

# ASSESSMENT OF THE ELECTRONIC RECORDS MANAGEMENT READINESS AT KENYA NATIONAL ARCHIVES AND DOCUMENTATION SERVICE (KNADS), NAIROBI, KENYA

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## ABSTRACT

The purpose of this study is to assess the electronic records (e-records) management readiness at the Kenya National Archives and Documentation Service (KNADS), Nairobi, Kenya, with an aim of finding out policies put in place in the e-records management; finding out strategies adopted in e-records management readiness and how best they can be implemented. The paper presents the background information about KNADS clearing pointing out the function of the institution in relation to the readiness in the management of the electronic records. This study uses a survey research design. The target population is 347. Simple random sampling is used to select a sample of 104 respondents, comprising of 60 active users and 44 archival staff. Two senior members of management are purposively selected to provide information that the users and archival staff may not be able to avail. A structured, open and closed ended questionnaire is the main instrument for data collection. This is supplemented by a structured interview for the senior members of management. Document review is conducted to collect independently verifiable data and information related to the area of study. The collected data are analyzed and findings presented in graphs and tabulated summaries. This study provides an attempt to validate the management of e-records in the context of a developing country. The paper presents a practical- based representation to policy makers of e-records management, record managers, researchers and archivists. The study also provides insights to other institutions in the adoption of ideal mechanisms that ensure the readiness in the management of e-records for effective and efficient service delivery.

**Keywords:** Electronic records, readiness, Records Management, Kenyan National Archives Documentation Services.

## 1. INTRODUCTION

In recent times majority of government services have moved to providing pertinent information in electronic formats which, according to Nkala, Ngulube and Mangena( 2012), “will be the basis for confirming a government’s accomplishments and transactions undertaken, be it in the collection of taxes and census enumeration, supporting financial management and enabling audits and evaluations, helping resolve land claims and so on.” E- records should be accorded similar attention as the paper based records on how they are managed. It is therefore

the responsibility of Archival institutions to accept e-records generated from government offices. Studies conducted by Mnjama, N., & Wamukoya, J. (2007); Nkala, Ngulube and Mangena(2012); Wangutusi(2013), and others, observe that management of the existing records in archival institutions is in pathetic condition and their neglect has become a notable barrier to sustainable development in most developing countries. For instance a study by Kalusopa and Ngulube (2012) went as far as establishing that in Bostwana, “e-records readiness was evidently low and evolving as evidenced by the slow adoption of ICTs; inadequate records management standards and practices; and low integration in the national e-readiness framework”. Without archival information, according to Wangutusi(2013), the past would remain unknown.

As quoted by Eze (2013) Lipchak and McDonald (2003) saw, e-records management readiness as, “the capacity to create, manage, share, and use electronic information and related technologies to improve governance, sustain business, improve global security and support other activities in the world”. United Nations University (2011) observes that e-readiness measures how well a society is positioned to utilize the opportunities provided by ICT. These ICT infrastructures along with human capital, regulations, policies and internet penetration are all crucial components of e-readiness (Kalusopa & Ngulube, 2012).

Kalusopa (2011) states that “although most countries in ESARBICA have attempted to put in place some programmes to manage records in general, there are no known clear legal frameworks in the form of policies that have been put in place, neither are there strategies initiated to manage electronic records or have e-records readiness assessment thoroughly carried out”

Initially world over, history has it that records were created by manual processes. In the Kenya National Archives and Documentation Services the situation is the same. Manual systems, according to Wandugusi (2013) “took long to access and disseminate information to researchers”. However, with the increase in computerization and automation, governments have embraced modern techniques for capturing, storing and providing access to reliable information. This has seen the creation of electronic records which require specialized infrastructures to manage them. Wato (2006) observes that “managing e-records among archivists and record managers is a challenging task in their creation, use and preservation which requires acquisition of hardware and software, need to re-train personnel on the use of Information Technology in order to manage the e-records appropriately, the need to provide appropriate media for storage of the e-records and the need to locally train archivists and record personnel in records management.” Wato however observes that “governments seem to shy away from safeguarding the records in e-format”

