



Assessing the Adequacy of Existing Infrastructure in the Management of Electronic Records to Support Service Delivery at the Selected Government Ministries in Kenya

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Abstract

Organizations ought to manage electronic records efficiently and effectively to achieve quality service delivery. Problems of poor service delivery and corruption in government ministries and public organizations in Kenya have, for a long time, been associated with poor records management. The evolution of e-governance in Kenya underscores the critical role that electronic records management (ERM) plays in enhancing public service delivery. Thus, this study aimed at establishing the adequacy of existing infrastructure in the management of electronic records to support service delivery at the selected government ministries a case study of Ministry of Labour and Social Protection and the Ministry of Land and Physical Planning. The study was guided by the Records continuum theory. The study used a mixed-methods approach employing a descriptive survey research design where questionnaires and interviews were used as the data collection tool. The sample size consisted of 97 respondents who were selected through purposive sampling from the target population of 643 employees of the Ministry of Labour, Social Security and Services and the Ministry of Land and Physical Planning. A Pilot study was conducted to ensure the validity and reliability of the instruments. Data will be analyzed using the Statistical Package for Social Sciences (SPSS) version 25 and presented in the form of tables of frequencies and percentages. The study identifies key infrastructural challenges and opportunities, with an emphasis on the capacity of current systems to support transparency, efficiency, and accountability in pub-

lic administration. These findings demonstrate widespread inadequacies in key enablers of electronic records management, such as ICT infrastructure, policies, standard operating procedures, and legal frameworks. This study recommended that the two institutions prioritize infrastructure development, review the policies to align with best practices standards and allocate adequate budget to support a sustainable records management framework in the institutions.

Subject Areas

Information Science, Records Management and Electronic Records

Keywords

Electronic Records, Infrastructure, Service Delivery, Government Ministries, Kenya, Records Management, E-Governance

1. Introduction

The paper introduces the background to the study. It describes the statement of the problem, objectives of the study, literature review, methodology, results and discussion, conclusion and recommendations.

1.1. Background to the Study

Globally, the provision of government services has progressively shifted from traditional paper-based systems to digital platforms such as e-tax systems, online census enumeration, and digital land claims. This transformation aims to enhance efficiency, accountability, and accessibility in public service delivery (World Bank, 2023) [1]. The shift is underpinned by the crucial role of Electronic Records Management (ERM) in ensuring that digital transactions are properly documented, preserved, and retrievable for transparency and accountability. ERM is a core organizational function responsible for preserving records in various formats, including paper, magnetic tapes, optical discs, and digital files, ensuring the availability of reliable documentation for institutional accountability and decision-making (UNESCO, 2022) [2].

Kenyan government ministries increasingly depend on electronic government (e-government) systems for service delivery. Effective Electronic Records Management (ERM) infrastructure, including technology, standards, policies, and human capital, is essential to support this transition. The management of electronic records (ER) has become increasingly pivotal in modern governance, particularly in developing countries like Kenya where digital transformation is accelerating. With the rollout of the e-Citizen platform and related e-government initiatives, public institutions face mounting pressure to improve their information handling capabilities. However, inadequate infrastructure often hampers these efforts, affecting the reliability and accessibility of public services. This study evaluates the status and suffi-

ciency of existing infrastructure in selected Kenyan ministries, examining their capacity to support robust ERM systems aligned with national development goals.

1.2. Statement of the Problem

Effective management of electronic records is critical to enhancing transparency, accountability, and service delivery in government institutions (International Records Management Trust [IRMT], 2009) [3]. In Kenya, government ministries have increasingly adopted electronic records management systems (ERMS) in line with the national e-government strategy and digital transformation agenda (Republic of Kenya, 2019) [4]. However, challenges related to infrastructure inadequacies, such as unreliable internet connectivity, insufficient data storage, lack of standardized systems, and limited technical support, continue to hinder the effective implementation and utilization of ERMS (Mwangi & Wamukoya, 2013; Wamukoya & Mutula, 2005) [5] [6]. There has been a lot of complain, lamentation and public outcry on the poor services rendered to the public at the ministry of Land and NSSF as a result misfiled record, missing files, loss of record leading to delayed service delivery which are an indication of poor records management practices (The Standard, 7th June 2018) [7]. A report by EACC (2015) [8] on corruption and ethics survey at both national and county governments indicated that the most prevalent complaints received by the Ministry of Land from the public included delay in service provision, bribery, double allocation of land or changing of land ownership, and files disappearance or missing records

