Methods used to ensure the security of digital records; and
- v. Disaster management.

5.5.4.1 Availability and Access to Information

To enable access to records, retrieval systems such as file classification systems, shelf labelling, and file tracking tools must be implemented. Being able to locate records is fundamental to ensuring that records are reliable and accurate. Properly maintaining digital records is also crucial for organizations as it influences long-term access to information. Subsequently, the study sought to discover the business processes in the Tanzanian public universities that led to the availability and access to information.

When asked if recordkeeping is centralized or decentralized, 54(68.4%) cited centralized, while 25(31.6%) said decentralized. Respondents were asked to name storage facilities used in their registry from a list of options. Multiple responses are depicted in Table 5.38.

Table 5. 38: Storage facilities used in the registry (n=79)

University	Wooden cabinet		Steel cabinet		Open shelves	
	F	%	F	%	F	%
University A	1	1.3	8	10.1	2	2.5
University B	5	6.3	1	1.3	6	7.6
University C	1	1.3	6	7.6	5	6.3
University D	1	1.3	4	5.1	3	3.8
University E	0	0.0	3	3.8	2	2.5
University F	2	2.5	5	6.3	2	2.5
University G	3	3.8	8	10.1	7	8.9
University H	0	0.0	19	24.1	0	0.0
Total	13	16.5	54	68.4	27	31.2
p-value	0.000**		0.003**		0.000**	

Note: ** Statistically significant at 1% level of significance

Survey results revealed that records were mainly stored in steel cabinets 54(68.4%), while in wooden cabinets 13(16.5%) were least used. Respondents were further asked to state if they indicated the security classification of records. Figure 5.20 shows that 42(53.2%) cited ‘yes’ indicating security classification of records, while 37(46.8%) recorded ‘no.’

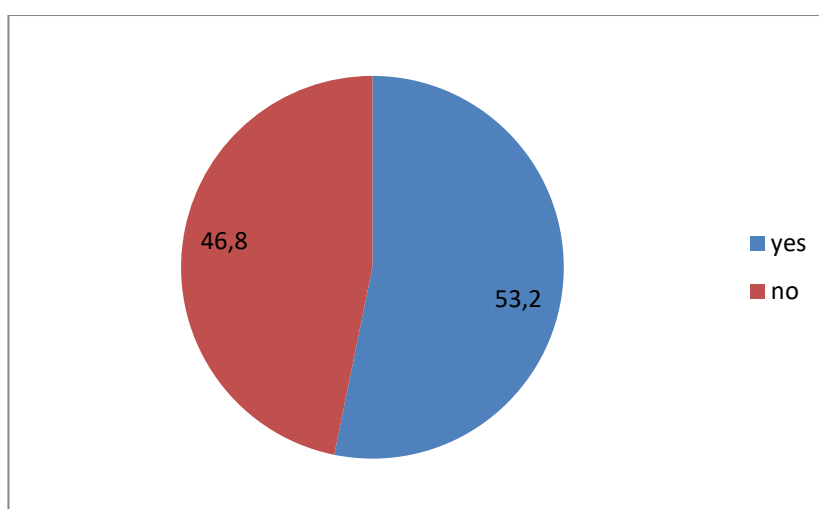


Figure 5. 20: Security classification of records in the office (n=79)

The protection of sensitive records is very important. This is why Daneshmandnia (2019:19) emphasized that institutions should maintain their records to ensure they are protected from

unauthorized access or secured from destruction. Records might be confidential for national security, personal integrity, official secrecy, and crime prevention (Klareld 2018:102). For this reason, participants were asked to indicate the types of security classification of records available in their universities.

Table 5. 39: Security classification of records in the office (n=42)

University	Top secret		Secret		Confidential		Restricted		Open	
	F	%	F	%	F	%	F	%	F	%
University A	0	0.0	0	0.0	5	11.9	1	2.4	1	2.4
University B	0	0.0	0	0.0	6	14.3	0	0.0	2	4.8
University C	3	7.1	3	7.1	4	9.5	2	4.8	2	4.8
University D	3	7.1	2	4.8	5	11.9	2	4.8	1	9.5
University E	0	0.0	0.0	0.0	3	7.1	0	0.0	0	0.0
University F	3	7.1	4	9.5	5	11.9	3	9.5	3	9.5
University G	3	7.1	4	9.5	12	28.6	1	2.4	3	9.5
University H	0	0.0	0.0	0.0	2	4.8	0	0.0	0	0.0
Total	12	28.6	13	31.0	42	100.0	9	21.4	12	28.6
p-value	0.008**		0.001**		0.000**		0.016*		0.045*	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

The 42 (53.2%) respondents who indicated security classification of records were further asked to state the types of security classification of records that their universities use. Their multiple responses, as presented in Table 5.39, reveal that records were mainly classified as confidential 42(100.0%) while restriction security classification 9(21.4%) was the least used.

All issues regarding records storage should be implemented before records are created, as this will aid in determining how records will be captured in recordkeeping systems. It is critical to maintain records properly to make them available to authorized users when required. The most important issues records professionals need to consider in storing records are the storage environment and location quality. Thus, it is important to examine whether such quality storage environments and locations exist in the public universities in Tanzania. When asked how access

to the records storage area was controlled, the majority, 53(67.1%), indicated access was only granted to records staff, while 25(31.6%) cited selected records staff granted access.

Since the present study focused on digital and paper records, it was essential to specifically explain how digital records were protected from unauthorized access. When respondents were asked to state the methods used to ensure the security of digital records, multiple responses are depicted in Table 5.40.

Table 5. 40: Methods used to ensure the security of digital records (n=79)

University	Passwords		Log in procedures		Firewalls		Gateway filter software		Audit trails to track use		Encryption technologies	
	F	%	F	%	F	%	F	%	F	%	F	%
University A	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
University B	5	6.3	5	6.3	0	0.0	0	0.0	0	0.0	0	0.0
University C	8	10.1	2	2.5	0	0.0	0	0.0	0	0.0	1	2.5
University D	5	6.3	1	1.3	1	1.3	2	2.5	0	0.0	1	2.5
University E	3	3.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
University F	4	5.1	2	2.5	2	2.5	0	0.0	3	3.8	0	0.0
University G	8	10.1	2	2.5	1	1.3	0	0.0	1	1.3	1	2.5
University H	19	24.1	13	16.5	1	1.3	1	1.3	1	1.3	1	2.5
Total	53	67.1	25	31.6	5	6.3	3	3.8	5	6.3	4	5.1
p-value	0.000**		0.000**		0.098*		0.166		0.000**		0.926*	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.40 shows that the most cited method used to ensure the security of digital records was the password, while the least cited method was gateway filter software, accounting for 3(3.8%). When asked if their universities have issued guidelines on security and access rights to records, 49(62.0%) recorded a ‘yes’ response, while 30(38.0%) cited ‘no.’ There is a high variation across the universities, making them differ statistically at a 1% significance level except for firewalls and encryption technologies.

Since some records need restrictions to access and use due to the nature of their content, participants were asked to explain how digital records were protected from unauthorized access. Participants gave the following feedback:

Participant in University A: No one can access and retrieve records without permission from an authorized person, and those who are authorized must have a username and password.

Participant in University F: We have measures to ensure unauthorized persons do not access our records. We use login controls, such as a password, to restrict access to records.

5.5.4.2 Disaster management

According to the Tanzania Records and Archives Management Act, No. 3 of 2002, every public office is responsible for protecting information under their custody, both in digital and paper format. Preventing records from disasters should be the main concern in all institutions. There should be a proper level of security control for both paper and digital records in any organization. Since the present study dealt with digital and paper records, it was essential to establish how digital records are protected from insecurities. It is important to consider how to access and use digital records in an emergency. Therefore, due to the constant technological change, it is important to regularly review the availability of necessary technologies to maintain access to information. When asked if their universities had issued guidelines on security and access rights of paper and digital records, Figure 5.21 shows that 23(29.1%) respondents cited a 'yes' response while the rest recorded a 'no.'

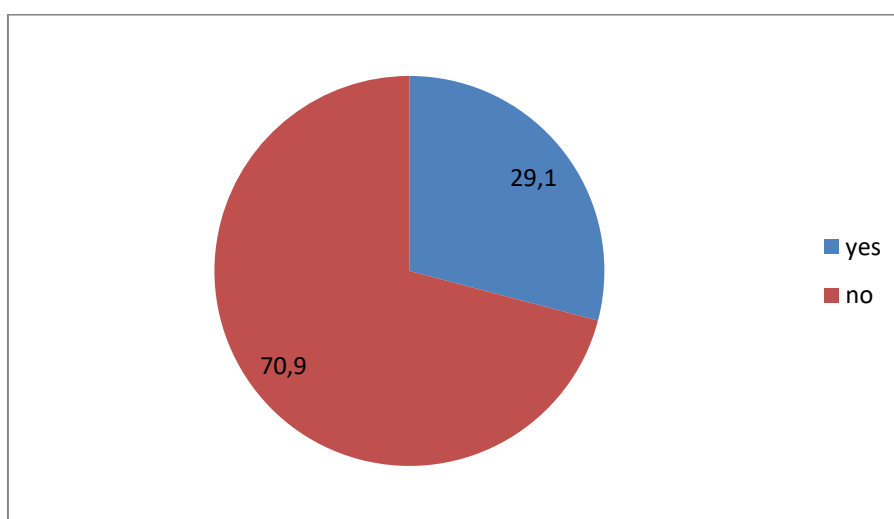


Figure 5. 21: Guidelines on security and access rights of records (n=79)

The 23(29.1%) were further asked to state the aspects covered in the disaster management plan. Their multiple responses varied. Notably, 23(100.0%) indicated disaster prevention, 22(95.7%)

recorded disaster protection, 19(82.6%) cited disaster preparedness and 14(60.1%) disaster response.

Table 5. 41: Disaster management plan (n=23)

Aspects covered in the disaster management plan	Frequency	Percent
Disaster prevention	23	100.0
Disaster protection	22	95.7
Disaster preparedness	19	82.6
Disaster response	14	60.1

When asked when the university disaster preparedness plan was last tested, the majority 9(39.1%) recorded within two years, 6(26.1%) and 3(13.0%) indicated 2019 and 2018, respectively. Five (21.7%) respondents surprisingly stated that the plan was never tested.

Table 5. 42: Disaster preparedness plan (n=23)

When was the disaster preparedness plan tested?	Frequency	Percent
Within two years	9	39.1
2019	6	26.1
2018	3	13.0
Never tested	5	21.7

The 23(29.1%) respondents were further asked to reveal if there was a disaster team in place. Figure 5.22 shows that seventeen (73.9%) cited a ‘yes’ response while 6(26.1%) recorded a ‘no.’

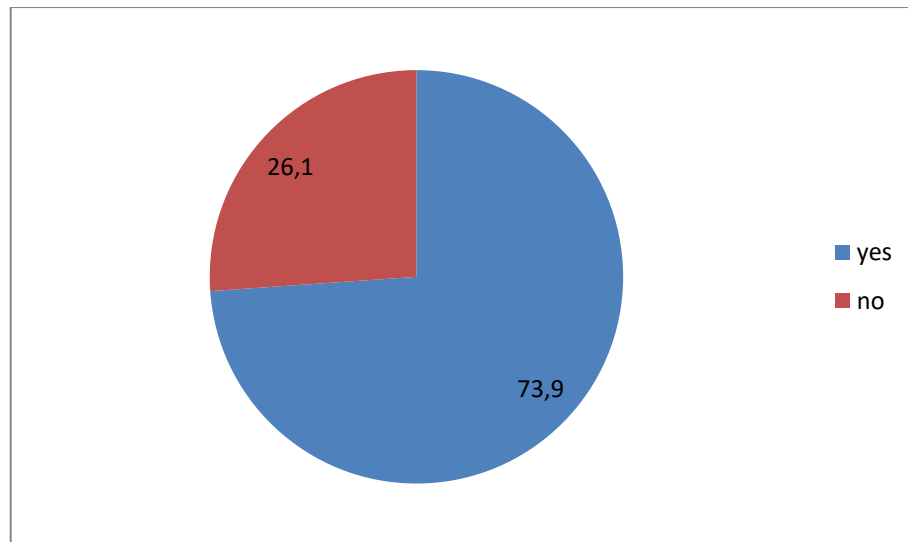


Figure 5. 22: Presence of a disaster team in place (n=23)

Records should be maintained in an environmentally controlled storage to protect them from fire, water, physical and chemical changes that might otherwise harm them. Thus, organizations must conduct risk assessments to know when they are weak regarding disasters and security and find the right solutions to alleviate the weaknesses (Asamoah, Akussah and Musah 2018:219). From a list of options, respondents were asked to name the disasters they thought would likely affect their paper and digital records. Their multiple responses are given in Table 5.43. There is a high variation across the universities, making them differ statistically at a 1% significance level except for sabotage and explosion.

Table 5. 43: Disasters that are likely to affect records in the universities (n=79)

Disaster	Frequency	Percent	p-value
Pest infection	45	57.0	0.001**
Rodents	34	43.0	0.000**
Computer systems failure	22	27.8	0.011**
Fire	21	26.6	0.002**
Unauthorized intrusion	21	26.6	0.00**
Floods	11	13.9	0.001**
Leaking roof	10	12.7	0.013**
Sabotage	7	8.9	0.336
Explosion	5	6.3	0.178

Note: ** Statistically significant at 1% level of significance

Table 5.43 shows that the most cited disaster was pest infestation, with a score of 45(57.0%), while the next most cited duty was rodents, with a score of 34(43.0%). The least mentioned duty was sabotage and explosion, accounting for 7(8.9%) and 5(6.3%) respectively. From a list of options, respondents were asked to indicate the equipment used to prevent records from disaster. Their multiple responses are given in Table 5.44. Smoke detectors were not statistically significant at either 1% or 5% significance level ($p=0.254$).

Table 5. 44: Equipment used to control disaster (n=79)

University	Lockable metallic cabinet		Smoke detectors		Fire detectors		Surveillance camera	
	F	%	F	%	F	%	F	%
University A	8	10.1	4	5.1	5	6.3	3	3.8
University B	6	7.6	0	0.0	3	3.8	1	1.3
University C	7	8.9	1	1.3	4	5.1	0	0.0
University D	2	2.5	4	5.1	5	6.3	1	1.3
University E	3	3.8	0	0.0	3	3.8	0	0.0
University F	3	3.8	2	2.5	0	0.0	2	2.5
University G	9	11.4	2	2.5	10	12.7	5	6.3
University H	18	22.9	6	7.6	16	20.3	11	13.9
Total	56	70.9	19	24.1	46	58.2	23	29.1
p-value	0.010**		0.254		0.017*		0.040*	

Note: ** Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.44 shows that 56(70.9%) claimed they use lockable metallic cabinets. 46(58.2%) cited fire detectors while 23(29.1%) indicated surveillance cameras. Nineteen (24.1%) said smoke detectors. Respondents were asked if they had fire suppression systems in the records storage area. 58(74.4%) of the respondents reported the presence of fire suppression systems in the records storage area, while 21(26.6%) did not have them. Those 58(74.4%) who said they had fire suppression systems in the records storage area were asked to name the types of fire suppression systems available. Their multiple responses are shown in Table 5.45.

Table 5. 45: Fire suppression systems available in the university (n=58)

University	Fire extinguisher		Buckets of sand		Standpipe water system		Automatic sprinkler water system	
	F	%	F	%	F	%	F	%
University A	5	8.6	2	3.4	5	8.6	4	6.9
University B	3	5.2	3	5.2	3	5.2	0	0.0
University C	7	12.1	1	1.7	1	1.7	0	0.0
University D	7	12.1	0	0.0	1	1.7	1	1.7
University E	3	5.2	0	0.0	0	0.0	0	0.0
University F	3	5.2	0	0.0	2	3.4	2	3.4
University G	13	22.4	4	6.9	3	5.2	1	1.7
University H	17	29.3	4	6.9	2	3.4	0	0.0
Total	58	100.0	14	24.1	17	29.3	8	13.8
p-value	0.191**		0.205**		0.114**		0.047*	

Note: * Statistically significant at 1% significance level, * statistically significant at 5% significance level.

Table 5.45 shows that all the respondents, 58(100.0%), cited fire extinguishers as a fire suppression system. Seventeen (29.3%) cited the use of standpipe water, while 14 (24.1%) cited buckets of sand. Eight (13.8%) recorded automatic sprinkler water systems. The 58 respondents were further asked if the firefighting equipment was regularly inspected. Of the 58 respondents, 34(58.6%) reported that their institutions regularly inspected firefighting equipment. When asked how often the inspection of the firefighting equipment is regularly done. Most respondents, 17(50.0%), revealed that inspection was done once a year. Eleven (32.4%) said twice a year, while 10(29.4%) indicated that the inspection was rarely done. There was no obvious high variation across the universities except for using an automatic sprinkler water system.

Follow-up with interviews with the participants revealed that all eight universities had installed alarm systems and fire extinguishers. A participant from University A had this to say:

Yes, we have a stand-by fire extinguisher and an electricity alarm.

Lack of staff training on recordkeeping and disaster management may make most institutions vulnerable to disasters and security. All records need some level of security to ensure that they are safe. The researcher sought to establish if respondents received training in firefighting techniques. The results presented in Figure 5.23 indicated that 28(35.4%) received training on firefighting techniques while 61(64.6%) recorded ‘no’ they did not receive training on firefighting techniques.

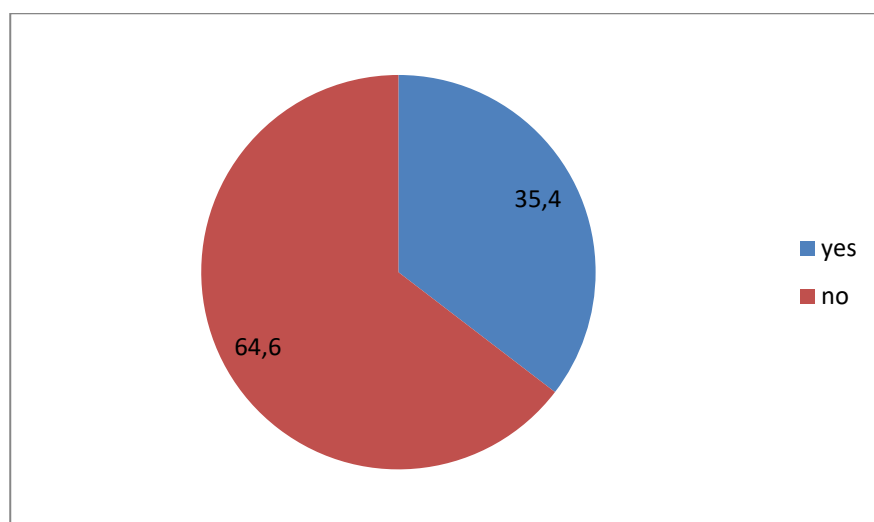


Figure 5. 23: Training in fire-fighting techniques (n=79)

5.5.5 Interventions required to be put in place to address recordkeeping issues in Tanzanian public universities

The preceding sections of this chapter show that respondents identified that in the eight public universities surveyed, interventions were required to address recordkeeping in Tanzanian public universities. The areas covered by this question include:

- i. Support offered by the top management toward recordkeeping activities; and
- ii. Problems faced in providing services/access to records.

5.5.5.1 Support offered by the top management toward recordkeeping activities

Recordkeeping is important in ensuring that previous memories are retained for the current and future generations and lifelong learning. Various challenges affect recordkeeping effectiveness. Several studies have indicated that the management of records faces several challenges: inadequate funds, lack of expertise, lack of supportive legislation, standards and

policy guidelines (Rafoneke and Mnjama (2019), Ameyaw and Frempong-kore (2020), Giba-Fosu (2020), Tsvuura and Ngulube (2020), Kiprono and Gichuhi (2021), Netshakhuma (2021), Mphunda and Mnjama (2022) and Ptsonyane and Mnjama (2022). These findings have been found to affect recordkeeping practices globally and not only in a single part of the world.

One critical issue in managing records is for top management to support proper recordkeeping. Respondents were asked if top management supports recordkeeping activities in their universities, and the majority of the respondents, 53(67.1%), reported that the top management supports recordkeeping activities in their universities. Those 53 (67.1%) who said that top management supports recordkeeping activities in their universities were further asked to rate the support offered by their top management toward recordkeeping activities. Their responses are shown in Table 5.46.

Table 5. 46: Support offered by the top management towards recordkeeping activities (n=53)

University	Very poor		Poor		Good		Very good		Excellent	
	F	%	F	%	F	%	F	%	F	%
University A	2	3.8	1	1.9	5	9.4	1	1.9	0	0.0
University B	0	0.0	1	1.9	4	7.5	0	0.0	0	0.0
University C	1	1.9	1	1.9	3	5.7	1	1.9	1	1.9
University D	2	3.8	0	0.0	3	5.7	2	3.8	1	1.9
University E	0	0.0	0	0.0	0	0.0	0	0.0	2	3.8
University F	0	0.0	0	0.0	3	5.7	2	3.8	0	0.0
University G	0	0.0	4	7.5	3	5.7	2	3.8	0	0.0
University H	0	0.0	4	7.5	3	5.7	1	1.9	0	0.0
Total	5	9.4	11	20.8	24	45.3	9	17.0	4	7.5

Table 5.46 shows that the majority of the respondents, 24(45.3%), rated the support offered by the top management towards recordkeeping activities as good, 11(20.8%) said poor, 9(17.0%) cited very good, 5(9.4%) recorded very poor and 4(7.5%) indicated excellently.

During interviews with participants, the participants also reported the top management support for recordkeeping. From University F, the participant had the following to say when asked about the importance of top management support on recordkeeping:

Yes, the top management supports recordkeeping activities at our university. This is because, through proper records management, staff can perform their duties as required and make informed decisions. Also, records are very important for accountability. You can't manage other resources if you can't keep records well.

When asked to indicate the state of recordkeeping in the records office, 14(17.7%) indicated that the state of recordkeeping in the office was excellent, while 38(48.1%) and 10 (12.7%) indicated good and very good, respectively and 17(21.5%) said the state of recordkeeping in the office was poor. When asked if they experienced any issues in providing services to records users, the majority of respondents, 61(77.2%), reported that they faced challenges in providing services/access to records to users. The 61(77.2%) respondents were further asked to select the problems faced in providing services/access to records from a list of choices provided. Their multiple responses are given in Table 5.47.

Table 5. 47: Problems faced in providing services/access to records (n=61)

Problem faced	Frequency	Percent
Shortage of records staff	51	83.6
Lack of adequate staff training	49	80.3
Shortage of filing space	44	72.1
Inadequate management support	44	72.1
Lack of adequate facilities and equipment	41	67.2
Lack of adequate facilities and equipment	41	67.2
Lack of properly implemented recordkeeping policy	37	60.7
Poor working conditions	36	59.1
Misfiling and missing files	35	57.4
Security issues	34	55.7
Absence of legal obligations	32	52.5

Table 5.47 shows that the most cited challenge was the shortage of records staff, with a score of 51(83.6%). The next most cited challenge was the lack of adequate staff training, with a

score of 49(80.3%), while the absence of legal obligations 32(52.5%) was the least cited challenge.

5.6 Summary

This chapter analyzed and presented research findings on the role of recordkeeping for good governance in Tanzanian public universities. The relevant data were obtained through methodological triangulation, where an interview schedule and questionnaire were used to gather data. Data analysis and presentation were done based on the research questions. Quantitative data was presented using tables and percentages. Results showed that the state of recordkeeping in the eight universities was not up to standard. For instance, although the findings indicated that the budget for recordkeeping functions was set aside, other indicators for recordkeeping readiness, such as recordkeeping training and skills, left much to be desired. Consequently, findings revealed that digital recordkeeping in the eight universities was not effectively practiced. This was evidenced by most respondents, 48(60.8%) indicating that digital recordkeeping was not part of their job description.

