LAND RECORDS MANAGEMENT SYSTEM AND SERVICE DELIVERY IN THE MINISTRY OF LANDS IN KENYA

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A RESEARCH PROJECT SUBMITTED IN FULFILMENT OF THE DEGREE OF MASTER OF SCIENCE (RECORDS MANAGEMENT AND ARCHIVE ADMINISTRATION) IN THE SCHOOL OF PURE AND APPLIED SCIENCES, KENYATTA UNIVERSITY

MAY 2024

DECLARATION

I declare that this project is my original work and has not been presented inany other university/institution for consideration of any certification. This research project has been complemented by referenced sources duly acknowledged.

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Supervisor Declaration:

I confirm that the work reported in this project is carried out by the candidate under my supervision as university supervisor.

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DEDICATION

This work is dedicated to my husband Harison Kulei my son Ryan Kiplagat,my parents,my siblings and my friends.May God bless you always for being the source of my joy.I have benefited from your wisdom and the is no way i would be able to match that but to say thank you may God’s grace be upon you always.

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ABBREVIATIONS AND ACRONYMS

EHR	Electronic Health Records
GOK	Government of Kenya
ICT	Information Communication Technology
KNADS	Kenya National Archives and Documentation Service
NLIMS	National Land Information Management System
OPAC	Online Public Access Catalogue
OSI	Open System Interconnection
TAM	Technology Acceptance Model
TSC	Teachers Service Commission
UBC	Uganda Broadcasting Cooperation
USA	United States of America

ABSTRACT

The Kenya Ministry of Lands has been plagued with rampant delays in accessing land records, registry services and numerous clerical errors that have affected service delivery. It is evident that service delivery problems within the department have been problem for most policymakers which resulted in the launch of the National Lands Management Information System geared towards improving service delivery. The impact of land records management systems on Kenya's Ministry of Lands has not been adequately explored in research. Therefore, this study examines how the system influences service delivery. This study investigated the relationship between land records management system and service delivery. Specifically, the study examined the quality level of services at the ministry, the effect of the land records management system on service delivery and the challenges faced when integrating land records management system at the Ministry of Lands in Kenya. The records continuum theory and the technology acceptance modelformed the basis of this study. A descriptive approach was employed, and the population targetedofstaff at the Ministry of Lands main registry at Ardhi House. The study sampled 154 officials within the headquarters at the Ministry of Lands who are involved in the lands records management system.Primary data was sourced using structured questionnaires developed under the guidance of the study objectives. Google forms supplemented the physical data to enhance the response rate. A pretesting was caried out on 10% of the sample participants to determine the research instruments' validity and reliability. Data analysis focused both descriptive and inferential analysis.Findings were presented using charts and tables.The findings of the correlation tests established there is a strong positive and significant relation between quality of service offering ($r = .631^{**}$, sig = .000<.05), digitization of land records ($r = .806^{**}$, sig = .000<.05), records management policies ($r = .581^{**}$, sig = .000<.05), records management staff competencies ($r = .733^{**}$, sig = .000<.05) and the service delivery at the Ministry of Lands in Kenya. This implies that a unit change in these variables resulted in a unit change in the service delivery. The regression analysis showed that that independent variables had explanatory power on level of service quality at the Ministry of Lands in Kenya linked to as they accounted for 77.7% of its variability (R Square = 0.777) hence the model was a good fit for the data.The study concluded that the Ministry's quality level of service delivery is very low and services are offered slowly and there is a lot of delays in giving services to customers. The implementation of land records management system provides a technique and method for land planning, management quantification and rationalization together with quick inquiry, analysis and innovation of land information, provides supplementary support for decision making and improves the traditional land management system through computer technologies and communications network. The study also concluded that the dynamic nature of the land resource in Kenya poses numerous and complex challenges which call for clearly articulated management tools. The study recommended that the Ministry should put up appropriate training programs to keep its employees updated with the current job requirements and training should be geared to all employees regardless of their gender and job category. According to the study, security should be the top priority while developing software and processing data for the land records management system. It is imperative that all employees working in the Ministry are made aware of the importance of security policies, and they should be instructed to abide by them. Furthermore, the study recommended the implementation of a Land Information Management System. Consequently, services were delivered to clients according to their expectations.

CHAPTER ONE

INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY

1.1 Introduction

This section contains the study's background, the problem that informed the study, objectives of the study, specific objectives, and questions to be answered by this study, the study's significance, delimitations and limitations, its significance, study assumptions, conceptual and theoretical framework and operational definition of terms.

Ultimately, Records Management ensures that institutional records of vital historical, fiscal, and legal value are identified and preserved, and that non-essential records are discarded in a timely manner according to established guidelines and identified legislation.Benefits of Records Management include more effective management of your current records (both paper and electronic); a reduced / eliminated level of record-keeping redundancies; reduced costs for records storage equipment and supplies; and increased usable office space through the elimination of unnecessary file storage. In addition, Records Management provides institutional accountability and timely access to information

1.2 Background to the Study

In addition to minimizing litigation risks, promoting accountability and transparency, ensuring compliance with regulatory requirements, and supporting informed decision-making, good records management also boosts efficient and effective public service delivery (Abuzawayda, Yusof & Aziz, 2017). A country's ability to access and use records effectively determines its ability to develop (Hoque and Sorwar, 2019). In order to improve information access and public service delivery, records managers should implement retention and disposal schedules,

international standards and procedures for records management, disaster management plans, user-friendly classification schemes, records management policies, and electronic records management systems.

The advent of technologies and increasing digital adoption has generated an increase of user-generated data and content. While the potential benefit of this data is obvious, systems are often challenged to make actionable insights and decisions from the data (Ambira, 2016). It is believed that these technologies are capable of transforming features of information management from documenting information to processing, storing, and retaining such information (Drucker, 2013).In developed economies, information systems have been successfully integrated to improve records management. In this regard, the Open System Interconnection (OSI) standard has beed adopted to create, manage and maintain standards in records management. This has resulted in improved efficiency in service delivery and raised the level of client satisfaction withthe delivered services (Sanderson & Ward, 2016).

Bhuiyan(2011) in a study of Kazakhstan government agencies indicated there is need to improve accessibility of information through e-platforms as well as recruit competent staff in order to improve cost-efficiency, cost-effectiveness, accountability, and transparency in service delivery to Kazakhstanis. Jürgenson (2016) noted that to achieve land consolidation in Estonia there is need for land reforms to be facilitated through availaing of information and creating awareness to the public on how to access lands records within the country. However, Yusof and Mohktar (2018) affirm that in developing countries, adoption of records management tecnology has been hard.

Land records management systems are obsolete and old in Pakistan, a developing country with a lot of socioeconomic issues. Imran, Ferdous, Adeel & Faheem, 2020), the land management system of Pakistan is almost obsolete because of the colonial period of

British rule in the subcontinent that lasted until the middle of the 20th Century. This system was designed to maintain, transfer and access land revenue and other levies from the land holders. The passage of time, however, seems to have left this system out of date, according to Malik, Shuqin, Talukder and Mattiullah (2021). Nearly 50 million landowners are represented in Pakistan's 190 million land records. There is, however, a need for a change that will address the current needs as well as meet the needs of the future.

Birner and Okumo (2012) reviewed land governance in Nigeria and revealed that the main challenges to better service provision was lack of computerized record keeping, poor land registry maintenance and poor compensation of the public. Atulomah (2019) observed that improving records management in public institutions in Nogeria would help to eliminate various observed administrative/managerial problems and weaknesses that cause inefficiency and ineffectiveness in the institutions. Therefore, proper care of records could translate into quality service delivery by the government to the populace.

In Ethiopia, Ghebrehiwet(2017) study showed perseverance of traditional structures and lack of a functional land information system have mande it virtually impossible to effectively manage urban land development. According to Shibru (2019) the smallest number of organizations in Ethiopia has record management departments, andmanages record wisely. Records management has gradually developed from a paper-basedrecord management to electronic record management. Each record management departments is responsible for the storage of an organization’s documents. Therefore, it is essential to organizationin order to make decision easy about organization, so if the decision of the organization is goodat every time the organization easily computes with other organization.

Because of poor records management, land boards have experienced poor service delivery, necessitating the implementation of electronic records management systems to improve service delivery (Kettani & Moulin, 2018). Similarly, Landmateriet (2019) observes that tribal land administration has been facing some challenges in Botswana, according to the Department of Land Boards Services. Dispersed records, which require a great deal of time to locate, incomplete registers, loss of records, a lack of a common registration system for tribal land, poor recordkeeping, which causes backlogs, duplication of rights to land parcels, and a lack of properly organized registration.

According to Abuki (2014), Kenya is among those countries with significant challenges in integrating records management systems into their ministries. Mitullah and Waema (2015) report that for the country to achieve its vision 2030 of enhancing efficiency and effectiveness in service delivery,it has to integrate new technologies to enhance management of records.The Kenyan Government has made significant strides in its attempt to improve land transaction operations. Through legislation and technologies adoption, the country has adopted the National Land Information Management System (NLIMS) which assures improved transparency, and business operations while at the same time limiting vices such as corruption(Kariuki, Karugu, & Opiyo, 2018).

World Bank Economic Report (2013) attributes the issues at the Kenyan Ministry of Landsto a weak and poor land administration system. The ministry is reported to still use a paper-based records management syatem, with millions land record papers distributed across the national headquarters and field around the country. The development of the NLIMS in Kenya, has been dismal due to technological-related, stakeholder, leadership, governance and budgetary constraints. This has resulted in the project full implementation being delayed(Nyongesa, 2013; Kamande & Orwa, 2015).According to the Lands Ministry (2020) there are 41 land registries spread across Kenya. The largest registry is

housed at Ardhi House which serves as the Ministry Headquarters. The study focused on service delivery at the Nairobi Lands Registry at Ardhi House.

1.2.1 Digitization of Lands Records

Businesses are increasingly relying on digital records to enhance their operations as they adopt innovative strategies (Asogwa, 2012). Digital records management systsems have become more popular in the 20th century. Empirical evidence has shown that until recently, most of the records were in paper form, buttechnological developments have enabled firms to go paperless (Foltyn, Lhotak, & Kocourek, 2012). Records are converted from printed to electronic form via digitization.The In addition to text and images, media may consist of audio, video, and animation.(Patel, 2014). Based on Murthy (2005), digitization activities consist of three phases; conversion of materials into digital formats, processing of the digital material through cataloguing, indexing and compression and the third process is concerned with preservation and maintenance of the digitized collection and services.

A two-fold challenge faces developing countries. In order for economic development to take place, it is vital to secure land property rights. Roth & McCarthy (2014) state that land rights support local governance processes, promote economic growth, and alleviate economic inequalities. Moreover, records of land ownership can impact property values and reduce lender risk (Domeher & Abdulai, 2012). Developing countries, however, keep land records in centralized databases on paper. Moreover, this paper-based system can be harmed by natural or man-made disasters due to it being cumbersome and difficult to access and maintain. Therefore, governments in developing countries are exploring digital methods for digitizing land records to reduce vulnerabilities of single-copy paper-based titles, as well as increase the authenticity, reliability, and transparency of land registration systems. Multi-stakeholder processes, such as land registration, are complex due to the

involvement of multiple stakeholders. Land ownership is kept track of by the system, and the titles registered therein are legally sound.

The design of modern land record systems are founded in the standards of digital libraries. These digital libraries serve as long-term data stewards and provide well-developed standards which land record systems can leverage. Digital land record systems are an applied tool for progressing land administration and gaining access to records in real time for validated sources (Walker, 2019). However, digital land record systems do more than just provide a tool. At present, they allow for the preservation of information that otherwise would be stored in physical formats subject to corrosion and loss. According to Abdullatif and Al-Rahahleh (2020) digital land record systems present us with an opportunity to create digital libraries that preserve and archive our land history. Additionally, the establishment of best-practices and archival standards allow for a single system that services historic as well as current land records. This is necessitated by the inherit differences between temporal overlap of records of the same property.

Land and property administration requires a vast amount of documents and supporting documentation, according to Graglia and Mellon (2018). An existing land information system is usually a centralized database that records a nation's transactions regarding land. Digital repositories offer greater functionality over paper-based counterparts, but they don't transform land registration processes intrinsically by themselves. In spite of this, digitalizing paper-based land records adds redundancy, concurrency, and consistency, which are qualities of a database. As a result, automation can be achieved at the application level (e.g., maintaining information availability, protecting against catastrophic losses). A number of governments have implemented e-Government and open data initiatives in the past few years (Domeher and Abdulai, 2019) to improve openness and transparency. By replicating and duplicating these central repositories, distributed

databases help protect them. It is possible for rogue individuals to alter or delete land records, however, thereby altering or destroying the integrity of the records.

As far back as Indian Civilization is concerned, land records have existed in India. Since the creation of the administrative system and socio-economic pressures that drive land records maintenance, maintaining land records has evolved (Yadav & Kushwaha, 2021). Land preparation and maintenance were developed during the Moghul period, and then reached a scientific level during the British rule. After the accreditation was granted, all efforts have been aimed at revisional preparations which are combined with newly accredited areas based on existing laws. A lack of adequate land record maintenance system in India has resulted in the inability of Samal, Mohanta, Sharma and Jena (2021) to work effectively. The administration was made more difficult, and the benefits were neutralized as a result. A workshop on computerization of land records (1987) followed the Conference of Revenue Ministers of states and UTs (1985) and the Study Group's report (1985). According to the government's recommendation, the government should fund a pilot project for computerization of land records (CLR) undertaken by different states on their own initiative.