### **KNADS and E-Records Management Readiness**

The Kenya National Archives and Documentation Services, was established in 1965, by an act of parliament the Public Archives and Documentation Services Act CAP.19 of the Laws of Kenya. The main role of the National Archives is to protect the heritage of the country, the preservation of records and Archives irrespective of the format, enhances research activities, evidential value especially when settling disputes, and facilitates good governance and accountability. As seen in the Public Archives and Documentation Services Act, Chapter 19, Sec.4, part(1), “the Director shall examine any public records and advice on the care, preservation, custody and control

thereof'. The KNADS therefore has the mandate of formulating, implementing, coordinating and overseeing the execution of records and Archives management services and programs within the public sector in an effort to embrace e-records readiness. KNADS maintain records as evidence of the government's policies and operations.

According to Wangutusi (2013):

The situation at the Kenya National Archives and Documentation Services as far as e-records management readiness is concerned, is at its infancy stage. Indicators such as computers, connectivity, image digitization of archival records is ongoing where microfilms and audiovisual materials are the most digitalized, uploading of records, the establishment of an online database for ease of information retrieval and establishment of a website where researchers can easily access and retrieve information are some of the notable milestones towards management of the e-records.

However Wangutusi suggests that "there is need to train their staff to be e-ready, improve on connectivity, bandwidth, and ICT infrastructure. Required skills and competencies according to Nyampong (2015) are diverse but can be categorized at various levels, including: records and information management skills, technology skills, managerial skills, and project management skills, skills to create, capture, classify, index, store, retrieve, track, appraise, preserve, archive and dispose of records to be able to effectively operate and undertake projects in an e-environment. Records at the KNADS range from; reports, files, audio-visual materials, specialized periodicals and journals, research and technical reports, conference proceedings, official publications, dissertations and theses and reference materials. Despite financial and organizational constraints facing the institution, Wangutusi (2013) points out that the KNADS has tried to embrace e-record management readiness in the provision of electronic archival information despite the absence of an ICT policy and e-readiness model. Such findings imply that without clear written policies and models it becomes difficult for an organization to operate efficiently and effectively.

### **Problem Statement**

The proliferation of Information Communication Technologies is challenging archival principles, practices and communication protocols demanding effective leadership from the archives community to access, capture and preserve records in all formats. Given the dynamic nature of information technologies and the obsolescence issues associated with them, the Kenya National Archives and Documentation Service does not have a well developed structure to facilitate management of electronic records. Apart from an online database that provides information at an abstract level, Researchers are required to make manual requests by filling forms at the repository for records that they require. This practice is manual, tedious and takes a long time before the staff in charge is able to retrieve the records which are more often missing or not well organized. Consequently, it is difficult to know what guiding policies and relevant strategies have been put in place to guide the management of these records. Ultimately, the competency of staff is also questionable as to whether they are well trained in management of records or not. Based on this background therefore, the researcher embarks on this research to examine the electronic records management readiness at the Kenya National Archives and Documentation Service (KNADS) with an aim of assessing the guiding policies towards successful e-records management and examining how the laid down strategies are best implemented.

**Research Objectives**

- i. To examine the policies put in place in the management of electronic records.
- ii. To assess the strategies adopted in the management of electronic records.

**2.Literature Review**

In order to engage citizens in participating at par with different activities of government, national organizations capitalize on the integration of ICT in the services provided. (Mjama & Wamukoya, 2007). Before discussing what records are and what they do, it is important for this literature review to examine the impetus that led to the need for e-records management. According to Lee (2005) “the transfer of records management into the electronic environment and e-government applications gained impetus in the middle of the 1990 s. Along with the USA and the UK, a number of countries, including Canada and Australia, acted as pioneers to start the provision of public services on the Web”. Lee further states that the last few years, has seen provision of portal-based Web sites that provide citizens and firms with access to public administration information and services. Traditionally, records have existed as print sources of information. In a study quoted by Kulcu (2009) conducted by the Association of Records Managers and Administrators (ARMA,2007) however, indicates that, 90 percent of the records are produced in the electronic environment where communication which started in the 1970 s, mainly through electronic mail, contributed to this high rate. However, World Bank (2010) asserts that records are information regardless of their format with structure, content and context that offers evidence of business transactions and can be relied upon in case of litigation. According to International Organization of Standardization (ISO 15489),(2015) “a record is information created, received and maintained as an evidence by an organization or person in pursuance of legal obligations or in the transaction of business”