Public sector staff, including recordkeeping professionals, should be aware of the laws and regulations about their work to demonstrate compliance in their business operations. As revealed by the findings, recordkeeping activities in Tanzanian public universities were anchored upon the Records and Archives Management Act of 2002. The study identified other relevant legislations, although it was revealed that very few respondents were familiar with the provisions of these laws and could, therefore, not implement them effectively. The results also showed that most universities have recordkeeping programmes and policies that are not fully implemented. As a result, the findings indicated that university recordkeeping was exposed to risks that threatened their permanent survival as records. Some identified risks included environmental hazards, manmade disasters, rapid technological changes and unauthorized access.

The findings subsequently captured respondents' recommendations for supporting sustainable recordkeeping practices in Tanzanian public universities. Generally, the respondents recommended that top management establish a records training program, that more storage facilities be needed in the registry, and that a recordkeeping policy be implemented. The next chapter provides the interpretation of the study's findings while referring to the literature review and underpinning the models of the current study.

CHAPTER SIX

INTERPRETATION AND DISCUSSION OF FINDINGS

6.1 Introduction

This Chapter interprets and discusses the findings presented in Chapter Five. It includes clarifying and organizing the results of a study and considering their implication and importance to the entire society (Fain 2013:272). This study's interpretation and discussion considered the literature review in Chapter Three and the analyzed results in Chapter Five. In other words, this Chapter attempts to connect the literature review and the conceptual framework with the results described in Chapter Five to demonstrate how the findings disconfirm or confirm the literature on recordkeeping for good governance. The whole process was anchored upon this study's overall objective, which was to investigate recordkeeping for good governance in Tanzanian public universities. Further, the interpretation and discussion of findings in this Chapter were logically arranged according to the research questions. The following research questions guided the study:

- i. What systems and processes are used in recordkeeping in Tanzanian public universities?
- ii. What recordkeeping skills and training do staff need in Tanzanian public universities?
- iii. What is the role of records legislation in recordkeeping in Tanzanian public universities?
- iv. What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?
- v. What interventions are required to be put in place to address recordkeeping in Tanzanian public universities?

The results for each research question are discussed and interpreted in adherence to the pragmatic perspective, synonymous with the Mixed Methods Research (MMR) approach employed by this study.

6.2 Systems and processes used in recordkeeping in Tanzanian public universities

The first research question sought to establish the systems and processes used in recordkeeping in Tanzanian public universities. As earlier reported in Chapter Two, section 2.2.2.2, the records continuum model recognizes the need to manage records holistically from creation to disposition. At the same time, the Information Governance Reference Model facilitates discussion on how records should be maintained to ensure timely, efficient and accurate retrieval. Therefore, the Generally Acceptance Recordkeeping Principles established in the IGRM were applied to determine the state of recordkeeping practices in the eight public universities. In this regard, the present study used the records continuum model and the IGRM, whereby the respondents were required to indicate the systems and processes used in recordkeeping in their universities under the following sub-themes:

- i. Budgetary allocation for recordkeeping;
- ii. Records for good governance;
- iii. Storing of records;
- iv. Tracking of records;
- v. Records appraisal;
- vi. Control of temperature, light and relative humidity in the storage area; and
- vii. Digital recordkeeping.

6.2.1 Budgetary allocation for recordkeeping

A recordkeeping system aims to maintain records from the creation stage to the final stage. Recordkeeping processes include records capture, records creation, records classification, records storage, access, tracking and records disposal (Government Records Service 2011:10). Effective and efficient administration of any institution, such as a university, depends on solid recordkeeping practices that make sure that proper records are made available when needed. Therefore, the significance of recordkeeping cannot be over-emphasized. As universities carry out their activities, they create various records. Thus, records should be maintained as fully essential as other administrative operations since records are at the core of governmental functions. It is a fact that proper management of records is evidence of a good-governed institution. Therefore, it should be seen as an essential part of business rather than incidental.

The present study found that the majority of the respondents, 51(64.6%), indicated that their university set aside a budget for recordkeeping functions. However, although most respondents stated that there is a budget for recordkeeping functions, the study established several impediments to implementing proper recordkeeping in the universities due to the current state of the registry funding. The inability to educate and train records staff was one of the major impediments facing public universities. Mosweu and Rakemane (2020:110) similarly observed this and reported that more funds dedicated to recordkeeping activities are needed to ensure training opportunities for recordkeeping staff. With these impediments to implementing proper recordkeeping in public universities, it was clear that the need for records and archives management activities in all public universities exceeded the annual budget for recordkeeping. The current study also agrees with the findings of Maseh and Mutula (2016:158) that activities associated with managing records were financed from the general budget, although funding was rarely available. In other words, top management did not have a budget specific for recordkeeping activities, such as providing enough storage facilities and staff capacity building.

The results also support the view fronted by Kamatula (2013:45) that top management should support records professionals by providing enough budgets, facilities and awareness training concerning recordkeeping practices. Proper recordkeeping needs adequate financial support. These universities need more budgets in their efforts to maintain records. It is challenging to implement recordkeeping activities in a situation where more than the budget set for recordkeeping functions is needed. Some recordkeeping activities with monetary implications are a shortage of records staff, lack of adequate staff training, shortage of filing space, lack of sufficient facilities and equipment, poor working conditions, and security issues (see Table 5.47). When these problems are not resolved due to insufficient budgets, an environment where records are not effectively and efficiently managed would be created. In other words, more funding dedicated to recordkeeping would positively affect service delivery. Therefore, records should be appropriately managed to serve as tools for assisting service delivery. In contrast, however, in developed countries such as Australia, the management of digital records was successfully implemented because enough budgets were allocated for digital recordkeeping activities (Asogwa 2012:205). This implies that for records and archives management to succeed in Africa, enough funding has to be allocated for recordkeeping activities. Change of perception by the top management towards recordkeeping activities must also be addressed.

6.2.2 Records for good governance

Records are essential assets that help organizations and individuals in meeting their objectives. The basic tenets of good governance cannot be accomplished unless employees at all levels in an organization have access to accurate and timely information when carrying out their responsibilities (Wamukoya 2021:36). Proper recordkeeping provides evidence of business transactions between individuals, groups, or institutions; it guarantees transparency and accountability and, as a result, strengthens good governance. Thus, adequate recordkeeping is the foundation for any responsible organization that must fulfill its obligation of accountability and transparency towards its individuals and protect their human rights and dignity. Chaterera (2016:116) indicated that poor recordkeeping in most African countries has made it impossible to hold individuals accountable for their deeds. When accountability is lacking, good governance will not prevail, so effective service delivery will not be attained (Chaterera 2016:116).

There are notable cases in Tanzania that show poor recordkeeping practices. From the Tanzania audit reports as seen on the Tanzania National Audit Office's website (<https://www.nao.go.tz/en/reports>), the late President Magufuli, in reacting to a government report on fraudulent qualifications in Tanzanian government sectors, sacked about 10,000 public servants for having fake academic certificates (British Broadcasting Corporation [BBC] News 2017). It was also revealed that Tanzania has been losing much money each year by paying salaries to workers whose positions did not officially exist. For instance, Masele and Kagoma (2021:166) reported a great failure with the manual payroll system, which caused challenges such as salary delays and inaccuracy in determining staffing levels, which resulted in poor accountability of funds, fraud, and lack of integrity. These cases highlight more on the importance of proper recordkeeping.

Chapter One, Section 1.1.1.1, explains that the Eastern and Southern African Region Branch of the International Council on Archives [ESARBICA] was established in Kenya in 1969. Its member states include Angola, Botswana, Burundi, Kenya, Lesotho, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland, Tanzania, Uganda, Zambia, Zanzibar and Zimbabwe. This body aims to be a leader and center of excellence in recordkeeping developments in the region (East and Southern Africa Regional Branch of the International Council on Archives 2018:1). ESARBICA has been a major tool in the development of

recordkeeping programmes and services in the Eastern and Southern African region. One of the main activities organized by ESARBICA is a general conference, which is held every two years (Mnjama 2007:24). In this conference, ESARBICA member states expressed their major recordkeeping concerns from which resolutions to address the growing challenges are formed. One of the resolutions was the need to build capacity in digital recordkeeping, development training, protection of archives and proper archiving (Mnjama 2007:25-26). Records professionals need to ensure that standards in recordkeeping are met and quality training is provided. Also, training institutions should put more emphasis on practical than theory learning. This is due to the industry's serious shortage of skilled and experienced records officers (Chigariro and Khumalo 2018:170). When such measures are put into place, accountability can be attained.

The first principle in IGRM, as reported in section 2.2.2.2.1 in Chapter Two, is the principle of accountability. The IGRM, through this principle, guides top management in making decisions that are accountable for significant activities of an institution by providing an institution with a communication model. One of the primary purposes of creating records in any institution is to provide evidence. Therefore, to guarantee accountability in an institution, recordkeeping professionals must develop, improve and strengthen systems to provide the evidence needed to expose corruption and ensure accountability. In this regard, the study sought to ascertain if the participants from the eight public universities agreed that records are vital for good governance. Phiri (2016:7) asserted that there should be sound recordkeeping systems to perform an audit effectively, as poor recordkeeping practices lead to corruption. The absence of effective and good recordkeeping practices creates a fertile ground for corruption. In the present study, 54 (68.4%) participants from the eight public universities agreed that records are vital for good governance. Despite the aforementioned result, it was surprising to discover that the top management from the eight public universities do not recognize the importance of recordkeeping. For instance, despite the presence of a recordkeeping policy in the universities, as reported in section 6.4.1 of this Chapter, the lack of recordkeeping policy implementation was a significant factor contributing to the problems experienced in recordkeeping in the universities.

72(91.1%) agreed that there could only be accountability with proper recordkeeping. In other words, the present research found that poor recordkeeping practices undermine good governance, resulting in corruption; hence, universities must possess robust recordkeeping

systems to ensure accountability and transparency. Osebe, Maina and Kurgat (2018:295) and New Era Live (2019:1) added that there can be no informed decisions, justice, or accountability without records. The lack of specific regulations on recordkeeping presents a limitation on the significance of recordkeeping as a tool for fighting and preventing corruption (Casadesus de Mingo and Cerrillo-i-Martinez 2017:257). For this reason, Chaterera (2016:131) advised that it is vital to prioritize recordkeeping to circumvent organizational problems that may come up due to poor handling of records.

The results in this study concur with those of Mosweu and Rakemane (2020:105), who established that effective recordkeeping standards in an institution improve good governance. The present study also agrees with the findings of Isabella and Ibitoroko (2016:290) that a good administration foundation is established and strengthened when records are adequately maintained. Proper management of records in an institution is needed if good governance is to be achieved (Phiri 2016:159). The current study noted a consensus among participants in all the universities that good governance can only be attained with proper recordkeeping practices. It is essential for a university to properly maintain records to have a reliable institutional memory that serves as evidence of its activities.

6.2.3 Storing of records

Once records have been processed, disseminated and utilized, they need to be well preserved for future use, and hence the need to have well-maintained records storage facilities. Records require appropriate storage conditions to protect them from unauthorized access, destruction and disasters. The International Organization for Standardization [ISO] 15489-1 (2001:9) advises that suitable storage systems should be considered when designing a recordkeeping system to ensure long-term record preservation. With digital records, the adoption of information technology has fundamentally altered how records are created, accessed and stored (Newa and Mwantimwa 2019:116). There are several ways in which digital records can be stored (Shepherd and Yeo 2007:185-188; Phiri 2016:83). Digital records can be stored online, whether on an institution's server or by cloud storage (Phiri 2016:83). Digital records can also be stored offline through removable media such magnetic tapes, Compaq disks (CDs), memory cards, digital video discs (DVDs) and USB memory sticks (Phiri 2016:83). Digital records may be stored in various formats, for example, in the form of Word document and or as portable

document format (PDF). More on digital recordkeeping is discussed under section 6.2.7 of this Chapter.

The most critical issues records professionals need to consider in storing records are the storage environment and location quality. The principle of availability of the IGRM states that for institutions to preserve the availability of their records, they have to make sure that such records are accessible and usable (Electronic Discovery Reference Model 2011). According to the records continuum model, the records created in D1 and D2 are significant for immediate business and regulatory use within the institution. This is because having the right information at the right moment will enable institutions to make well-informed decisions. Therefore, access to records should be facilitated so that the records can be available for use. Thus, it was essential to examine whether such quality storage environments and locations exist in the public universities in Tanzania. Inadequate storage of records would negatively compromise university service delivery. For instance, a lack of enough storage would affect the speed of retrieving records, leading to decision-making delays. In the present study, the respondents were required to indicate if their universities had enough records space. If not, they were requested to tell if their universities used commercial records centers or the Cloud to preserve their records. The results indicated a lack of proper records storage facilities in public universities. Despite the importance of records storage avenues in universities, their lack of and significance has yet to be appropriately appreciated, as evidenced in the present study. Irons (2006) emphasizes that records should be managed so that their form, retrieval, reliability and authenticity, as evidence of a particular activity, are not subjected to change.

The present research found that two of the eight universities needed more records storage space. University H and University B indicated that their universities need more records storage space. In the universities that lacked enough records storage, the results indicated that current records were stored in the same area as the semi-current records. The findings differed from the advice by Abdulrahman (2015:54) that universities should provide enough storage and security facilities to prevent damage and loss of records. This is because maintaining and storing records in an environmentally and physically stable area is significant in ensuring the longevity of their useful life (Nsibirwa 2012:218). For instance, when managing digital records, one may be required to migrate the records in cases where the storage medium used is outdated or the software used to create it has lived out its lifetime due to the change in technologies. This means that managing digital records also includes managing the software used to create the records. All institutional records should be properly maintained in a secured storage platform

for future records (Madulu 2016:3). More on the storage facilities used in the registry is discussed under section 6.5.1 of this Chapter.

6.2.4 Tracking of records

To enable records tracking, universities must decide the kind of record that must be managed. In other words, records should be stored in such a way that they can easily be retrieved whenever they are needed. In this regard, records professionals should not rely on their memories to track records, contributing to delays in tracking requested files. This situation may lead to difficulties retrieving files and sometimes to loss of files. Capturing and maintaining records in recordkeeping systems allow monitoring and controlling of all the transactions through which the records have passed (Casadesus de Mingo and Cerrillo-i-Martinez 2017:258). Results from the present study revealed that the eight public universities do track records use. The survey findings showed that missing files were frequently reported despite file tracking being done in the eight universities. However, following an analysis of the claims made by the respondents, the study found that a lack of proper storage equipment and poorly trained recordkeeping staff were the problems attributed to the issues of missing files in universities. Table 5.7 also shows that 77(84.6%) respondents are recordkeeping professionals.

Similarly, Asogwa's (2013) study established that in Nigeria, records were regularly misplaced or lost due to mishandling of files. The current study's findings were also similar to Mwangangi's (2013) study, which noted that among the challenges that contributed to the poor state of management of records at Kisii University was the misfiling and loss of files. The present study's results contradict Maseh's (2015) study, which indicated that manual filing systems contributed to missing files in the Kenyan judiciary. Concerning poorly trained recordkeeping staff, Dikopoulou and Mihiotis (2010:273) noted that recordkeeping personnel need appropriate training to obtain new skills and knowledge, particularly training on information technology-related issues. It is, therefore, important to provide on-the-job training to the staff who participate in recordkeeping activities, from creation to destruction or preservation.

Searching for a missing file in an organization can be the most stressful and wasteful time for recordkeeping staff. Given that, developing and using an effective records tracking system that can save a lot of time for the recordkeeping staff is necessary. Tracking of records is significant because it helps in enabling retrieval of records, preventing missing records and maintaining

an audit trail of transactions of records (International Organization for Standardization 15489-1 2001:22). To facilitate access to records, retrieval systems such as file tracking tools must be implemented (Maseh 2015:50). This means that recordkeeping systems should have tracking systems that will be used to locate and control records movements and make retrieval of records easy (Kamatula 2018:58). Thus, it was essential to examine whether such recordkeeping systems exist in the Tanzanian public universities.

6.2.5 Records appraisal

Some aspects that are significant to efficient and effective recordkeeping skills and worth imparting to recordkeeping staff are records appraisal and disposal. Therefore, institutions should work by the established standards to ensure that the appraisal aspect serves to give instructions on which records should be destroyed and which records are considered to have sufficient value to be preserved (Garaba 2010:98). Therefore, records staff must have recordkeeping skills and training needed to make sure the disposition of records takes place properly when records become valueless to make use of the limited storage capacity. This is why universities should formulate guiding principles on the activities of the record, such as the creation of records, records classification, appraisal of records, records disposal and preservation of records (Netshakhuma 2019:25).

The IRGM provides guidelines on how institutions should maintain their information while considering regulatory, operational, fiscal and legal requirements (Electronic Discovery Reference Model 2011). Additionally, the seventh principle of the IGRM states that unless immediate destruction is needed, it may be necessary for records to be transferred to appropriate storage. This means that not all records created or received can be retained long-term. The present study sought to determine if the eight universities were conducting records appraisal. The present study found that most participants needed to do records appraisals in their universities. This was confirmed by the results, which showed that 33(41.8%) respondents gave a 'yes' response while 46(58.2%) recorded a 'no' response when asked if they conducted records appraisal in their universities.

These results are interesting because it was anticipated that most respondents would have given a 'yes' response. Since records appraisal is a very important activity in recordkeeping, it is through records appraisal that recordkeeping professionals can establish what records become part of the collection. There is a need for retention control; therefore, records appraisal is

significant. An organization should perform records appraisal because regardless of the format of the records, not all records can be retained for long-term preservation (Ndenje-Sichalwe 2010:80). Storage and maintenance of records over time is very expensive and, as the volume of records increases, access to records becomes more difficult and slower Shepherd and Yeo (2003:146). The implication of not performing records appraisal and disposition would lead to the universities maintaining records that no longer have value, thus creating space issues. Consequently, it may affect service delivery because in a situation where records storage is limited, access to and retrieval of records is very difficult. Therefore, when retaining records for long-term preservation, recordkeeping officials should weigh the records against important considerations such as storage costs, maintenance costs and access implications because of quantity.

Although a retention/disposition schedule is an essential tool as it ensures that records remain protected and reliable evidence, the results of the present study show that only 22(27.8%) of the respondents indicated that their universities had a university-wide retention/disposition schedule. This indicated that the universities were at risk concerning recordkeeping practices because 57(72.2%) respondents indicated that their universities had no university-wide retention/disposition schedule. Equally, Mohammed, Tetteh and Ahmed's (2018) study noted that the absence of the disposition schedule was among the challenges associated with managing records at the Sunyani Technical University in Ghana. The International Organization for Standardization 15489-1 (2016:14) emphasizes that institutions should possess recordkeeping systems that facilitate and implement retention-disposal decisions.

Previous studies have noted that a lack of retention and disposal schedules may cause challenges in managing records. For instance, Ndenje-Sichalwe (2010:80) indicated that without a retention schedule, an institution might unnecessarily retain records for an extended period or destroy records without considering their values. Similarly, Madulu (2016:131) also noted that the absence of a disposal schedule might cause problems in the storage and tracking of records. Therefore, universities should initiate regular disposal of records in harmony with the approved records retention and disposal schedules. In other words, the retention and disposal of records should follow the disposal schedule (Madulu 2016:3). Records appraisal and disposition schedules are essential to effective recordkeeping as they assist the institution in controlling the growth of records (Shepherd and Yeo 2007:147-148). The absence of retention and disposal schedules in public universities threatens university service delivery since the disposal of records is a significant activity in recordkeeping. Records appraisal and

disposal should be embraced as part of university business activities and carried out systematically.

6.2.6 Control of temperature, light and relative humidity in the storage area

It is significant to control temperature, light and humidity in the records storage area. Control of temperature, light and humidity in the records storage area is usually done using artificial climate control equipment such as air conditioning systems and hygrometers. The study's findings revealed that thirty-nine (49.4%) indicated that they do control temperature, light and humidity in the storage area. In comparison, 40(50.6%) said they did not control the storage area's temperature, light and humidity. Although there was no question asked on the objective of controlling temperature, light and humidity in the storage area, it can be assumed that cooling is needed because the most significant factors affecting the physical quality and stability of records material are fluctuating or excessively high or low temperatures and relative humidity as well as excessive exposure to light. For instance, in this study, University F and University H have higher chances of being affected by high temperatures and relative humidity as compared to University B, and University E. This is because of the geographical location and the climatic conditions in which they are located. Therefore, control of environmental conditions in the records storage area is important for recordkeeping.

Participants were asked to indicate the type of climate control equipment used to control temperature, light, and humidity. The use of air conditioning systems and fans in the storage area as methods to control the temperature in record storage areas was cited by 41(51.9%) and 21 (26.6%) respondents, respectively. One of the main challenges to the safety and maintenance of records is the risk of disaster (Asamoah, Akussah and Musah 2018:219). Therefore, protecting records against disasters is crucial for any records officer. In this regard, controlling temperature, light and humidity in the records storage area greatly affects the long life of records. The life of records would be compromised by uncontrolled light, temperature and humidity, leading to their destruction. Deterioration of records would make records unavailable for use.

It is a fact that each institution is obliged to safeguard records under its custody. Therefore, the protection of records is necessary. This is why, in his study, Daneshmandnia (2019:19) emphasized that institutions should manage their records to prevent them from being damaged. This study also revealed that dehumidifiers and dehydrating agents were not widely used in

universities. It can be assumed that dehumidifiers and dehydrating agents were not needed in the universities as in Tanzania, almost every month temperatures are high (Climates to travel 2023). Control of environmental factors such as light and humidity positively impacts preventing biological factors such as rodents and moulds. Rodents like cockroaches do not favor light, so controlling and monitoring light, temperature, and humidity would diminish insect infections. For instance, in this study, University A, University F, and University H have higher chances of being affected by moulds as compared to University B, University C, University D, University E, and University G. This is because of the geographical location and the climatic condition in which they are located. Therefore, planning in anticipation of disasters is significant for protecting records against damage (Asamoah, Akussah and Musah 2018:228).

6.2.7 Digital recordkeeping

Records professionals need to be more knowledgeable about the management of digital records. Chigariro and Khumalo (2018:170) noted that among the challenges African countries face is the need for more knowledge among records officers and government authorities on digital recordkeeping issues. What is challenging in most of the African offices, particularly the older employees, is technophobia. Due to insufficient skills in ICTs, many records professionals are very conservative and have a phobia of computers. This could be due to the generation gap between the new and old records professionals, which leads senior employees to see information technologies as a threat to their status as recordkeeping specialists. In this regard, ESARBICA members have expressed their concerns about the impact of information technologies on managing records in their general conferences. ESARBICA resolved to have their member states explore relationships with IT experts to develop strategies for managing digital records (Mnjama 2007:27). ESARBICA was also concerned that the introduction of information technology was producing records that needed to be managed differently from the well-known paper-based records (Mnjama 2007:25). Despite these ESARBICA resolutions, the recordkeeping situation in most parts of Africa is largely still faced with the old challenges including shortage of records professionals with requisite knowledge and skills in digital recordkeeping, lack of appropriate infrastructure and facilities for digital records, absence of migration policies, procedures and strategies, and instability of electronic media (Wamukoya 2021:42). Considering the aforementioned issues, it shows that not only have African governments been slow in addressing issues relating to digital records but even archival

institutions have done so little to investigate how digital records are being managed (Wamukoya 2021:42).

The principle of integrity in the IGRM advocates the necessary collaboration of recordkeeping professionals with information technology experts to enhance integrity (Electronic Discovery Reference Model 2011). The present study found that 33(41.8%) indicated that their universities manage digital records. These findings show that universities must maximize the benefits of using computers in recordkeeping. This would negatively affect the university's service delivery. Within the current study, the researcher established that, even though participants indicated that their universities manage digital records, only 39.2% cited that digital recordkeeping was part of their job description. This finding concurs with Issa and Wamukoya (2018:31), who indicated a need for more digital recordkeeping activities in many African countries. This could be because the responsibilities of maintaining digital records in African countries need to be better defined. In Africa, records officers have yet to capture the basics of managing digital records (Asogwa 2012:201). Kamatula (2018:158) indicated that even though there is an indication of the use of digital records in Tanzanian public institutions, digital recordkeeping still needs to be streamlined in many registries. For instance, Mikidadi's (2013) study states that within Tanzanian higher learning institutions, facilities for managing records according to international standards were often lacking and were almost non-existent for digital records. In other words, one can say that, despite rigorous efforts made by the Tanzanian government to initiate e-government, most public service records need to be digitally managed (Newa and Mwantimwa 2019:116). More on the initiatives done by the Tanzanian government to improve the recordkeeping state is found in section 6.6 of this Chapter.