Matusiak and Johnston (2014) opine that there has been a lot of skeptisicm regarding the ability of digital systems to preserve important data in the preservation community. Conversion of data to digital formats was touted to promote access and reproduction, rather than preservation.Eusoff and Yusof (2011) affirm that digitization does more than just reduce the bulkiness of data; but add that it eases access through indexing, searching and records retrieval. Digitization improves ordering, searching and retrieval, permits validity checks,enables research, and supports improvement in organizational decision making (Foltyn, Lhotak, & Kocourek, 2012). Records dgitization enables archives to appropriately archive and secure storage. Archiving enables managements to develop

unique access codes, thus increasing the securitization of data. Restricting access to data retains itsqualiuty through reducing possibilities for tampering through unnecessary handling, theft, unethical means, exposure to light (Balogun & Adjei, 2019).

Hamooya Njobvu and Mulauzi (2013) studied digitization of records in Zambia's National Archives andreported that records digitization promoted preservation since it reduced direct use of fragile original records. This was also reported by Bayissa, Ketema and Birhanu (2011) in Ethiopia. The study findings showed that digitization was carried out to improve preservation of records. This implies that digitization has been used as a preservative measure, and that it is also successful in preventing or creating substitutes for valuable materials that may be susceptible to damages. Kwanya (2014) revealed that land records digitization was not viable in Kenya since the country lacks the necessary technological infrastructure, and has a poor human resource, culture and structure. This resulted in poor service provision and performance of land management functions. Chaterera (2016) in a study on service delivery indicated that lack of records management training, poorly formulated procedural manuals, and insufficient number of electronic records management professionals impact service delivery within the Ministry of Lands.

Worldwide, land data such as surveys, land registrations, valuations, land use planning, and infrastructure data are typically held in silos and managed manually. Inefficient, time consuming, and untimely decisions can result from this manual system of handling data. It has long been a major challenge to many organizations managing land to maintain the continuously growing and massive land records data containing cadastral maps as well as alphanumeric information. A Land Information Management System would allow policymakers to make timely and effective decisions and plan for the future if this data were converted into digital form, processes and procedures were automated, and processes

and procedures were developed. Investing in, developing and managing land requires land information. It is directly related to the quality and availability of the information that determines the value of the information and the effectiveness of the decision making process.

In developing countries, computerization has been regarded as one of the most challenging aspects of land administration reform (Williamson, 2015). With the current global challenges facing the continent on climate change, food and fuel shortages, natural disasters and environmental degradation, it makes sense to develop land information systems. By providing timely, accurate, and reliable land information, this will help in the effective management of the land resource. A reliable Land Information System is essential for managing and controlling land and land resources (Tuladhar et al, 2002). Development countries face a number of external and internal challenges in modernizing land administration systems, which must be addressed appropriately.

As Okoth (2015) points out, Kenya's land administration processes have become time-consuming, unreliable, restrictive, repetitive, unaccountable and costly, reducing efficiency and effectiveness. Further, the manual land administration system has gradually deteriorated service provision to citizens as well as accruing large quantities of paper records to an unmanageable level that cannot be maintained in this age of reforms and constant demand for citizen-oriented services. Managing information/records through digitization would enhance efficiency and effectiveness, according to Smith (2009). As well as ensuring convenience, efficiency, transparency and reliability, successful e-Governance initiatives or digitization programs focus on improving services for citizens. Aside from addressing duplication of work, it will lower the cost of communication, improve the transparency of government departments, and facilitate citizen service delivery.

1.2.2 Service Delivery

Despite rapidly changing preferences and emergence of diverse taste, value and pattern segments, service delivery in the modern economy is critical. To decrease costs and increase profitability, organizations use innovation to deliver services and products in the most cost-effective manner, improve service delivery methods, and increase customer value (Edvardsson & Olsson, 2016). Service delivery orientation, according to Chen, Tsou, and Huang (2019), refers to an organization's ability to adapt to change by using new technologies, skills, and resources. In other words, when service delivery has a positive impact on an organization, it means that it fulfils its mandate and meets stakeholder needs and expectations.

Delivering services of high quality is an important pursuit for the organizations that seek to create and provide value to their customers (Grönroos &Ravald, 2019). Through theprovision of high levels of service quality, organizations can achieve increased customersatisfaction, loyalty and therefore better performance. According to Parasuraman, Berry, and Zeithaml (2020), organizations must plan their services delivery and ensure their successful implementation in order to achieve high service quality and create value for customers. For the service delivery system to work effectively, good planning and plan implementation are essential. This is the provision of goods and services to members of the public (Mbecke, 2014). It refers to the way which the government meets the needs of the public (Oronsaye, 2010). Since this is an obligation of the state, services are expected to be delivered to all who seek it in a friendly environment with no obstructions, hindrances or interruptions. Instead, services should be delivered through comprehensive consultation, transparency, openness, accessibility, availability, convenience, timeliness, accountability, and participation(Miriti, 2016).

African governments are under increasing pressure to deliver basic services such as education, roads, health as well as other public services and also to improve the people's living conditions (Kiilu & Ngugi, 2014).According to Gakure, Muriu and Orwa (2013) service delivery is one of the national governments' mandate and this must be ensured to all citizens at a reasonable cost. In this regard, governments make use of public services principal organs to translate policies and plans into tangible goods and services (Oyedele, 2015). Milakovich (2012) notes thatin any government, the efficacy of the public delivery system denotes the success of the nation's service delivery.

However, according to Biwott (2014), Kenya's public service is underperforming. It is characterized by chronic corruption, lack of accountability, transparency, commitment, and trust, resulting in low public dependence and trust. Kwata (2010) reports that sevrice delivery has been slow, unresponsive, inefficient and plagued with unnecessary bureaucracy. Members of the public, who are supposed to be the main beneficiariesof public services have been forced to access multiple offices for a simple service that could be accomplished easily through use of certain technologies. Further, the officials in public offices are often unmotivated and recalcitrant in nature. As a consequence, accountability in the services delivery sector has deteriorated considerably(Karim, 2015; Oyedele, 2015).

Generally, challenges facing delivery of government services include capacity gaps, poorly developed infrastructure, poor cooperation between intergovernmental, agencies and stakeholders, and human related vices such as tribalism and corruption. This increases materialism, indiscipline, and dissatisfaction among expected beneficiaries. High levels of dissatisfaction have resulted in increased pressure from the public for the governments to facilitate equitable services delivery (Kimathi, 2017).Mugambi(2013) revealed that most government ministries in Kenya have been unable to reduce costs associated with services

delivery, transaction time and ease work procedures due to failure to implement clear e-government records management systems. Ambira (2016) revealed that the current practices for the management of electornic records within Kenyan ministries are inadeqaute which limits effective service provision.

1.2.3 Ministry of Lands Kenya

In Kenya, there is increased pressure from the public and other civil organization for the government to improve service delivery, and emerging technologies have been identified as the key drivers for enhancing public service delivery (Biwott, 2014). In Kenya, government services are characterized by long waiting times, slow response, low levels of technology integration, disintegration of roles and corruption, which citizens categorize as frustrating and inefficient (Yang & Maxwell, 2011).This also impacts the government's ability to deliver quality services. Increased bureaucracy has hampered employees' capacity to attend to or respond to certain queries, while poor work culture has resulted in low motivation and intention to deliver services in a timely fashion. The use of papers also dominates the offices, rising cost significantly. Karim (2015) also reports that apart from the rigid processes, a high rate of involvement of intermediaries and neglect by mostof the officials has also negatively impacted service delivery within the government(Karim, 2015).

Ministry of Lands (2020) has categorized the services offered under four main themes; land registration services, the lands administration services, survey services, and land valuation services. The Ministry indicates that under land administration, the primary services are; preparation and issuance of land lease, change of land users, processing of issuance consents, and advice to the general public. Under the survey services, the ministry offers the following; a survey of land boundaries, processing of mutation documents, resolution of land disputes, amendments of deeds, and sale of national maps.

Ministry of Lands (2020) service charter shows that the land registration services are categorized into; registration of land documents, issuance of land title, title searches, determination of boundary disputes, preparation of provision and new titles, issuance of certificates of incorporation, stamping of land instruments, an inspection of duty franking machines and processing of conversion of land titles. Under land valuation, the Ministry offers the following services; valuation for stamp duties, assessment of rent for government leasing, determination of rent disputes, valuation of foreign government missions, valuation of rates, valuation of fixed government assets, and subdivision, and lease of extension services among users.

Maina (2013) examined service delivery in Kenya's ministry of lands. The study sourced data reported between 2005 and 2012, and revealed that corruption had contributed to costly service accessibility, loss of revenue and poor service delivery. Ntabo (2016) found out that within the Ministry of Lands, most citizens have been faced by long queues, long processes, complicated procedures and practices, missing files and unmaintained records. Mbwana (2011) indicated that the Ministry of lands was plagued by the poor quality of service offering, poor record retrieval, corruption, system downtime and lack of trained personnel.Ngairah (2018) found out that the Ministry of lands was influenced by lack fo strategic plans which limited the capacity to detect records loss, improve information storage, sharing of data and fostering efficiency in service provision.

Gisemba and Iravo (2019) note that the lands ministry is mostly affected by lack of proper record keeping which results in delayed retrieval of files, high adjudication fees, loss of files and poor information recording. Abdalla et al. (2015) indicated poor record-keeping, poor customer care, long periods of waiting for services and chronic absenteeismwithin the ministry. The current study utilized on the

contextual measures of service delivery in Kenya's lands ministry. It measured accountability, service efficiency, effectiveness, accessibility, affordability, openness and transparency as well as satisfaction level by the citizens.

1.3 Statement of the Problem

In Kenya, delivery of public services suffers from poor transparency, unaccountability, corruption, traditional systems of management, poor working conditions, and often characterized by employees with minimal training on modern information management systems, leading to inefficiency, rigidity, ineffectiveness, underperformance and dissatisfaction. This state of operation has plagued developing countries around the world, triggering a global effort to address this long-standing issue. Currently, the National Land Information Management System has been operationalized across 8 counties in Kenya with more expected to be included in coming year. The launch of ARDHISASA is expected to drive the reforms initative in digitization of lands records and promote better service delivery within the country. This research was thus be critical to expanding available evidence on how digitization efforts have influence the service delivery within the ministry and bridge the knowledge gap.However, within state ministries there have been increasing incidences of documented delays in delivery of services. Kenya's Ministry of Lands is characterized by rampant delays in accessing land records, while the Judicial System in Kenya is faced with delays in registry services and numerous clerical errors that have affected service delivery. It is evident that service delivery problems within state ministries and agencies is well documented. However, the review of how various digitization practices of records influences the service delivery is not extensively documented hence need for solving the knowledge gap. Hence the current study investigated the link between land records management systems and service delivery in Kenya's Ministry of Lands.

1.3.1 Purpose of the Study

The main aim of the study was to examine the relationship betweenland records management system and service delivery in the ministry of lands in Kenya.

1.3.2 Specific Objectives

i. To examine the effect of quality level of service delivery on service delivery at the Ministry of Lands in Kenya.

ii. To determine the effect of digitization of records on service delivery at the Ministry of Lands in Kenya.

iii. To establish the effect of records management policies on service delivery at the Ministry of Lands in Kenya.

iv. To investigate the effect of records management staff competencies on service delivery at the Ministry of Lands in Kenya.

v. To examine the challenges faced in the implementation of land records management system at the Ministry of Lands in Kenya.

1.3.3 Research Questions

i. What is the quality level of service delivery at the ministry of lands in Kenya?

ii. What is the effect of digitization of records on service delivery at the Ministry of Lands in Kenya?

iii. What is the effect of records management policies on service delivery at the Ministry of Lands in Kenya?

iv. What is the effect of records management staff competencies on service delivery at the Ministry of Lands in Kenya?

v. What are the challenges faced in the implementation of land records management system at the Ministry of Lands in Kenya?

1.4 Significance of the Study

The study was beneficial to the organizations' management in Kenya who would understand the underlying causes of ineffective and inefficiency and develop record management strategies to reduce and eventually eliminate the many cases of poor delivery in these organizations. The government would use this study to understand the problems facing Kenyan state organizations and implement policies that would aim to solve the problems and improve the reduction of inefficiency and effectiveness in these organizations. This wouldsignificantly offer knowledge contribution in this area as reference material for scholars and students carrying out studies in this area or related studies.

1.5 Limitation and Delimitations of the Study

The study anticipated limitations in accessing some records and officials due to the high levels of bureaucracy. The study expected limitations in accessing some respondents as well as limitations during the interviews due to work commitments. To address these challenges, the researcher made schedules and booked appointments prior to the actual research and utilized electronic data collection procedures. The National Lands Management System had only been recently operationalized within the Ministry, hence there could be challenges in accessing officials with knowledge on the system due to work from home directives due to the pandemic. The study was limited to the employees

working within Nairobi County which could limit the voice of officials overseeing the implementation of the NLMS within other regions in the country.

1.6 Assumptions of the Study

The research assumed that a digitization of records has addressed issues within the ministry that may impedean effective and efficient service delivery. The research also assumed that the study respondents would be available within the Ministry to take part in the research despite the lockdown processes activated by the government in light of the COVID pandemic. The study also assumed that study participants would offer concise and apolitical responses that could be critical in establishing an association between study variables. The study further assumed the respondents would voluntarily partake in the survey and they would offer honest responses to the submitted instrument. The study also assumed that the sample selected for this study adequately represented the population to support generalization of the research findings

1.7 Theoretical and Conceptual Framework

1.8.1 Theoretical Review

Theories are formulated to define various aspects of a phenomenon (Berg, 2007). A theoretical framework is a section defining and developing associations between study variables. This study was grounded on the records continuum modelwhich issupported by the Technology Acceptance Model.