These infrastructural deficiencies compromise the ability of ministries to ensure timely access to accurate records, thereby negatively affecting decision-making processes and overall service delivery. Furthermore, the absence of robust infrastructure often leads to inefficiencies in records retrieval, poor information security, and increased operational costs (Kibet & Muthee, 2020) [9]. Despite ongoing efforts by the Kenyan government to digitize its operations, there is limited empirical data assessing whether the existing infrastructure in selected ministries is sufficient to support effective electronic records management. Other challenges cited were lack of records management policy, unauthorized access to land records, absence of system of tracking records, existence of parallel records, duplicates, missing records, and records being managed by interns, casual laborers, and volunteers without the necessary skills and competency (EACC, 2015; Daily Nation Newspaper March 14th, 2018) [8] [10].

Therefore, this study seeks to investigate the adequacy of the existing infrastructure supporting the management of electronic records in selected government ministries in Kenya, and how this affects their capacity to deliver services efficiently. The findings will help inform policy, capacity-building efforts, and infrastructural investments needed to enhance public sector performance through effective records management.

1.3. Research Objective

The objectives of the study was to assess the adequacy of existing in the manage-

ment of electronic records to support service delivery at the selected government ministries in Kenya

2. Literature Review

2.1. Theoretical Literature Review

Records Continuum Theory

The Records Continuum Model presents a dynamic, multidimensional framework for managing records, particularly electronic records, throughout their existence. Unlike the traditional life cycle model, which treats recordkeeping as a linear progression from creation to disposal or archival preservation, the continuum model views records as existing simultaneously in multiple dimensions of use, context, and value. Originating in Australia in the 1990s, the model was developed by Frank Upward as a response to the limitations of the life cycle approach, especially in the context of electronic records management (Upward, 2000; McKemmish, 2015) [11] [12]. It conceptualizes records management and archival functions as coexisting and mutually reinforcing activities, enabling organizations to ensure records are not only preserved but also continuously accessible, trustworthy, and meaningful. Dunbar (2018) [13] outlines the continuum model's four dimensions as create, capture, organize, and pluralize.

The Create dimension refers to the inception of records during organizational activities. It emphasizes the need to consciously design recordkeeping systems that support the documentation of decisions, actions, and transactions from the very beginning. In management of electronic records contexts, this requires collaboration between records professionals, business process owners, and IT teams to ensure that metadata, classification, and compliance requirements are embedded into electronic systems at the point of record creation. This approach promotes transparency and accountability while enhancing the evidentiary value of electronic records (Ngulube & Tafor, 2021) [14].

The Capture dimension focuses on securing records in controlled and trustworthy recordkeeping systems. This includes the processes of assigning metadata, ensuring authenticity, and preserving contextual relationships. For electronic records, capturing involves integrating systems EDRMS that meet legal, regulatory, and institutional standards. It also includes ensuring version control, audit trails, and interoperability with other information systems to support long-term reliability and usability (McKemmish, 2015) [12].

In the Organize dimension, records are structured and maintained as part of an organization's memory. This involves developing taxonomies, classification schemes, and access controls to ensure records are retrievable, shareable, and understandable across departments and over time. In digital environments, this is particularly critical given the volume, variety, and volatility of electronic records. An effective organization ensures that electronic records continue to serve operational, legal, and historical needs, supporting governance and service delivery long after their initial creation (Dunbar, 2018) [13].