Concerning training on digital recordkeeping, the results of this study show that 65.8% of the respondents from the eight public universities have yet to receive training on digital recordkeeping. The universities are expected to ensure that their recordkeeping staff are well trained in digital recordkeeping, which makes the universities generate digital records. The recordkeeping departments in the universities should be empowered to train recordkeeping staff. The lack of skills by recordkeeping staff on issues relating to digital recordkeeping was noted by Chigariro and Khumalo (2018:170), who indicated that most records professionals in the ESARBICA region need ICT skills in managing digital records. Adeola and Evans (2019:12) state that most African countries' digital infrastructure is very poor. Egwunyenga (2009:113) indicated that African recordkeeping professionals lack the essential skills for

maintaining records and archives in universities. The lack of trained staff or experienced recordkeeping officers to manage and preserve digital records is among the challenges African institutions face when managing digital records and archives (Erima 2022:112). Staff members should have the knowledge and skills to maintain records to ensure the university recordkeeping systems are working properly (Phiri 2016:246).

Digital infrastructure refers to facilities, tools, systems, platforms, applications, devices and strategies that support the use of both present and emerging technologies (Chaterera-Zambuko, Masuku and Bhebhe 2022:53). Digital infrastructure facilitates the implementation of different economy components including cloud computing and others (Chaterera-Zambuko, Masuku and Bhebhe 2022:49). Cloud computing is one of the common examples of digital record infrastructure that can be used for improving security, increasing teamwork, increase institutional performance, increasing system performance and increasing storage capacity just to mention a few (Chaterera-Zambuko, Masuku and Bhebhe 2022:54). The International Records Management Trust (2003:2) advised that institutions should have strong information technologies infrastructure with regard to digital recordkeeping while Ngoepe (2017:31) observed that institutions should invest in capacity development including training and provision of a strong and sustainable infrastructure needed for digital recordkeeping. The importance of having strong digital infrastructures cannot be over-emphasized, as evidenced by the above studies. However, the present study noted the lack of strong, sustainable digital infrastructures and capacity development amongst recordkeeping staff.

Although digital recordkeeping is becoming more common in the public sector (Chaterera-Zambuko et al. 2022:55), previous studies showed that public institutions in Africa faced challenges in digital recordkeeping (Ngoepe and Keakopa 2011; Abuzawayda, Yusof and Abaziz 2013; Asogwa 2013; Kamatula 2018; Newa and Mwantimwa 2019). Among the root causes of the challenges in recordkeeping in Africa are the presence of outdated legislation on the management of digital records, fewer universities offering recordkeeping modules and lack of infrastructure (Ngoepe 2018:18-19).

The International Research on Permanent Authentic Records in Electronic Systems [InterPARES] is a research project investigating the authenticity, reliability and accuracy of electronic records through their lifecycle (Dictionary of Archives Technology 2023). Since 1998, the InterPARES research project has been working on the challenges facing digital recordkeeping issues, including having stable content for digital records and how to ensure the

trustworthiness of digital records over the long term (Katu 2016:118). During the fourth phase (2013-2018) of the InterPARES project, an InterPARES Trust was established aiming at exploring how digital records were being managed in a networked and Internet environment (Ngope 2022:2). The overall goal of the InterPARES Trust was to develop frameworks that would support issues such as procedures, regulations, standards, policies and legislation regarding digital records entrusted to the Internet (Katu 2016:117). As a result of this project, ESARBICA regional member countries have embraced technological advancements and are promoting e-governance initiatives (Chaterera-Zambuko et al. 2022:55). However, despite the efforts towards digital government initiatives, their links to recordkeeping practices are not well grounded and thus need more attention (Kalusopa and Mosweu 2022:96; Wamukoya 2021:42). More on the professional knowledge and skills of records staff responsible for recordkeeping is found in section 6.3 of this Chapter.

With the shift from paper to digital records, most institutions are now adopting information technologies-based systems to improve recordkeeping and service delivery (Mosweu, Bwalya and Mutshewa 2016:1). Examples of these systems are Electronic Documents and Records Management Systems (EDRMS), Electronic Records Management Systems (ERMS), Document Imaging Systems (DIS), Enterprise Knowledge Management System (EKMS) and File Management Systems (FMS) (Kamatula 2018:57). The present study established that 32.9% of respondents recorded that their universities have an Electronic Document/Records Management (EDRM) system. This is interesting because most of the respondents, as indicated earlier, cited that they did not receive any training in digital recordkeeping. The university's prevailing situation regarding the lack of digital recordkeeping training could compromise service delivery; the recordkeeping systems may need to be handled more effectively and efficiently. Lack of digital recordkeeping training would affect the management of digital records in the recordkeeping systems.

As reported in section 3.3.1.1 in Chapter Three, recordkeeping systems such as ERMS and EDRMS are presently the most popular application systems for maintaining digital records. For instance, EDRMS can integrate and interface with existing paper filing systems to assist in access and retrieval, track the movement of records, manage storage facilities and the retention and disposition of paper-based records (Kamatula 2018:65). This integration is slowly eradicating the paper filing systems and thus promoting efficiency and effectiveness in recordkeeping. Therefore, a lack of digital recordkeeping systems in universities greatly negatively impacts the efficiency of recordkeeping in general. For the public universities in

Tanzania, EDRMS is still in the infancy stage of usage, and hence more needs to be done to ensure full utilization. Digital records can easily be retrieved, so they are vulnerable to being modified, deleted and copied by unauthorized users. Such activities compromise the integrity of the records. Tanzanian institutions, therefore, should implement strategies to protect their records from unauthorized users. This can be done by utilizing recordkeeping systems such as EDRMS. One way to protect digital records is to maintain them in digital recordkeeping systems that meet requirements for maintaining authentic records (Svard 2014:35). Proper recordkeeping will assist universities in maintaining their records, efficiently fulfilling their objectives, safeguarding their records from litigation, maintaining their corporate memory, and enhancing good governance. Thus, effective recordkeeping is the foundation for any responsible organization that must fulfill its obligation of accountability and transparency towards its individuals and protect their human rights and dignity.

6.3 Professional knowledge and skills of records staff responsible for recordkeeping

Despite the establishment of national archival institutions with the mandate to manage records generated by the government, the records and archives management situation in most African countries has largely remained not good (Wamukoya 2021:42). Effective recordkeeping depends upon recordkeeping staff receiving training and education in the management of records. Lack of appropriate recordkeeping training for recordkeeping staff is one of the factors that hinder proper recordkeeping practices (Akotia and Balasu 2017:5). The present study used the records continuum (which incorporates a systems approach in all the four phases of the model) and the Information Governance Reference Model to guide in answering the second research question. The records continuum was used to guide this research question because it encourages collaboration engagements in the work of archivists and records managers where recordkeeping is concerned, and the IGRM was used because it facilitates visualization and discussions on how best to apply the generally accepted recordkeeping principles. IGRM also illustrates how it is necessary to collaborate with information technology professionals. The second research question needed the participants to explain the recordkeeping skills and training required for recordkeeping practices under the following sub-themes:

- i. Level of professional training in recordkeeping; and
- ii. Recordkeeping professional associations.

6.3.1 Level of professional training in recordkeeping

Knowledge and skills are essential in recordkeeping as they affect how records are maintained. Therefore, it is necessary to identify whether recordkeeping professionals have adequate knowledge and skills. As indicated in Chapter One, under section 1.9.3, there is a reconceptualization of the term records management, which has led to the development of recordkeeping informatics (Australia) and records and information management (United States of America). With this reconceptualization, records professionals have had to shift their roles and responsibilities to remain relevant within their institutions. In this regard, new recordkeeping competencies and ways of maintaining records are needed. Among the resolutions adopted by the ESARBICA was that there should be staff visits and exchange of information. This was considered a significant benefit to recordkeeping professionals because it was believed that it would provide platforms for the exchange of ideas and acquisition of new skills (Mnjama2007:25). New skills gained from staff exchange programmes will eliminate issues grappling ESARBICA member countries, including lack of archival legislation, inefficient management of digital records and ineffective professional training for records officers as mentioned by Nengomasha (2018:258).

As reported in section 3.4.1 in Chapter Two, various institutions offer recordkeeping training at different levels in Africa. Some of these institutions include the University of Botswana, the School of Information Sciences at Moi University in Kenya, the School of Library, Archives and Documentation Studies, Bagamoyo, in Tanzania, Zimbabwe Open University, Makerere University in Uganda, Kenyatta University and the University of Zambia, just to mention a few (Nengomasha 2013:7). Although this may be seen as an indication of the recognition on the importance of management of records, the impact on quality education is questionable (Katuu 2015:107). This is evident from the low numbers of qualified recordkeeping staff (Katuu 2015:107; Wamukoya 2021:43). This is why the government of Tanzania has put in place measures to control this situation, making it a rule that the Tanzania Commission for Universities should approve all the programmes courses offered by Tanzanian universities.

Failure to manage records has, in many ways, become a stumbling block to providing services to citizens (Wamukoya 2021:43). Participants were asked to indicate their highest level of educational qualification. The majority of participants, 54(59.3%), have diploma

qualifications, 13(14.3%) have a certificate qualification and 10(11.0%) have an undergraduate degree qualification as their highest education level. This indicates that the participants in the selected public universities have formal records and archives management qualifications. This could have positive implications for the recordkeeping practices in the public universities. These findings contradict Phiri's (2016) study, which established that the education level of the records officer in the Malawi universities was very low. Recordkeeping staff with relevant recordkeeping skills and knowledge are the source for successful future implementation of sound recordkeeping practices. Due to the shortage of skilled and experienced staff in the recordkeeping profession, training institutions should strengthen experiential learning (Nengomasha 2013:8). The pressure should be on ensuring that the training institutions' curriculums meet the industry's requirements. Although the participants have formal recordkeeping qualifications, the results also show that the participants had various training needs and one of the training needs was management of digital records.

The increase in the number of digital records in public offices needs records staff to be equipped with new recordkeeping skills that can promote records creation, capture, maintenance and use in digital environments (Svard 2014:6). Such new recordkeeping skills and competencies are information technology-related skills such as digital preservation and digitization. Knowledge and skills in digital records and related systems, including metadata identification in digital records procedures for digital records storage, distribution and disposition, is a pre-requisite for recordkeeping staff. Marutha (2011:47) emphasizes the significance of having well-capacitated recordkeeping staff who will establish the necessary records and archives management infrastructure. Poor digital systems infrastructure and incompetent recordkeeping staff are challenges facing digital recordkeeping (Kamatula 2013:104). Therefore, training is one of the essential elements of modern recordkeeping.

The IGRM illustrates interrelationships among values, duties and information assets, demonstrating cooperation among groups of stakeholders to attain effective information governance (Franks 2013:30). By combining operations between the IGRM and the IGMM, the institutions offer the collaboration necessary to attain a transformational recordkeeping level (Electronic Discovery Reference Model 2011). Considering the importance of skilled recordkeeping officers, in this study, participants were asked to indicate if they considered themselves sufficiently capable of maintaining records. The findings revealed that 51.9% of the respondents need to be adequately skilled in recordkeeping. This finding concurred with the view of Egwunyenga (2009:113), who noted that African recordkeeping professionals need

to gain the essential skills for maintaining records and archives in universities. This is in line with what was recommended in Mohammed, Tetteh and Ahmed's (2018) study that measures should be put in place to provide on-the-job training in the management of records for records staff as it was established that most of the records staff do not have knowledge in the management of records.

Similarly, Nakato's (2019) study established that among the challenges facing Islamic University in Uganda was the limited skilled personnel. Consequently, the study recommended that there was a need for the recruitment of professional and skilled personnel with the required qualifications. The success of any integrated recordkeeping program hinges on the professional capacity and status of the recordkeeping staff in the management of records (Mampe and Kalusopa 2012:17). Lack of recordkeeping training places records professionals throughout many parts of Africa in a difficult situation. In this regard, Akotia and Balasu (2017:5) noted that specific skills and broad knowledge are required to carry out recordkeeping. The lack of these skills in recordkeeping could impede recordkeeping in the universities as records are subject to change/modification, deletion and unsafe dissemination, leading to improper decision-making and jeopardy of office operations. This may eventually cause a loss of intellectual and physical control over the generated records.

On the other hand, 48.1% of the respondents who cited that they considered themselves sufficiently skilled in maintaining records were asked to indicate how often their universities trained them. The findings show that ten (26.3%) of the respondents cited every two years, while 7(18.4.2%) recorded more than once a year. Seven (18.4%) indicated every three years and the rest stated they do not know. These low statistics on recordkeeping training attendance by participants was probably due to a need for more budgets allocated for training and educating recordkeeping staff in the universities. This is because the findings of this study also showed that among the problems encountered due to the current state of registry funding in the universities was the inability to educate and train records staff. This means that in the eight universities, continuous training for recordkeeping professionals was a low-priority area for the top management. Training should be a continuous process for recordkeeping staff. This is because the development of information technology and the extensive use of digital devices to perform business operations has led to an exponential growth of digitally-created records. In other words, recordkeeping can be defined as a profession that is constantly changing (Mulauzi 2019:47). With technology; nothing remains the same; much has to be learned along the way, new approaches to knowledge, new skills and undertaking courses or learning with new

technologies (Ndenje-Sichalwe 2010:97). Therefore, recordkeeping staff need continuous training to obtain new skills and knowledge (Dikopoulou and Mihiotis 2010:273). The training should comprise informal and formal approaches, such as on-the-job training. Therefore, providing on-the-job staff training in recordkeeping activities is significant.

Regardless of the findings showing that 48.1% of the participants considered themselves sufficiently skilled in recordkeeping, this study established that the staff had various training needs. The most cited training need was the management of digital records in their entire continuum, accounting for 51(64.6%) of the respondents and the least was the management of paper records in the continuum as the whole, accounting for 22(27.8%) (see Table 5.29). The findings of this study are consistent with those of Luyombya (2010:61), who noted that records personnel needed more technical skills to maintain digital recordkeeping systems. Garaba (2015:3) rightfully said that recordkeeping professionals in ESARBICA lack information technology-related skills and capabilities such as digital curation, digital preservation, audio-visual and digital archiving and digitization. The study's findings by Justice (2016:43) also revealed that those entrusted with recordkeeping are not equipped with the essential skills and knowledge to ensure that records are maintained and preserved in a condition that will make them accessible in institutions. Management support through providing funds for training forums such as seminars, workshops, conferences and other relevant programmes for recordkeeping staff is an option to be considered by the eight public universities. Therefore, training records staff in the management of records will allow them to possess skills that will help them carry out their duties properly.

There are several challenges when we are preserving digital records for the long term. These challenges are technological obsolescence, media fragility and possible physical damage to storage media. Therefore, recordkeeping staff need digital preservation skills to ensure long-term preservation and continuous access to records. As reported earlier in section 3.6.1 of Chapter Three, digital preservation strategies are among the core and requisite skills needed by recordkeeping staff in digital recordkeeping. Migration and emulation are examples of digital preservation strategies. In this study, participants were asked to state if they were using preservation strategies to ensure the long-term preservation of digital records. The results of this study show that migration is the primary strategy used, accounting for 14(42.4%). Migration is the process whereby records are maintained initially in their native digital environment and then moved to new platforms in response to technological changes (Shepherd

and Yeo 2003:197). With this strategy, records must be migrated at intervals throughout their life.

Besides migration and emulation, conversion to an alternative medium is also among the long-term digital preservation strategies. An institution may have various reasons for deciding that records created in one medium/format should be transferred to/converted into another medium/format. Conversion can enhance durability, improve records security, facilitate access to records, or reduce the space that records occupy. Converting paper records into digital records is known as scanning/digitization while converting digital records to paper records is known as printing. The present study shows that digital records into paper records was the conversion mainly used. Twenty (60.6%) of the participants indicated printing to paper as the approach used mainly by the universities (see Table 5.29). The main issue in conversion to an alternative medium is how often one keeps the backup copies of digital records. In other words, the best way to protect digital records is to make backup copies regularly. It is essential to consider how to access and use digital records in an emergency. The findings of this study concurred with what was noted by Kamatula (2013:43/44) that one of the fundamental measures in securing digital information in computer systems is the running of regular backups of digital information. An ideal recordkeeping framework needs to help institutions effectively maintain records; such a framework should consist of backup techniques (Marutha and Ngoepe 2018:189).

Long-term preservation of records has a positive impact on access to records; ensuring the long-term preservation of records would significantly increase the continuous accessibility of digital records. No institution is immune from disaster. In this regard, preventive measures must be implemented to reduce the risk of losing information in digital format. Institutions should use file formats that will survive the technology change. The study's findings reveal that the most commonly used format in universities was the word processing format. Using a stable file format is one of the necessary preservation considerations for managing digital records (Thurston 2015:33). Adobe PDF is one of the file formats that are not easily affected by the change in technologies. The implication of not exercising digital preservation strategies in managing digital records implies a high chance of an organization losing digital records in cases where the storage medium used is outdated. Digital storage media are likely to deteriorate more quickly than paper storage media. Therefore, the rapid rate of technological change makes digital media vulnerable to obsolescence. For this reason, digital records should be transferred to new or other media before old media becomes unusable.

6.3.2 Recordkeeping professional associations

An association is a group of people who have joined a formal organization dedicated to pursuing a common purpose, usually by applying for membership and paying an annual fee (Reitz 2014). Professional associations promote the interest of a specific profession and its practitioners (Reitz 2014). Franks (2018:359) indicated that professional associations are important because they provide continuing training opportunities such as stand-alone courses or certificates. For instance, in addition to a newsletter, professional journal and standards, ARMA International provides online courses and seminars to its members (Franks 2018:359). Also, as indicated in section 3.4.1.1 in Chapter Three and section 5.5.2.2 in Chapter Five, one of the objectives of a professional association is to promote best practices and recognize high standards in professional ethics and competence through professional registration. Being a member of any professional association means you have a higher chance of attending workshops, conferences, seminars and any other training platform the association offers organizations (Hunter 2020:512). If the management of records is considered a professional field, it must possess certain features, including professional organizations (Franks 2018:359). One of the strengths of the records and archives management profession is the community of common purpose embodied in professional organizations (Hunter 2020:509). Records professionals are any persons who are trained in all aspects of records and information management, including their creation, use, retention, disposition and preservation and are similar to the legal, ethical, fiscal, administrative and governance context of records and archives management (International Research on Permanent Authentic Records in Electronic Systems Trust Project 2018). For this study, records professionals include records managers, archivists and registry officers. Therefore, the work of recordkeeping professional associations is to ensure its members become more professional in records and archives management. Recordkeeping professional associations are important in empowering members to obtain the tools, knowledge, skills, exposure and strategic strategies needed to develop, transform and showcase their profession (Ambira 2012:120).

Considering the significance of recordkeeping professional associations, participants were asked to indicate if they are members of any local or international professional association. The results of this study showed that the majority, 54(68.4%) of the respondents, were not members of any international professional association. In comparison, 26(32.9%) indicated they are not

local association members. Of those who said they were local association members, 49(62.0%) respondents indicated TRAMPA, while 5(6.3%) indicated TARESO.

Moreover, for those who indicated that they were members of an international association, 6(7.6%) indicated being members of the International Council on Archives and 3(3.8%) indicated as members of ARMA International. Two (2.5%) indicated that they were members of ESARBICA. These results show that most participants are not members of any association. This means that the participants need training programmes offered by their professional associations to help them improve their skills and knowledge in recordkeeping. For instance, the Australian Society of Archivists, the Association of Canadian Archivists in Canada, the Archives and Records Association in the United Kingdom and Ireland and ARMA International in the United States of America have a competency framework for recordkeeping professionals with an emphasis on knowledge and skills.

This study's results agree with the view of Luyombya (2010:61), who noted that a lack of training opportunities for records specialists in developing countries is still common in many developing countries. This could be because most recordkeeping professionals need to associate themselves with recordkeeping professional associations available in their countries. Although professional associations are important for the discipline, very few African countries have active recordkeeping professional associations (see section 3.4.1.1 in Chapter Three). International Research on Permanent Authentic Records in Electronic Systems Trust Project (2018:15) suggests that countries without a functional professional association should form one. For instance, there is the Tanzania Records and Archives Management Professional Association in Tanzania. This association is as good as not being present. This is evidenced more by a static webpage on the association's website (<http://www.tramp-tz.org>). This means that getting information or events about the discipline is very hard. The current professional association in Tanzania should become more involved in training and education. The implication of not being a member of any professional association is that the recordkeeping staff would be missing the training opportunities that the associations offer. Professional associations in recordkeeping would be key support resources for guiding recordkeeping issues and establishing a professional identity. These associations are in charge of regulating and monitoring education and training programs.

6.4 Recordkeeping laws

Effective institutional frameworks should be in place to have proper recordkeeping in an institution. Sound recordkeeping, as well as the use of appropriate legal frameworks, help institutions achieve transparency and accountability. Therefore, Tanzanian public universities must fulfill legal requirements and adhere to recordkeeping rules and regulations specified by the Tanzanian government. In Tanzania, the relevant laws and regulations that guide the management of records are the Records and Archives Management Act of 2002, the Tanzania Access to Information Act of 2016, the National Security Act of 1970, the Public Service Act of 2002, the National Information Communication and Technology Policy of 2003 and the Tanzania Electronic Transactions Act of 2015. Tanzanian recordkeeping professionals should be aware of these laws and regulations to demonstrate compliance in their business operations. More details about these laws informing recordkeeping in Tanzania were reported in section 3.5.2.1 in Chapter Three.

According to Luyombya (2010:128), legislative and regulatory frameworks are critical considerations for successful recordkeeping programmes because they inform the environments within which records are managed. Legislation related to recordkeeping should reflect the decisions made about how an institution intends to manage its records and archives. Records legislation becomes a significant feature of the broader regulatory framework of accountable and effective organizations. Compliance with records legislation impacts how records are managed. The principle of achieving compliance is amplified by the Information Governance Reference Model (IGRM) used in this study. This is because the model demonstrates eight principles to guide institutions in maintaining records. For instance, as reported in Chapter Two, section 2.2.2.2.1, the fifth principle in this model states that recordkeeping programmes designed should comply with laws, regulations and standards applicable in the management of records, policies of the organization as well as other binding authorities (Electronic Discovery Reference Model 2011). In short, the use of IGRM is widely accepted because it provides a framework that ascertains the level of compliance. Likewise, the records continuum model was also used in this research question because it advises developing laws and policies that unify records and archives as a continuous process in recordkeeping managers. In this regard, the present study used both the records continuum and the IGRM to guide in answering the third research question, which needed the participants to establish the role of records legislation in recordkeeping under the following sub-themes:

- i. Awareness of legislative and regulatory frameworks for recordkeeping;
- ii. The need for a registry procedures manual; and
- iii. Recordkeeping audit.

6.4.1 Awareness of legislative and regulatory frameworks for recordkeeping

For records to be maintained effectively, institutions should ensure that they possess a robust recordkeeping legislative framework. This is why universities should formulate guiding principles on the activities of the records, such as the creation of records, records classification, appraisal of records, records disposal and preservation of records (Netshakhuma 2019:25). In other words, records legislation is the key to sound recordkeeping practices in institutions. A solid records legislative framework is needed for a trustworthy and reliable recordkeeping system. IGRM emphasizes that recordkeeping professionals are to maintain rules and regulations when performing recordkeeping as specified by their governing body. In this regard, awareness of the legislative and regulatory frameworks was investigated and 52(65.8%) of the respondents affirmed that they were aware of the laws informing recordkeeping in their universities.