1.8.1.1 Records Continuum Theory

This theory was formulated by Marchall (2000),and aims to identify the different functions of records. It asserts that record-keeping systems have to capture, manage and maintain integrity of records over long periods of time (Flynn, 2001). This theory provides

a consistent framework and model for records continuum, detailing the role of the management in creating, using, designing and preserving record-keeping systems as archives. The focus of this model is on four dimensions; the creation of the records, capture, organization and pluralization, and these interact with transactionality, evidentiality, record keeping and identity.These interactions are essential elements of this model since they inform the different activities that are involved in preservation of records over time. Therefore, this model can form a basis for the exploration of the long-time management of both paper and electronic data records (Svärd, 2013). It also helps in the identification of possible stakeholders who would benefit from use of the records over time, hence improve archival systems.

This theory challenges previous views on record lifespan which was linear in nature, positing that there are different set stages that embellish all records. Instead, this model supposes that records lifecycle is not linear, but continuous. Further, while traditional models categorize records according to their stages of life, identifying recent records as current records and old as 'archaic', this model does not categorize records, arguing that their use varies and can simultaneously be used at once, albeit with different goals, and different purposes. McKemmish (2010) argue that similar records can be accessed to aid inn solving current needs while at the same time can be used by researchers as source data. Atherton (1985) posits a strong interrelation between the stages of records management, resulting in a continuum whereby records managers, users and archivists all access records at different times and for different reasons.

Although having significance influence on record-keeping professionals, the continuum model has received a fair share of criticisms (Svärd, 2013). McKemmish (2017)reported an increase in criticism from record managers and archivers, whose professional autonomy may be perceived to be threatened by continuum model. They also contend that this model

could be used as a justification for organizations to restructure their record keeping systems, rendering some of them jobless or their roles redundant. The theory was relevant to this research, as Marchall (2000) contends that its focus is on multiple purposes that records serve calling for the development of record-keeping systems that capture, manage, maintain, and preserve valuable organizational records. As such, this theory dominated the examination into the determinants of successful lands record management systemsat the Ministry of Lands.

1.8.1.2 Technology Acceptance Model

This theory was postulated by Davis in 1989 as an information systems theory modelling how individuals accept the use of a technology (Venkatesh & Davis, 2000). This model by Davis suggests that when a new technology is presented to the users, some factors influencing the decision of the users on adopting the technology based on perceived use and perceived usefulness (Chuttur, 2009). The level at how users believes that use of a specific system would improve a work performance is regarded as the perceived usefulness while the degree of believing that use made the work easier is known as the ease-of-use (Lala, 2014).

In general, the TAM theorizes that people use emerging technologies only if they perceive the technology to be useful, and if they have an accommodative attitude towards use of the technology (Ghazizadeh, Lee, & Boyle, 2012). TAM is noted to have been developed specifically with an aim of understanding how information technology is accepted and used at the workplace. It simply explains how a new technology is accepted by the users when it is introduced and when they used it (Kiarie, 2013). These many factors

determining the users of a new technology perceived the new technology (Adler-Milstein, et al., 2015).

For incorporation in our study, this theoretical framework depicts the relationship between users' acceptance and perceptions of using new information recording systems, in this case, it showed the employees' perception and acceptance to use the Information Management System introduced at the lands ministry. The theory is integral in explaining the rationale behind the implementation of system in managing land records, and how various internal and external factors may impact the implementation of the project.

1.8.2 Conceptual Framework

A conceptual framework provides a visual description of a phenomenon under examination (Mugenda, 2012). It aims to present a logical structure of the interrelations of different concepts in a study (Berg, 2007).

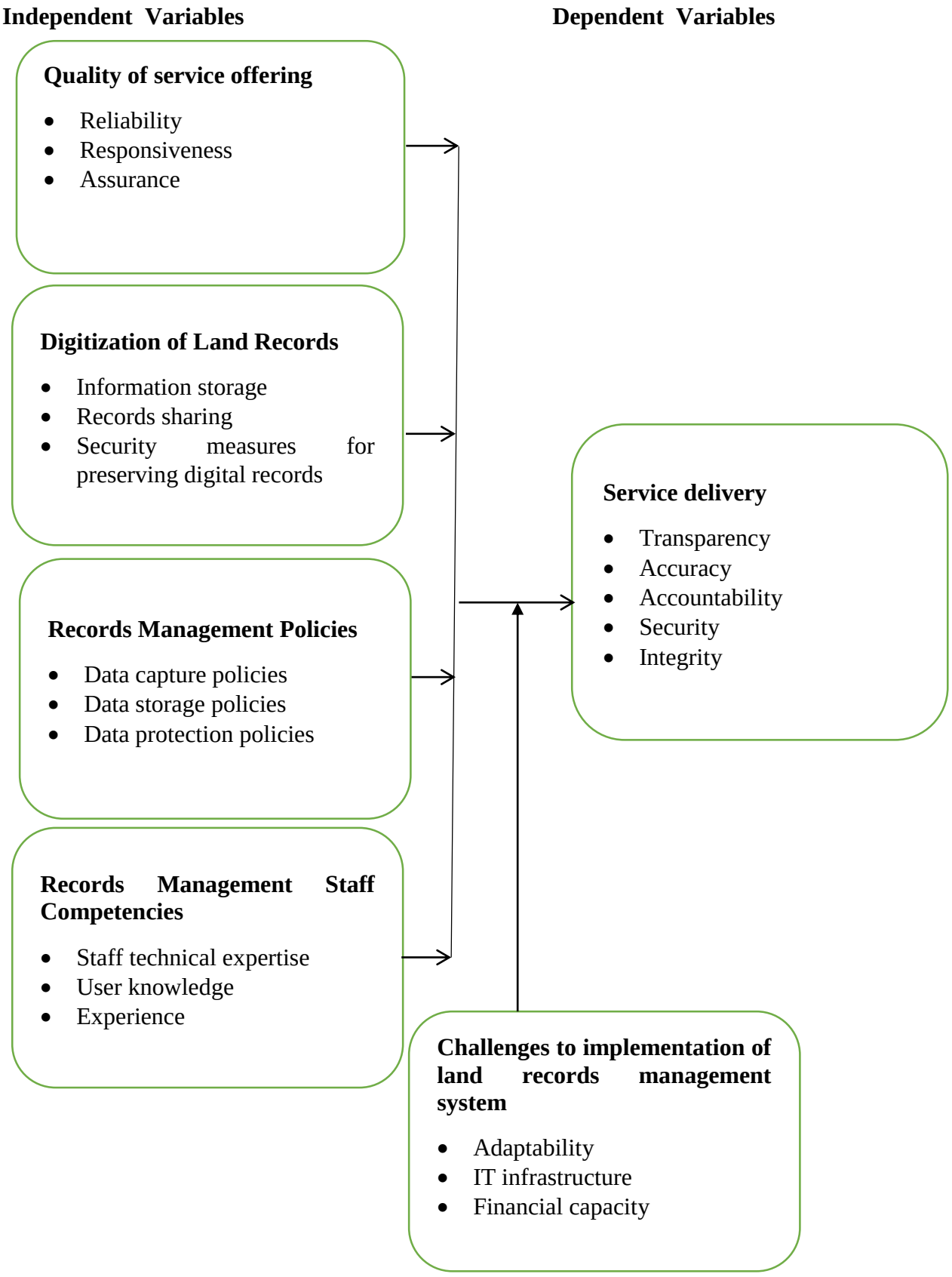

Figure 1.1: Conceptual Framework

Above, the conceptual framework presents the hypothesized interaction of digitization of records and service delivery in Kenya's lands ministry. The extent of the digitization process was assessed in terms of records creation, management and preservation. The effect of digitization was assessed in terms of information storage, records sharing, accessibility to digital records, maintenance of digital records and security measures for preserving digital records. This is also conceptualized to be affected by the available policies and staff competencies. The study further conceptualized challenges faced in the implementation into the IT infrastructure, financial constraints and adaptability. Service delivery in Kenya'sMinistry of Lands was measured in terms of transparency, accuracy, accountability, security, and integrity.

1.9 Operational Definition of Terms

gitization	e conversion of information into a format that can be input o computers and enable re-organization of information ıyikci, 2018).
gital preservation	ese are all the activities undertaken to maintain access to ital materials (Kennedy & Schauder, 2018).
gital record	s refers to an electronic record created, housed, or ısmitted electronically or through an internal network lungi, 2018).
blic service delivery	e provision of government services to the public (Moraa, eno, & Salim, 2012).
cord	ormation that has been recorded in documents, disks, eo clips, image or audio format and is in need of storage

abedze, Mutula, & Jacobs, 2012).

vice Delivery e means through which services are rendered, either to vate or public citizens in reference to the public act ugambi, 2013).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a literature review concerning the relationship between land records management system and service delivery in the ministry of lands in Kenya. The sections of the empirical review of the chapter include; lands records management systems, implementation of digital land records, records management policies, records management staff competencies, challenges of digitization of records and summary of research gaps.

2.2 Empirical Review

This section previews previous researchers' findings on the study variables. It is arranged on the basis of the study objectives.

2.2.1 Lands Records Management Systems

Chugh (2020) examined the impact of land management systems in the provision of e-Governance in India. The study primarily sought to determine ICT services can substitute good governance by examining electronic land management systems and various state interventions initiated to improve transparency and efficiency of land records. After analyzing the various reforms undertaken by the government in records digitization, the research determined that records digitization is a necessary but insignificant step in promoting good governance. The study determined that land records digitization was only as effective with adequate support structures in place. The study recommends harmonization of the different agencies in charge of registration, mutation, and survey/re-survey of land to reduce information asymmetry and complication. Further, the study

determined it necessary to computerize and mutate entries of land records to remove inconsistencies between textual and spatial records. The study focussed on good governance, while the current focus on service delivery.

Singh (2020)investigated the influence of blockchain technology on digitization of land records in India. The study carried out a literature review to determine how blockchain technology had impacted the digitization of land records. It was determined that blockchain technology was adopted for its ability to promote secure property transfer. Features of blockchain promote smart contract records' updating, which increases confidence in land purchasing since the records are updated instantly. Further, digitization using blockchain was noted to be secure and beneficial to uplifting the poor through unique property identification, computerized registration, and promotion of property security since blockchain promotes records' preservation. Smart contracts also prevent illegal manipulation of land records. The study focused on blockchain technology, while the current focuses on general digitization.

Bakare, Abioye, and Issa (2016) assessed records management in select local government councils in Ogun State, Nigeria. A descriptive research design was employed, with 415 council personnel being targetted. Structured questionnaires were used to collect data for the study. The study results show there was semi-active maintenance of the registry, inadequate records storage facilities, and access to stored records. The study affirmed that poorly developed records management policies, coupled with inadequate provision of financing characterized local governments. The study is focused on state councils in Nigeria and does not examine if records management policies influence service delivery.

Shonhe and Grand (2018) sought after the initiatives undertaken by Botswana's land board to improve records management and enhance service delivery at the country's lands ministry. The exploratory research adopted an interpretive paradigm in an in-depth case analysis of the Tlokwen Land Board. Questionnaires,interviews, and document reviews were applied in the research. The study affirmed that there are various electronic resource management initiatives that can enhance delivery of services at the lands ministry, including the introduction of new filing systems,classificationand labeling systems, enhanced data retention and disposal systems, and electronic indexing. These ease plot identification, increased durability of data, searching, and promote sustainable socio-economic development.The study focussed on Botswana's land ministry, while the current focuses on Kenya's land ministry.

Bukirwa, Gudoi, and Sendikadiwa (2018) investigated the impact of the Online Public Access Catalogue (OPAC) system on the functionality of Ugandan public libraries. The study noted that the OPAC system was introduced to promote ease of access to materials at the International Health Sciences University Library. Using a mixed research methodology that incorporated both qualitative and quantitative approaches, this study adopted a case study design. It was affirmed that, while the system was up and functional, users' lack of knowledge on use, insufficient staff assistance, limited access terminals, and poor network connectivity significantly impact OPAC utilization. The study noted the need to improve OPAC user education programs. Further,it identified the need for universities tointroduce information literacy programs in the school curriculum to promote participation. The study noted that institutional support is necessary to enhancingthe

digitization process. The study assessed digitization systems in libraries while the current focuses on digitization systems at the Ministry of Lands.

Musinguzi and Enemark (2019)analyzed principles for building a flexible, sustainable, and universal Fit for Purpose Land Administration system in Africa and sought to assess how this could enhance the countries' chance of attaining the 2030 sustainable development goals. The study recognizes the association between colonization and global security of tenure divide in Africa, where less than 10% of the total land mass has declared ownership in informally recognized systems. The study reported sound governance as a function of operational processes, a rigorous legal and regulatory framework, and the capacity of implementing policies, with a focus on an individual country's traditions. Further, land management systems were identified as essential to supporting the implementation of sustainable land management policies and strategies. The Fit for Purpose system is one such system that ensures secure t Makoro (2015) study examined the use of land management information system (NLIMS). A case study of ministry of land, housing and urban development, Nairobi. The study employed quantitative and qualitative research methodologies to investigate the reasons for the delay. The data was collected through interviews using the questionnaires from the respondents in the Department of Lands. The data was analysed using the content analysis from the questionnaires that were returned by the respondents. The findings of this research show most of the people are aware of the core functions and features of the National Land Management Information System (NLMIS); have never been adequately trained on how to use the system in their daily operations; Lands department lack enough funds to manage the system; that there are challenges that have hampered the implementation of the system.

Using Nairobi City Council as a case study, Liyala (2019) evaluated a web-based land information management system. An online mapping component, a database and a website are the three subcomponents of the proposed system. There are three components to the data hosting provided: the database, the mapping component, and the website, which hosts the mapping component and contains additional information in relation to land management. In order to create the system, Open Source GIS and Mapserver software was used along with stable Geographic Information Systems (GIS) software. As well as parcel ownership and land use information, this system contained data on land value, encumbrances, location boundary, taxation, and various other factors. As a result of the system, the Nairobi city council is able to streamline the flow of land records within the city, ensuring that land information is collected, stored, and disseminated in an efficient and systematic manner. With the adoption of the system, we will be able to take advantage of advancements in GIS technology with regard to resource management.