According to Shepherd and Yeo (2007) a record can be in any media, paper, electronic or microfilm. Records play a vital role in the process of government activities. They provide a historical record of decisions, changes, outcomes, evidence to support the rule of law and support the accountability of governments and other institutions. In order to manage electronic records effectively in an increasing technological environment, records managers and archivists need a basic understanding of several areas of IT including networking principles, operating systems, database systems, imaging systems, workflow, e-mail systems, internet/intranet. This, according to Ngulube and Tafor (2006) aims at developing assessment tools that would assist government institutions and other agencies to assess their e-record readiness against internationally accepted standards.

**Policies in the management of electronic records**

According to Wamundila (2008) organizational decisions and actions are influenced by policies which serve as guiding principles that are intended to reflect on agreed practices. According to Cresswell (2007) a good records management policy consists of information related laws, programs, records management standards and practices, and the necessary qualified human resources to implement and manage the systems. The legal and policy frameworks ensure a strategic approach to building capacity to capture, process, store, use, conserve and preservation of records and national heritage. Quoted by Keakopa (2013) Shepherd, Stevenson and Flinn (2011) reiterates that, “this calls for clearly defined policies and procedures to guide the implementation of record management programs but however, appear that most organizations

have not developed the required frameworks” A literature analysis by Masheh (2016) revealed that “in most African countries, general records management policies and specifically electronic records management policies are not available” This was echoed by a study conducted by Eze (2013) on the readiness of universities in managing electronic records in Nigeria, which sought to find out whether the institutions had an information management policy, guidelines and responsibility for e-records creation and found out that, universities in Nigeria did not have basic records management policies for managing ordinary records and did not consider having electronic records which are emerging and more challenging. In addition, the same study revealed that the policies and guidelines have been neither regularly reviewed nor updated. The study revealed that the following tools were used to assess the e-records management readiness among the universities in Nigeria; standard forms and templates, records classification scheme, record metadata, profile template, records retention and disposition, search and retrieval indexes, equipment for storage, systems back up and a records and management center. A study conducted by Wandugusi (2013) revealed that the KNADS did not have an ICT policy and e-readiness model either.

### **Strategies in Management of Electronic Records**

According to the Minnesota State Archives (2012):

The arrival of the Information Age means that much of our history is now recorded in electronic format, implying that there is need to develop a strategy for managing electronic records and government agency’s electronic records management strategy must conform to legal mandates, as well as reflect your preferred management practices and technological options.

Available literature regionally and internationally indicates that records play an important role in ensuring that organizations achieve their mandate as they provide evidence of business transactions (Keakopa, 2013). Empirical studies such as those conducted by Keakopa (2013); Wato (2006); Nyampong (2015) and many others have dwelt a lot on some of the strategies for e-record management. In particular Shepherd, Stevenson and Flinn (2011) observe “most organizations have basic practices that only allow them to function in the different divisions without necessarily covering the whole scope in terms of the life cycle and all organizational offices”

Initial approaches to preserving records according to Wamukoya and Mutula, (2005), relies on storage in their original format on physical media such like boxes which were used for the storage and protection of paper records. However, magnetic tapes, disks, optical storage disks (e.g. CDs and DVDs) are manufactured for short-term storage of digital objects, not long-term archival retention. The greatest concern for this method of preservation, in addition to the relatively short life span of digital media, is the obsolescence of the hardware and software used to access the records.

Capacity building for archival personnel is a strategy towards e-records management, which may not be overlooked. According to Katuu and Ngoeba (2015) Africa’s archives and records professionals are expected to be adept at managing e-records. However, Ngoepe et. al (2014) observes that few programs in Library and information science in South Africa offered training in digital records management. Such revelations incidentally raise concerns as to whether archival institutions are ready for the lack of trained personnel may be a catalyst for reversing e-

records management readiness. A study by Nasieku, A. P., Kemoni, H., & Otike, J. (2011) on management of e-records in Moi University, Kenya, found out that only 10.6 percent of personnel were trained on e-records management. The study recommended that effective management of records was dependent on staff receiving training on e-records, appraisal and proper disposition of record more so in the digital environment.