Even though recordkeeping policy existed, lack of implementation significantly contributed to the problems experienced in recordkeeping in the universities. In other words, the participants indicated they seldom applied the recordkeeping policy in their routine work. Recordkeeping professionals must comply with rules, regulations, standards and procedures. They are to manage the university records as directed by the national archives legislation, standards and regulations. The Universities Act 2005 (Chapter 346 of the Laws of Tanzania) states that any university that fails to comply with the Act, for instance, on information management, such as transferring student records from the university registry to the university archive, will be subjected to a fine. Complying with relevant legislative requirements is a prerequisite for proper recordkeeping in these universities.

Marutha (2018:2) mentioned that even though some Southern African countries have a records legislation framework, the problems still lie in implementing records legislation to ensure that recordkeeping is appropriately done. Having records legislation and not implementing it is equal to not having it in place. This is because records legislation is essential for institutions to ensure proper records and archives management. Records legislation significantly affects how records are maintained in an institution. Thus, the significance of records legislation in the

successful processing, storing and maintenance of records must be considered. The lack of implementation of the laws informing recordkeeping could negatively impact public universities' fostering of good governance, as it would be hard to demonstrate the university's commitment to attaining legal requirements and abiding by recordkeeping standards. One of the indications that there is proper recordkeeping in an institution is that retrieving records is relatively easy.

As reported in Chapter Three, section 3.5, the significance of recordkeeping laws in the successful processing, storing and maintenance of records must be considered. This is because recordkeeping laws are one of the core components of proper management of records. Hence, universities should plan for recordkeeping activities by introducing and implementing records legislation. Recordkeeping laws provide compelling reasons for essential and right measures to be taken. Recordkeeping professionals must have a solid understanding of the legislation available concerning recordkeeping practices. The present study, therefore, concurs with (Mutsagondo and Chaterera 2016; Khumalo and Baloyi 2017; Marutha 2018; Mosweu and Simon 2018; Mosweu and Rakemane 2020; Tsvuura and Ngulube 2020) who opined that weak legislative and regulatory framework hamper efficient and effective management of records. The absence of well-defined recordkeeping policies and practices continues to be a major contributing factor to the mismanagement of records in the public sector (Wamukoya 2021:42).

6.4.2 Registry procedures manual

A registry procedures manual gives office procedures based on best practices for recordkeeping. It should be designed to inform and instruct recordkeeping staff on proper methods used throughout the recordkeeping programme. The registry procedure manual provides guidelines for recordkeeping officers in defining their recordkeeping procedures and, in that way, serves as a framework for establishing stable and consistent recordkeeping systems. The manual describes the significance of managing records from initial to final phases. Among the criteria used to assess the performance of a records office was the presence of a registry procedures manual. As indicated in Chapter Two, section 2.2.2.2.1, the IGMM describes a pathway of improvement for organizational performance and is categorized by maturity levels. It describes recordkeeping programs' features, with specific reference to the Generally Acceptance Recordkeeping Principles (GARP), using maturity levels as a spectrum for measurement. The maturity level ranges from level one to level five, where the lower level means lack of maturity (substandard) and the higher level means fully matured and self-

optimizing (Hagmann 2013:233; Proenca, Vieira and Borbinha 2017:128). The current study required the participants to indicate if their universities had a registry procedures manual.

Seventy-one (89.9%) showed they had a registry procedures manual. The findings of this study concurred with those of Ndenje-Sichalwe (2010), who noted the presence of the registry procedures manual. The absence of a registry procedures manual would have negative implications for proper recordkeeping and, hence, poor service delivery. This is because recordkeeping professionals would lack guidelines concerning the management of records. This situation would affect the capability of recordkeeping officers to access and use the records. For instance, a lack of comprehensive recordkeeping guidelines has been identified as one of the hindrances to the development of management of records in Africa (Nengomasha 2013:3). Presence of a registry procedures manual in public universities was among the ways would help enhance the state of recordkeeping in the universities.

6.4.3 Recordkeeping auditing

Recordkeeping auditing should be done regularly to ensure that the systems are being implemented according to the organizational policies and requirements (International Organization for Standardization 15489-1 2001:17). An institution should conduct a regular review of its recordkeeping practices to assess its compliance with crucial recordkeeping functions and requirements and identify areas needing improvements concerning desirable best practices and formulation of plans to implement improvements measures (Government Records Service 2011:24). This is to make sure that the institution's recordkeeping programme is functioning effectively. Auditing ensures the efficiency of a recordkeeping system (Kemoni 2007:163). The process of recordkeeping auditing can also be a valuable tool in assessing an institution's knowledge of recordkeeping. Generally, institutions undertake two types of recordkeeping auditing activities to understand how institutions perform and identify the areas that need attention. These two types are compliance auditing and performance auditing. Compliance auditing aims to establish if recordkeeping is carried out in line with relevant legislation and regulations (Ngoepe 2012:12). Performance auditing involves an in-depth analysis of recordkeeping to determine if recordkeeping is effectively and efficiently done (Ngoepe 2012:209).

As a benchmark for progressive improvement, the IGMM enables measuring and assessing an institution's progress as it frequently improves its overall information governance (Dong and

Keshavjee 2016:251). As reported in section 2.2.2.2, Chapter Two, the Maturity model defines effective recordkeeping levels in the institutions, with specific reference to the IGRM. The IGRM focuses on the GARP principles and provides essential context for the Maturity model. These principles offer guidelines on how universities can enhance appropriate recordkeeping programmes. The current study sought to establish whether the eight universities have systems to control and monitor the performance of their recordkeeping systems. Fifty-five (59.6%) recordkeeping professionals indicated that they did not audit their universities' recordkeeping practices. This was contrary to the advice (2016:7), who asserted that there should be sound recordkeeping systems to perform an audit effectively as poor recordkeeping practices lead to corruption. The lack of recordkeeping audits in public universities may affect the service delivery of the universities as recordkeeping staff would be incapable of determining the performance of their recordkeeping systems.

Institutions are expected to conduct recordkeeping audits, and auditing ensures the efficiency of a recordkeeping system at the creation, circulation, management, use and disposition stages (Phiri 2016:208; Franks 2018:253). The IGRM advocates that information audits should be done regularly and improvements should be undertaken continuously in an organization. The implication of not performing recordkeeping auditing in an organization is that it would be hard to establish if an organization is performing well in recordkeeping activities; hence, identifying areas that need further attention will also be very hard. The absence of recordkeeping auditing also implies that determining if an organization is complying with the obligations of the relevant records legislation and the related standards and codes of best practice is also impossible. Universities should regularly assess the efficiency and effectiveness of their recordkeeping programmes.

6.5 Disaster management, security and confidentiality control

One of the main challenges to the safety and maintenance of records is the risk of disaster (Asamoah, Akussah and Musah 2018:219). Some of the risks facing records and archives management are software and hardware obsolescence, water damage, computer virus attack, rodents, fire, unauthorized access, moulds, rapid change in technologies, modification and malicious deletion (Kamatula 2013:40). Therefore, in recordkeeping, ensuring that records are protected from unauthorized access, modification, destruction, and prevention from theft and disasters is significant (Msibi 2015:110). In this regard, the International Organization for

Standardization 15489-1 (2016:15) emphasizes that it is essential to formulate, develop and use rules that recognize access rights, restrictions and permissions appropriate to records. Risk management strategies such as regular backups, the use of smoke detectors, the use of controlled access, the use of surveillance cameras, the use of anti-virus protection, the use of passwords, the provision of physical security and use of firewalls should be put into consideration to enhance disaster management and security control.

As reported in Chapter Two, the records continuum model recognizes the need to protect records from the time they are created to the time they are preserved as archives and the Information Governance Reference Model (IGRM) is designed and created to guarantee a security level to information intended to be private, vital or confidential to business continuity. Amongst the benefits of the IGRM is maintaining valued information in a secure environment within an organization. In this regard, the present study used both the records continuum model and the IGRM to guide in answering the fourth research question, which needed the participants to establish the level of security and confidentiality control in recordkeeping under the following sub-themes:

- i. Storage facilities used in the registry;
- ii. Security classification of records in the office; and
- iii. Disaster management.

6.5.1 Storage facilities used in the registry

Records are valueless unless they are used, and for them to be used effectively, they must be readily available and accessible to the users. Being able to locate records is essential to making sure that records are reliable and accurate. It is also crucial for institutions to properly manage records as it influences long-term access to information. Making sure records are appropriately stored will ensure that records are protected from being affected by disasters. In this regard, it is critical to ensure that records are appropriately managed to make them available to authorized users when needed. Issues such as storage capacity and records format concerning records storage should be considered before records are created, as this will aid in determining how records will be captured in recordkeeping systems. Records should be stored in storage that will guarantee authenticity, reliability and usability (International Organization for Standardization 15489-1 2016:17).

The sixth principle of the IGRM states that ensuring the availability of information on records is very important since, with timely information, an institution can continue with normal operations. IGRM indicates that institutions should manage records to guarantee efficient, timely and accurate retrieval of needed information (Electronic Discovery Reference Model 2011). Considering the importance of storage facilities, participants were asked to indicate storage facilities used in their university to store records in the current study. The present study's findings were that universities used a variety of storage facilities for recordkeeping. Steel cabinets 54(68.4%) was the most common storage facility. The next most commonly used storage facilities were open shelves. The International Organization for Standardization (ISO) recommends that records storage be able to protect the records from destruction by disasters. Thus, steel cabinets are considered the most appropriate for records storage, especially in disasters like fire.

While universities used various storage facilities, the primary issue was the sufficiency of the storage facilities used. This study noted that universities needed more storage space for records. This is why participants were asked to give suggestions to help improve the current recordkeeping practices in their universities. They recommended that the universities should have more storage facilities. Lack of proper records storing avenues can damage records (Nsibirwa 2012:218) and affect their availability, access and use (Mampe and Kalusopa 2012:14). In the present study, it was also indicated that lack of proper storage equipment was among the problems attributed to missing files in the universities. Iwhiwhu (2005: 2349) noted that most universities have failed in managing records because the offices in charge of the management of records are ill-equipped and have recordkeeping staff that are ill-trained in the management of records. Universities should provide enough storage and security facilities to prevent damage and loss of records. Access and use of records is an essential aspect of recordkeeping since records can only be useful to the institution if records users can access the records in a timely manner. International Organization for Standardization (15489-1 2001:18) directs that there should be timely and efficient access to and retrieval of records to support the institution's business operations and achieve accountability and regulatory requirements. Proper storage conditions guarantee that records are secured, available and managed cost-effectively (International Organization for Standardization 15489-1 2001:18).

Since storage space is an issue in universities, universities should opt to preserve their records in the cloud. This is because, despite having the benefits of unlimited storage and remote access, cloud computing guarantees the long-term storage of records. Converting paper into

digital format is also necessary. Conversion into digital form can enhance durability, improve the security of records, and reduce the space the records occupy. These digitized records can be stored online or offline. Less use of paper records will facilitate timely service delivery, decrease storage space requirements, and guarantee easy access to and sharing of records. The essential issue recordkeeping professionals need to consider in storing records is the storage environment (digital or physical). The picture portrayed by the current study is that there was a need for improvement in university records storage. Lack of enough records storage would negatively affect service delivery. It would affect the speed of retrieving files, leading to delays in decision-making. Inadequate records storage facilities would also compromise the security of records, leading to their loss, hence making them unavailable when needed. Concerning storage space, digital records can be preserved offsite for safe storage. This helps institutions to reduce their storage space needs.

Concerning the management of vital records, participants were asked to indicate if their universities had specific procedures for identifying and protecting vital records. Results show that all universities had specific procedures for identifying and protecting vital records. Not all records can be secured equally in an emergency. Therefore, it is best to plan what will be receiving priority for protection in the event of a disaster (Przybyla and Huth 2004:6). These vital records can be stored on-site or be moved to safe storage such as an offsite vault, another office within the institution with good environmental controls or to the records center. The participants were then asked to indicate where they stored their vital records. The results show that 12(15.2%) were using commercial storage to store their vital records, 14(17.7%) were using servers and 31(39.2%) cited offsite. These results indicate that all eight public universities have a dedicated place to store their vital records. As reported in section 5.5.1.1.3 in Chapter Five, vital records are any records needed to begin business recovery after a disaster. It is important to identify those records important to the university's business and ensure they are secured first. Without those records, universities would have difficulties performing their core business activities. For this reason, recordkeeping officers should often choose to concentrate much on those records whose loss would put the universities at great risk or those without which the universities could not continue to function. In general, vital records are those records that support the vital functions of the institution (Shepherd and Yeo 2003:211).

6.5.2 Security classification of records in the office

To enable activities such as capturing, retrieving records, security, access monitoring and disposal of records, records are to be organized according to records classification schemes (Ndenje-Sichalwe 2010:259). Classification of records allows actions such as security protection and user permission to be easily done (Mampe and Kalusopa 2012:13). Depending on how records are created, security procedures such as access controlling and user confirmation must be put into practice to safeguard records (Kamatula 2018:55). There should be a proper level of security control for both paper and digital records in any institution. One should consider the level of security and protection when practicing proper recordkeeping. Proper recordkeeping ensures that there are no security problems surrounding records.

The principle of protection in the IGRM emphasizes that there should be a proper security control level for both paper and digital records. Using the Information Governance Reference model, the study sought to determine security measures to protect records from unauthorized access and gather suggestions from respondents to improve recordkeeping practices in the eight universities. The current study found it was necessary to establish the level of security and confidentiality control in recordkeeping in public universities. In the present study, when respondents were asked to indicate if the security classification of records was being done in their universities, 42(53.2%) responded that they did indicate the security classification of records. In comparison, 37(46.8%) said they did not indicate the security classification of records. The protection of sensitive records is significant. Therefore, security classification of records should be done to protect confidential records and loss of information and protect the interest of universities. Institutions should maintain their records in such a manner that will make sure those records are protected from unauthorized access or secured from destruction (Daneshmandnia 2019:19). Concerning the types of security classification of records, respondents in the current study reported that they were using different types of security classification including confidential (100.0%), secret (31.0%), top secret (28.6%), open (28.6%) and restriction (21.4%) as shown in Table 5.39. These results show that the respondents recognized the need to protect records against unauthorized access.

Many African records professionals need to be more knowledgeable about the security of digital records. In the ESARBICA region, most of the records professionals are faced with challenges in managing digital records and among the challenges is the lack of knowledge among records officers and government authorities on digital recordkeeping issues such as data

security (Chigariro and Khumalo 2018:170). The protection of digital records should be addressed to guarantee confidentiality, information integrity and accuracy. Therefore, since the present study dealt with both digital and paper-based records, there was a need to establish precisely how digital records were protected from unauthorized access. The respondents confirmed that they were using methods such as passwords (67.1%), login-in procedures (31.6%), firewalls (6.3%), audit trails to track use (6.3%), encryption technologies (5.1%) and gateway filter software (3.8%) to ensure the security digital records. The development of information technologies and the preservation of digital records have raised concerns regarding records security, privacy and confidentiality. This introduction of technologies means that records are made more available and accessible. Without a high-level security framework, confidence in recordkeeping would be hard to build, as digital records can be easily modified or deleted at any time. For this reason, there is a need to provide proper security controls to manage digital records. By implementing security measures, universities can reduce information security risks and threats.

6.5.3 Disaster management

Disaster management involves being prepared for unexpected and dealing with disasters effectively should they occur (Asamoah et al. 2018:219). Disaster management in recordkeeping is the key to protecting records from natural and human disasters. One of the major threats to managing records is the risk of records loss. Therefore, to protect records, many organizations develop business continuity plans. Such plans are based on the concept that an institution should identify its assets, such as critical information sources and then establish procedures to protect them. To prevent disasters in offices, individuals are needed to ensure that there is a disaster management plan. According to the Tanzania Records and Archives Management Act, No. 3 of 2002, every public office is responsible for protecting information under their custody. Fifty-six (70.9%) respondents answered that their universities had yet to issue guidelines on the security and access rights of both digital and paper records. Planning in anticipation of disasters is significant for protecting records against damage or theft (Asamoah et al. 2018:228). It is meaningless to manage records without taking into consideration issues of security, privacy and ethics (Ngoepe, Mokoena and Ngulube 2010:38). Lack of guidelines on security and access rights to protect records against damage or theft in the universities signifies a lack of top management support for the adoption and implementation risk management programmes.

The need for institutions to maintain the security and privacy of records is a matter that must be addressed. In this regard, it is best to plan what will receive priority for protection in the event of a disaster (Przybyla and Huth 2004:6). The records professional's priority is to secure the institution's records. Thus, institutions need to conduct risk assessments to know when they are weak regarding disasters and security and find the right solutions to alleviate the weaknesses (Asamoah et al. 2018:219). Respondents in this study were asked to indicate the disasters that are likely to affect records in the universities; the present study showed that pest infection (57.0%), rodents (43.0%), computer system failure (27.8%), fire (26.6%), unauthorized intrusion (26.6%), floods (13.9%), leaking roof (12.7%), sabotage (8.9%) and explosion (6.3%) as shown in Table 5.43 were the disasters that were likely to affect records in their universities. This indicates that the university records were highly vulnerable to risks and threats, negatively impacting the universities.

No institution is immune from disaster. Preventing records from disasters should be the primary concern in all institutions. Protecting records against disasters is a very crucial role of any recordkeeping officer. Respondents of this study were required to provide information on the methods/equipment used to prevent university records from being damaged. The methods/equipment cited by respondents included lockable metallic cabinets (70.9%), fire detectors (58.2%), surveillance cameras (29.1%) and smoke detectors (24.1%). Institutions should provide staff training, including training on disaster management. Respondents were asked to confirm if they received training on fire-fighting techniques; the findings of this study were that 61(64.6%) had yet to receive any training in fire-fighting techniques. Recordkeeping staff should be trained on how to operate the fire-fighting equipment. The absence of fire-fighting training was likely to impact service delivery because recordkeeping officers depend on the information they use to provide services. Training in fire-fighting techniques would provide recordkeeping staff with the necessary skills and knowledge in areas including fire awareness, fire prevention and fire control. Fire suppression present in the universities included fire extinguishers (100.0%), standpipe water systems (29.3%), buckets of sand (24.1%) and automatic sprinkler water systems (13.8%), as shown in Table 5.45. The findings show that the fire-fighting facilities, such as the fire extinguishers, were regularly inspected for maintenance. The impact of not regularly inspecting and servicing the fire-fighting facilities implies that the records managed by the public universities are at risk of being affected by the fire. Inspecting and servicing these facilities means that the chances of having faulty equipment are minimized.

6.6 Interventions required to be put in place to address recordkeeping issues in Tanzanian public universities

The present study used the records continuum model and the Information Governance Reference Model guide to answer the fifth research question. The records continuum model was used because it recommends that recordkeeping should be practiced continuously as long as there is a need for business continuity and the Information Governance Reference model was used because it covers the requisite infrastructure (personnel, finance, IT, etc.) that should be in place for control and use of information. The fifth research question needed the participants to indicate if there were any interventions required to be put in place to address recordkeeping issues in Tanzanian public universities under the following sub-theme:

- i. Support offered by the top management toward recordkeeping activities.

6.6.1 Support offered by the top management toward recordkeeping activities

One of the significant issues in recordkeeping is for top management to support proper recordkeeping activities. For instance, it is for top management to guarantee the existence and implementation of records legislative framework for proper recordkeeping. Top management must be involved in each phase of the recordkeeping process. Top management must embrace recordkeeping functions to enhance effectiveness in all aspects. As discussed in section 6.2.1 of this chapter, the success of recordkeeping programmes in institutions depends upon adequate funding and budgetary allocations. Among the records and archives management functions that need budgetary allocation are; staff capacity building and training, development and implementation of recordkeeping policies, and recordkeeping programmes (Kemoni 2007:291). But, regrettably, the problem of low budgetary allocations for archives and records management is common in many African countries. Previous studies have established that some African public universities considered recordkeeping to be a low-priority activity and did not provide the needed support to recordkeeping staff to enhance recordkeeping practices (Mwangangi 2013; Pereira 2018; Nakato 2019).

This lack of enough budgets dedicated to recordkeeping in the universities could be attributed to the top management's lack of prioritization of the records and archives management functions. For instance, in this study, although the findings indicated that the budget for recordkeeping activities was set aside, other indicators for recordkeeping readiness, such as

recordkeeping training and skills, left much to be desired. A review by Mnjama in 2007 of the ESARBICA resolutions from 1965-2005 revealed a failure to manage archives due to a lack of trained recordkeeping staff and insufficient records storage equipment (Nengomasha 2013:3).

The study sought to establish whether the eight universities received support from their top management in ensuring that recordkeeping was done correctly. Most respondents, 53(67.1%), reported that the top management supported recordkeeping activities in their universities. Although the top management supported recordkeeping activities, as earlier reported in section 6.3 of this Chapter, the current study's findings identified the need for adequate recordkeeping training as one of the challenges faced by recordkeeping professionals in managing records in public universities. The findings of this study showed that continuous training for recordkeeping professionals was a low-priority area for the top management in the universities. The lack of enough funds dedicated to recordkeeping activities limits training opportunities for recordkeeping staff (Mosweu and Rakemane 2020:110). A study by Mphunda and Mnjama (2022) revealed that support for managing records practices is a major challenge. Top management should support the management of university records by providing enough budget and facilities. In this regard, Tanzanian public universities can explore top management support through funding for training forums such as conferences, workshops and seminars. The lack of recordkeeping training leads to the inability of recordkeeping professionals to play an active role in designing and implementing digital recordkeeping systems. Therefore, information technology-related skills, such as digital curation, digital preservation, audio-visual and digital archiving, and digitization are essential aspects of modern recordkeeping.

Further, the present study's findings revealed that a lack of properly implemented recordkeeping policy was a challenge in managing university records. Even though some Southern African countries have a records policy framework (Marutha 2018:2), the problems still lie in implementing a records policy framework to ensure that recordkeeping is appropriately done. This issue of policy framework has also been reported by (Asogwa 2013). Therefore, one of the important issues in recordkeeping is for the top management to guarantee the existence and implementation of a recordkeeping policy framework for proper management of records. The readiness of top management to support the implementation of recordkeeping policies is an important enabler of effective recordkeeping.

Subsequently, respondents were needed to provide suggestions for improving university recordkeeping practices. The following general recommendations were cited:

- i. Universities should employ more recordkeeping staff;
- ii. Allocate sufficient budgets for the management of records activities;
- iii. Improve working conditions for the recordkeeping staff;
- iv. Universities should improve recordkeeping security; and
- v. Top management should establish a training program for recordkeeping staff.

The present study has highlighted fundamental issues regarding records and archives management in Tanzanian public universities. The focus is on the issues affecting recordkeeping and how they can be resolved. Based on the results of this study, the study comes up with a framework to manage university records in Tanzanian public universities, a key output of the study. The proposed framework is meant to ensure effective recordkeeping in public universities, supporting service delivery. More details on the proposed framework are discussed in Chapter Seven. The next section provides a summary of this Chapter.

6.7 Summary

This chapter presents a discussion and interpretation of the data presented in Chapter Five. The Chapter was guided by the underpinning models: the records continuum model and the Information Governance Reference Model. The researcher was drawn to the literature review to provide comparisons by confirming and disconfirming the study findings from similar studies to provide new insight into the literature. Effective and efficient administration of any institution, such as a university, depends on solid recordkeeping practices that ensure that proper records are available when needed. Therefore, the significance of recordkeeping cannot be over-emphasized. Poorly maintained records can make it very hard to find them when needed. Thus, recordkeeping should be prioritized and considered as essential as other institutional resources, such as finance, materials and staff. Encouraging proper recordkeeping as an institutional and societal benefit should be taken seriously.

This chapter has shown that certain shortcomings exist in managing university records, as demonstrated by the study's research findings. This situation would have adverse consequences for service delivery from the universities. The study established that managing digital records in universities was below standard. The Chapter also discussed the staff capacity, skills and knowledge for recordkeeping staff to successfully undertake recordkeeping activities in

universities. The issue of funding for recordkeeping featured prominently; the budget allocated for recordkeeping activities was limited. This limited budget was prohibitive in properly managing records in all the universities.