2.2.2 Implementation of Digital Land Records

Kayikci (2018) investigated the impact of digitization in logistics and manufacturing industries. The researcher recognizes digitization as the next frontier to the industrial revolution, promoting the creation of smart manufacturing factories and interconnected factories of the future. The study carried out a qualitative research approach which adopted the Delhi panel to assess digitization in four top firmS in Turkey. The study notes that integrating technologies and applications that enhance knowledge management across organizations is key to future success in the manufacturing and supply industry. The study determined that digitization enhances cooperation, connectivity, adaptiveness, integration, and autonomous control. Digitization reduced cost, enhanced time management, and improved service delivery. It also promotes sustainable environmental practices through

the reduction of greenhouse gas emissions and reduction of waste and pollution. It was also noted to enhance decentralized decision-making and customer experience. The study focussed on digitization in Turkey's supply chain sector, while the current study explores digitization in Kenya's Ministry of Lands.

Asare, Otoo-Arthur, and Frimpong (2017) assessed the readiness of the digitization of health records among Municipal hospitals in Ghana. The descriptive cross-sectional study sought after the readiness of hospitals to adopt digitization of health records. The study population consisted of 90 hospital staff at the Mampong-Ashanti Municipal Hospital and sought to determine the technological and societal readiness of the hospital. The study noted that technological readiness encompasses the level of engagement with ICT services and products, internet access, and technological resources at the hospital. The study noted that hindrances to digitization include insufficiency in electicity supply,lack of basic ICT knowledge among staff, lack of ICT infrastructure, lack of adequate financial support, and resistance to new technologies. The study assessed records digitization in the health sector while the current assesses records digitization at the Ministry of Lands.

Matangira (2016) reviewed records and archives management in Zimbabwe, adopting an interpretivist philosophy with a case study design guiding the research. Interviews and observations were used in data collection. 76 staff members from state ministries were contacted. The study indicated that record-keeping was based on archaic manual systems, and the absence of digitalized systems had led to system failures in accessing archives. The study revealed that lack of ICT resources, skilled workforce, and government support for the digitalization of records negatively affected archives management. The study indicates that the decentralization of record-keeping and archival services can reduce

operational challenges in public service. The study inherently fails to establish if archives management can influence service delivery.

Baba-Abdulrahman (2015) examined university records management and its impact on administration of Nigerian universities. The descriptive study used structured questionnaires to collect data. The study showed that both alphabetic and subject filing systems were primarily utilized in universities. The study notes that records creation, retrieval, scheduling, and filing were all conducted manually. The study notes that effective records manaement begins with compliance with storage facilities needs, periodic checks to ensure proper records management, and computerization of records. The research fails to determine how records management practices can impact service delivery.

Dinah, Mwai, Wasike, and Cyprian (2019) assessed the readiness of the Kenya National Archives and Documentation Service (KNADS) to implement electronic records management. A survey research design targeting 347 respondents was adopted. Through simple random sampling, 104 people were selected. Through qualitative and quantitative approaches, the study determined that KNADS is still at the infancy stage of records digitization. The study concluded that training staff to be e-ready, improving internet connectivity, and improving ICT technologies are key to effective records digitization. The study suggests that institutional support through the implementatoin of sustainable policies is necessary to ensuring uniform records digitization across various government branches.The study concluded that institutional support is key to sustainable records digitization.

Ongwenyi, Yegon, and Mathangani (2018) reviewed records storing format and professional knowledge in a bid to determine how they influence service delivery in Nairobi City County.The descriptive study targeted clerks at the County government. The study revealed that lack of in-house training programs on record management. The results show records were stored in both physical and electronic formats, although physical forms of storage were persistent. The study indicates that the failure of the management to offer adequate support for adoption has affected the deployment of ICT in records management functions. Further, it was revealed that the format adopted in records storage strongly impacts how government offices deliver services. The study was not focused on service delivery within the Lands Ministry, which is the focus of this study.

Moemi and Rotich (2015) study examined the influence of records management on service delivery in the public sector in Kenya: A case of Lands Department, Ministry of Lands, Housing and Urban Development. The study focused on 231 employees at the department of lands and 1,000 customers. The study used stratified random sampling. Stratified into eight homogeneous subgroups, the target population consisted of administration/registration/valuation assistants, record managers, cartographers, clerical staff, and customers. The sample size was calculated using a proportionate stratified method. The target population was represented by 371 respondents. Questionnaires, observation schedules, and interview guides were used to collect data. Many of the respondents worked in the department for at least a few years, so they were able to provide invaluable insight into the subject matterAccording to the study, manual systems are no longer sustainable for expediting land transactions, so an electronic system should be switched from them. As a result of these and similar bureaucratic processes, procedures, and practices, service delivery has been negatively affected.

2.2.3 Records Management Policies

Organizations must manage their records in order to function properly. Organizations of all kinds should put a great deal of emphasis on records management since records are crucial to every aspect of governance. The ISO 15489 standard defines records management as the control of creating, receiving, maintaining, using, and disposing of records in an efficient and systematic manner, as quoted by Healy (2001). This includes the processes for collecting evidence of business activities and transactions and maintaining information related to them. "Having recorded information, which can be used for planning, decision-making, and controlling, is what keeps public services going in any modern system of government. Records must have been available in a timely manner to enable planning, decision-making, and controlling"

(Amina, 2011).

Every organization relies on records to run their operations. By supporting the delivery of services, supporting administration, proving individual rights and responsibilities, and demonstrating the work of public agencies, they improve the efficiency and effectiveness of operations and document services in organizations. The goals and objectives of an organization are met by creating and maintaining records, according to Kulcu (2009). Mahakura (2005) points out that governments would have difficulty addressing social issues such as poverty, crime, social grants, land information and even providing basic services such as water and electricity without records. It would be beneficial for socioeconomic and political progress if information was made available to people throughout the world.

Mwangi, Ngétich and Ochichi (2015) carried out an examination of records management practices and service delivery in Laikipia County using mixed methods approach. The study's population was 101 hence adoption of a census method as the number of participants was small. Using questionnaires and face to face interview, the study found that physical location of registry was working against information provision as it was difficult to easily access the records. There was also inadequate space and equipment needed for proper records management. It was also revealed that there were no policies to support regulation on records management and as such, records managers indicated how they were creating their own policies while others were under instructions from their senior management due to lack of written policies. This brought inconsistencies in records management. The study made a conclusion that records management has not been fully embraced by the County Government of Laikipia due to lack of records management policies and recommended a decentralized system to reduce delays in records provision.

A study undertaken by Ndungi (2018) sought to evaluate the role of records management in supporting administrative reforms at the Directorate of Housing in Kenya with an objective of finding the infrastructure and the incorporation of records in the reforms. The study used qualitative research to gain more comprehensive information. Working with a population of 166 and a sample size of 33 consisting of employees from the Directorate department, the study findings indicated that records management were important in supporting reforms within the Directorate department as records were essential during the planning and operations, providing information to the beneficiaries and for policy development. The study also scored the achievement made due to evidence presented in records as far as past and current activities evaluation were concerned that allowed for more insight during decision making. Records officers indicated how records allowed for

information flow through the provision of relevant records, retrieval and safe custody that was necessary in achieving the department's objectives.

Ravenwood and Zijlstra (2018) explored business archives and local communities, and the corporate heritage in the United Kingdom. The research adopted a qualitative approach with both interviews and focus group discussions being conducted with stakeholders in the local community. The study observed that the preservation of corporate archives, collecting and storage of local historical information, and archival access policies were deemed essential for improved information sharing and improving the identity of the community. The study notes that the lack of digital adoption policies for archives management and skilled managers affected the maintenance of the archives. The study does not focus on how archive management impacts public service delivery, which this study examined.

Koptyakova, Zinovyeva, and Maiorova (2019) looked into the integration of automated document management systems in municipal units. The study was carried out using dialectic analysis methods. The study's operating hypothesis was that the adoption of emergent information management technologies is key to improving the efficiency of information management systems among municipal units. The study established that staff re-training, re-equipping, and redesigning whole systems are among the costs of integration. However, the real effect of the adoption of new technologies is more impactful on the reliability of the entire municipal infrastructure, which is the main goal of emerging information systems. The study failed to access new systems integration within Kenyan institutions.

Alegbeleye and Chilaka (2019), in their research study, evaluated records maintenance, access, and staffing requirements practices in Nigeria's Ministry of Health in Abia State. The study employed a survey research design with 526 senior staff members comprising of the study population. Research questionnaires were used to collect data in the study. The findings demonstrated the records management practices at the ministry were inadequate. The study shows poor development of records management system; there are no records disposal policies, procedural manuals, uniform guidelines for dealing with electronic records, and poor review of records access policies. The study, however, does not establish how the digital records archival process and process utilization impact the effectiveness of service delivery, which this study focuses on.

Amodot (2018) assessed records management in Uganda's parliament in a descriptive study which featured 15 faculty members from the parliamentary commission. The study notes there is poor records disposal, which has limited the accessibility of existing archival records. The study indicates there is a need for better records preservation plans, the revival of the records office, and streamlining records appraisal and disposal policies. The study does not link archival policies to service delivery.

Shonhe and Grand's (2018) study focussed on service delivery improvement strategy for a records management program in Botswana lands ministry. The research employed a case study research design with purposive sampling adopted in selecting 53 respondents. The study relied on interviews, observations, and open-ended questionnaires in collecting research data. The study results show that enhancing record-keeping processes such as computerized record storage; new filing systems led to reduced errors, better use of online services. The study revealed that better

records storage practices ensure there is better tracking of records, improved productivity, and service delivery. The research focuses on Botswana lands ministry; the current study examined service delivery in Kenya Lands Ministry.

Namukasa (2017) studied records management and procurement performance in Uganda. The research investigated the country's National Agricultural Advisory Services offices. The study population comprised 101 employees. The study established that proper procurement records management improves procurement performance. The study indicates that records creation, records maintenance, records access, and preservation significantly improved procurement performance. The research focused on procurement performance, while this examination narrows down to service delivery in a Kenyan ministry.

Mokandu, Orayo, and Muthoka's (2018)investigated archives management in Kenyan universities, with a specific focus on Kisii University. The descriptive study sampledregistry staff at Kisii University, and collected secondary data. It was ascertained that the institution lacked a clear policy on archives management, and no professional approach was implemented in managing the institution archives. The study notes there was a lack of proper management support, implementation of archival management policy, lack of adequate storage equipment, space, confidential protocols for accessing records, and records disposal schedules. The research, however, does not indicate how archives management impacts service delivery within the institutions.

Abuki (2014) investigated records management and its role in public service delivery in Kenya's local government. The study focused on a single oranization and targeted record managers from the Kisii County Government who formed the study population. The

analysisdetermined that county governments had an porly developed and implemented record management programs,record managers are poorly trained, and that the system lacks a records center and archival processes. The study notes that it is necessary to develop clear records management policies, standardized guidelines, and procedures since this enabled the county government to enhance public service delivery. The research focuses on service delivery within a county government, while this study examines service delivery in a national government ministry.

Rosemary, Mbenge, and Jotham (2017)investigated records management and service delivery inKenyan universities. The study employed triangulation, collecting data rich in quantitative and qualitative features. The population of the study was 25,000 universities in Egerton and Kabarak University. The analysis showed that records management policies have a significant impact on the implementation of records management systems, hence on the delivery of services. The study indicated there were inadequate materials, inadequately skilled employees, conservation policies, filing systems, and a lack of precise, standardized control and preservation policies which resulted in poor service delivery at tertiary institutions. The study focuses on service delivery within an education setting. The current study examined how records management policies, archives management, and records storage influence delivery of services.

2.2.4 Records Management Staff Competencies

Owino and Namande, (2022) examined the effect of records management practices on service delivery at the Pensions Department in Kenya. The study was guided by the design and implementation of records keeping systems (DIRKS) theory. Mixed method descriptive survey research design was used. The target

population was 112 employees where a sample of 88 was derived. A stratified sampling technique guided sample selection. Questionnaire, participant observation and personal interviews supported data collection. Pilot study was undertaken to determine research feasibility and to make improvements to the research instrument. Validity and reliability was achieved using content validity, expert opinion and Cronbach's alpha. Data was analysed using descriptive and inferential statistics with the aid of Statistical Package for Social Sciences (SPSS). The study established that respondents agreed that records management policy affected service delivery. It was also found that staff capacity affects service delivery. ICT application in records management was also found to affect service delivery. Finally, the study established that records management practices affect service delivery at the Pension Department.

Oganga (2020) sought to determine records management risks in selected ministries in Kenya using quantitative and qualitative methods. The target population was 130 where a sample of 64 was generated. The findings showed inadequate skills and competencies within the different records management cadres. There was also understaffing in all the ministries hence meeting the objectives of the ministries was becoming a challenge. The study noted that the understaffing was likely to get worse especially within the senior management who were due for retirement. Even though the study underscored the skills from the records managers with backgrounds in masters, undergraduate and diploma, the records managers observed how they were not being given training opportunities due to negative attitude from senior managers towards records management profession. The study was focused on highlighting the importance of risk management in records to support the realization of objectives. This study was focused on how staff capacity in records management supports pension processing. A similar finding

was reported that staff were receiving less training hence skill gaps and lack of new skills and knowledge on emerging trends.