### **3. Methodology**

This study adopts a survey research design. Which according to Wato (2006) “is a design which selects a relatively large sample of people from a pre-determined population or selection of a part of a wider group of people in whom the researcher is interested in a particular study” The study was conducted at the Kenya National Archives and Documentation Service located in the Central Business District of Nairobi. The study area was chosen since it is one of the organizations in the public sector with a mandate to effectively manage records.

From a target population of 347, simple random sampling is used to obtain a suitable sample size of 104 respondents comprising of 60 Archival users and 44 Archival staff, while purposive sampling is used to select two senior members of management. The sample size is based on the 30% rule, which, according to Kothari (2007), is reliable for the study.

The study utilizes quantitative and qualitative approaches to collect data whereby a structured, open and closed ended questionnaire is administered to the users and staff. Archival staff were useful in providing information on policies used to guide the management of e-records and the extent to which they were followed. Users were important since they provided data on their levels of awareness on the strategies used in e-records management. An interview schedule is also used to collect qualitative data from the senior members of top management based on their central role of management in ensuring the control and general maintenance of the records is adhered to.

The study reviews existing documents at the KNADS, as well as relevant literature found in print books and electronic information. The main purpose of document review is to collect independently verifiable data and information related to the area of study. Document review provides the researcher with a systematic procedure for identifying, analyzing, and deriving useful information from the existing documents, which are not limited to policies, reports, performance ratings, programs, funding proposals, meeting minutes and many others. Quantitative data are analyzed using the Microsoft Excel package and presented in tabulated summaries. Qualitative data are categorized and thematically analyzed to illuminate the findings.

### **4. Findings of the Study**

#### ***Policies guiding the e-record management readiness.***

The first objective of the study sought to examine the extent to which policies are used in the management of electronic records. From the findings, it was evident that policies had been put in place in guiding the management of the e-records with 64 percent of the respondents attesting to this. However, other respondents indicated that there were no policies in place. Senior members of management were through an interview session, probed to elaborate on the availability of policies. In response, it was revealed that a draft policy was in place though was awaiting approval. Other policy related documents, records related to planning, minutes to previous meetings, retention and disposal schedules, financial and audit records were identified.

In a bid to obtain more clarification, respondents were also required to agree with the statements describing the availability of a working policy at KNADS. Responses are summarised in table 1.

*Table 1: Statement on availability of policy on the Management of Electronic Records*

Statements	Responses				
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Extent of working policy	7%	7%	25%	-	61%
Existence of electronic records and Archives management policy	-	9%	11%	71%	9%
Adherence to policy in the management of electronic records	4%	5%	16%	64%	11%

The findings in table 1 reveal a strong disagreement on the extent of working policies while most respondents disagreed that there was an existence of electronic records and archives management policy. Such response could tally with what was earlier on indicated that the policies were in draft form yet to be approved. The findings also show that a bigger percent of respondents felt that the policy on management of electronic records was not adhered to. Such response could possibly raise issues of unawareness on the availability of policies among the staff.

### **Strategies adopted in the management of electronic records.**

To investigate the strategies adopted in the management of electronic records, the respondents first and foremost asked to indicate if they are aware of the strategies used in e-records management and further asked to state the strategies used. From the responses given, it was revealed that most respondents were aware that various strategies in management of electronic records had been adopted.

Similarly the respondents partly agreed there is a records retention schedule, that there are adequate storage options put in place for e-records. That an e-off-site backup exists as an effective e-record back up system, that staff are trained on e-record management and existence of search and retrieval indexes. A summary of responses is given in table 2.

Table 2: Strategies adopted in the management of electronic records.

E-preparedness Strategies		Responses				
		Disagreed	Not Agreed	Undecided	Agreed	Partly agreed
Records Retention Schedules		-	-	-	6%	94%
Existence of e-off-site		5%	2%	-	86%	20%
e-record Back up system		2%	5%	2%	86%	3%
Storage Options for e-records		2%	6%	4%	81.8%	5%
Staff trained on e-records management		5%	20%	10%	3%	15%
Existence of search and retrieval indexes,		2%	3%	15%	40%	20%
Confidentiality of Records and Archives		-	66%	8%	30%	6%

When probed further, the senior staffs indicated an e-off-site storage area for proper management of electronic records and Archives did not exist and this posed a major challenge as there is no back-up for records in case a disaster occurred. The staff, however, indicated that, “development of an e-off-site was a work in progress”. The need for training staff who are vested in proper management of electronic records may not be over emphasized. The senior officers indicate that, “We have not trained any staff on e-records management perse. They manage the e-records with similar principles used in print records which prove a major handicap”.