Recordkeeping activities such as records appraisal, storage and access in the universities were discussed and found to be insufficient in all the universities. Subsequently, a discussion of the recordkeeping policy framework in universities was done. The study established that the university's recordkeeping policy still needed to be fully implemented. The lack of a properly implemented recordkeeping policy presents a danger of losing access to records managed in the universities. Having a recordkeeping policy and not implementing it is equal to not having it in place. This is because a recordkeeping policy is essential for universities to ensure that recordkeeping is properly done.

Making sure that records are appropriately stored will ensure that records are protected from being affected by disasters. The study findings revealed that fire-fighting facilities, such as the fire extinguishers, were regularly inspected for maintenance. Fire suppression present in the universities included fire extinguishers (100.0%), standpipe water systems (29.3%), buckets of sand (24.1%) and automatic sprinkler water systems (13.8%). It is critical to ensure that records are adequately maintained to be made available to authorized users when required. Thus, it is important to examine whether such quality storage environments and locations exist in the public universities in Tanzania. The present study found that a shortage of recordkeeping space/storage was one of the challenges facing universities. The environment under which records are stored can significantly influence their longevity. On this account, good records storage equipment such as filing cabinets, file boxes, document racks, and hard disks are prerequisites for digital records. Risks to recordkeeping were found to occur in the universities. The study findings revealed that universities faced numerous risk exposures concerning recordkeeping. They included pest infection, rodents, computer system failure, fire, unauthorized intrusion, water damage and theft. Approaches concerning risk alleviation in the universities were discussed in the study. These strategies include controlled access, firewalls, fire-fighting equipment, lockable metallic cabinets, surveillance cameras and controlling temperature, humidity and light in the records storage area. Lastly, challenges faced in recordkeeping in the universities were also discussed, along with respondents' suggestions concerning improving recordkeeping. The next Chapter summarizes the findings, conclusions, suggestions and recommendations for improving recordkeeping in Tanzanian public

universities. It also proposes a framework for managing records in the Tanzanian public universities.

CHAPTER SEVEN

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This study examined the role of recordkeeping in enhancing good governance in Tanzanian public universities. Chapter seven is structured according to the study research questions. This study's summary, conclusions, and recommendations were made from the issues discovered in the reviewed literature. In other words, this Chapter presents an overview of the entire study by summarizing the findings, conclusion and recommendations underpinning the results analyzed and presented in Chapter Five and the subsequent Chapter Six. The chapter aimed to draw together the research threads to provide general conclusions and suggest further actions to address the research problem. The current study's practice, policy, knowledge, and societal significance are outlined, and further suggestions are made. The final chapter of a thesis should have the following (Mutula and Majinge 2017:125):

1. Have a linkage of the significant concerns that surfaced in the study;
2. Must stipulate conclusions that provide for accountabilities for all the specific questions addressed in the study; and
3. Recommendations with action plans and responsibilities must be provided.

The current research study aimed to examine the role of recordkeeping in improving good governance in Tanzanian public universities. The current study addressed the following specific research questions:

- i. What systems and processes are used in recordkeeping in Tanzanian public universities?
- ii. What recordkeeping skills and training do staff need in Tanzanian public universities?
- iii. What is the role of records legislation in recordkeeping in Tanzanian public universities?
- iv. What is the level of security and confidentiality control in recordkeeping in Tanzanian public universities?
- v. What interventions are required to be put in place to address recordkeeping in Tanzanian public universities?

The records continuum model and the Information Governance Reference Model underpinned the study. A pragmatic research paradigm using mixed methods (quantitative and qualitative methods) was used to guide the study. The population of the research study was comprised of records officers and senior university officials. The heads of the recordkeeping sections and the director of the human resource office were considered senior officials. The study adopted a cross-sectional survey design where data were collected using interviews and questionnaires. The study employed the Statistical Package for Social Science (SPSS) version 23 to analyze quantitative data. For qualitative data, the NVivo software version 11, content and thematic analysis techniques were employed.

7.2 Summary of the findings of the study

The study findings are presented in this section in the order of the research questions.

7.2.1 Systems and processes used in recordkeeping in Tanzanian public universities

For the first research question, we investigated the systems and processes used in recordkeeping in Tanzanian public universities. Pertinent data was collected and organized according to the following themes: budgetary allocation for recordkeeping, records for good governance, storing records, tracking records, records appraisal, temperature control, storage area light and humidity, and digital recordkeeping. A summary of the findings is presented below:

7.2.1.1 Budgetary allocation for recordkeeping

According to the literature review, proper recordkeeping needs adequate financial support. The present study found that universities set aside a budget for recordkeeping functions. However, although a budget for recordkeeping functions was set aside from the current state of the registry funding, the study established several impediments to implementing proper recordkeeping in the universities. First, the inability to educate and train records staff was one of the major impediments facing public universities. This implies that for universities to be able to educate and train their records staff, enough funding has to be allocated for recordkeeping activities.

7.2.1.2 Records for good governance

Records are essential assets that help organizations and individuals meet their objectives. Firstly, appropriate recordkeeping practices provide proof of business transactions between individuals, groups, or institutions while guaranteeing transparency and accountability. This strengthens good governance. Thus, proper recordkeeping is the foundation for any responsible organization to enhance its obligation of accountability and transparency towards its individuals. A consensus among participants in all the universities that good governance can only be attained with proper recordkeeping practices was established by the study. In other words, the present research found that poor recordkeeping practices undermine good governance, resulting in corruption; hence, universities must possess robust recordkeeping systems to ensure accountability and transparency.

7.2.1.3 Storing of records

The literature review submits that once records have been processed, disseminated, and utilized, they need to be well preserved for future use; hence, there is a need to have well-maintained records storage avenues. Lack of proper records storing avenues can damage records. Therefore, the most critical issues records professionals need to consider in storing records are the storage environment and the location of reliable records. From the data collected, eight universities needed more records storage space. University H and University B indicated that their universities need more storage space for records.

7.2.1.4 Tracking of records

To facilitate easy retrieval of records, they should be properly stored. Findings from the present study revealed that eight (8) public universities do track records use. From survey findings, it was clear that missing files were frequently reported despite file tracking being done in the eight universities. The major challenge discovered from the analysis was the lack of proper storage equipment and poorly trained recordkeeping staff, particularly on information technology-related issues, which were among the problems attributed to the issues of missing files in the universities.

7.2.1.5 Records retention and disposition

Institutions such as universities should formulate guiding principles on recordkeeping activities, including creation, classification, appraisal, preservation, and disposal. The implication of not performing records appraisal and disposal would lead to the universities maintaining duplicates of records and thus creating space availability issues. Records appraisal is a significant activity in recordkeeping because it is through records appraisal that recordkeeping professionals can establish what records become part of the collection thereof. The present study found that most participants needed to do records appraisals in their universities. Records appraisal should be accepted as part of university business activities and carried out systematically.

7.2.1.6 Temperature, light and relative humidity control in storage areas

It is important to control temperature, light, and humidity in the records storage area. Temperature, light, and humidity in the storage area are usually controlled using artificial climate control equipment such as air conditioning systems and hygrometers. The study's findings revealed that thirty-nine (49.4%) indicated that humidity, temperature, and light are controlled in their storage area. In comparison, 40(50.6%) said they did not control the storage area's temperature, light and humidity. Air conditioning systems and fans in the storage area were used to manage the temperature in record storage areas. This study also revealed that dehumidifiers and dehydrating agents were not widely used in universities. It can be assumed that dehumidifiers and dehydrating agents were not needed in the universities as in Tanzania, the temperatures are high almost every month. Fumigation should be done at least twice a year to deal with pests such as termites and cockroaches.

7.2.1.7 Digital recordkeeping

The development of IT and the extensive use of digital devices to perform business operations have led to an exponential growth of digitally created records. In other words, the introduction of information technology has impacted how records are received, created and maintained. The present study found that 33(41.8%) indicated that their universities manage digital records. These findings show that universities need to maximize the benefits of using computers in recordkeeping. The use of computers in recordkeeping would positively affect service delivery

in the surveyed universities. the service delivery of the universities. The researcher found out that although participants indicated that their universities manage digital records, only 31(39.2%) of the total population cited that digital recordkeeping was part of their job description. Concerning training on digital recordkeeping, 52(65.8%) respondents have yet to receive training on digital recordkeeping.

Regarding preservation strategies, participants indicated that they were engaging in some recordkeeping preservation strategies, such as migration and emulation. Whereas universities were engaging in some recordkeeping strategies, the main issue was how frequently the backup of digital records was being done.

7.2.2 Professional knowledge and skills of records staff responsible for recordkeeping

The recordkeeping skills and training staff needed to manage records was investigated in the second research question. The summarized findings are as follows:

7.2.2.1 Level of professional training in recordkeeping

Proper recordkeeping depends upon recordkeeping staff receiving training in the management of records. Lack of recordkeeping training for recordkeeping staff is one factor that hinders proper recordkeeping practices. Knowledge and skills are essential in recordkeeping as they affect how records are maintained. The study results show that fifty-four (59.3%) participants have diploma qualifications, 13(14.3%) have a certificate qualification, and 10(11.0%) have an undergraduate degree qualification as their highest education level. This indicates that the participants in the selected public universities have formal records and archives management qualifications. Additionally, the findings revealed low statistics on recordkeeping training attendance by participants. The most cited training need was the management of digital records in their entire continuum.

7.2.2.2 Recordkeeping professional associations

A recordkeeping professional must be a member of at least a local association and one of any international professional associations. These associations help set national competency standards in recordkeeping. It was discovered that fifty-four (68.4%) of the respondents were not members of any international professional association. In comparison, 26(32.9%) indicated

they are not local association members. Of those who said they were local association members, 49(62.0%) respondents indicated TRAMPA, while 5(6.3%) indicated TARESO.

7.2.3 Recordkeeping laws

Proper recordkeeping is anchored on a solid legislative and regulatory framework. In this research study, the role of records legislation in recordkeeping in Tanzanian public universities was investigated in the third research question. The summarized findings are as follows:

7.2.3.1 Awareness of legislative and regulatory frameworks for recordkeeping

Legal, regulatory, and policy frameworks are crucial for proper recordkeeping they because they formulate the environments within which records are managed. Compliance with recordkeeping legislation impacts how records are managed. The respondent's awareness of these frameworks was examined, and 52(65.8%) of the respondents strongly asserted being aware of recordkeeping laws informing recordkeeping in their universities. Even though a recordkeeping policy existed, the lack of implementation and application in participants' work routines was a significant contributory factor to the problems experienced in recordkeeping in the universities. The lack of implementation of recordkeeping policies negatively impacts good governance initiatives in public universities since it becomes extremely challenging to exhibit the university's commitment to abiding by recordkeeping standards.

7.2.3.2 Registry procedures manual

A registry procedure manual provides instructions on the best recordkeeping practices. This manual should be designed to inform and guide recordkeeping personnel on the appropriate methods to be used throughout the recordkeeping cycle. This study's findings confirmed that the universities had a registry procedures manual.

7.2.3.3. Recordkeeping auditing

Recordkeeping practices should frequently be audited to ensure that the systems are being instigated according to the policies and requirements of the organizations. This ensures that the institution's recordkeeping programme is functioning effectively. Universities should regularly assess the efficiency and effectiveness of their recordkeeping programmes. This study showed that recordkeeping auditing was not done in the surveyed public universities. The implication

of not performing recordkeeping auditing in an organization is that it would be difficult to establish if an organization is performing well in recordkeeping activities; hence, identifying areas that need further attention will also be challenging. The absence of recordkeeping auditing also implies that determining if an organization is complying with the obligations of the relevant records legislation and the related standards and codes of best practice is also impossible. This recordkeeping auditing can be done by either an external or in-house records auditor.

7.2.4 Disaster management, security and confidentiality control

The fourth research question investigated the security and confidentiality control level in recordkeeping in Tanzanian public universities. The summarized findings are as follows:

7.2.4.1 Storage facilities used in the registry

Proper record management is crucial for institutions as it influences long-term access to information. Proper storage will ensure that records are protected from disasters. The present study's findings were that universities used a variety of storage facilities for recordkeeping. However, they were not the most adequate facilities. Steel cabinet 54(68.4%) was the most common storage facility.

7.2.4.2 Security classification of records in the office

Depending on how records are created, security procedures such as access control and user confirmation must be put into practice to safeguard records. There should be a proper level of security control for both paper and digital records in any institution. In the present study, 42(53.2%) indicated that the security classification of records was being done, while 37(46.8%) said they did not indicate the security classification of records. Concerning the types of security classification of records, respondents in the current study reported using different types of security classification, including confidential, secret, top secret, open and restriction. The present study dealt with both digital and paper-based records; therefore, there was a need to establish precisely how digital records were protected from unauthorized access. The respondents confirmed using methods such as passwords, login-in procedures, firewalls, audit trails to track use, encryption technologies and gateway filter software to ensure the security of digital records.

7.2.4.3 Disaster management

Disaster management in recordkeeping is a crucial mechanism for protecting records from natural and human disasters. The need for institutions to maintain the security and privacy of records is a matter that must be addressed. Research participants were requested to outline the disasters most likely to affect records in their universities and the findings showed that pest infection, rodents, computer system failure, fire, unauthorized intrusion, floods, leaking roofs, sabotage, and explosions were likely to affect records in the universities. The study findings revealed lockable metallic cabinets, fire detectors, surveillance cameras, and smoke detectors were used to protect records from disasters. Additionally, the results showed that the recordkeeping staff had training in fire-fighting techniques. Professional training in fire-fighting techniques would equip recordkeeping staff with the necessary skills and knowledge in combating fire disasters and bringing awareness to fire prevention and control. Fire suppression present in the universities included fire extinguishers, standpipe water systems, buckets of sand and automatic sprinkler water systems.

7.2.5 Interventions required to be put in place to address recordkeeping issues in Tanzanian public universities

The fifth research question investigated the interventions required to address recordkeeping issues in Tanzanian public universities. The findings are summarized below:

7.2.5.1 Support offered by the top management toward recordkeeping activities

Research advises that the top management should be involved in every segment of the recordkeeping process. Top management must embrace recordkeeping functions to enhance effectiveness in all aspects. The study identified that the top management supported recordkeeping activities in their universities. Although the top management supported recordkeeping activities, the results of this study revealed a low attendance for training due to constraints in financial support to attend training. Recordkeeping should be prioritized and considered as essential as other institutional resources, such as finance, materials and staff. The current study's findings identified the urgent need for adequate recordkeeping training as one of the challenges faced by recordkeeping professionals. Therefore, one of the critical issues in recordkeeping is for top management to support proper recordkeeping activities in an organization. The readiness of top management to support the implementation of

recordkeeping policies is an essential enabler of effective recordkeeping. Also, recordkeeping professionals should be proactive and work closely with the top management.

7.2.5.3 Recommendations from respondents

To overcome the above-mentioned challenges, study participants were requested to offer suggestions to improve their universities' recordkeeping. The following is a generalized summary of respondents' recommendations;

- i. Universities should employ more recordkeeping staff;
- ii. Allocate sufficient budgets for the management of records activities;
- iii. Improve working conditions for the recordkeeping staff;
- iv. Universities should improve recordkeeping security and;
- v. Top management should establish a training program for recordkeeping staff.

7.3 Conclusion

This subdivision reiterates the thesis deposition and the critical issues discussed in previous chapters while also presenting the study's final position. The conclusion is presented in alignment with the specific research questions.

7.3.1. Conclusion on the systems and processes used in recordkeeping in Tanzanian public universities

The study findings revealed that although a budget for recordkeeping functions was set aside, the study established several impediments to implementing proper recordkeeping in the universities. From survey findings, it was also clear that missing files were frequently reported despite file tracking being done in the eight universities. This was associated with a lack of proper storage equipment and poorly trained recordkeeping staff, which were among the problems attributed to the issues of missing files in the universities. It was concluded that although public universities in Tanzania set aside a budget for recordkeeping functions, the amount of money allocated for recordkeeping activities in the universities was not sufficient. Proper recordkeeping needs adequate financial support.

7.3.2 Conclusion on the professional knowledge and skills of records staff responsible for recordkeeping

The overall findings revealed low statistics on recordkeeping training attendance by participants. Lack of recordkeeping training for recordkeeping staff was one of the factors that hindered proper recordkeeping practices. Further, the study revealed that more recordkeeping staff should be employed to improve the recordkeeping state. The findings further revealed that most respondents have diploma qualifications as their highest education level. The results concluded that top management in public universities needed to prioritize recordkeeping by providing recordkeeping staff with awareness training regarding recordkeeping. Skills and training are essential elements of modern recordkeeping. Records professionals in the present study lacked appropriate training to obtain new skills and knowledge.

7.3.3 Conclusion on the recordkeeping laws

The findings showed that recordkeeping staff in the surveyed public universities were aware of recordkeeping laws in their universities. The results further established that even though recordkeeping legislation, regulations, policies and strategic plans to govern the management of records existed, lack of implementation significantly contributed to the problems experienced in recordkeeping in the universities. The lack of proper implementation of recordkeeping laws bestows a threat of loss of records managed in the universities. Compliance with records legislation impacts how records are managed. Based on this, the present study proposed a framework to manage university records. The legal and regulatory framework is among the key components of the proposed framework. These frameworks are vital for the success of recordkeeping programmes because they manage the environments in which records are stored (Luyombya 2010:128). The study's findings also showed that auditing recordkeeping practices still need to be implemented in universities. Recordkeeping audits ensure compliance with the practices and assist in determining the situation of recordkeeping in institutions. Recordkeeping auditing should be done regularly to ensure that the recordkeeping practices follow the legislation framework and requirements. An institution should periodically review its recordkeeping practices to comply with crucial recordkeeping measures, determine where there is a need for improvements and formulate plans to include improved practices (Government Records Service 2011:24).

7.3.4 Conclusion on the disaster management, security and confidentiality control

The study findings revealed that the public universities adopted various methods to prevent university records such as using techniques such as login-in procedures, firewalls, audit trails to track use, encryption technologies, lockable metallic cabinets, fire detectors, surveillance cameras and smoke detectors were the methods used to prevent university records from disaster. Although universities have adopted various methods to prevent risks to records, the findings revealed that recordkeeping in public universities was still exposed to risks. The findings showed the risks identified included pest infection, rodents, computer system failure, fire, unauthorized intrusion, floods, leaking roofs, sabotage and explosion.

7.3.5 Conclusion on the interventions required to be put in place to address recordkeeping issues in Tanzanian public universities

The study results revealed that top management supported recordkeeping activities. However, there was low staff training attendance, which resulted from insufficient funding allocated by the top management for staff training. Top management must embrace recordkeeping functions to enhance its effectiveness. Further, the study's findings revealed a need for more adequate facilities and equipment for recordkeeping activities. Poor working conditions, lack of storage space, and security issues were also revealed as among the problems facing recordkeeping in public universities. From these findings, it was concluded that top management needed to prioritize the management of records in the universities by creating a conducive environment for recordkeeping staff, which would have helped overcome the challenges faced by recordkeeping in the universities. Although public universities have adopted various methods and strategies to alleviate the identified challenges, they are still afflicted with the problem of poor recordkeeping. The current study recommends ways of enhancing university recordkeeping practices, which will be discussed in the next section.

7.4 Recommendations

Considering the abovementioned discoveries, the present research study submits recommendations to improve recordkeeping practices in public universities in Tanzania.

7.4.1 Recommendation on the systems and processes used in recordkeeping in Tanzanian public universities

The study findings revealed that although a budget for recordkeeping functions was set aside, there were several impediments to implementing proper recordkeeping in the universities. Public universities lack appropriate recordkeeping systems, a critical factor in effective and efficient recordkeeping. Therefore, the study recommends that public universities invest in robust and proper recordkeeping systems. Accordingly, the top management of the surveyed universities must immediately set aside adequate funding for recordkeeping functions. The Vice Chancellors of the universities should seek government support to purchase digital recordkeeping systems such as Electronic Documents and Records Management Systems (EDRMS) and Electronic Records Management Systems (ERMS), as these will provide for the longest-term preservation of records and enhance continuous access to the records. Recordkeeping professionals should initiate the process with the support of information technology in the universities through formal channels. The systems are also used to track the movements of records to provide complete and accurate information on all transactions related to a particular record. Kamatula (2013:45) advised that top management should support records professionals with enough funding and facilities. The availability of enough storage facilities is crucial for managing records and archives in organizations. However, it was evident that most public universities lacked enough storage facilities for paper and digital records. Therefore, the current study advocates for the top management, records managers and archivists to take the initiative to ensure their universities have enough storage facilities to manage records and archives effectively.

The study findings show that the public universities surveyed experienced issues of missing files as they performed their work. Tracking of records within records systems is needed to enable records retrieval, monitor usage for the system maintenance and manage an auditable trail of records transactions. The relocation process must be well-managed to minimize the risk of losing records. Records should be stored properly so it is easy to relocate whenever needed. This exercise must be led by the records managers and archivists in collaboration with all heads of university sections to consider users' needs during the process. Therefore, this study recommends that recordkeeping practitioners use recordkeeping systems for tracking file movements and not rely on their memories to track records, a situation that contributes to the delays in tracking requested files. This situation may lead to difficulty retrieving files and

sometimes to losing files. For instance, an inventory with information such as file title, reference number, date opened and storage location must be well prepared and maintained by the recordkeeping personnel to ensure a proper tracking trail of records in a paper-based recordkeeping system. Furthermore, records managers and archivists should display an important advisory role in ensuring that the appropriate recordkeeping processes are adopted.

7.4.2 Recommendations on the professional knowledge and skills of records staff responsible for recordkeeping

Identifying whether records professionals have adequate knowledge and skills in recordkeeping practices was essential. The study discovered the existence of few skilled and knowledgeable recordkeeping staff as compared to the number of registry staff. Skills and training are crucial elements of modern recordkeeping. Recordkeeping personnel need appropriate training to obtain new skills and knowledge (Dikopoulou and Mihiotis 2010:273). Managing digital records requires recordkeeping practitioners to possess sufficient recordkeeping skills that can promote managing records in digital environments. Since many recordkeeping practitioners do not have adequate knowledge and skills on recordkeeping matters concerning digital recordkeeping, training, particularly practical training on digital recordkeeping, is recommended by this study. Top management should prioritize capacity building for recordkeeping staff. Moreover, awareness programmes may be carried out at least once a year by records managers and archivists to inform and educate fellow staff about managing records and archives and digital recordkeeping processes in universities. Recordkeeping professionals should collaborate with information technology specialists and organize training on information technology-related issues. In other words, recordkeeping practitioners should undergo continuous professional development programmes to enhance their recordkeeping skills and knowledge. Rotich, Mathangani and Nzioka (2017:137) advised that an institution prioritizing recordkeeping should have a continuous staff training programme. Adequate knowledge and skills in recordkeeping practices are prerequisites to implementing proper recordkeeping in an institution.

7.4.3 Recommendation on the recordkeeping laws

Public universities must maintain records governed by the national archive's legislation, standards and regulations. When maintaining records in an organization, records professionals should adhere to both access and privacy laws and act within the confines of set legislations.

The present study's findings revealed that despite a recordkeeping policy, lack of implementation significantly contributed to the problems experienced in university recordkeeping. Top management should develop recordkeeping legal and regulatory frameworks for the universities to achieve legislative compliance. Top management should lead the development of comprehensive recordkeeping rules and regulations and ensure that university staff enforces compliance with the recordkeeping rules and regulations when dealing with records and archives in their day-to-day activities. Records managers and archivists should ensure that their inputs on recordkeeping issues are considered during the development of comprehensive recordkeeping rules and regulations. Recordkeeping laws should guide how proper recordkeeping should be implemented in universities. They should also include issues of recordkeeping budgets and requirements for systems for digital recordkeeping. This will assist with improving the existing recordkeeping laws and provide the necessary push for comprehensive recordkeeping.