Tagbotor, Adzido and Agbanu (2015) did an analysis of records management and organizational performance of Ho Polytechnic in Ghana working with 30 senior and junior staff members. Simple random sampling was used and questionnaire adopted in data collection. The study found that staff had skills that enabled their understanding of record management systems. The institution had also embraced electronic records management for easy storage, sorting and retrieval of needed information that improved staff performance in their record keeping and service to the public. The study in Ghana was related to the current study as it also sought to understand how staff capacity built by the pension's department supports good record keeping practices and how this improves pension processing. The findings indicated increased retiree satisfaction, easy and convenient and remote access of pension processing hence more service delivery to the public.

Mukred, Yusof, Mokhtar, and Abdul-Manap (2016) reviewed institutional readiness and adoption of electronic records management systems in Yemeni institutes of higher education. The study sampled 20 specialists in Yemen Higher educations and utilized interview questions to collect data. The study notes there is low adoption of information technology and lack of clearly developed standards in records management, which negatively impacts e-frameworks integration. This lack of proper management of records has severely impacted trust and confidence of government services. The study was conducted in Yemen higher learning institutions, while this study examines service delivery in the Kenyan ministry.

Keakopa (2019) investigated Botswana's public system to examine records management in the country's public sector. The study adopted an exploratory research design with an extensive review of literature and interviews with select participants being conducted. The study indicates that the country has faced challenges in the creation of archival records policies, maintenance, and disposition of public sector records. The study indicates there is low levels of technology adoption in management and preservation of public records. The research fails to assess how service delivery is impacted by records management practices.

Pangcatan and Prado (2019) sought after the perspective of faculty members on records digitization and records management practices at Mindanao State University. The study employed purposive sampling to select 363 respondents. It was revealed that although the staff was supportive of digitization as a strategy to preserve records, successful digitization was dependent on management awareness and involvement. The respondents lamented lack of institutional support through training, seminars, and orientations in records management, and lack of adequate financing severely impacted their capacity to ensure effective transition from analog to digital. The study asserted that having a clear business vision, mission and plan, effective project management teams, awareness among staff about record keeping, and onsite training and support are essential for successful records management. The study failed to explore how records digitization influences service deliver in government institutions.

Nakidde (2018) assessed record storage and how they influence retrieval of information at the Uganda Broadcasting Cooperation (UBC) . The study targetted 30 administrative staff at UBC, with structured questionnaires being utilized in data collection. From the analysis, it was determine dthat both manual and electronic methods were utilized when

storing documents. The findings indicate that improved record storage practices led to better decision-making and enhanced operational efficiency. The study notes that inadequate storage space affects the implementation of records management practices. The study does not examine how record storage practices influence service delivery, which is the current research focus.

Ndungi's (2018) investigated the role of records management systems in Kenya's housing directorate. The sample respondents were 33 respondents drawn from the directorate who were interviewed. It was established that the department is in the process of streamlining records management processes as part of internal reforms. The study concluded that better records storage, effective filing processes, adequate infrastructure, integrated records management, and modernization efforts would enhance the administrative reforms within the directorate. The study does not examine how records management practices influence service delivery.

Mwanyungu (2019) study the impact of records management practices on delivery of services to teachers at the Teachers Service Commission (TSC), Nairobi, Kenya. 300 staff members were targets for the research. Questionnaires and interview schedules were utilized in collecting data. The study showed that the organization had adopted a records management policy designed with the goal of increasing service efficiency and reliability. However, from the analysis, it was determined that records survey, appraisal, file classification, indexing, and disposal had been inadequately implemented within the commission, impacting the quality of services delivered. Poor management had resulted in insufficient filing and archival of records within the

commission, which impedes service delivery. The study was conducted at the Teachers Service Commission, while this study examines Kenya's lands ministry.

2.2.5 Challenges of Digitization of Records

Adler-Milstein et al. (2015) assessed the developments and constraints to the adoption of electronic health records (HER) in hospitals in the United States. The study noted that it is national policy to achieve nationwide adoption of electronic health records. The study used 2008-2014 national data to determine the trends in EHR adoption in hospitals across the US and sent a survey to all hospital CEOs to get a more detailed review of the extent of EHR adoption in more than 6000 hospitals. The study noted that EHR adoption was spatially distributed, with rural hospitals having the least likely to have adopted advanced EHR management systems due to financial challenges and obtaining physician consent. Lack of adequate IT infrastructure also impacted their adoption. The study focussed on EHR adoption in American hospitals, while the current focuses on records digitization in Kenya's Ministry of Lands.

Mohammed and Azhar (2018) acknowledge the significant influence of social media in the digitization of public health records. In their study, they sought to determine the influence of social and mobile technologies in digitization of Pakistani's Health Sector records by focusing on the MARHAM platform. The study carried out a thematic content analysis of MARHAM's social media and mobile applications, which consisted of Facebook and Twitter interactions. The study obtained a sample of 6083 group posts, 1724 tweets, and 1123 Facebook posts. The study concluded that MARHAM's social media interfaces were useful platforms for raising awareness on health education. The platform was useful to medical practitioners who used it to register patients and store their data for

faster service delivery in the future. The study also determined that although the services were enhancing health service delivery, the public's low literacy levels, poor internet access, and lack of adequate technological devices and education impacted accessibility thus limiting its effectiveness in service delivery. The study focussed on online health communication in the health sector while the current study focusses on digital records management at the Ministry of Lands.

Asare, Otoo-Arthur and Frimpong (2017) assessed the readiness of health records digitization in Ghanaian health institutions. The descriptive cross-sectional study collected data from 90 respondents at Mampong-Ashanti Municipal hospital. Data was obtained through structured questionnaires and the respondents were selected through simple random sampling. Identified challenges include; inadequate supply of electricity and ICT infrastructure, financial constraints, lack of adequate technological skills, poor internet penetration, and resistance to emergent technologies both from hospital heads and the locals. This is despite the respondent's expressing readiness in adopting ICT technologies in the creation, storage and retrieval of patients' health records. The study was based on health records management, the current addresses records management in a government ministry.

Sigauke and Nengomasha (2011)looked into the challenges and opportunities of records digitization and preservation in the Zimbabwean National Archives. The study adopted a qualitative research methodology and adopted purposive sampling to select top officials from two main archives in Harare and Bulawayo. Questionnaires and post-questionnaire interviews were used in data collection. It was concluded that there were no electric data security management systems in use to monitor data security and authenticity. The study

determined that the country lacks adequate technological infrastructure and expertise to guide the digitization process. The study recommends that the National Archives of Zimbabwe carry out extensive staff training in contemporary digitization technology in accredited institutions abroad since these were not available locally.

2.3 Summary of Research Gaps

The review identified empirical, conceptual and methodological gaps. Matangira (2016) study focused on records and archives management in Zimbabwe and found out that lack of ICT resources, skilled workforce and government support for the digitalization of records negatively affected archives management. The study was however not able to focus on how digitization affects service delivery within the public sector which was the focus of this research. In another research, Pangcatan and Prado (2019) concluded that successful digitization was dependent on management awareness and involvement. The research did not focus on how the digitization of records affects service delivery and was not conducted locally.

Asare, Otoo-Arthur and Frimpong (2017) identified challenges to digitization into inadequate supply of electricity and ICT infrastructure, financial constraints, lack of adequate technological skills, poor internet penetration. The study focused on management of health records as opposed to land records management systems, presenting a methodological gap.Ongwenyi, Yegon, and Mathangani (2018) showed that both manual and electronic storages were being utilized with manual formats widely utilized. The study was not focused on service delivery within the Lands Ministry, which is the focus of this study thus highlighting a contextual gap. Ravenwood and Zijlstra (2018) in a study in the UK revealed that lack of digital adoption policies for archives management affected maintenance of archives. The research however was not focused on the Kenyan Lands

Ministry which was the gap this study intends to fill. Lastly, Rosemary, Mbenge, and Jotham (2017) reported improved service provision after implementation of records management policies. the study failed to look into land records digitization within the Ministry of Lands.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the blueprint that was adopted in solving the research problem. It highlights the design to be followed, the target population, the sampling design, and the data collection instruments. The chapter also presents the data collection procedures, the data analysis, and presentation as well as the ethical considerations.

3.2 Research Design

In addition to allocating limited resources to a research project, this framework or roadmap guides a researcher in terms of methodology, kind of data to be collected, and ways and means of gathering data. (Cooper & Schindler, 2014). For a researcher to conduct a study effectively there was a need to select an appropriate research design. A descriptive study allows a researcher to collect data that describes a study subject's general characteristics without changing or interfering with its surroundings, according to Cresswell (2014). This study adopted a descriptive research design since it is a model that sought to identify and describe relationships and causation. According to Creswell and Creswell (2017), cross-sectional methodswere used in examining the significance of associationsbetween variables.

3.2.1 Research Variables

The study focused on a review of the influence of digitization of records on the delivery on service in Kenya's lands ministry. The independent variable was land records digitization processes in Kenya. The dependent variable for the research

was the level of service delivery in Kenya's Ministry of Lands. The extent of land records digitization was measured by the creation, preservation and management of digital records. The second variable digitization process of land records was assessed by the level of information storage, records sharing, accessibility to digital records, maintenance of digital records and security measures for preserving digital records. The third variable was measured using through the IT infrastructure, staff technical expertise, financial constraints and user knowledge. The dependent variable service delivery was measured through the transparency, accuracy, accountability, security and integrity in the services offered at the Ministry of Lands.

3.2.2 Research Methodology

The research was purely quantitative with a descriptive design being adopted in the conduct of the research work. The research utilized a quantitative instrument (structured questionnaire) in the collection of research data with both physical questionnaires and electronic methods being applied in the process of data collection.

3.2.3 Location of the Study

The research was conducted at the lands ministry headquarters registry within Nairobi City County. The selection was justified by the current introduction of lands records management system which was initiated within the headquarters. Further, the entire lands records management system was being coordinated and housed within the headquarters, hence the selection of the location ensuredthe participants considered had the required knowledge on lands records management system and service delivery.

3.3 Target Population

Study populations are made up of all the research units that are being examined and from which inferences can be drawn by researchers looking to conduct a study (Cresswell, 2014). The study unit of analysis was Kenya's lands ministry, while the unit of observation wasthe employees at the ministry. There were 252 employees within the headquarters of the Ministry of Land.

Table 3.1: Target Population Distribution

partment	**Number of Employees**
gistry	57
ıd administration	34
[	27
luation	22
ysical planning	22
vey	45
judication and settlement	33
stomer service	12
:al	252

Source: (Ministry of Lands and Physical Planning , 2021)

3.4 Sampling Technique and Sample Size

3.4.1 Sampling Technique

A sampling design is basically the approach that a researcher adopts to determine how to select a sample for analysis(Lavrakas, 2008). This study employed simple random sampling.

3.4.2 Sample Size

A sampling design is defined by Cooper and Schindler (2014) as the process of determining and establishing a sample size for a study, one that represents the wider population effectively. A sampling frame is the list containing all elements of a study population. The researcher draws the study sample from this list (Saunders, Lewis, & Thornhill, 2016). The sample consisted of 246 employees working within the Ministry of Lands Headquarters who oversaw the implementation of the National Land Management

System in Kenya. The formula adopted in selecting the sample size was the Yamane formula (Adam, 2020);

$$n = \frac{N}{1 + N(e^{2})}$$

Where: n is the sample size, *e* is the error term, and N is the total target population

N = 252

$$nf = \frac{252}{1+252\ (.05*.05)} = 154 \text{ respondents}$$

The sample size for the study was 154 respondents.

Table 3.2: Sample Distribution

partment	**Number of Employees**	***Sample Size***
gistry	57	*57/252*154 = 35*
ıd administration	34	*34/252*154 = 21*
Γ	27	*27/252*154 = 16*
luation	22	*22/252*154 = 13*
ysical planning	22	*22/252*154 = 13*
vey	45	*45/252*154 = 28*
judication and settlement	33	*33/252*154 = 20*
stomer service	12	*12/252*154 = 8*
nple Size		***154***

3.5 Research Instruments

It is possible to define a data collection method as a systematic method of collecting data stemming from a study phenomenon. (Berg, 2007). Data can be collected from primary or secondary sources. Data was primarily gathered using structured research questionnaires to collect the primary research data. The questionnaires were created using Likert scale statements in line with the study objectives. Secondary data was also utilized and

sourced from peer-reviewed journals and reports to enhance the findings that were drawn from the structured questionnaires.

The research questionnaire was formulated in congruence with the study objectives, and the conceptualization of the variables. Part one of the questionnaire contained demographic questions, while the second section contains questions assessing the quality of delivered services. Information on records digitization was in the third section while statements on the challenges to implementation of digitization of land records were on the fourth section. The last section contained statements detailing service delivery quality at the ministry. The research questionnaire was structured with Likert scale adopted throughout the quantitative aspects of the objectives.

3.6 Research Procedure

Researchers follow a research procedure from the point of inception through the analysis of data and presentation of results of the study, according to Cooper and Schindler (2014). The National Commission for Science, Technology, and Innovation as well as the university's graduate school were consulted for approval. Officials from the Ministry of Lands were contacted to allow data collection in their institution. The study dominantly utilized Google forms in the collection of research data from the various officials. Where not possible the researcher adopted a drop and pick approach in the collection of data using physical questionnaires. This ensured that a mixed approach was utilized in the study thus enhancing the response rate of the research.

The study pre-tested the questionnaire with 10% (15) of the sample size drawn from the Ministry of Lands offices in Thika Municipality.This determined whether the

study's research instrument met the threshold of internal consistency and was valid in answering the research problem.

3.6.1 Reliability Tests

Reliability testwas carried out to determine the internal consistency of the data collection tools.Josias (2005) opines that reliability tests are useful in determining whether research instruments can produce similar results even after repeated trials. This assesses the degree of replication of the research instrument in repeat studies (Fraenkel, Wallen, & Hyun, 2012). The research applied the Cronbach alpha (α) formula, and the results obtained was presented graphically. Results were interpreted using the following scale: >0.9 – Excellent, >0.8 – Good, >0.7 –Acceptable, >0.6 – Questionable, >0.5 – Poor and <0.5 – Unacceptable (Tavakol & Dennick, 2011).