### Resources in the Management of Electronic Records

When asked to give their knowledge on the resources available in the management of electronic records, most respondents disagree that there is existence of proper allocation of funds on e-readiness in the management of electronic records. However, top management indicated that, “the inadequacy in e-readiness due to insufficient budget”. Other respondents disagreed on the availability of current equipment and the existence of adequate security measures. Responses are shown in table 3.

Table 3: Resources in the Management of Electronic Records

Resources	Statements about Availability of resources in the management of electronic records				
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Availability of funds	-	24%	-	76%	-
Proper storage facilities	-	35%	1%	63%	1%
Availability of current equipment		3%	5%	90%	2%
Security measures	6%	5%	10%	71%	8%



## **DISCUSSION**

### **Existing policy in Management of Electronic Records**

The availability of e-readiness policy in the management of electronic records in the Kenya National Archives and Documentation Service is lacking. The question on e-readiness raises interesting concerns. The respondents in the study seem to present higher percentages on the availability of an e-readiness policy in disagreement regarding the extent of working policy, existence of electronic records and Archives management policy, adherence to policy in the management of electronic records but a lower percentage in agreement regarding the existence of policies. One senior staff pointed out that, “ We have developed a working e-readiness policy to manage the e-records, but it is in draft form yet to be approved by the Chief archivist”. Such sentiments would be in line with Griffin (2003), who argues that in many organizations, policies and guidelines for managing electronic records of governments are often not implemented or non-existent and regulatory framework is often weak or outdated.

### **Strategies in Management of Electronic records**

The study revealed that the respondents are partially aware of e-record management strategies. From the responses, a lot seems to be lacking in terms of proper budgetary allocation, existence of e-off-site, the regular training of staff, guidelines followed when a calamity occurs, confidentiality of records and archives.

Unavailability of an elaborate e-off-site storage area for proper management of electronic records poses a major challenge, A senior staff pointed out that,

“ We are in the process of developing an e-off-site backup system for our records. We have acquired a server with up-to-date storage capacity to house all the records that we shall find relevant after appraisal.”

Inability to locate and retrieve records was as a result of untrained and incompetent staff. This was evident from the study. The senior staff pointed out the need for staff training in proper management of electronic records as a critical task for it helps institutions understand e-readiness in the management of electronic records. This is in line with a study conducted by Wandugusi (2013) which found out that the lack of trained personnel and poor management of information where data was scattered was rampant in archival institutions.

As found in this study, KNADS has elaborate records retention schedules which outlines how long documents must be retained and what to dispose. The senior staff clearly points out that as much as management does not approve the retention schedules, it guides them in appraising the records.

### **Conclusion and Recommendations**

The existence of a national policy on e-readiness portrays a clear indication that the KNAD in the progress of formulating a policy for guidance in the management of electronic records in consultation with the main stakeholders. The policy must provide a legal framework for managing the e-records, provide a guide for retention of records within the institution, highlight storage requirements, put emphasis on the need for capacity building for staff and emphasis on the level of ICT uptake in terms of appropriate infrastructure and related facilities such as bandwidth and connectivity.

**The study recommends the following;**

The KNADS should fast track the approval of the existing draft policy that was mentioned in the findings and ensure that it is followed in guiding the e-records management. Formulate and implement policies to address the management of records in e-environments and maintain an active involvement in the entire records life cycle. (Maseh, 2014; Ngulube, 2007).

The KNADS should analyze key policy issues related to the management of records and improve its guidance and if necessary provide a schedule and appropriate appraisal process through the use of ICT.

Proper strategies on e-records management that incorporate ICT.

The KNADS should avail appropriate training for the staff on concepts, principles and proper management of records in order to enhance efficiency and effectiveness and remain at the cutting edge of the changing technological sphere.

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