The recordkeeping laws should also include a training intervention on managing digital records. Additionally, in collaboration with the government, public universities should acclimatize and modify the current government policy, plans, guidelines, and standards on records management to suit their environments. Among the components of the proposed framework is the legal and regulatory framework. The proposed framework is meant to ensure effective recordkeeping in public universities. This study recommended that legal and regulatory frameworks concerning recordkeeping should be implemented in the universities. This will provide directives, guidelines, legislation, regulations, strategic plans, and policy statements that would improve effective recordkeeping.

7.4.4 Recommendation on disaster management, security and confidentiality control

The risk of disasters is among the challenges posed to the safety and maintenance of records (Asamoah, Akussah, and Musah 2018:219). In other words, one of the significant threats to managing records is the risk of records loss. The study findings revealed that public universities faced several risks from poor recordkeeping. The present study's findings showed that disasters likely to affect university records include pest infection, rodents, computer system failure, fire, unauthorized intrusion, floods, leaking roofs, sabotage and explosion. This was a sign that the university records were highly vulnerable to risks and threats. Therefore, top management

should form a disaster management committee, whose duties would be to establish the disasters likely to affect records and implementation of a disaster management plan. The committee should include records managers and archivists as members. The committee should also re-visit and evaluate the risk management policies to warrant the incorporation of recordkeeping practices to minimize threats and risk exposure for public universities.

7.4.5 Recommendation on the interventions required to be put in place to address recordkeeping issues in Tanzanian public universities

Recordkeeping in Tanzania faces significant challenges that affect proper recordkeeping (Mohamed, Rasheli and Mwagike 2018). This situation is attributed to various factors, including a limited budget allocated for recordkeeping in the country, the need for more recordkeeping strategies, priority to recordkeeping issues, and awareness of the importance of digital recordkeeping. Results of the current research study showed that although the top management supported recordkeeping activities, there was insufficient funds allocated for staff training. Based on these findings, the study recommended that top management prioritize the management of records in the universities by creating a conducive environment for recordkeeping staff to overcome the challenges facing recordkeeping in the universities. Additionally, the study mainly aimed to recommend a framework that could be used in universities to effectively manage records and archives. This framework addressed Tanzanian public universities' challenges in managing records and archives. The recommended framework ensures effective recordkeeping in public universities.

7.5 A Summary of the key outcomes from the literature, conceptual framework, study findings and recommendations

The main objective of this study is to investigate recordkeeping for good governance in Tanzanian public universities. The literature review discovered poor recordkeeping, which has caused serious barriers to service provision. Recordkeeping models were analyzed to support the choice of the ones used in this study. The models chosen and used for the current study were the records continuum model and the Information Governance Reference Model. The results of the current study were interpreted relative to the provision of the two models. The level of digital recordkeeping in the surveyed public universities was below standard. Insufficient funds for recordkeeping activities featured significantly; the allocated budget for recordkeeping activities was limited. This limited budget was prohibitive in managing records

in all the universities. Records appraisal, the lack of enough storage, and timely access were problems identified by the surveyed universities. The study established that the university's recordkeeping rules and regulations still need to be fully implemented. The present study also found that a shortage of recordkeeping space/storage was one of the challenges facing universities. The study findings revealed that universities faced numerous risk exposures concerning recordkeeping. They included pest infection, rodents, computer system failure, fire, unauthorized intrusion, water damage and theft.

The current study made several recommendations concerning improving recordkeeping practices in public universities. For instance, the study recommended that top management prioritize capacity building for recordkeeping staff. Preferably, recordkeeping practitioners should undergo continuous professional development programmes to enhance their recordkeeping skills and knowledge. This continuous training may be organized minimally once a year to ensure that the practitioners are up-to-date with their current professional skills. Routine in-house training may also be arranged for all employees. Training staff would acquire relevant recordkeeping skills and knowledge, which would be essential in recordkeeping and lead to better provision of services. It is also advised that recordkeeping staff should regularly attend seminars, conferences, and workshops hosted by professional recordkeeping bodies.

It was also recommended that top management should set aside sufficient budgets for recordkeeping functions. Therefore, the Vice Chancellors of the universities should immediately seek government support to purchase digital recordkeeping systems such as Electronic Documents and Records Management Systems (EDRMS) and Electronic Records Management Systems (ERMS). As such, recordkeeping systems will provide prolonged preservation of and continual access to records. Among the records and archives management functions that need budgetary allocation are staff capacity building, training and development, and implementation of recordkeeping policies. Although most of the participants indicated that their universities have semi-active centres and archival repositories, the issue of storage space was a problem. Therefore, it was recommended that the top management, records managers and archivists take the initiative to ensure their universities have enough storage facilities to manage records and archives effectively.

The current study also recommended that records managers and university archivists should lead in developing comprehensive recordkeeping laws and ensure that university staff enforce compliance with the recordkeeping laws when dealing with records and archives in their day-

to-day activities. The recordkeeping laws should guide how proper recordkeeping should be implemented in the universities. Therefore, records managers and archivists should participate in auditing recordkeeping exercises. recordkeeping audit activities will ensure compliance with the recordkeeping laws. Recordkeeping activities should be audited frequently, preferably once every year.

Further, based on the poor state of records and archives management in public universities, the present study proposed a framework to manage university records. Archivists and records managers should adopt the proposed framework to describe and model various recordkeeping practices in their universities. The proposed framework could deepen the understanding of recordkeeping practices in public universities and improve best practices in recordkeeping activities. The proposed framework comprises the following elements: funding, top management support, recordkeeping standards, recordkeeping systems, staffing and capacity building, recordkeeping policies, recordkeeping records storage and risk management. The researcher believed the current situation could be mitigated by a framework that would ensure and establish a robust recordkeeping system. As a result, recordkeeping practices would be enhanced, promoting good governance in public universities. The following section discusses the proposed framework for proper recordkeeping.

7.6 Proposed framework for proper recordkeeping

As indicated in section 7.5, poor recordkeeping is a barrier to service delivery provision. Also, the results of the current study show that the level of digital recordkeeping in the surveyed public universities was below standard. Insufficient funds for recordkeeping activities featured significantly; the allocated budget was limited. This limited budget was prohibitive in managing records in all the universities. Records appraisal, the lack of enough storage, and timely access were problems identified by the surveyed universities. The study established that the university's recordkeeping rules and regulations still need to be fully implemented. The present study also found that a shortage of recordkeeping space/storage was one of the challenges facing universities. The study findings revealed that universities faced numerous risk exposures concerning recordkeeping. They included pest infection, rodents, computer system failure, fire, unauthorized intrusion, water damage and theft. The study recommends that records managers and archivists and information technology specialists in the Tanzanian public universities should forge collaborative ventures to promote efficient recordkeeping. From these findings, a framework for the management of records was proposed. The goal of

the current research study was to establish the role of recordkeeping for good governance in Tanzanian public universities to propose a framework that will improve proper recordkeeping. From the findings, interpretation, discussion, and recommendations, the study proposes a framework for proper recordkeeping, as illustrated in Figure 7.1.

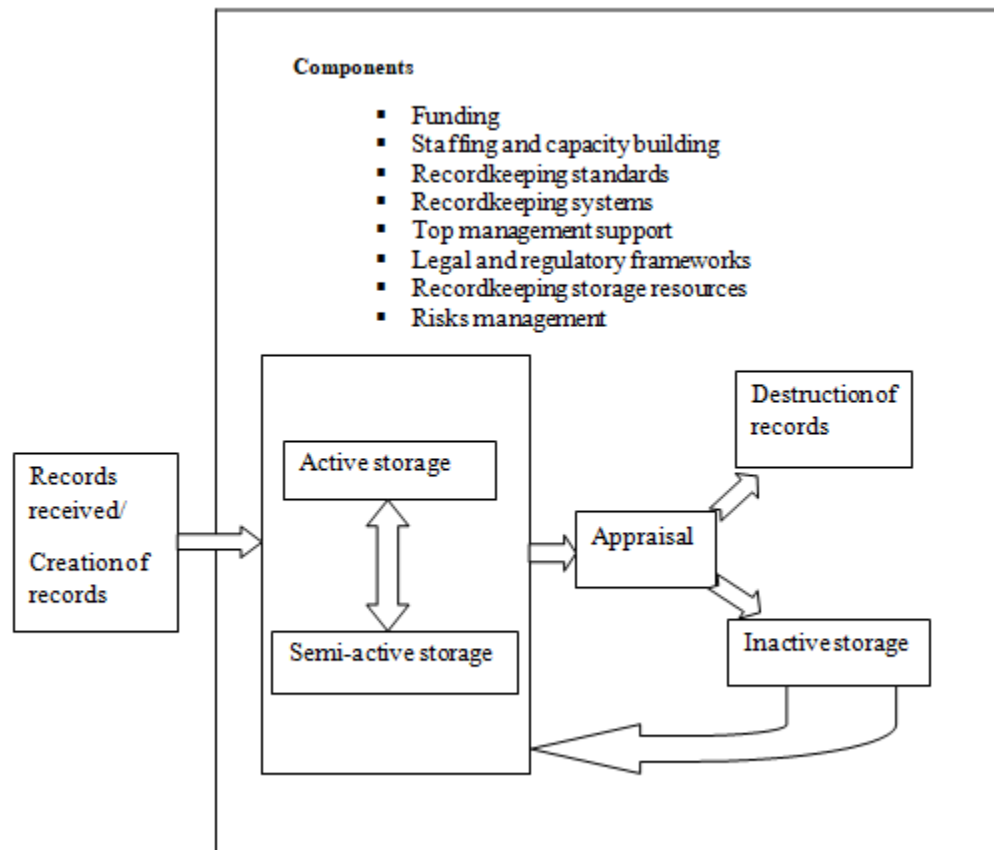


Figure 7. 1: Proposed framework for proper recordkeeping (synthesized by the researcher)

7.6.1 Explanation of the proposed framework

The proposed framework promotes the management of records for prolonged and continual preservation and access, supporting good governance. The proposed framework begins with creating records, which can be either in paper or digital format. Once the records are created, they enter a stage where they are in regular use (active storage) or are still of use to the creator, but only occasionally (semi-active storage). During this stage, records are classified and those that are confidential are protected to ensure that only authorized people have access to them. Recordkeeping practitioners should consider the level of security and protection when practicing effective recordkeeping. With the Information Governance Reference Model,

management of records is designed and created to guarantee a security level to information intended to be top secret, secret, or confidential. At this stage, vital records are also identified and moved to safe storage with good environmental controls. During this stage, records are properly managed since they have continuing value. Records are managed in conformance with the records continuum and Information Governance Reference Model elements such as availability, compliance, access provision, protection and accountability. As Chapter Three, section 3.4.1.2 mentions, the most common challenge to using records is inaccessibility due to poor recordkeeping. The records continuum model promotes continuous use of records without time limitations to accessing and using records. Availability is attained when an institution protects and maintains its records to ensure efficient, timely and accurate retrieval. After appraisal operations, inactive records are selected for long-term preservation. All records that do not have continuing value are shredded after the appraisal process. This proposed framework treats records as inclusive of the archives. This implies that records' usefulness for current activities and records for research use (historical) cannot be differentiated. This is why, after the appraisal process, records with continuing values can be returned to the active and semi-active stages whenever needed. In other words, the proposed framework provides a unifying and homogenous platform for records management and archives administration.

For the above recordkeeping activities to occur as needed, the organizations' recordkeeping practitioners must receive support from the top management. One of the significant issues in recordkeeping is for top management to support proper recordkeeping activities. The problem of low budgetary allocations for archives and records management is common in many public universities (Mwangangi 2013; Pereira 2018; Nakato 2019). Therefore, top management must embrace recordkeeping functions to ensure registries and archives get sufficient budgets allocated for skilled staff, capacity building and training, purchase of sufficient recordkeeping facilities, and development and implementation of recordkeeping policies. Legislation addressing recordkeeping issues such as funding, security, standards and systems, to mention a few, should be developed and enforced. The components of the proposed framework (sufficient funding, top management support, recordkeeping standards, recordkeeping systems, staffing and capacity building, recordkeeping policies, records storage and risk management) must be reinforced by the public universities to attain effective and efficient recordkeeping.

It is fundamental for recordkeeping practitioners to perform risk assessments to know where and when they are weak regarding disasters and security and find the right solutions to alleviate

them. Therefore, recordkeeping practitioners should regularly monitor and evaluate the atmosphere for records storage and apply steps to eliminate the risks identified. The assessment aims to ensure compliance with best practices for recordkeeping. In line with ISO 15489-1 (2016), the proposed framework advocates that records should be maintained holistically from when they are created to the disposition stage. Records managers and archivists should partake in all the continuum phases. The proposed framework emphasizes using an integrated recordkeeping systems structure that unifies the roles of archivists and records managers to promote collaborations on issues pertaining to management of records. The proposed framework, therefore, provided a structure that enhances a collaborative approach to recordkeeping between records managers and archivists. The proposed framework advocates that records should be managed with the requisite infrastructure of policies, systems and standards to foster the continuous use of records. The framework thus informs how a recordkeeping programme, its operations and systems can be established in the surveyed universities regarding managing their records (paper or digital).

7.7 Implication of the study for practice, theory and policy

The issues elaborated on in the current study are significant as they affect the effectiveness of recordkeeping services at universities. Next, the researcher discusses the study's significance and contribution.

Research implication for practice: The results of this study outlined and emphasized essential subjects for consideration in improving recordkeeping practices in public universities. The study recommends that record managers and archivists follow the proposed framework steps when managing their records right from creation. From the proposed framework, challenges elaborated in this study could be eliminated in practice. If appropriately implemented, the proposed framework could help Tanzanian public universities, government, and other African countries perform recordkeeping effectively.

Research implication for theory: The results are aligned with Kemoni (2007); Luyombya (2010); Ndenje-Sichalwe (2010); Maseh (2015); Phiri (2016); Kamatula (2018); Netshakhuma (2020) and Erima (2022) to the extent that they all focused on the issues related to management of records, focus being specifically on risks exposure and how they can be prevented. The current research study contributes to the theory of recordkeeping, where empirical studies are

considerably limited. Theoretically, the current study postulates the perceptiveness of the role of recordkeeping in enhancing good governance, particularly in public universities. The study paves the way for public universities in Tanzania to understand and reduce recordkeeping issues. While the records continuum model focuses on the continuous use of records without time limitations to accessing and using records, the Information Governance Reference Model goes beyond and includes availability, compliance, access provision, protection and accountability. Combining these variables may provide a framework for developing integrated recordkeeping systems. Such a framework would help improve recordkeeping practices. In this regard, the study recommends a framework to guide and enhance the management of records and archives in the area under study. Such a framework could be used to describe and model various recordkeeping practices. The framework could deepen the understanding of recordkeeping practices in public universities and improve best practices in recordkeeping activities. Additionally, the current study adds to the prevailing knowledge body on university recordkeeping by integrating the management of records and good governance. In a nutshell, the present study could postulate new insight into the challenges public universities face in managing records.

Although several earlier studies (Kemoni 2007; Luyombya 2010; Ndenje-Sichalwe 2010; Maseh 2015; Phiri 2016; Kamatula 2018; Netshakhuma 2020; Erima 2022) have been conducted on recordkeeping practices, this current study is both an addition to the body of knowledge while also different in terms of focus and time frame. This is a recent study tackling and identifying the issues that contribute to the current recordkeeping practices in public universities, and its main focus is on public universities.

In terms of methodological implications, the current study contributes methodologically by adopting Mixed Methods Research to establish the role of recordkeeping in ensuring good governance in Tanzanian public universities. Scholarships on recordkeeping sources reveal that several research studies have been conducted using Mixed Methods Research, such as Luyombya 2010; Ndenje-Sichalwe 2010; Maseh 2015; and Erima 2022. Even though Mixed Methods Research was applied in the current study just like other researchers used it in their own studies, the previous studies differ from the present study in applying philosophical orientation and subsequent methodological approaches. For instance, this current study used a questionnaire and interview guide to gather data, while Maseh (2015) used the observation technique to supplement data collected from interview schedules and questionnaires. Erima's

(2022) study triangulated an interview schedule, questionnaire and document reviews to achieve complementarity in the study's results. In addition, the current study focused on Tanzanian public universities. In contrast, Luyombya (2010) focused on Uganda's public service, Ndenje-Sichalwe's (2010) study concentrated on the ministries of Tanzania, and Maseh (2015) focused on the Kenyan judiciary.

Research implications for policy: Policymakers and other stakeholders in managing records and archives in public universities could find this study relevant. The study could guide policymakers in establishing efficient recordkeeping policies, legislation, and strategic plans to guide and improve records management in universities. The proposed framework may pave the way for the universities to introduce a legal and regulatory framework that will boost the proper management of records.

7.8 Suggestions for future research

The findings of this study showed that more research could be carried out on the role of recordkeeping in enhancing good governance. the study provides the following propositions for future research:

- i. The current research discoveries shed light on the recordkeeping practices in Tanzanian public universities. Nevertheless, similar studies could be conducted in other institutions, such as private higher learning institutions using the same or different research design and theoretical orientation.
- ii. This study's findings have shed light on the recordkeeping needs of recordkeeping officials in the management of records. Based on this fact, more specific investigations are needed on the training needs of the staff in the Tanzanian public sector to improve recordkeeping practices.
- iii. This study has established that the existing university recordkeeping policies must be fully implemented. Therefore, further investigation is required to determine the adoption of the best practice policies and guidelines for effective recordkeeping practices within the Tanzanian public sector.

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Appendices

Appendix 1: Questionnaire for records officers

General information

1.) Name the University you work for.

.....

2.) Gender

☐ Male

☐ Female

3.) Age

☐ 20 -29 years

☐ 30- 39 years

☐ 40- 49 years

☐ 50+ years

4.) How long have you been working in the recordkeeping office?

☐ Less than a year

☐ One year

☐ Two to five years

☐ Six to ten years

☐ More than ten years

5.) What is your job role?

☐ Assistant registry officer

☐ Archivist

☐ Registry officer

Other, please specify

.....

6.) What is your highest level of education?

☐ O-level

☐ A-level

☐ Certificate

- ☐ Diploma
- ☐ Undergraduate degree
- ☐ Postgraduate level

7.) What is the area of your expertise?

- ☐ Archival science
- ☐ Recordkeeping
- ☐ Librarianship
- ☐ Information Technology
- ☐ Administration and management

Other, please specify

.....

8.) Which of the following do you think is the ideal number of dedicated employees for recordkeeping in any institution?

- ☐ 1 to 3
- ☐ 4 to 6
- ☐ 7 to 10

Other, please specify

.....

Recordkeeping professional associations

9.) In which of the following international professional associations are you a member? (Please tick all that is applicable)

- ☐ International Council on Archives (ICA)
- ☐ ARMA International
- ☐ Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA)
- ☐ Records Management Foundation for Africa (RMFA)
- ☐ Not in any association

Other, please specify

.....

10.)In which of the following local professional associations are you a member? (Please tick all that is applicable)

☐ Tanzania Records and Archives Management Professionals (TRAMP)

☐ Tanzania Records Society (TARESO)

☐ Not in any association

Other, please specify

.....
.....
.....

Recordkeeping practices

11.)Does the University set aside budget for recordkeeping functions?

☐ Yes

☐ No

12.)Do you experience any problems due to the current state of registry funding?

☐ Yes

☐ No, go to question 14

13.)Which of the following do you encounter due to the current state of registry funding?

☐ Inability to purchase appropriate storage equipment

☐ Inability to purchase sufficient supplies

☐ Inability to educate and train records staff

☐ Inability to produce adequate registry services

Other, please specify

.....
.....
.....
.....

14.)Records are vital for good governance.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

15.)Without proper recordkeeping there can be no accountability.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

16.) Does the University have semi-active records centre?

☐ Yes

☐ No

17.) Does the University have an archival repository?

☐ Yes

☐ No

18.) Do you think the University has enough records storage space?

☐ Yes, go to question 20

☐ No

19.) How is the University dealing with the surplus of quantities of records?

☐ Use of commercial records centre

☐ the Cloud

Other, please specify

.....
.....

20.) Does the University have a specific procedure for identifying and protecting vital records?

☐ Yes

☐ No, go to question 22

21.) Where are they stored?

☐ In a server

☐ Offsite

☐ Commercial Storage

Other, please specify

.....
.....

22.) Which of the following indicates the methods used to request files? (Please tick all that is applicable)

☐ Subject index

☐ Registry staff

☐ Registers

☐ Telephone call

☐ Personal visit by action officer

Other, please specify

.....
.....

23.) Are there finding aids to help users in searching records/archives?

☐ Yes

☐ No, go to question 25

24.) Which of the following finding aids are available in your registry?

☐ Catalogs

☐ Subject staff

☐ Subject list

☐ Subject register

☐ Subject index

Other, please specify

.....
.....
25.)Do you have a written classification scheme?

☐ Yes

☐ No

26.)Do you have a university-wide retentions/disposition schedule?

☐ Yes

☐ No

27.)Do you have a metadata set in your registry?

☐ Yes

☐ No

28.)Does the University use a standardized file plan to create and file records?

☐ Yes

☐ No

29.)Which of the following indicates the filing system in the University?

☐ Organizational (departments/section names) based classification

☐ Subject based classification

☐ Functional classification

☐ Document type classification

Other, please specify

.....
.....
30.)Which of the following is true regarding your current file classification system? (Please tick all that is applicable)

☐ Easy to understand

☐ Not easy to understand

☐ Easy to use

☐ Not easy to use

☐ Backed by procedures manual

☐ Not backed by procedures manual

☐ Prone to automation

☐ Not prone to automation

☐ Updated

☐ Not updated

Other, please specify

.....
.....

31.) Do you track records use?

☐ Yes

☐ No, go to question 36

32.) Which of the following indicates the purpose of tracking records? (Please tick all that is applicable)

☐ Know location of records at any time

☐ Monitor record use

☐ To ensure action is taken

☐ To ensure records return to the registry

Other, please specify

.....
.....

33.) Which of the following methods is used to track records use? (Please tick all that is applicable)

☐ File tracking card

☐ File tracking register

☐ Computer system

☐ Physical checking of files on shelves

☐ Subject index

Other, please specify

.....
.....

34.) Do you have procedures guiding file tracking?

☐ Yes

☐ No, go to question 36

35.) Which of the following aspects of file tracking do they cover? (Please tick all that is applicable)

☐ Who has authority to use files

☐ Recording circulation of files

☐ Movement of files among action officers

☐ How long action officer may retain files

☐ Responsibility for documentation

Other, please specify

.....
.....

36.)Do you establish the information needs of your users?

☐ Yes

☐ No, go to question 38

37.)Which of the following do you use to determine the information needs of users? (Please tick all that is applicable)

☐ Interviews (face-to-face)

☐ Questionnaire

☐ Information conversations

☐ Newsletter

Other please specify

.....
.....

38.)Do you conduct performance measures of registry services provided to clients?

☐ Yes

☐ No, go to question 40

39.)Which of the following aspects do you consider in measuring the quality of services by the registry? (Please tick all that is applicable)

☐ Time taken to retrieve files

☐ Time taken to deliver files to action officers

☐ Levels of users satisfaction

☐ Efficiency of access and retrieval aids

☐ Accuracy of registry services

Other, please specify

.....
.....

40.)Do you experience issues of missing files as you do your work?

☐ Yes

☐ No, go to question 42

41.)What would you attribute the problem of missing files to? (Please tick all that is applicable)

- ☐ Poor recordkeeping
- ☐ Inadequate recordkeeping staff
- ☐ Poorly trained recordkeeping staff
- ☐ Lack of proper storage equipment
- ☐ Reliance on manual recordkeeping strategies

Other, please specify

.....
.....
.....

42.)Do you have a mail management programme?

- ☐ Yes
- ☐ No

43.)Which of the following actions do you take when opening incoming mails? (Please tick all that is applicable)

- ☐ Check address on the envelope
- ☐ Date-stamping
- ☐ Account for all enclosures (if attached)

Other, please specify

.....
.....

44.)Do you receive mail in an incoming mail register?