3.6.2 Validity Tests

Validity refers to how well the study's findings represent and inform the entire population. Schonhaut (2013), defines validity as the degree to which the results of data analysis essentially describe the phenomenon under research. Validity test was carried out to determine whether the research instrument is reflective of the subject under examination (Cresswell, 2014). Content and construct validitywas applied in validity testing. Supervisor's opinion was sought to assess content validity, while construct validityexamined whether the questionnaire covered all the research objectives.

3.7 Data Analysis and Presentation

The collected research data was sorted and coded into SPSS 25 for further statistical analysis. Inferential statistics, including Pearson Correlation and Multiple Regression

Analysis, were used to analyze the data, including frequencies tables, means, standard deviations, and percentages. Tables, charts, and bar graphs were used to present the analysed research data.

3.8 Ethical Considerations

Ethical consideration involves the principles and procedures that a researcher takes into account while undertaking the research (Rani & Sharma, 2012). Ethical considerations were key to promoting integrity of research data. These considerations are in place since the research involves respondents who do not stand to gain from the particular study. To adhere to ethical practices, the researcher applied for authorization from the university, the national commission in charge of research and from the institution which the study focused on. Respondents were assured of confidentiality, and they informed that participation in the research was purely on voluntary basis. To promote data integrity, none of the collected data was tampered with before, during and after the analysis.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The fourth chapter of the study provide details on the analysis of the collected research data and interpretation of the results in line with the study objectives. Further, the study adopted inferential tests to determine the relationship between land records management system and service delivery in the ministry of lands in Kenya. The research utilized charts, figures and tables in presentation of the study findings.

4.2 Response Rate

The objective of this section was to answer the questions developed in this study from the respondents, which included response rate. The response rate was based on the number of questionnaires returned from the total number of questionnaires that were administered to the respondents. The research sample size was 154 respondents who were drawn from various departments and units within the Ministry of Lands. A response rate of 67% (n=103) was obtained from the field work and Google forms adopted in the data collection process. This response was deemed suitable for quantitative analysis as Cooper and Schindler (2014) have recommended at least 60% responses for generalization of the study results.

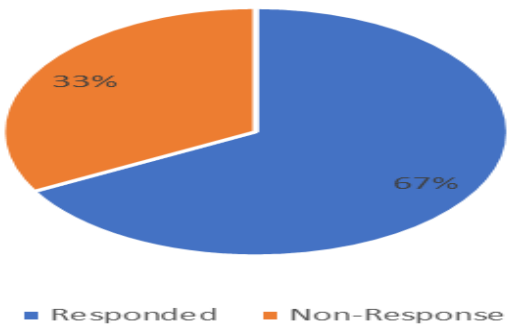

Figure 4.1: Response Rate
Source: Research Data (2022)

4.3 Background Information

Demographic information is a necessary element that is used in the description of the characteristics of those participating in the research. It enables better comprehension of particular background characteristics of participants.The study explored various demographic characteristics of respondents such as age, gender, education level and length of time working within the Ministry of Lands.

4.3.1 Age of Participants

The respondent's age was sought by the study. Age is considered an important element in organizational service delivery because it indicates to their experience with land records management system. The older one is the more vulnerable they are to disasters and therefore more likely an employee has gained experience in land records management system. The respondents were asked to indicate the age category that represented their age and findings are shown in Table 4.1.

Table 4. 1: Age Profile of Participants

	Frequency	Percent
w 35 years	8	7.8
5 years	50	48.5
5 years	45	43.7
l	103	100.0

Source: Research Data (2022)

The findings revealed that 48% (n=50) of the participants were between the ages 36-45 years, 44% (n = 45) indicated their age was between 46-55 years with only 8% being below 35 years of age. The review showed that the ministry has improved on age

diversity within their workforce which is key to expanding the level of service delivery within the institution.

4.3.2 Gender of Participants

The gender of the participants was requested to be known. Gender was considered by this study due to its importance in land records management system and service delivery in the ministry of lands in Kenya. Land record management system is done by both male and female employees hence the importance of differentiating gender analysis on service delivery. This study therefore captured gender in terms of male and female and computed the findings in frequency and percentage

The study focused on the gender identity of the personnel and results showed that majority of the respondents 70% (n = 72) were male employees with 30% of the represented personnel identifying as female. This finding is indicative of a skewed distribution in the gender of the respondents within the Ministry.

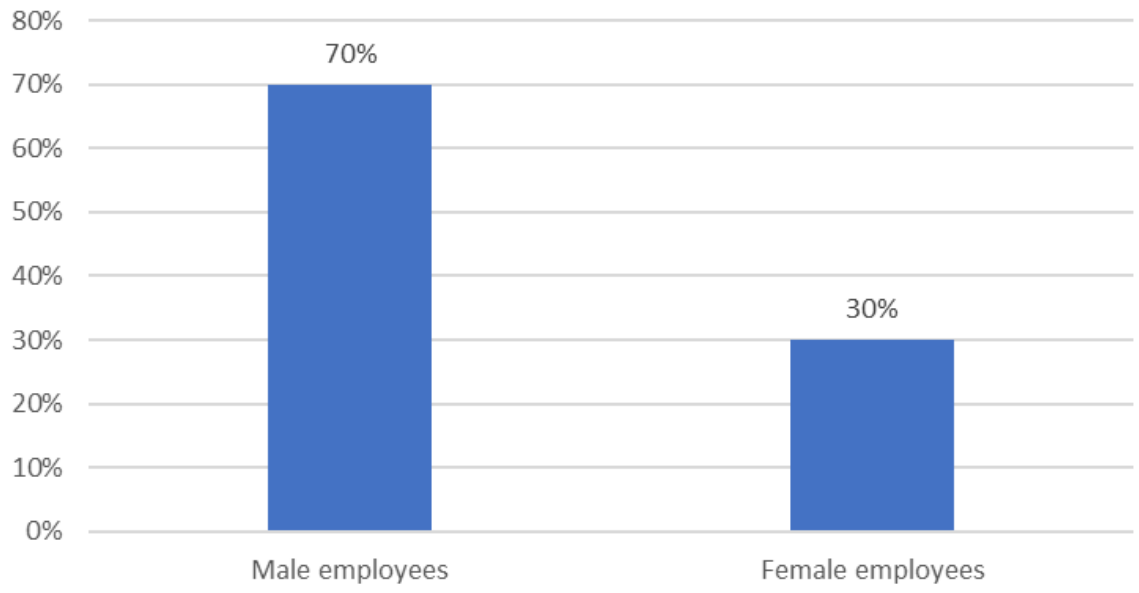

Figure 4.2: Gender of Participants

Source: Research Data (2022)

4.3.3 Education Level of Participants

The study established from the respondents their highest academic level. According to the study, it was important to determine the level of education of the respondents since employees with adequate training are more likely to perform better and be more satisfied with their jobs, which in turn leads to more efficient work and better service delivery for the organization. The study presented employees with questions on their highest education attainment and results showed that 47% (n = 48) had a graduate level degree, 31% (n = 32) had a diploma level education with 22% having a postgraduate degree. The results are reflective of the high level of education qualification within the employees which key to improved technical competency and professionalism within the workforce.

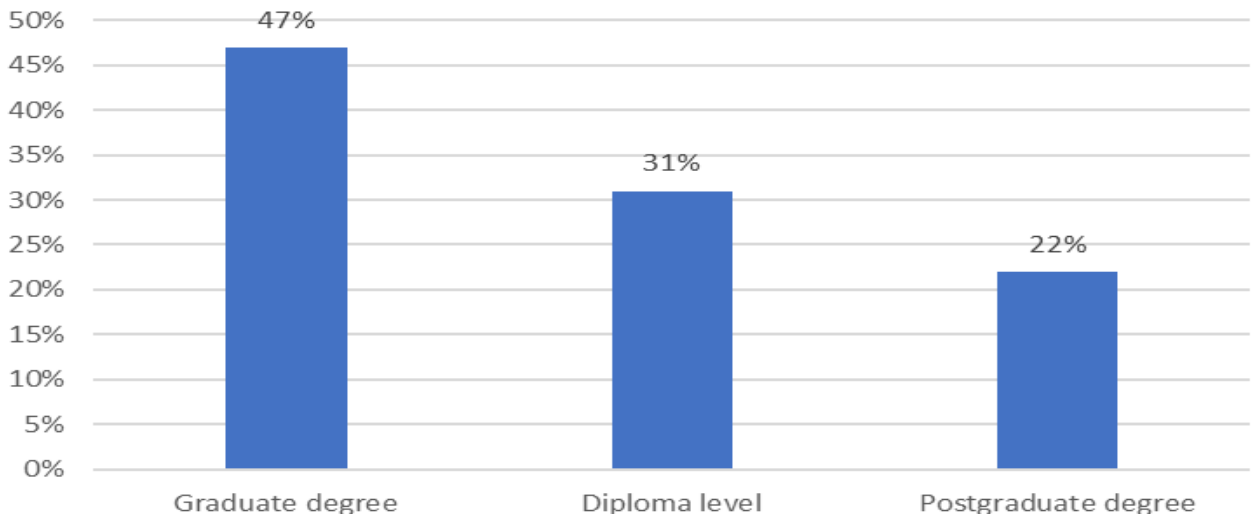

Figure 4.3: Education Qualification of Participants

Source: Research Data (2022)

4.3.4 Length of Work Experience

The study established from the respondents their length of work experience. This was importance because havinga diverse work experience means that the respondents have

better understanding of the environment at their workplace, what the organization expects from them and that they have experienced more opportunities in developing their competencies and acquiring skills related to lank record management system. The survey reviewed the length of period the various employees have worked within the Ministry and results are shown in Table 4.2 below.

Table 4. 2: Work Experience of Participants

	Frequency	Percent
than 2 years	23	22.3
ears	42	40.8
5 years	38	36.9
l	**103**	**100.0**

Source: Research Data (2022)

The above findings demonstrate that 41% (n = 42) of employees have atleast 2-5 years of work experience, 37% (n = 38) have over 5 years' experience with only 22% having less than 2 years of work experience. These findings illustrate that the participants have adequate knowledge on the implementation process of the land records management system and how this has impacted service delivery in the ministry of lands in Kenya.

4.4 Descriptive Analysis

The research employed a structured questionnaire in the data collection process with a 5-point Likert scale used in the analysis. The computed means were interpreted as follows; over 4.2 = very great extent, 3.5 – 4.19 = great extent, 2.5 – 3.49 = moderate

extent, 1.5 – 2.49 = to low extent and less than 1.49 = not at all. The findings are represented in line with the study objectives;

4.4.1 Quality Level of Service Delivery at the Ministry of Lands in Kenya

A Likert scale was used in a series of statements to enable elicit responses in relation to the quality level of service delivery at the ministry of lands in Kenya.The employees at the Ministry of Lands were queried on the Quality Level of Service Delivery and the responses obtained are analyzed and presented in Table 4.3 below.

Table 4. 3: Quality Level of Service Delivery

	Mean	. Deviation
employees within the ministry ensure that services offered are ndable by all our users/customers	.9612	1.30551
employees within the ministry are focussed on ensuring that we ngly help our users/customers in a responsive manner	.0000	1.49509
employees within the ministry ensure that we offer prompt ices with no delays to our users/customers	.8350	1.31430
employees within the ministry and knowledgeable of the ous activities which foster the confidence in service offering	.2136	1.39080
employees within the ministry offer caring, individualized ition the users/customers visiting our offices	.9320	1.42294
e has been notable improvement in the transparency within the istry of Land	.2816	1.47141
e is better accuracy in the services provided by Ministry of staff	.9612	1.34982
e has been notable improvement in the accountability in the ision of services within the Ministry	.5146	1.20346
have witnessed an improvement in the security of the services vered within the Ministry of land	.4951	1.39940
e has been notable boost in the quality and level of integrity in ervices provided by the Ministry of land	.1845	1.49998
e has been notable improvement in the efficiency and ctiveness in the service provision in the Ministry of land	.9709	1.56215

Source: Research Data (2022)

The employees agreed to a great extent (mean = 3.835) they ensure that we offer prompt services with no delays to our users/customers. The respondents noted that to a moderate extent (mean = 3.2136) the employees within the ministry and knowledgeable of the various activities which foster the confidence in service offering. The analysis pointed out that to a moderate extent (mean = 3.000) with a high deviation of 1.495 the employees within the ministry are focussed on ensuring that we willingly help our users/customers in a responsive manner. To a moderate extent (mean = 2.961) the employees within the ministry ensure that services offered are dependable by all our users/customers. The analysis showed that to a moderate extent there is improvement in the transparency within the Ministry of Land (mean = 3.282). The results showed that to a moderate extent (mean = 3.184) they have witnessed a notable boost in the quality and level of integrity in the services provided by the Ministry of land. Participants also revealed that to a moderate extent there is notable improvement in the efficiency and effectiveness in the service provision in the Ministry of land (mean = 2.971). Results showed that to a low extent the employees have witnessed an improvement in the security of the services delivered within the Ministry of land (mean = 2.495).

These findings resonate with Gakure, Muriu and Orwa (2013) who revealed service delivery is focused on enhancing efficiency, effectiveness, cost-friendliness and reliability among the users. Milakovich (2012) contends that efficiency, timeliness, responsiveness and empathy are necessary to foster quality service delivery. Biwott (2014) shows that there is need for Kenyan public sector institutions to improve on the accountability, transparency, commitment, and trust as well as dependence in service provision. Mugambi(2013) demonstrated that its' vital for government ministries to improve on

services delivery, transaction time and ease work procedures to ensure there is better service provision.