The final dimension, Pluralize, extends the role of records beyond the originating institution to the wider society. It acknowledges the value of records as part of the collective social, cultural, and historical memory. In this dimension, electronic records contribute to public accountability, historical research, and social justice by being made accessible through archives, public repositories, or open data platforms. This reinforces the democratic function of recordkeeping by ensuring that communities and future generations can access electronic records as evidence of institutional and governmental actions (Ngulube & Tafor, 2021; Cumming, 2010) [14] [15].

In essence, the Records Continuum Model offers a forward-thinking, integrated approach to the management of electronic records. It encourages proactive recordkeeping practices that begin at creation and extend indefinitely, rather than reactive archiving at the end of a record's life. This model supports the design of digital recordkeeping systems that ensure continuity, integrity, and public value. As organizations transition to electronic records and digital platforms, the continuum approach offers a robust foundation for ensuring compliance, operational efficiency, and the preservation of institutional and societal memory.

2.2. Empirical Literature Review

Records Management Infrastructure

A well-established records management infrastructure is fundamental to the successful implementation and sustainability of electronic records management that supports service delivery. In today's digital environment, both public and private institutions must invest in resilient, scalable ICT frameworks that guarantee the integrity, accessibility, security, and long-term preservation of records in both electronic and physical formats (ICA, 2022; Ngoepe, 2021) [16] [17]. This infrastructure goes beyond hardware and software to include policies, procedures, metadata standards, and skilled personnel to support the entire lifecycle of records, from creation and capture to use, storage, and final disposition. A holistic approach ensures that critical records remain accessible and trustworthy, thereby promoting accountability, transparency, and institutional memory.

Moreover, a robust records management infrastructure facilitates compliance with legal and regulatory obligations while also enhancing decision-making and service delivery. Without sufficient infrastructure, institutions often struggle with inefficiencies, service delays, and data loss, all of which compromise operational effectiveness. As Kamatula (2018) [18] emphasizes, records management plays a pivotal role in enhancing public service delivery by ensuring that accurate information is readily available to support administrative and policy functions. This is echoed by Ngulube (2022) [19], who argues that effective record systems underpin good governance by enabling transparency and responsiveness.

ICT infrastructure impacts on service delivery. In Kenya, the Huduma Centres initiative, which aimed to provide integrated access to government services, initially faced numerous service delays in counties with poor ICT infrastructure.

Limited internet connectivity, insufficient power supply, and outdated hardware severely hampered system performance. However, once these gaps were addressed through centralized data centers and improved connectivity, the turnaround time for services improved markedly (World Bank, 2021) [20]. Similarly, the South African Department of Home Affairs encountered serious challenges during the initial phases of digitizing birth and identity records due to fragmented systems and the absence of standardized metadata. After deploying a centralized EDRMS and upgrading its ICT infrastructure, the department reported a 40% reduction in record retrieval time, which significantly improved service delivery and reduced incidences of fraud (Ngoepe & Saurombe, 2020) [21].

In Uganda, the Uganda Revenue Authority (URA) provides another compelling case. Before adopting an integrated records management system, URA faced persistent issues related to document loss, duplication, and inefficient response to taxpayer queries. These challenges stemmed largely from weak infrastructure and uncoordinated records systems. After implementing a structured EDRMS supported by adequate ICT infrastructure, URA recorded a 35% improvement in query response times and enhanced audit preparedness (Ngulube & Mavodza, 2022) [22]. These cases underscore the reality that infrastructure inadequacies directly affect service delivery outcomes. Conversely, institutions that invest in comprehensive ICT infrastructure for records management demonstrate improved service delivery.

Thus, as institutions transition toward digital governance and service automation, building a sustainable records management infrastructure becomes not only a technical requirement but also a strategic imperative. A strong infrastructure provides the foundation upon which efficient, accountable, and citizen-centric services are built. It is through this lens that policymakers and administrators must view investments in records systems not as isolated ICT projects, but as essential components of service delivery reform and public sector transformation.