- ☐ Yes
- ☐ No, go to question 46

45.)Which of the following information is recorded in the incoming mail register? (Please tick all that is applicable)

- ☐ Sender's name
- ☐ Sender's address
- ☐ Sender's designation
- ☐ Mail subject
- ☐ Mail reference number
- ☐ File reference on which mail is filed

Other, please specify

.....
.....

46.)Do you have procedures for managing outgoing mail?

☐ Yes

☐ No, go to question 48

47.)Which of the following indicates the action taken on ongoing mail?

☐ Mail signed by action officer

☐ Mail are dated and stamped

☐ Correct reference number indicated

☐ Subject cleared indicated

☐ Correct address indicated

☐ postal express entered in the poster register

☐ Mail entered in the dispatch

☐ Copy of mail filed

Other, please specify

.....
.....

48.)Do you enter mail in the outgoing mail register?

☐ Yes

☐ No, go to question 50

49.)Which of the following information is recorded in the outgoing mail register? (Please tick all that is applicable)

☐ Date of letter

☐ File reference number

☐ Subject

☐ To whom letter is sent

Other, please specify

.....
.....

50.)Do you have a recordkeeping programme?

☐ Yes

☐ No, go to question 53

51.)How do records staff made aware of the recordkeeping programme existence? (Please tick all that is applicable)

☐ Circulars

☐ Notices

☐ Workshops

☐ Orientation

Other, please specify

.....
.....

52.)Does the recordkeeping programme in consistent with the University's records keeping practices?

☐ Yes

☐ No

53.)Do you conduct records appraisal?

☐ Yes

☐ No, go to question 55

54.)Which of the following instrument does the University use to appraise records?

☐ Retention schedule

☐ Standing instructions

Other, please specify

.....
.....

55.)Do you have a records disposition programme?

☐ Yes

☐ No

56.)Which of the following guide the University in records disposition? (Please tick all that is applicable)

☐ Retention schedule

☐ University policy

☐ Records and Archives Management Act, 2002

Other, please specify

.....
.....

57.) Which of the following methods do you use to destroy confidential records?

☐ Shredding

☐ Destruction using chemical

☐ Pulping

☐ Burning

Other, please specify

.....
.....

58.) Do you prepare a certificate of disposition once records are destroyed?

☐ Yes

☐ No, go to question 60

59.) Which of the following information is included in the records disposition certificate? (Please tick all that is applicable)

☐ Record group

☐ Records series

☐ Destruction method

☐ Date of destruction

☐ Name of the officer carrying out destruction

☐ Name of the officer witnessing destruction

Other, please specify

.....
.....

60.) Do you control temperature and relative humidity in the storage area?

☐ Yes

☐ No, go to question 62

61.) Which of the following do you use to control temperature and relative humidity in the records storage area? (Please tick all that is applicable)

☐ Fans

☐ Use of dehydrating agents

☐ Use of dehumidifier

☐ Air conditioning

Other, please specify

.....
.....

62.) Do you control light in the records storage area?

☐ Yes

☐ No

If yes please explain how

.....
.....
.....

Electronic recordkeeping

63.) Does your registry maintain electronic records?

☐ Yes

☐ No, go to question 81

64.) Is the electronic recordkeeping part of your job description?

☐ Yes

☐ No, go to question 66

65.) Has any training on electronic recordkeeping been consciously organized for you?

☐ Yes

☐ No

66.) How do you ensure that electronic records are accessed only by authorized person?

.....
.....
.....

67.) Does the University have an Electronic Document/Records Management (EDRM) system?

☐ Yes

☐ No, go to question 74

68.) Is there any officially adopted Electronic Records Management (ERM) system?

☐ Yes

☐ No

69.) What is the electronic system (product name) used in the University?

.....
.....
.....

70.) What are the reasons for the choice of this system?

☐ Cost benefit

☐ Required by top management officials

☐ Easy to use

☐ Based on benchmark comparison

☐ Compliant to a specific standard

Other, please specify

.....
.....

71.) Is the system integrated to another electronic system?

☐ Yes

☐ No, go to question 73

72.)Where are the electronic records stored in your registry?

☐ In both systems

☐ In the EDRMS or ERMS

Other, please specify

.....
.....

73.)How often is the Electronic Records Management system migrated to new software and hardware?

☐ Every 1 year

☐ Every 2 year;

☐ Every 3 years;

☐ Every 4 years;

☐ More often than once

☐ Every 5 years;

Other, please specify

.....
.....

74.)Which of the following does your university use to provide backup for electronic records?
(Please tick all that is applicable)

☐ External hard drive

☐ Magnetic tape

☐ Optical disk

☐ Flash memory

Other, please specify

.....
.....

75.)Which of the following format do you use to create electronic records?(please tick all that is possible)

☐ Word processing format (e.g. Microsoft Word etc.)

☐ Image format (e.g. TIFF, GIF etc.)

☐ Portable Document File (PDF)

☐ Text files with markup language (e.g. SGML, HTML, XML etc.)

Other, please specify

.....
.....

76.)Do you have procedures for appraising electronic records?

☐ Yes

☐ No

If 'Yes' please explain

.....
.....
.....

77.) Do you have procedures for destroying electronic records?

☐ Yes

☐ No, go to question 79

78.) Which of the following procedures do you use for the disposal of electronic record? (Please tick all that is applicable)

☐ Deleting

☐ Reformatting

☐ Re-writing disk

☐ crushing disk

Other, please specify

.....
.....

79.) Which of the following strategies do you use for long-term preservation of electronic records? (Please tick all that is applicable)

☐ Migration strategy

☐ Emulation strategy

☐ Print to paper

Other, please specify

.....
.....

80.) How often is the backup of the electronic records done?

☐ Daily

☐ Weekly

☐ Monthly

☐ Quarterly

☐ More than quarterly

81.) How are confidential records stored?

☐ Electronically regardless of sensitivity

☐ Prohibited from being stored

☐ In a separate repository

☐ In the same storage with other normal records

Other, please specify

.....
.....

82.) How are records kept in the university

☐ Exclusively in paper format

☐ Exclusively in electronic format

☐ Both

83.) Does the University consider email as a record?

☐ Yes

☐ No

Staff capacity building

84.) What is your level of professional training in recordkeeping?

☐ Certificate

☐ Diploma

☐ Undergraduate degree

Other, please specify

.....
.....

85.) Do you consider yourself to be sufficiently skilled in maintaining records?

☐ Yes

☐ No, go to question 87

86.) How often does your university train you?

☐ More than once a year

☐ Every two years

☐ Every three years

☐ Not at all

87.) Does the University organize training programmes courses on recordkeeping to records staff?

☐ Yes

☐ No, go to question 89

88.) Have you attended any recordkeeping courses run by your university in the last five years?

☐ Yes

☐ No

If 'Yes', please indicate the nature of recordkeeping course

.....
.....
.....

89.) In what area do you have the greatest need for additional training in recordkeeping? (Please tick all that is applicable)

☐ Maintaining paper records in their entire continuum

- ☐ Maintaining electronic records in their entire continuum
- ☐ Computer skills
- ☐ Computer application in recordkeeping

Other, please specify

.....

Policy, legal and regulatory framework

90.) Do you have a recordkeeping policy?

- ☐ Yes
- ☐ No, go to question 92

91.) Does it cover the following aspects? (Tick all that is applicable)

- ☐ Provides guidelines on how records should be managed
- ☐ Electronic recordkeeping
- ☐ Clearly outlines responsibilities of each recordkeeping staff
- ☐ Allows for penalties for staff who do not comply with policy
- ☐ Makes references to recordkeeping standards
- ☐ States aim and scope of the recordkeeping policy
- ☐ provides a definition of technical terms

Others, please specify

.....

92.) Do you have a registry procedures manual?

- ☐ Yes
- ☐ No, go to question 94

93.) Which of the following indicates the need for a registry procedure manual? (Please tick all that applicable)

- ☐ Security to records is ensured
- ☐ Records accessibility is ensured
- ☐ Ensure records retrieval efficiency
- ☐ Ensure disposal of records of no value
- ☐ Meet government statutory requirement

☐ Long term preservation of records is ensured

Other, please specify

.....
.....

94.) If 'No to question 92', which of the following does the University currently make reference to in recordkeeping? (Please tick all that applicable)

☐ Present recordkeeping literature

☐ Own initiative

☐ Fellow workmate

☐ Registry supervisor

Other, please specify

.....
.....

95.) Are recordkeeping practices in the University audited for compliance with international standards?

☐ Yes

☐ No, go to question 97

96.) How are storage conditions and equipment specifications complying with international standards?

☐ Poorly

☐ below average

☐ Good

☐ Very good

☐ Excellent

Other, please specify

.....
.....

97.) Do you have an internal audit checklist for recordkeeping?

☐ Yes

☐ No, go to question 99

98.) Which of the following areas does the internal audit checklist cover?

☐ Creation of records

☐ Records distribution

☐ Records maintenance and use

- ☐ Appraisal of records
- ☐ Disposal of records
- ☐ Preservation of records
- ☐ Training of staff
- ☐ Roles of staff

Other, please specify

.....

99.) Are you aware of the Records and Archives Management Act, 2002?

- ☐ Yes
- ☐ No

100.) Are you aware of the Tanzania Access to Information Act, 2016?

- ☐ Yes
- ☐ No

101.) Are you aware of the National Security Act, 1970?

- ☐ Yes
- ☐ No

102.) Are you aware of the Public service Act 20 of 2002?

- ☐ Yes
- ☐ No

103.) Are you aware of the National Information and Communication Technology Policy, 2003?

- ☐ Yes
- ☐ No

104.) Are you aware of the Constitution of the United Republic of Tanzania, 1977?

- ☐ Yes
- ☐ No

105.) Are you aware of the penalties for not complying with these legislative instruments informing recordkeeping practices in Tanzania?

- ☐ Yes
- ☐ No

106.) Has the University issued guidelines and principles which are in conformity with Tanzanian's regulations with regard to recordkeeping?

- ☐ Yes

☐ No

107.) What disciplinary actions do you face when you violate issues concerning recordkeeping such as illegal access, not adhering to security and private issues?

☐ Internal fines

☐ Internal demotion

☐ None

Other, please specify

.....
.....

108.) Are there in your institution any cases of adverse consequences of not using records and archives?

☐ Yes

☐ No

If 'Yes', please specify

.....
.....

Disaster management, security and confidentiality control

109.) Is recordkeeping centralized or decentralized?

☐ Centralized

☐ Decentralized

110.) Which storage facilities do you use in the registry?

☐ Wooden cabinet

☐ Steel cabinet

☐ Open shelves

Other, please specify

.....
.....

111.) Do you indicate the security classification of records in your office?

☐ Yes

☐ No, go to question 113

112.) Which of the following indicates the security classification of your records in your office? (Please tick all the applicable options)

☐ Top secret

- ☐ Secret
- ☐ Confidential
- ☐ Restricted
- ☐ Open

Other, please specify

.....

113.) How is the access to records storage area controlled?

- ☐ Doors are always locked
- ☐ Access only granted to records staff
- ☐ Selected records staff granted access

Other, please specify

.....

114.) Which of the following methods do you use to ensure the security of electronic records? (Please tick all that is applicable)

- ☐ Password
- ☐ Login procedures
- ☐ Firewalls
- ☐ Gateway filter software
- ☐ Audit trails to track use
- ☐ Encryption techniques

Other, please specify

.....

115.) What security system exists in the recordkeeping office? (Please tick all that applicable)

- ☐ Security guard
- ☐ Closed circuit television cameras (CCTV)
- ☐ Intruder alarm system

Other, please specify

.....
.....

116.) Has the University issued guidelines on security and access rights of records?

☐ Yes

☐ No,

117.) Do you have a disaster management plan in place?

☐ Yes

☐ No, go to question 121

118.) Which of the following aspects does it cover? (Please tick all that applicable)

☐ Disaster preparedness

☐ Disaster prevention

☐ Disaster protection

☐ Disaster response

Other, please specify

.....
.....

119.) When the University disaster preparedness plan was last tested?

☐ 2019

☐ 2018

☐ within two years

☐ Never

Other, please specify

.....

120.) Is there a disaster team in place?

☐ Yes

☐ No

If 'Yes,' please explain

.....

121.) Which of the following are disasters that are likely to affect your records? (Please tick all that applicable)

☐ Pest Infection

☐ leaking roof

☐ floods

☐ Unauthorized intrusion

☐ Computer systems failure

☐ Explosion

☐ Fire

☐ Sabotage

☐ Rodents

Other, please specify

.....

122.) Which of the following equipment does the University have? (Please tick all that is applicable)

☐ Lockable metallic cabinets

☐ Smoke detectors

- ☐ Fire detectors
- ☐ Surveillance cameras

Other, please specify

.....

.....

123.) Does the University have fire suppression system in the storage area?

- ☐ Yes
- ☐ No, go to question 128

124.) Which of the following systems does the University have? (Tick all that applicable)

- ☐ Fire extinguisher
- ☐ Buckets of sand
- ☐ Stand pipe water system
- ☐ Automatic sprinkler water system

Other, please specify

.....

.....

125.) Is the fire-fighting equipment inspected regularly?

- ☐ Yes
- ☐ No, go to question 127

126.) How often is the fire-fighting equipment regularly inspected?

- ☐ Once a year
- ☐ Twice a year
- ☐ Rarely

Other, please specify

.....

.....

127.) Do you receive training in fire-fighting techniques?

- ☐ Yes
- ☐ No

Challenges and recommendations

128.) Does top management support recordkeeping activities in the University?

- ☐ Yes

☐ No, go to question 130

129.) How would you rate the support offered by the top management towards recordkeeping activities?

☐ Very poor

☐ Poor

☐ Good

☐ Very good

☐ Excellent

130.) How would you rate the state of recordkeeping in the records office?

☐ Very poor

☐ Poor

☐ Good

☐ Very good

☐ Excellent

131.) Do you experience any challenges in providing services/access to information to users?

☐ Yes

☐ No, go to question 133

132.) What are the challenges? (Please tick all that is applicable)

☐ Poor working conditions

☐ Lack of adequate facilities and equipment

☐ Staff lack adequate training

☐ Lack of proper implemented of recordkeeping policy

☐ Misfiling and missing files

☐ Shortage of records staff

☐ Shortage of filing space

☐ Inadequate management support

☐ Security issues

☐ Absence of legal obligations

Other, please specify

.....
.....

133.) How do current recordkeeping practices affect university service delivery?

.....

.....

.....

134.) What do you recommend to help the state of recordkeeping in the university?

.....

.....

.....

.....

.....

Thank you

Appendix 2: Interview Schedule for director of human resources office

General information

- 1.) Name the University you work for.....
- 2.) Gender
- 3.) Age
- 4.) What is your job role?
- 5.) How long have you been working in this position?
- 6.) Place of interview:
- 7.) Date of interview:
- 8.) Highest academic qualification?
- 9.) Highest professional qualification?
- 10.) Do you consider recordkeeping as being a key to fostering good governance in the public universities? If 'Yes', please explain.
- 11.) For what purposes do you use records and archives?

Recordkeeping practices

- 12.) Do you easily find records you are searching? If 'No', what is being done to alleviate the problem?
- 13.) Does the issue of missing files affects your registry? If 'Yes', please explain.
- 14.) Which tools do you use in searching and retrieval of the records?
- 15.) How do you maintain records in your custody?
- 16.) Does the registry have a tracking system for the records which have been issued out? Please explain.
- 17.) Do you think sound recordkeeping strategy is required in the registry?
- 18.) What is your assessment on the quality of recordkeeping in the registry?
- 19.) Do the current recordkeeping practices undermine accountability in the University? If 'Yes', please explain.
- 20.) For your institution what are the recordkeeping programme benefits?

Electronic recordkeeping

- 21.) Do you maintain electronic records in your university?
- 22.) If 'Yes', in your view, how does the electronic records system meet all the recordkeeping functionalities?
- 23.) How do you ensure security to electronic records?

Recordkeeping policies

- 24.) Are recordkeeping strategic objectives and formal policies officially adapted in your institution?
- 25.) If 'No', do you plan to enact a recordkeeping policy?
- 26.) If 'Yes', does the policy impose security classifications or any other restrictions on some of the records? If 'Yes', please explain.

- 27.)Who is responsible for recordkeeping policy formulation in the University?
- 28.)Does recordkeeping form part of strategic management plan? If ‘Yes’, what recordkeeping plans have been identified for the next five years?
- 29.)What guidelines are available for governing recordkeeping in the University?
- 30.)Are there in your institution any cases of adverse consequences of not using records and archives? If ‘Yes’, please explain

Skills and competencies among the recordkeeping staff

- 31.)What skills do you look for when recruiting recordkeeping staff?
- 32.)What is the level of academic and professional qualification required for recordkeeping staff in the registry?
- 33.)What is the current status of records officers in reference to the qualification and adequacy?
- 34.)What is the optimum required number of recordkeeping staff that the registry should have?
- 35.)In your assessment, to what extent are records officers motivated in their work?
- 36.)How comparable is the scheme of service (in terms of relativity of salaries) of records officers compared to other related positions?
- 37.)Do you have training needs assessment programmes for records staff? If ‘Yes’, what kind of training policy for records staff does the University have?
- 38.)To what extent are records staff facilitated to in-service training and participation in recordkeeping conferences and workshops?

Challenges and recommendations

- 39.)How would you rate the state of recordkeeping in the registry?
.....
- 40.)How do current recordkeeping practices affect your university service delivery?
- 41.)What recommendation do you suggest to enhance recordkeeping practices in your university?

Thank you

Appendix 3: Interview Schedule for head for recordkeeping section

General information

- 1.) Name the University you work for.
.....
- 2.) Gender.....
- 3.) Age.....
- 4.) What is your job role?
- 5.) How long have you been working in this position?
.....
- 6.) Place of interview:
- 7.) Date of interview:
- 8.) Highest academic qualification?
- 9.) Highest professional qualification?
- 10.) Do you consider recordkeeping as being a key to fostering good governance in the public universities? If 'Yes', please explain.
- 11.) For what purposes do you use records and archives?

Recordkeeping practices

- 12.) Do you easily find records you are searching? If 'No', what is being done to alleviate the problem?
- 13.) Does the issue of missing files affect your registry? If 'Yes', what would you attribute the problem of missing files to?
- 14.) Do you have a tracking system for those records which have been issued out? If 'Yes', please explain.
- 15.) How is the security of stored records ensured?
- 16.) Does the registry have a structured disposition program? If 'Yes', is the disposition programme informed by a retention and disposal schedule? Please explain.
- 17.) How do you ensure security at disposal of records?
- 18.) Do you issue a records disposition certificate on records that have been disposed? If 'Yes', what role does the certificate play for the destroyed records?
- 19.) In your opinion, how is a retention and disposal schedule useful tool in the recordkeeping?
- 20.) Do you have a disaster management programme? If 'Yes', please explain.
- 21.) Do you have a vital recordkeeping programme? If 'Yes', please explain.
- 22.) What is your assessment on the quality of recordkeeping in the registry?
- 23.) Does the registry have a budget for recordkeeping functions and activities? If 'Yes', how adequate is the budget? If 'No', how does the registry fund its operation?
- 24.) Do you experience any problems due to the current state of registry funding? If 'Yes', which problems do you encounter due to the current state of registry funding?
- 25.) Are there any key performance indicators to verify the efficiency of your recordkeeping programme? If 'Yes', please explain.
- 26.) Do the current recordkeeping practices undermine accountability in the University? If 'Yes', please explain.
- 27.) For your institution what are the recordkeeping programme benefits?

Electronic recordkeeping

- 28.) Do you maintain electronic records in your registry? If 'Yes', what is the electronic system (product name) used in the system?
- 29.) What are the reasons for the choice of the system?
- 30.) How are electronic records stored?
- 31.) In your view, how does this system meet all the recordkeeping functionalities?
- 32.) How do you ensure that electronic records are accessed only by authorized persons?
- 33.) How are electronic records appraised and disposed of?
- 34.) What strategies have been put in place for the long- term preservation of electronic records?

Recordkeeping policies

- 35.) Are recordkeeping strategic objectives and formal policies officially adapted in your institution?
- 36.) If 'No', do you plan to enact a recordkeeping policy?
- 37.) If 'Yes', what policies regulates recordkeeping in the registry?
- 38.) Does the policy impose security classifications or any other restrictions on some of the records? If 'Yes', please explain.
- 39.) Who is responsible for recordkeeping policy formulation in the University?
- 40.) Does recordkeeping form part of strategic management plan? If 'Yes', what recordkeeping plans have been identified for the next five years?
- 41.) What guidelines are available for governing recordkeeping in the University?
- 42.) What working relationship do you have with professional bodies and institutions like the Tanzania National Archives?
- 43.) Are there in your institution any cases of adverse consequences of not using records and archives? If 'Yes', please explain.

Skills and competencies among the recordkeeping staff

- 44.) What skills do you look for when recruiting recordkeeping staff?
- 45.) What is the level of academic and professional qualification required for recordkeeping staff in the registry?
- 46.) What is the current status of records officers in reference to the qualification and adequacy?
- 47.) What is the optimum required number of recordkeeping staff that the registry should have?
- 48.) In your assessment, to what extent are records officers motivated in their work?
- 49.) Do you have training needs assessment programmes for records staff? If 'Yes', what kind of training policy for records staff does the University have?
- 50.) To what extent are records staff facilitated to in-service training and participation in recordkeeping conferences and workshops?

Challenges and recommendations

- 51.) How would you rate the state of recordkeeping in the registry?
- 52.) How do current recordkeeping practices affect your university service delivery?
- 53.) What recommendations do you suggest to enhance recordkeeping practices in your registry?

Thank you

Appendix 4: Research permit

CLEARANCE PERMIT FOR CONDUCTING RESEARCH IN TANZANIA

Appendix 4: Research permit



UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND
TECHNOLOGY.

**SOKOINE UNIVERSITY OF AGRICULTURE
OFFICE OF THE VICE-CHANCELLOR**



P.O Box 3000, CHUO KIKUU, MOROGORO, TANZANIA.

Phone: +255 (023) 2640006/7/8/9, Direct Line: +255 (023) 2640015,

E-mail: vc@sua.ac.tz, Website: <https://www.sua.ac.tz>

Please refer to:

Our Ref: SUA/CPF/LIB/1/28/33

Date: 19th October, 2020

The Vice Chancellor,
Mzumbe University,
P. O. Box 1,
MOROGORO.

The Vice Chancellor,
University of Dar es Salaam,
P.O. Box 35091,
DAR ES SALAAM.

The Vice Chancellor,
The Nelson Mandela (NM – AIST) Technology,
P.O. Box 447,
ARUSHA.

The Vice Chancellor,
University of Dodoma,
P. O. BOX 259,
DODOMA.

The Vice Chancellor,
State University of Zanzibar,
P.O. Box 146, Tunguu,
ZANZIBAR.

The Vice Chancellor,
Mbeya University of Science and Technology (MUST),
P.O. Box 131,
MBEYA.

CLEARANCE PERMIT FOR CONDUCTING RESEARCH IN TANZANIA

The Vice Chancellor,
Open University of Tanzania,
P.O. Box 23409,
DAR ES SALAAM.

The Vice Chancellor,
Moshi Co – operative University,
P.O. Box 474,
MOSHI.

The Vice Chancellor,
Muhimbili University of Health and Allied Sciences (MUHAS),
P.O. Box 65001,
DAR ES SALAAM.

The Vice Chancellor,
Ardhi University,
P.O. Box 35176,
DAR ES SALAAM.

The Vice Chancellor,
Mwalimu J.K. Nyerere University of Agriculture and Technology – Musoma,
P. O. Box 976,
BUTIAMA, MARA.

RE: UNIVERSITY STAFF, STUDENTS AND RESEARCHERS CLEARANCE

The Sokoine University of Agriculture was established by University Act No. 7 of 2005 and SUA Charter, 2007 which became operational on 1st January 2007 repealing Act No. 6 of 1984. One of the mission objectives of the university is to generate and apply knowledge through research. For this reason the staff and researchers undertake research activities from time to time.