4.4.2 Implementation of Lands Record Management System

A Likert scale was used in a series of statements to enable elicit responses in relation to the level of implementation of the lands records management systems. The study evaluated the employees' responses on the level of implementation of the lands records management systems and the analysis is presented in the table below;

Table 4. 4: Implementation of Lands Record Management System

	Mean	Deviation
ministry has put in place mechanism and structure to ensure e is public access to digital land records	.0000	1.50163
ministry has developed practical solutions to support sharing to al land records between different counties	.0583	1.46076
ministry has set-up a well-manned data centre to support ıge of digital land records	.4854	1.39230
ministry has put in place security measures and ocols to ensure digital land records are not lost	.4951	1.41334
ministry has put in place measures to guide access to digital records by the right personnel	.7184	1.38208
ministry has put in place measures to guide the management of aged digital archives	.4854	1.37102

Source: Research Data (2022)

The analysis revealed that to a moderate extent (mean = 3.058) the ministry has developed practical solutions to support sharing to digital land records between different counties. Results showed to a moderate extentthe ministry has put in place mechanism and structure to ensure there is public access to digital land records (mean = 3.000, dev = 1.502). The study participants revealed that to a low extent the ministry has set-up a well-manned data

centre to support storage of digital land records as demonstrated by mean of 2.4854. A low extent was also noted on the ministry has put in place security measures and protocols to ensure digital land records are not lost, the ministry has put in place measures to guide access to digital land records by the right personnel and the ministry has put in place measures to guide the management of damaged digital archives having means of 2.4951, 2.7184 and 2.4854 respectively.

These findings are consistent with Chugh (2020) who showed that improved computerization of land records was necessary to improve transparency and efficiency of land records. Moreso digitalization reduces level of inconsistencies and promotes governance. Singh (2020) revealed that land management systems are vital to enhancing the promote smart contract records' updating and quality of services. Bakare, Abioye, and Issa (2016) contend that adoption of lands records management is characterized by improved records storage, implementing records management policies and maintaining the registry. Shonhe and Grand (2018) research showed that introduction of new filing systems, classification and labeling systems, enhanced data retention and disposal systems, and electronic indexing are vital to the records management process.

4.4.3 Land Record Management Policies

A Likert scale was used in a series of statements to enable elicit responses in relation to the lands records management. The study evaluated the employees' responses on policies relating to lands records management and the analysis is presented in the table below;

Table 4. 5: LandRecord Management Policies

	Mean	Deviation
re are clear policies for storage and retrieval of digital land rds	.2563	1.39872
ministry has put in place policies to ensure digital records are maintained	.9223	1.29622
ministry has created clear policies to guide the preservation and ing of digital records	.6990	1.44734
ministry ensures that the systems incorporated are in line with nternational standards of records management	.3221	1.00230
available policies ensure smooth transition from manual to al records	.5422	1.32230
ministry frequently reviews its policies in order to improve agement of records	.3312	1.39230

Source: Research Data (2022)

The analysis revealed that to a large extent (mean = 3.922) ministry has put in place policies to ensure digital records are well maintained. The findings showed that to a moderate extent (mean=3.3312) the ministry frequently reviews its policies in order to improve management of records and there clear policies for storage and retrieval of digital land records(mean = 3.2563). However a low extent was stated on the ministry has created clear policies to guide the preservation and sharing of digital records, the ministry ensures that the systems incorporated are in line with the international standards of records management and the available policies ensure smooth transition from manual to digital records having

means of 2.6990, 2.3221 and 2.5422 respectively.

In a similar manner, Mwangi, Ngétich and Ochichi (2015) also revealed that lack of policies to support regulation on records management brought inconsistencies in records management. The study made a conclusion that records management has not been fully embraced by the County Government of Laikipia due to lack of records management policies and recommended a decentralized system to reduce delays in records provision. A study undertaken by Ndungi (2018) indicated that records management were important in supporting reforms within the Directorate department as records were essential during the planning and operations, providing information to the beneficiaries and for policy development. Ravenwood and Zijlstra (2018) notes that the lack of digital adoption policies for archives management and skilled managers affected the maintenance of the archives. The study does not focus on how archive management impacts public service delivery, which this study examined. Koptyakova, Zinovyeva, and Maiorova (2019) established that staff re-training, re-equipping, and redesigning whole systems are among the costs of integration.

4.4.4 Land Record Management Staff Competencies

A Likert scale was used in a series of statements to enable elicit responses in relation to the land record management staff competence. The study evaluated the employees' responses on the land record management staff competenceand the analysis is presented in the table below;

Table 4. 6: Land Record Management Staff Competencies

	n	Deviation
e are well laid out staff recruitment procedures	86	603
staffs are duly qualified for their respective position	51	241
level of experience of the staff determine their records agement system competencies	11	951
competency is a main criteria when hiring of record agement staff	25	523
staff are sent for benchmarking activities in other organizations regions which have successfully digitalized their records	05	355
management in the ministry formulates and implements loyee development programs including seminars, forums and ction activities.	18	664
ministry routinely trains the staff on various aspects of the rds digitization process	50	331

Source: Research Data (2022)

The analysis revealed that to a large extent (mean = 3.7725) the ministry has IT competency is a main criteria when hiring of record management staff. A large extent was also noted on the staff are sent for benchmarking activities in other organizations and regions which have successfully digitalized their records, the management in the ministry formulates and implements employee development programs including seminars, forums and induction activities and the ministry routinely trains the staff on various aspects of the records digitization process with means of 3.5505, 3.6818 and 3.6050 respectively. A large extent was also stated on the staffs are duly qualified for their respective position(mean = 3.6151) and the level of experience of the staff determine their records management system competencies(mean = 3.8511). The analysis further revealed that

to a moderate extent (mean = 3.1186)that there are well laid out staff recruitment procedures.

These findings concur with Owino and Namande, (2022) who examined the effect of records management practices on service delivery at the Pensions Department in Kenya and found that staff capacity affects service delivery. Oganga (2020) noted that staff were receiving less training hence skill gaps and lack of new skills and knowledge on emerging trends. Tagbotor, Adzido and Agbanu (2015) indicated increased retiree satisfaction, easy and convenient and remote access of pension processing hence more service delivery to the public. Mukred, Yusof, Mokhtar, and Abdul-Manap (2016) reviewed institutional readiness and adoption of electronic records management systems in Yemeni institutes of higher education and notes there is low adoption of information technology and lack of clearly developed standards in records management, which negatively impacts e-frameworks integration. Similarly, Musinguzi and Enemark (2019) showed that implementation of lands management systems is vital to improving flexibility in the service delivery process.

4.4.5 Challenges Faced in The Implementation of Land Records Management System

A Likert scale was used in a series of statements to enable elicit responses in relation to the challenges faced in the implementation of land records management system. Lastly, the research queried the employees at the ministry on the various challenges they have faced in the implementation of land records management system. The results are presented in the table below;

Table 4. 7: Challenges Faced in the Implementation of Land Records Management System

	Mean	Deviation
e is lack of adequate technological infrastructure within the stry to guide execution of the land records management system	.9806	l.54654
e is lack of adequate technically competent staff within the stry to guide the successful execution of land records agement system	.1456	l.51727
e is lack of public awareness on the status of the implementation e land records management system	.3495	l.17747
e is inadequate access to internet and digital tools among munities in the country to utilize the land records management em effectively	.2816	l.32412
e is inadequate power supply to support the land records agement system in the ministry	.5728	l.45926
e is lack of adequate data security protocols within the ministry curely manage the land records management system	.1650	l.44912
ncial constraints have limited the ministry land records agement digitization efforts	.8058	l.48890

Source: Research Data (2022)

The survey revealed that to a moderate extent (mean = 3.349) there is lack of public awareness on the status of the implementation of the land records management system. The participants revealed that to a moderate extent (mean = 3.282) there was inadequate access to internet and digital tools among communities in the country to utilize the land records management system effectively. Analysis of the study demonstrated that to a moderate extent (mean = 3.165) there was lack of adequate data security protocols within the ministry to securely manage the land records management system. The employees agreed that to a moderate extent (mean = 2.573) there was inadequate power supply to support the land records management system in the ministry. Results showed that to a moderate extent financial constraints have limited the ministry land records management digitization efforts (mean = 2.806).

Consistent with our results Asare, Otoo-Arthur, and Frimpong (2017) contend that insufficiency in electicity supply, lack of basic ICT knowledge among staff, lack of ICT infrastructure, lack of adequate financial support, and resistance to new technologies implementation. Matangira (2016) concluded that lack of ICT resources, skilled workforce, and government support for the digitalization of records negatively affected archives management.Dinah, Mwai, Wasike, and Cyprian (2019) revealed that improving ICT technologies are key to effective records digitization. Ongwenyi, Yegon, and Mathangani (2018) study showed that failure of the management to offer adequate support for adoption has affected the deployment of ICT in records management functions. Alegbeleye and Chilaka (2019) reseacrh noted that poor development of records management system; there are no records disposal policies, procedural manuals, uniform guidelines for dealing with electronic records impacted automation of records management. Keakopa (2019) showed low levels of technology adoption in management and preservation of public records affected the implementation process.

4.5 Inferential Analysis

The research utilized inferential tests such as correlation and regression analysis to determine the relation and strength of the relationship between the dependent and independent variables.

4.5.1 Correlation Tests

The study utilized a structured Likert scale questionnaire hence Pearson correlation was preferred in the analysis and the results are shown below;

Table 4. 8: Correlation between Land Records Management System and Service Delivery

		vice ivery	ality of vice ering	gitization of id Records	cords nagement icies	cords nagement ff mpetencies
vice delivery	ırson rrelation					
	. (2-tailed)					
ality of vice offering	ırson rrelation	1**				
	. (2-tailed)					
gitization of id Records	ırson rrelation	6**	6**			
	. (2-tailed)					
cords nagement icies	ırson rrelation	1**	4**	7**		
	. (2-tailed)		01	01		
cords nagement ff mpetencies	ırson rrelation	3*	1**	4**	7**	
	. (2-tailed)					
		}	}	}	}	}

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

Source: Research Data (2022)

The findings of the correlation tests established there is a strong positive and significant relation between quality of service offering (r = .631**, sig = .000<.05), digitization of land records (r = .806**, sig = .000<.05), records management policies (r = .581**, sig = .000<.05), records management staff competencies (r = .733**, sig = .000<.05)and the service delivery at the Ministry of Lands in Kenya. This implies that a unit change in these variables would result in a unit change in the service delivery. Ravenwood and Zijlstra (2018) study showed that technologically-drive archival processes are key to enhancing the level of service delivery. Koptyakova, Zinovyeva, and Maiorova

(2019) concluded that adoption of emergent information management technologies is key to improving the efficiency and effectiveness.

4.5.2 Regression between Land Records Management System and Service Delivery

The study adopted regression analysis to determine the magnitude of the relationship between quality of service offering, digitization of land records, records management policies records management staff competencies and service delivery in the Ministry. The summary of the results is revealed in the table below;

Table 4. 9: Regression Summary

Model Summary

lel	R	R Square	djusted R Square	Std. Error of the Estimate
	.882[a]	.777	.768	.572

edictors: (Constant), Quality of service offering, Digitization of Land Records,

ords Management Policies, Records Management Staff Competencies

Source: Research Data (2022)

The results in Table 4.9 showed that independent variables had explanatory power on level of service quality at the Ministry of Lands in Kenya linked to as they accounted for 77.7% of its variability (R Square = 0.777) hence the model w as a good fit for the data. This showed a positive relationship between quality of service offering, digitization of land records, records management policies records management staff competencies and service delivery in the Ministry. Shonhe and Grand's (2018) research revealed that better records storage practices ensure there is better tracking of records, improved productivity, and service delivery. Ndungi's (2018) study showed that better records storage, effective filing processes would enhance the administrative reforms within the directorate.

Table 4.9: ANOVA

lel	m of Squares	df	lean Square	F	Sig.
ression	112.105	4	28.026	85.591	.000[b]
dual	32.089	98	.327		
l	144.194	102			

ependent Variable: Service Delivery

redictors: (Constant), Quality of service offering, Digitization of Land Records, ords Management Policies, Records Management Staff Competencies

Source: Research Data (2022)

Regression model significance was determined using ANOVA. A p-value of less than or equal to 0.05 was considered significant in testing the significance level. The findings above showed F = 85.591, p = 0.000<.05 implying there was statistically significant relationship between quality of service offering, digitization of land records, records management policies records, management staff competencies and service delivery in the Ministry.

Table 4. 10: Regression Coefficients

del		standardized efficients		ndardized efficients		.
			. Error	a		
	nstant)	8	2		54	5
	ality of service ering	3	6	74	9	5
	itization of Land cords	9	7	7	42	0
	cords Management icies	4	3	2	07	0
	cords Management ff Competencies	1	4	1	57	6

Source: Research Data (2022)

The coefficient results revealed that all the independent variables had positive model coefficients. This implies that a unit change in quality of service offering, digitization of land records, records management policies and records management staff competencies

would result in a corresponding positive .073, .769, 3.04 and .101 change respectively in the level of service delivery at the Ministry of Lands in Kenya. Similarly, Mwanyungu (2019) concluded that organization have adopted a records management policy designed with the goal of increasing service efficiency and reliability. Abuki (2014) revealed that developing clear records management policies, standardized guidelines, and procedures since this enabled the county government to enhance public service delivery. Rosemary, Mbenge, and Jotham (2017) demonstrated that records management policies have a significant impact on the implementation of records management systems, hence on the delivery of services.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of findings, conclusions, recommendations for policy and practice and suggestions for further studies.