Inadequate records management infrastructure significantly hinders institutions' ability to manage electronic records effectively, affecting the quality of service delivery. A key challenge lies in the absence of records management policies, which leads to inconsistent and uncoordinated practices across departments. This inconsistency compromises the authenticity, integrity, and reliability of records, which are critical for institutional accountability and decision-making (Ngulube, 2022) [19]. Moreover, outdated policies often fail to address modern requirements such as the management of born-digital records, metadata application, and digital retention strategies. These gaps contribute to poor records organization, reduced accessibility, and delays in service provision. Without standardized procedures, institutions are unable to guarantee the timely availability of accurate information to support operations.

Additionally, weak or outdated legal frameworks further undermine efforts to establish effective electronic records management systems. Many existing laws were designed for paper-based environments and do not provide adequate guid-

ance on the admissibility of electronic records in legal proceedings, mandated retention periods for digital formats, or digital accountability mechanisms (Ngoepe, 2021) [17]. This legal ambiguity creates uncertainty around compliance and weakens trust in public sector processes. Furthermore, the lack of enforceable legislative support allows for gaps in the creation, classification, access control, and disposal of records, exposing them to unauthorized alteration, loss, or deletion. Such risks ultimately erode institutional memory and transparency. As Katuu (2022) [23] notes, without a robust regulatory environment, even well-designed ERMS initiatives remain unsustainable, fragmented, and prone to failure. Strengthening both policy and legal frameworks is therefore essential for safeguarding records and ensuring public accountability in the digital age.

3. Research Methodology

3.1. Research Design

The research adopted a descriptive survey design, which served as a structured blueprint for systematically gathering, analyzing, and interpreting data to understand the current state of electronic records management in selected government ministries. Descriptive surveys are particularly suited for fact-finding inquiries that answer “what” and “how” questions, as noted by Kothari and Garg (2023) [24], and Ngoepe and Saurombe (2021) [25]. This design is ideal for exploring existing practices without manipulating variables and enables the development of detailed profiles and identification of patterns (Ngulube, 2021; McCombes, 2023) [26] [27]. It ensures the reliability and validity of findings within records and archival studies, as emphasized by Ngoepe and Ngulube (2021) [28].

In addition, the study applied a mixed-methods research approach, combining both qualitative and quantitative methods to enhance the depth and breadth of analysis. This integration, as described by Creswell (2016) [29] and Ngulube and Sibanda (2021) [30], provided a more holistic perspective on the management of electronic records. The use of both approaches allowed the researcher to capitalize on the strengths of each method while addressing their individual limitations, resulting in a richer, more comprehensive understanding of the research problem (Ngulube, 2020) [31].

3.2. Geographical Location of the Study

The study was conducted in the Ministry of Land and Physical Planning, Ardhi House, off Ngong Road, and the Ministry of Labour, Social Security and Services headquarters in NSSF HQ, off Ngong Road, Nairobi. The specific focus on the headquarters is based on the fact that it is the main hub of records management, including storage, processing, analysis, and even dissemination of information.

3.3. Target Population

According to Mugenda and Mugenda (2019) [32], a population refers to the entire group of individuals, items, or events that possess similar characteristics and to

which the researcher intends to generalize the study findings.

The study population was 643 subjects comprised of 376 staffs from the Ministry of Labour, Social Security and Services and 267 staffs from the Ministry of Land and Physical Planning has 267 employees.

3.4. Sampling Technique

To ensure that a study's findings are factual and applicable to the larger group, it's important to select a sample that truly represents the whole population. This requires choosing participants in a fair and unbiased way (Mugenda and Mugenda, 2019) [32]. In this study, the researcher used a method called stratified purposive sampling. This approach involves dividing the population into distinct groups and then selecting participants from each group based on specific characteristics. According to Ngulube (2022) [19], this method helps include diverse perspectives and ensures that the selected participants can provide valuable information relevant to the study's goals. Stratified purposive sampling was appropriate because it allowed the selection of key departmental staff responsible for records management and ICT operations, ensuring relevant and informed responses.