2. To facilitate the research function, the Vice Chancellor of the Sokoine University of Agriculture (SUA) is empowered to issue research clearance to staff, students, research associate and researchers of SUA on behalf of the Tanzania Commission for Science and Technology.

CLEARANCE PERMIT FOR CONDUCTING RESEARCH IN TANZANIA

3. The purpose of this letter is to introduce to you **Mr. George F. Kavishe** who is a **PhD (Information Studies)** student with Registration number **212556842** of University of KwaZulu-Natal, Republic of South Africa and a bonafide **Assistant Librarian** of Sokoine University of Agriculture (SUA). By this letter **Mr. George F. Kavishe** has been granted clearance to conduct research in the country. The title of the research in question is "**Record keeping for good governance in public universities in Tanzania**".
4. The period for which this permission has been granted is from **October, 2020** to **July, 2021**. The research will be conducted in **your University**.
5. Should some of these areas/institutions/offices be restricted, you are requested to kindly advice the researcher(s) on alternative areas/institutions/ offices which could be visited. In case you may require further information on the researcher please contact me.
6. We thank you in advance for your cooperation and facilitation of this research activity.

Yours sincerely,


Prof. Maulid W. Mwatawala
FOR: VICE-CHANCELLOR

Copy to: Student – **Mr. George F. Kavishe**

VICE CHANCELLOR
SOKOINE UNIVERSITY OF AGRICULTURE
P. O. Box 3000
MOROGORO, TANZANIA

Appendix 5: Letter from the State University of Zanzibar

THE STATE UNIVERSITY
OF ZANZIBAR
P.O. Box 146
Tel: 255-24-2230724/2233337
Zanzibar – Tanzania
Fax: 255-24-2233337
E-mail: vo@suza.ac.tz
Web site: www.suza.ac.tz



CHUO KIKUU CHA TAIFA
CHA ZANZIBAR
S.L.P 146
Simu: 255-24-2230724/2233337
Zanzibar - Tanzania
Fax: 255-24-2233337
E-mail : vo@suza.ac.tz
Web site: www.suza.ac.tz

SUZA/60/20/26

3rd May, 2019

Dr. Francis Garaba
The University of KwaZulu-Natal
School of Social Sciences
Republic of South Africa

RE: REQUEST FOR PERMISSION TO UNDERTAKE RESEARCH

Kindly be informed that the State University of Zanzibar (SUZA) has received your letter with the above subject.

SUZA assures you that it has no objection at all to receive your candidate George Firmin Kavishe to carry out his research at this university on the indicated dates. However, he will be supposed to request for the permission to conduct his research from the concerned office, i.e. the 2nd Vice President's Office, Zanzibar; this issue will fall at his own responsibility and that what SUZA will do is to give surety to him.

The State University of Zanzibar welcomes the candidate and wishes him good health, strength, patience and the resilience to successfully finish this important task with composure.

Regards,



Dr. Ali Makame Ussi
For: Vice Chancellor

Appendix 6: Ethical clearance from UKZN



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

21 March 2021

Mr George Firmin Kavishe (212556842)
School Of Social Sciences
Pietermaritzburg Campus

Dear Mr Kavishe,

Protocol reference number: HSSREC/00001529/2020
Project title: Recordkeeping for good governance in Tanzanian public universities
Degree: PhD

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 18 May 2020 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 21 March 2022.
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hialele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee
Postal Address: Private Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 8350/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

Appendix 7: COVID-19 Research ethics guidelines 2020



6 April 2020

HSSREC (Human and Social Sciences Research Ethics Committee) NOTICE: CONDUCTING HELPFUL, HOPEFUL AND RESPECTFUL RESEARCH DURING COVID-19

We note research ethics, an indispensable facet in knowledge generation, as the application of rules and professional codes of conduct to the collection, analysis, reporting, and publication of information about research participants, in particular active acceptance of participants' right to privacy, confidentiality, and informed consent.

The COVID-19 pandemic has delivered the world into some form of *terra incognita*, and researchers are not immune to its consequences. Considering declaration of the current state of national disaster [escalated to a national lockdown] and aligning itself with the call from national health authorities and experts to practice social distancing, the HSSREC has made immediate decisions in respect of approved [full and provisional] and new ethics applications.

HSSREC recommendations are as follows:

1. All protocols granted full ethics approval where the data collection/generation process is complete (i.e., no further contact with participants) should proceed unimpeded.
2. All protocols granted full ethics approval but data collection/generation is incomplete should:
 - 2.1 devise plans detailing adaptations, modifications under the guidance of the supervisor/lead researcher and forward such to HSSREC for consideration and record purposes on the RIG system and manually (emailed to hssrec@ukzn.ac.za) if the protocol was manually approved before RIG was implemented. These adaptations may adopt remote data collection/generation strategies such as telephonic or other online/remote methods (e.g., telephone interviews, online surveys, etc). Where informed consent cannot be attained in writing or by providing consent on the platform such as when using online surveys, informed consent needs to be audio-recorded.
 - 2.2 amend instruments as well as informed consent forms accordingly.
 - 2.3 de-escalate or suspend all research activities where protection of participants cannot be secured or risk cannot be mitigated. In such cases, the PIs may then apply for re-certification should the period of approval expire before data collection/generation is

Humanities & Social Sciences Research Ethics Committee
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Tel: +27 31 260 8350 / 4557 / 3587
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

INSPIRING GREATNESS

completed.

3. All protocols granted provisional approval must include a statement detailing precautionary measures put in place to protect participants and researchers and limit infections.
4. Every effort must be made to inform research participants timeously of those changes that impact on them.
5. HSSREC will continue to provide support to researchers remotely.
6. All new ethics applications must comply with national guidelines, directives and laws during the COVID-19 crisis.

It must be noted that as the COVID-19 pandemic unfolds these guidelines may change to comply with current government, international, UKZN recommendations and/or emergent international best practices.

Your support and cooperation at this critical time are essential and much appreciated.

Yours sincerely,



Prof DJ Hlalele (Chair: HSSREC)

CC: Prof D Ramjugernath (DVC: Research)

Prof U Bob (Dean: Research)

Acknowledgements: Prof D R Wassenaar (Deputy Chair: BREC), HSSREC members, Prof L Hansen (Chairperson): REC: SBE, Stellenbosch University letter dated 20/03/2020

Humanities & Social Sciences Research Ethics Committee
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Tel: +27 31 260 8350 / 4557 / 3587
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

Appendix 8: Informed consent for interviews

Dear sir/madam

I am a PhD student at the University of KwaZulu–Natal, South Africa in the Information Studies Programme. I am carrying out a research as part of the requirements for the award of a PhD degree. The topic of my research is entitled “**Recordkeeping for good governance in Tanzanian public universities**”

It is anticipated that the result of the study will provide recordkeeping solutions that could help in enabling proper recordkeeping in the public universities for good governance. The research will collect data on recordkeeping practices, recordkeeping policies, procedures and guidelines, skills and competencies among the records staff. The study is focused on how the university records are managed from the time they are received or created to their disposition.

The aim for this communication is to kindly request you to afford me audience to interview you to gather data that would address the research problem being investigated. The information you provide will be kept confidential and used only for the academic purposes of this study and will not be revealed to third parties.

You are kindly asked to answer all questions to the best of your ability. You have the right to withdraw at any time in the process.

Thanking you in advance for your time and cooperation.

Yours faithfully,

George Firmin Kavishe

Appendix 9: Informed consent for questionnaires



University of KwaZulu-Natal
School of Social Sciences and
Information Studies Programme
Private Bag X01Scottsville
3209, PMB

Dear respondent,

Researcher: Mr George Firmin Kavishe

Institution: University of KwaZulu-Natal

Tel: [REDACTED]

Email address: [REDACTED]

Supervisor: Dr Francis Garaba

Institution: University of KwaZulu-Natal

Tel: 0332605321

Email address: Garaba@ukzn.ac.za

I George F Kavishe of University of KwaZulu-Natal, kindly invite you to participate in the research project entitled '**Recordkeeping for good governance in Tanzanian public universities**'. The study aims at making a contribution towards promoting good governance in Tanzanian public universities. It is undertaken as a part of the requirement of the award of PhD (Information Studies), at the University of KwaZulu-Natal, South Africa.

The purpose of this questionnaire is to assess your knowledge and understanding of recordkeeping practices. Please note, however, that this is not a formal test. Please try to answer the questions as best as you can. If you do not know or are unsure of an answer, it is not a problem – please simply indicate this on the questionnaire or you are welcome to leave it out. Your participation in this research project is voluntary. You may decline to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage.

Any information that is obtained in connection with this study and that which will be identified by you will remain confidential. Disclosure of information will only be done with your permission. Please note that your name will not be included in the report. You are kindly asked to answer all questions to the best of your ability. The data collected will be securely kept at the school premises and eventually disposed of by incineration after a period of five years. If you have any question, please feel free to contact me or my supervisor using the contacts provided in this letter.

Thank you for agreeing to participate in this research study.

Yours sincerely,

DECLARATION BY THE PARTICIPANT

I (Full names of participant), hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.
I consent / do not consent to this interview being recorded.

SIGNATURE OF PARTICIPANT: ----- DATE -----

Supervisor's details

Dr Francis Garaba
Institution: University of KwaZulu-Natal
Tel: 0332605321
Email address: Garaba@ukzn.ac.za

Student's details

Mr George Firmin Kavishe
Institution: University of KwaZulu-Natal
Tel: +255769026548
Email address: georgekavishe@sua.ac.tz/212556842@stu.ukzn.ac.za

HSSREC Research Office

Ms P. Ximba
Telephone number: 0312603587
Email address: ximbap@ukzn.ac.za

Appendix 10: Letter of authorization from ARU

ARDHI UNIVERSITY

Tel: (+255) 729 557 310
Fax: (+255) 729 557 311
Mob: (+255) 738 557 312
E-mail: aru@aru.ac.tz



P.O. Box 35176
Dar es Salaam, Tanzania
e-mail: aru@aru.ac.tz
Website: <http://www.aru.ac.tz>

Our Ref.No. GA.35/630/03/18

2nd November, 2020

Vice Chancellor,
Sokoine University of Agriculture,
P.O.Box 3151,
Morogoro.

RE: RESEARCH CLEARANCE

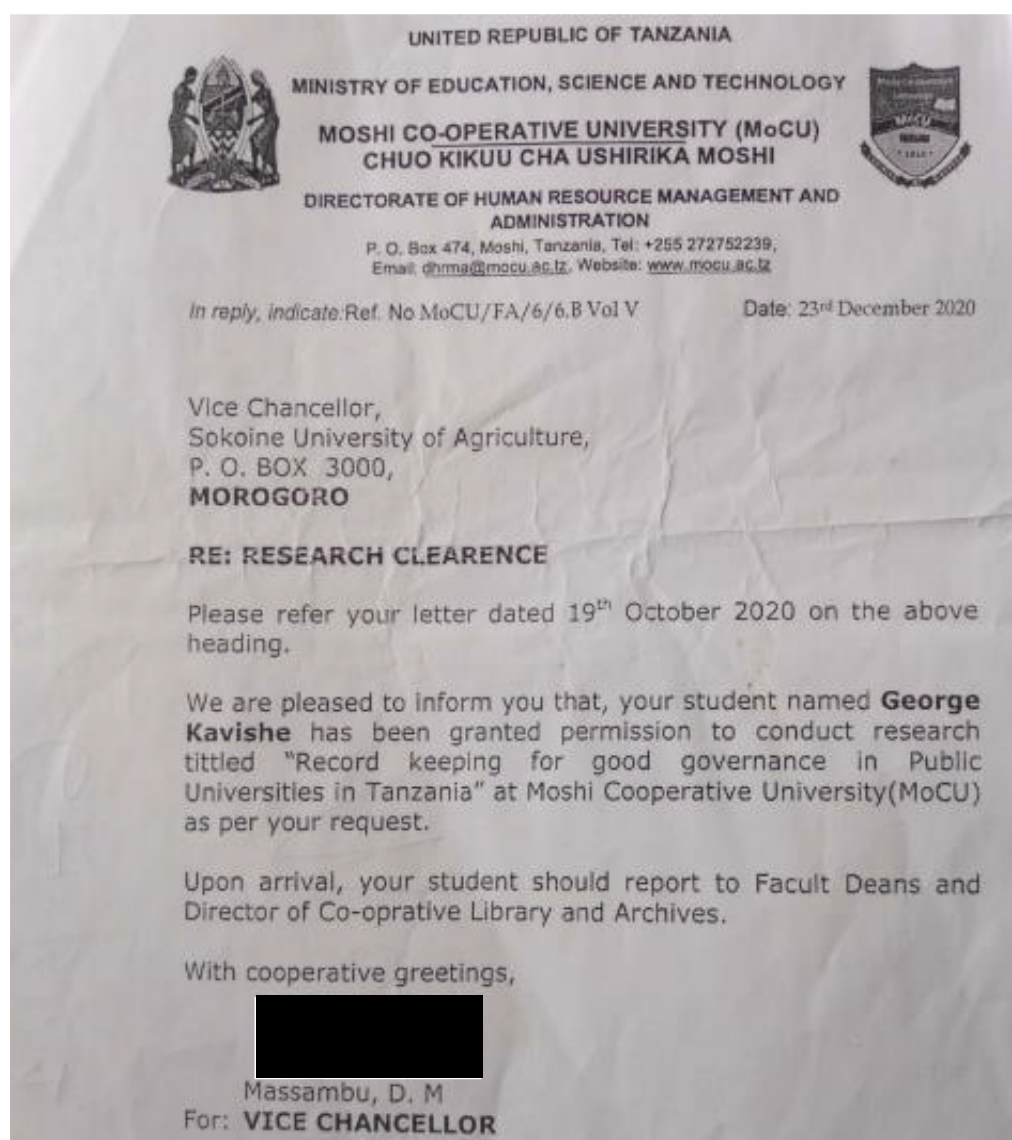
Reference is made to your letter with Ref. No. SUA/CPF/LIB/01/28/33 dated 19th October, 2020.

- Please be informed that, your request for Research Clearance in respect of **Mr. George F. Kavishi** pursuing PhD titled "**Record keeping for good governance in Public Universities in Tanzania**" for the period between **October 2020 to July, 2021** has been granted. Upon arrival the student will report to the Head, General administration for further guidance.

Sincerely,

Moshi A. M
For DVC-PFA

Appendix 11: Letter of authorization from MoCU



Appendix 12: Letter of authorization from MU


MZUMBE UNIVERSITY
(CHUO KIKUU MZUMBE)

OFFICE OF THE DEPUTY VICE CHANCELLOR (ACADEMICS)

E-Mail: info@mzumbe.ac.tz Tel: +255 22 280 0121 Fax: +255 22 280 0123 Cell: +255 0754644029 Website: www.mzumbe.ac.tz	P.O. Box 1 Mzumbe TANZANIA

Ref. No.: MU/OF/R.2/1/Vol. III/184 Date: 15th January, 2021

The Vice Chancellor,
Sokoine University of Agriculture,
P.O. Box 3000,
MOROGORO.

RE: PERMIT FOR DATA COLLECTION AT MZUMBE UNIVERSITY

The caption above refers.

2. This is to acknowledge receipt of your letter with ref. No. SUA/CPFF/LIB/1/28/33 dated 15th October, 2020 in which you introduced Mr. George F. Kavishe as bonafide student of the University KwaZulu-Natal, Republic of South Africa. You also informed that the said student is conducting research entitled "Record keeping for good governance in public Universities in Tanzania" and would like to collect data at Mzumbe University during her study period from October, 2020 to July 2021.

3. I am glad to inform you that the office of the Vice Chancellor of Mzumbe University has granted permission for him to carry out data collection exercise at the University as requested by your office. Alongside this permission, the researcher will be required to carry this letter with him anytime he is moving around the University for the purpose of data collection and present it to whoever may need to identify him. Upon arrival at MU for the purpose of data collection, he should report to the office of the Deputy Vice Chancellor (Administration and Finance) for logistical arrangements. This data collection permit will be valid from the day of reporting to that office ready for the exercise. Should there be a need to extend time to complete the assignment, he should communicate the same in writing to the office of the Deputy Vice Chancellor (Academic).

4. I trust that the researcher will exercise the highest level possible of ethical conduct of research during his data collection exercise at our university and thus enjoy his stay at MU.

5. Yours Sincerely, 

Prof. Ganka Nyamsogoro
DEPUTY VICE CHANCELLOR (ACADEMIC)

MZUMBE UNIVERSITY
P.O. Box 1, MZUMBE
TANZANIA

cc. Mr. George F. Kavishe.

QUOTATION OF REF. NO IS ESSENTIAL

Appendix 13: Letter of authorization from MUST

MBEYA UNIVERSITY OF SCIENCE AND TECHNOLOGY
DIRECTORATE OF POSTGRADUATE STUDIES, RESEARCH AND PUBLICATIONS

Telephone: +255(0) 252301677 or 2522861.
Fax: +255(0) 252302162

E-mail: vc@mustnet.ac.tz
dysr@mustnet.ac.tz

Website: www.mustnet.ac.tz



P.O. Box 131,
Mbeya,
Tanzania.

Ref: CA.173/83/03/159

Date: 29th December, 2020.

TO: Mr. George F. Kavishe

FROM: DPSRP

RE: CLERARANCE PERMIT FOR CONDUCTING RESEARCH AT MUST

The caption above refers.

The reference has been made in your letter dated 19th October, 2020 with Ref. SUA/CPF/LIB/1/28/33 which was received on 22nd December, 2020 requesting permission to collect data at MUST.

This letter therefore serves as note of being permitted to collect data on: *"Record Keeping for good Governance in Public Universities in Tanzania"* at Mbeya University of Science and Technology.

Wishing you all the best in data collection at MUST while complying with research ethics.

Best Regards;

Dr. Asheri M. Mwidege

Director of Postgraduate Studies, Research and Publications.

Appendix 14: Letter of authorization from NMAIST

**THE NELSON MANDELA
AFRICAN INSTITUTION OF SCIENCE AND TECHNOLOGY
(NM-AIST)**

Office of the Deputy Vice Chancellor- Planning, Finance & Administration

Direct Line: +255 272970003 Mobile Phone: +255 784777580 Fax: +255 272970016 E-mail: dvc-admin@nm-aist.ac.tz		Tengeru P.O Box 447 Arusha Website www.nm-aist.ac.tz

Reference No. BJ.199/809/01/39

6th May, 2019

Dr. Francis Garaba,
University of Kwazul Natal,
School of Sciences Private Bag X01,
Scottsville, Pietermaritzburg 3209,
Republic of South Africa.

**RE: REQUEST FOR MR. GEORGE FIRMIN KAVISHE TO UNDERTAKE RESEARCH
AT NM-AIST**

Please refer to the heading above.

Reference is made to your letter dated 18th April, 2019 requesting to undertake data collection for research titled "records management for good governance in Tanzania public universities".

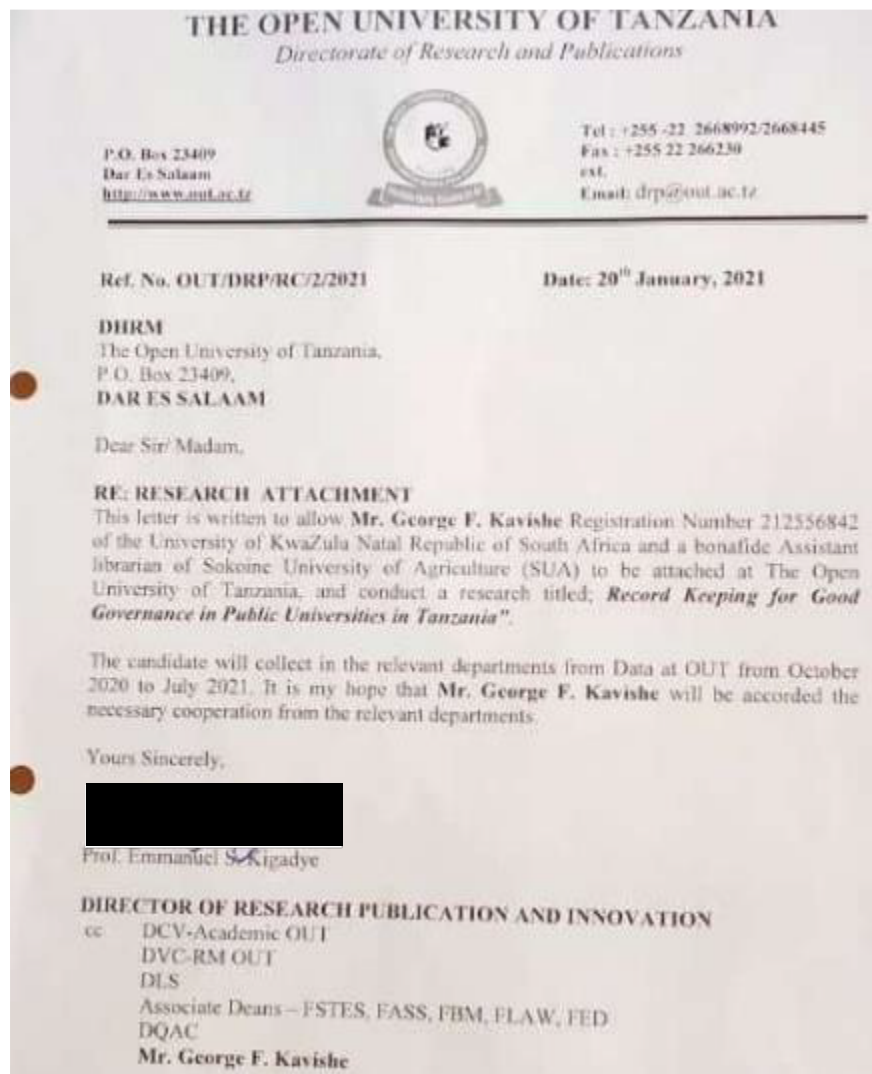
Kindly be informed that NM-AIST Management has allowed your student **George Firmin Kavishe** to collect his research data for fulfillment the requirements of his PhD studies at the University of Kwazulu-Natal.

Once Mr. George arrived at NM-AIST he should visit the office of Chief Human Resource officer for further directives.

Yours Sincerely,


Prof. Charles Lugomela
Deputy Vice Chancellor – Planning Finance and Administration

Appendix 15: Letter of authorization from OUT



Appendix 16: Letter of authorization from UDSM

UNIVERSITY OF DAR ES SALAAM

DIRECTORATE OF RESEARCH AND PUBLICATION

P.O. Box 35091 ■ DAR ES SALAAM ■ TANZANIA

General Line: 2410500-8 Ext. 2084

Direct Line: 2410727

Website: www.udsm.ac.tz



Fax: 255 022 2410743

255 022 2410023

E-mail: research@udsm.ac.tz

Our Ref. AB3/31

24th December 2020

Deputy Vice Chancellor - Administration
University of Dar es Salaam

RE: INTRODUCTION LETTER

This is to introduce **Mr. George F. Kavishe** who is a PhD student at University of KwaZulu-Natal. Mr. Kavishe is at the moment conducting data collection as part of his Studies. The title of his research is '**Record Keeping for Good Governance in Public Universities in Tanzania**'.

This is to request you to grant the above-mentioned student any help that may enable him to achieve his study objectives. The period for which this permission has been granted is from **December 2020 to July 2021**.


Dr. Mussa I. Mgwatu

DIRECTOR OF RESEARCH AND PUBLICATION

Appendix 17: Letter from editor



Mzumbe University,
P.O.Box 5,
Mzumbe – Morogoro
1/12/2023

To Any Concerned Authority

Re: Language Editing Confirmation

This is to certify that the undersigned proofread the PhD thesis (**Recordkeeping for good governance in Tanzanian public universities**) of the document commissioned to me by Mr. George F. Kavishe.

I request that any concerned authority accept his PhD thesis for further procedures.

Yours sincerely,



Issaya Lupogo
Language (English and Kiswahili) Expert
Department of Languages and Communication Studies
Mzumbe University
Mobile: +255712143909
Email: islupogo@nzmumbe.ac.tz