5.2 Summary of the Findings

The main purpose of the study was to examine the relationship between land records management system and service delivery in the ministry of lands in Kenya. The study specifically sought to examine the effect of quality level of service delivery and land records management system on service delivery at the Ministry of Lands in Kenya. In addition, the study sought to examine the challenges faced in the implementation of land records management system at the Ministry of Lands in Kenya. The study sample size was 152 employees who were sampled from the headquarters of the Ministry of Land using simple random sampling method from a total population of 252 employees. Data was collected using questionnaires. Analysis of data was done using descriptive statistics and regressions analysis method. Below is the presentation of findings in a summary form.

5.2.1 Quality Level of Service Delivery

The first research objective sought to examine the effect of quality level of service delivery on service delivery at the Ministry of Lands in Kenya. The employees agreed to a great extent they ensure that they offer prompt services with no delays to our users/customers. The respondents noted to a moderate extent that the employees within the ministry are knowledgeable of the various activities which foster the confidence in service offering. In addition, was established that employees within the ministry are

focussed on ensuring that we willingly help our users/customers in a responsive manner. The inferential analysis including regression and correlation analysis further showed a strong positive and significant relation between quality of service offering and service delivery at the Ministry of Lands in Kenya.

5.2.2 Implementation of Lands Record Management System

A second research objective was to determine the impact of implementing a land records management system at the Ministry of Lands in Kenya on service delivery. The study revealed that to a moderate extent the ministry has developed practical solutions to support sharing to digital land records between different counties. The results also showed to a moderate extent the ministry has put in place mechanism and structure to ensure there is public access to digital land records and that the ministry has put in place protocols to ensure digital records are well maintained. Inferential analysis, as well as regression and correlation analyses, further showed that service delivery at the Ministry of Lands in Kenya is strongly correlated with implementation of the lands record management system.

5.2.3 Lands Record Management Policies

The third research objective sought to determine the effect of land record management policies on service delivery. The respondents revealed that that to a large extent the ministry has put in place policies to ensure digital records are well maintained. The findings showed that to a moderate extent the ministry frequently reviews its policies in order to improve management of records and there clear policies for storage and retrieval of digital land records. However a low extent was stated on the ministry has created clear policies to guide the preservation and sharing of digital records, the ministry ensures that the systems incorporated are in line with the international standards of records management and the available policies ensure smooth transition from manual to digital

records. The inferential analysis including regression and correlation analysis further showed a strong positive and significant relation between land record management policies and service delivery at the Ministry of Lands in Kenya.

5.2.4 Lands Record Management Staff Competencies

The fourth research objective sought to determine the competencies of the land record management staff. The study results showed that The analysis revealed that to a large extent the ministry has IT competency is a main criteria when hiring of record management staff. A large extent was also noted on the staff are sent for benchmarking activities in other organizations and regions which have successfully digitalized their records, the management in the ministry formulates and implements employee development programs including seminars, forums and induction activities and the ministry routinely trains the staff on various aspects of the records digitization process. A large extent was also stated on the staffs are duly qualified for their respective position and the level of experience of the staff determine their records management system competencies. The analysis further revealed that to a moderate extent that there are well laid out staff recruitment procedures. The inferential analysis including regression and correlation analysis further showed a strong positive and significant relation between land record management staff and service delivery at the Ministry of Lands in Kenya.

5.2.5 Challenges in the Implementation of Lands Record Management System

The last research objective sought to examine the challenges faced in the implementation of land records management system at the Ministry of Lands in Kenya. The study revealed that to a moderate extent that there is lack of public awareness on the status of the implementation of the land records management system, there was inadequate access to internet and digital tools among communities in the

country to utilize the land records management system effectively. The study also revealed that there was lack of adequate data security protocols within the ministry to securely manage the land records management system.

5.3 Conclusions

The study concluded that the Ministry's quality level of service delivery is very low and services are offered slowly and there is a lot of delays in giving services to customers. The quality level of service delivery involves a customer's comparison of expected service quality and perceived service quality. The smooth and efficient running of any organization depends directly on how well employeesare e quipped with relevant skills regarding giving quality service.

Based on the findings of the study, land records management systems provide a technique for land planning, quantification and rationalization of land information, as well as rapid inquiry, analysis and innovation. As a result of computer technology and communication networks, it enhances the traditional land management system and provides supplementary support for decision making. The establishment of an efficient comprehensive land records management system management plays an important role in promoting County to County unification management and the rational, efficient and organized use of land within the Counties.

The study concludes that the ministry has put in place measures to ensure digital records are effectively maintained. The study also concludes that the ministry has created clear policies to guide the preservation and sharing of digital records, the ministry ensures that the systems incorporated are in line with the international standards of records

management and the available policies ensure smooth transition from manual to digital records. This is attributed to the fact that well laid out policies are paramount in guiding the nature of undertakings of any organization.

The study concludes that the ministry has IT expertise is a primary consideration when hiring of record management professionals. The study also concludes that staff are sent for benchmarking activities in other organizations and regions which have successfully digitalized their records, the management in the ministry formulates and implements employee development programs including seminars, forums and induction activities and the ministry routinely trains the staff on various aspects of the records digitization process. This shows that having the appropriate qualification, skills and experience among the staff would play a huge role in ensuring that the set objectives are accomplished.

The study concluded that the dynamic nature of the land resource in Kenya poses numerousand complex challenges which call for clearly articulated management tools. Among the challenges faced by the Ministry of Lands are a lack of departmental integration, outdated and bureaucratic processes and procedures, unauthorized land allocations, poor communication between district offices and departments, an absence of data backups and adequate human and financial resources, and a lack of readily accessible and accurate land information.

5.4 Recommendations

The following policy recommendations are derived from the above findings and conclusions:

5.4.1 Policy Recommendations

i. The study recommended that the Ministry should put up appropriate training programs to keep its employees updated with the current job requirements and training should be geared to all employees regardless of their gender and job category. The ministry should adopt a proper management style which allows employees to participate in decisions making especially in areas affecting the performance in service delivery. The ministry should target in ICT reforms include enhancing employee skills and infrastructure improvements.

ii. The study recommended that during the implementation of the land records management system, security should be of the paramount consideration while developing software and processing data and the need of security policies has to be clearly told to all the employees working in the Ministry and they should be directed to adhere to these policies.

iii. As a result of the study, a proper implementation of a Land Information Management System is recommended. Providing services according to clients' expectations would ensure the Ministry's success. As a result of the implementation of the system, the Ministry will be able to deliver services efficiently, integrate key technical departments and functions, ensure the security of land information, provide clients with easy access to land informati on through online means, and link land ownership records with map data geographically.

5.4.2 Recommendations for Further Research

The regression analysis results indicated that there was a gap remaining. As a result, it is recommended that further studies be carried out that are able to address this gap. In addition, the study suggests that further studies should be done that focus on different study context apart from the Ministry of Lands in Kenya.

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APPENDICES

Appendix I: Participants Consent Form

1.1 Why is this study being carried out?

The research is being undertaken as a partial requirement for the academic award of Degree of Masters of Education (Library Services). Research data sought for this study was purely academic in nature, and no other usage was intended. Several relevant authorities within the Ministry of Lands were informed of the results of the study.

1.2 Do I have to take part?

It was your own choice whether or not to participate in the study. It is possible for a respondent to decline to participate in the study even after consenting to participate in it. At all stages of the research, participants are informed of their right to stop participating at any time.

1.3 Who is eligible to take part in this study?

The study was open to employees within the Ministry of Lands who have been participating and overseeing the implementation of the National Lands Records Management System.

1.4 Who is not eligible to take part in this study?

The research did not consider participation from participants with no knowledge on the Land Records Management System and Service Delivery within the Ministry of Lands.

1.5 Procedure to be Followed

It was necessary for you to answer all the questions in the questionnaire as well as some questions that were not outlined in the questionnaire but were still recorded. We respect your right to refuse to participate in this study Please remember the Any

questions regarding this study are welcome at any time. Participation in this study is voluntary.

If you want to refuse to respond to any question in this study or stop an interview at any time, you can do so. You can also stop being in the study at any time without any consequences from the management.

1.6 Confidentiality

You was given the questionnaires within the organizations or through online means andfill it alone. Your name will not be recorded on the questionnaires. The questionnaires responses was stored securely in electronic storages and where hard copies are used was securely stored by the researcher.

1.7 Contact Information

If you have any queries regarding the questionnaire kindly communicate with me (Eunice Taurus) through; taruseunice@gmail.com or through +254 737 403260.

1.8 Participant's Statement

As far as my participation in the study is concerned, I understand the information above.I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. It is entirely voluntary for me to participate in this study. As a participant in the study, I am aware that my records will be kept confidential and I can depart at any time. As far as I understand, both the management and investigator respected my decision to withdraw from the study.

Name of Participant …… …… …… …… …… …… …… …… …… …

…… ……

Signature Date

Investigator's statement

I, the undersigned, have explained to the volunteer in a language she/he understand s the procedures to be followed in the study and the risks and benefits involved.

Name of Interviewer/ Questionnaire administrator … … …… …… …… ……

Signature……. Date……..

Appendix II: Research Questionnaire

PART A: GENERAL INFORMATION

1) **What is your Age Bracket?**

Below 35 years [ ]

36 – 45 years [ ]

45– 56 years [ ]

56 and above [ ]

2) **What is your Gender?**

Male [ ]

Female [ ]

3) **What is your Education Level?**

O- Level [ ]

Diploma [ ]

Graduate [ ]

Postgraduate [ ]

4) **Years of experience within the firm?**

Less than 2 years [ ] 2-5 years [ ]

Over 5 years [ ]

PART B: QUALITY LEVEL OF SERVICE OFFERING

Please use a tick (√) or across (×) on the following scale to indicate the level of agreement with the following statements

5= To a very great extent 4= To a great extent 3= To a moderate extent 2= To low extent 1= Not at all

No	Quality of service offering	5	4	3	2	1
	The employees within the ministry ensure that services offered are dependable by all our users/customers					
	The employees within the ministry are focussed on ensuring that we willingly help our users/customers in a responsive manner					
	The employees within the ministry ensure that we offer prompt services with no delays to our users/customers					
	The employees within the ministry and					

No	Quality of service offering	5	4	3	2	1
	knowledgeable of the various activities which foster the confidence in service offering					
	The employees within the ministry offer caring, individualized attention the users/customers visiting our offices.					

PART C: LAND RECORDS MANAGEMENT SYSTEM

Please use a tick (√) or across (×) on the following scale to indicate the level of agreement with the following statements

5= To a very great extent 4= To a great extent 3= To a moderate extent 2= To low extent 1= Not at all

No	Land Records Management System	5	4	3	2	1
	There are clear policies for storage of digital land records					
	The ministry has put in place protocols to ensure digital records are well maintained					
	The ministry has put in place mechanism and structure to ensure there is public access to digital land records					
	The ministry has developed practical solutions to support sharing to digital land records between different counties					
	The ministry has set-up a well-manned data centre to support storage of digital land records					
	The ministry has put in place security measures and protocols to ensure digital land records are not lost					
	The ministry has put in place measures to guide access to digital land records by the right personnel					
	The ministry has put in place measures to guide the management of damaged digital archives					
	The ministry routinely trains the staff on various aspects of the records digitization process					
	The ministry has created clear policies to guide the preservation and sharing of digital records					

PART D: CHALLENGES TO IMPLEMENTATION OF LAND RECORDS MANAGEMENT SYSTEM

Please use a tick (√) or across (×) on the following scale to indicate the level of agreement with the following statements

5= To a very great extent 4= To a great extent 3= To a moderate extent 2= To low extent 1= Not at all

No	Challenges to Digitization of Land Records	5	4	3	2	1
	There is lack of adequate technological infrastructure within the ministry to guide execution of the land records management system					
	There is lack of adequate technically competent staff within the ministry to guide the successful execution of land records management system					
	There is lack of public awareness on the status of the implementation of the land records management system					
	There is inadequate access to internet and digital tools among communities in the country to utilize the land records management system effectively					
	There is inadequate power supply to support the land records management system in the ministry					
	There is lack of adequate data security protocols within the ministry to securely manage the land records management system					
	Financial constraints have limited the ministry land records management digitization efforts					

PART E: SERVICE DELIVERY AT MINISTRY OF LANDS

Please use a tick (√) or across (×) on the following scale to indicate the level of agreement with the following statements

5= To a very great extent 4= To a great extent 3= To a moderate extent 2= To low extent 1= Not at all

No	Service Delivery	5	4	3	2	1
	There has been notable improvement in the transparency within the Ministry of Land					
	There is better accuracy in the services provided by Ministry of land staff					
	There has been notable improvement in the accountability in the provision of services within the Ministry					
	We have witnessed an improvement in the security of the services delivered within the Ministry of land					
	There has been notable boost in the quality and level of integrity in the services provided by the Ministry of land					
	There has been notable improvement in the efficiency and effectiveness in the service provision in the Ministry of land					

Thank you for your Time

Appendix III: Research Authorization Letter

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E107/CTY/PT/39703/2016

DATE: 20th January, 2022

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR EUNICE TARUS – REG. NO. E107/CTY/PT/39703/2016.

I write to introduce Eunice Tarus who is a Postgraduate Student of this University. The student is registered for M.LIS degree programme in the Department of Library & Information Science.

Eunice intends to conduct research for a M.LIS Project Proposal entitled, "Land Records Management System and Service Delivery in the Ministry of Lands in Kenya".

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANI
AG. DEAN, GRADUATE SCHOOL

HI/lnn

Appendix IV: Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **790324**

Date of Issue: **25/January/2022**

RESEARCH LICENSE

This is to Certify that Ms.. EUNICE CHEPOTIP TARUS of Kenyatta University, has been licensed to conduct research in Nairobi on the topic: LAND RECORDS MANAGEMENT SYSTEM AND SERVICE DELIVERY IN THE MINISTRY OF LANDS IN KENYA for the period ending : 25/January/2023.

License No: **NACOSTI/P/22/15436**

790324

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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