The study population was stratified into two groups: The Ministry of Labour, Social Security, and Services. From the ministry stratification, the population was further stratified into respective departments, and where applicable, the departments were further stratified into respective units or divisions. Respondents were therefore selected purposively from each stratum, which ensured the desired sample of 15 percent was attained.

3.5. Sample Size

Given the enormous population of the two ministries, it was untenable to complete the study with the entire population as the unit of the study. According to Mugenda and Mugenda (2019) [32], when the study population is less than 10,000, a sample size of between 10% and 30% is a good representation of the target population, and hence 15 % was adequate for analysis.

In the study, the total population is 643 employees from the two selected ministries (the Ministry of Land and Physical Planning and the Ministry of Labour, Social Security and Services).

$$N = N \times 0.15$$

$$n = 643 \times 0.15. \text{ Therefore, sample size (n) = 97 respondents.}$$

3.6. Data Collection Methods

Data collection is the process of systematically gathering and recording information relevant to the study topic. It is essential in answering research questions and testing assumptions (Mugenda & Mugenda, 2019) [32]. According to Ngulube (2022) [33], using structured data collection methods enhances the credibility and usefulness of research, especially in records and information management. For this study, the researcher used questionnaires to collect data from 83

departmental staff and conducted interviews with 14 heads of departments to gain strategic insights on electronic records management.

A pilot study was conducted with a subset of 10 respondents to test the reliability and validity of the instruments. Validity was established through expert review by two supervisors who assessed the content relevance, clarity, and comprehensiveness of the questionnaire and interview guide.

3.6.1. Questionnaires

Questionnaires are structured tools designed to collect standardized data on a specific issue (Mugenda & Mugenda, 2019) [32]. In this study, closed-ended questionnaires (**Appendix I**), were distributed to 83 staff members responsible for records creation and use in two ministries. They were selected due to their efficiency in collecting large volumes of data quickly and uniformly.

3.6.2. Interview

Interviews involve direct, oral questioning guided by an interview schedule. They provide deeper insights not easily obtained through questionnaires and allow clarification of questions during the session (Mugenda & Mugenda, 2019) [32]. For this study, interviews were administered to 14 departmental heads to capture their expert perspectives and gain a more detailed understanding of the strategic and operational aspects of electronic records management.

3.7. Data Analysis

Data analysis involves applying statistical techniques to interpret information gathered during research (Kothari & Garg, 2023) [24]. In this study, responses were organized based on the research objectives and analyzed accordingly. Quantitative data from questionnaires were processed using SPSS version 25, which allowed for efficient generation of descriptive statistics and presentation of results in tables and charts. Qualitative data from interviews were categorized by themes, coded, and analyzed to derive meaningful insights aligned with the study's objectives.

3.8. Limitations

The scope of the study was also limited to two ministries, which may affect the generalizability of the findings to the wider public sector. Future research should consider a stratified random sampling approach and expand the study to include more ministries and county governments to obtain a broader understanding of ERM infrastructure challenges in Kenya.

4. Findings and Discussions

This study sought to accessing the adequacy of existing infrastructure in the management of electronic records to support service delivery at the selected government ministries in Kenya at the Ministry of Lands and Physical Planning and the National Social Security Fund.

4.1. Response Rate

The sample size according to this study consisted of 97 respondents who took part in the research, all staff from the two selected ministries (the Ministry of Land and Physical Planning and the Ministry of Labour, Social Security and Services). The findings from the return rate from questionnaires and interview schedules are shown in **Table 1**.

Table 1. Analysis by response rate.

Category	Sample Size	(Frequency)	(Percentage)
Ministry of Labour, Social Security and Services	376	57	15
Ministry of Land and Physical Planning	267	40	15
Total	643	97	15

Source: Research Data (2025).

Out of a sample of 97 staff, 83 returned the questionnaire. In addition, out of a sample of the staff, 14 heads of departments participated in the interview schedule. The survey response rate was 85%, which correlates to Mugenda and Mugenda (2019) [32] who argued that a response rate of 50% is considered adequate for analysis, 60% is good, and 70% and above is very good. Therefore, the response rate for this study was adequate for analysis.

4.2. Infrastructure Adequacy in Electronic Records Management

The respondents were asked to indicate how adequately the various infrastructures in place are used in the management of e-records in the institutions. The findings are presented in **Table 2**.

Table 2. Infrastructure adequacy in e-records management.

Adequacy				
Statement (Items)	Mean	N	SD	
Adequate ICT infrastructure (computers, networks, printers, scanners)	1.94	83	0.394	
Standard for management of e-records	1.99	83	0.398	
E-records management system (e.g, EDRMS)	2.04	83	0.397	
Records Management Policy	2.11	83	0.383	
Records management SoP	1.92	83	0.389	
Records management procedure manual	2.01	83	0.398	
Records management disposal schedule	2.01	83	0.398	
Legislation on the management of e-records	1.99	83	0.398	

The analysis of responses in **Table 2** reveals a prevailing inadequacy in the infrastructure and policy tools necessary for effective management of electronic rec-

ords from the two institutions. Key components such as ICT infrastructure, including computers, networks, scanners, and printers, were rated poorly (mean score 1.94), indicating widespread dissatisfaction. Similarly, the standard frameworks for managing electronic records (mean = 1.99), the presence of electronic records management systems like EDRMS (mean = 2.04), records management policies (mean = 2.11), standard operating procedures (mean = 1.92), procedure manuals (mean = 2.01), disposal schedules (mean = 2.01), and legislative support for electronic records (mean = 1.99) were all rated inadequate and below satisfactory levels by the majority of respondents.

These findings demonstrate widespread inadequacies in key enablers of electronic records management, such as ICT infrastructure, policies, standard operating procedures, and legal frameworks. These deficiencies limit the institutions' ability to manage electronic records effectively, ultimately impacting service delivery. Recent research by Mungai and Muthee (2022) [34] found that weak infrastructure, absence of standard guidelines, and lack of government commitment are persistent barriers to digital records transformation in Kenyan public institutions, sentiments supported by Wamukoya and Mutula (2005) [35] who emphasize that many African governments face systemic infrastructural deficits, which hinder the development of robust electronic records systems.

This study recommended that the two institutions prioritize infrastructure development, review the policies to align with best practices standards and allocate adequate budget to support a sustainable records management framework in the institutions.

The study's findings can be effectively interpreted through the lens of the Records Continuum Model, which provides a multidimensional framework for understanding the integrated management of records over time and across contexts. Inadequate ICT infrastructure undermines the Create and Capture dimensions by impeding the systematic generation, authentication, and secure acquisition of electronic records. Without reliable infrastructure such as stable power supply, sufficient digital storage, and interoperable systems institutions face challenges in ensuring that records are created accurately and captured in a trustworthy and secure environment. These weaknesses compromise the evidential value of records at their inception, leading to gaps in institutional memory and weakening the foundation upon which accountability processes rely.

Furthermore, deficiencies in records management standards and the absence of clearly defined Standard Operating Procedures (SoPs) negatively affect the Organize dimension of the continuum. This results in fragmented classification, poor indexing, and inefficient retrieval mechanisms. In parallel, the lack of comprehensive legal frameworks and well-articulated archival strategies significantly undermines the Pluralize dimension, which emphasizes the societal role of records through long-term preservation, access, and reuse. Without supportive legislation and institutional mechanisms for archival transfer and access, the pluralization of records where records serve not only administrative but also historical

and cultural functions is obstructed. Therefore, both infrastructural and policy inadequacies disrupt all four dimensions of records continuum management, compromising the capacity of institutions to maintain authentic, usable, and publicly accessible records throughout their lifecycle.

5. Conclusions

The study revealed widespread infrastructural and institutional inadequacies in the management of electronic records across the two ministries. Most notably, critical infrastructure elements including ICT facilities (computers, scanners, printers, and networks), electronic document and records management systems (EDRMS), standard operating procedures, records classification schemes, disposal schedules, and enabling legislation were either absent or inadequate. These deficiencies compromise the institutions' ability to support secure, efficient, and accountable digital recordkeeping practices, ultimately hindering service delivery and transparency (Ngulube, 2022; Ngoepe, 2021) [17] [19]. This implies the need for infrastructure enhancement to facilitate proper service delivery in the institutions. Ngulube and Tafor (2006) [36] propose the establishment of central records repositories, investment in cloud-based solutions, and partnerships with private tech firms to improve infrastructure access.

The current electronic records systems lacked critical functionalities such as records capturing, issuing and returning (circulation), scanning and capturing of paper-based records, and the ability to produce audit trails for each record. This indicates that the existing systems in the two institutions lack fundamental components required for effective electronic records management. The absence of these capabilities jeopardizes records integrity, traceability, and user accountability, and significantly hampers operational efficiency. This finding underscores the urgent need to upgrade and enhance the e-records systems to ensure they support secure recordkeeping, ease of operation, streamlined storage and backup, and efficient access and retrieval mechanisms. Ngulube (2011) [37] warns that without strategic planning, systems may become obsolete or underutilized, leading to wasted resources. A lifecycle approach to digital records management is thus essential for long-term functionality. Without strategic investment and policy enforcement, the goals of digital governance and improved service delivery remain at risk.

Recommendations

I Infrastructure enhancement. The ministries should prioritize investment in modern ICT infrastructure, including high-performance hardware, centralized data centers, and uninterrupted power supply systems to ensure secure and reliable electronic records management.

System interoperability. The ministries should develop and implement interoperable electronic records management systems across all ministries to facilitate seamless information sharing, consistency, and improved service delivery.

Capacity development. Institutionalize continuous professional development through structured training and digital literacy programs targeting all staff involved in records creation, management, and use in the ministries.

Policy alignment and harmonization. The ministries should ensure that electronic records management policies are fully aligned with national digital transformation strategies to foster coherence, regulatory compliance, and strategic implementation.

Performance monitoring and evaluation. Establishing robust monitoring and evaluation frameworks, including clear Key Performance Indicators (KPIs) and periodic audits, to assess the effectiveness and compliance of electronic records management practices.

Sustainable budgetary support. The ministries should have a dedicated budget allocations for records management functions to adequately support ICT infrastructure, system maintenance, capacity-building initiatives, and long-term program sustainability.

Conflicts of Interest

The authors declare no conflicts of interest.

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Appendix I: A Questionnaire for Data Collection

Dear respondent,

I am conducting research on Assessing the Adequacy of Existing Infrastructure in the Management of Electronic Records to Support Service Delivery at the Selected Government Ministries in Kenya.

The information you give will be treated with utmost confidentiality and will only be used for research purpose. Thank you in advance for accepting to take part in this study.

Instructions for completing the questionnaire

Please tick (✓) where appropriate.

Use the spaces provided to write your answers to the questions

Do not write your name in the questionnaire. I would be grateful if you could complete and return the completed questionnaire to me within the time required.

SECTION A: GENERAL INFORMATION

[1] Indicate the Ministry you work with

- a) Ministry of Lands and Physical Planning ()
- b) Ministry of Labour, Social security and services ()

[2] Department

[3] How adequate does your ministry have the following infrastructure in place for management of e-records?

Items	Adequate	Not adequate	Not sure
a) Adequate ICT infrastructure (Computers, networks, Printers, scanners)			
b) Standards for management of e-records			
c) E-records management system (e.g, EDRMS)			
d) Records management policy			
e) Records management standard operating procedure			
f) Records management procedure manual			
g) Records retention and disposal schedule			
h) Legislation for the management of e-records			