

# Managing Records in Networked Environments in Kenya's Public Sector Organisations: A Literature Review

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## Abstract

This paper presents the results of an empirical and theoretical literature review on managing records in networked environments in Kenya's public sector organisations. Three objectives are addressed, namely, to examine the legislative and regulatory framework for managing digital records in Kenya's public sector organisations, to establish the technological framework for managing digital records, and to find out the capacity of the human resources managing the digital records. The results indicated that the Kenyan legal framework for records management is forward-thinking in a number of ways. In particular, the Kenyan Information and Communications Act, 2009, provides explicit consideration of electronic records and transactions, including providing for the legal validity of such records. However, the reviewed literature indicated that the key legislation governing records management in the country had some weaknesses. Further, the results showed that several public sector organisations had deployed different applications and systems to manage their digital records. It was however not clear whether emerging technologies such as cloud computing had been employed. Furthermore, the review unearthed several human resource-related challenges facing the sector. The paper therefore concludes that Kenya's public sector has made its first steps in the management of records in networked environments but still contends with a myriad of challenges. As a way forward, the paper recommends the following: the amendment of key legislation, fast-tracking the development and implementation of a National Records Management Policy, and hiring trained staff and/or retraining the staff charged with the responsibility of managing public sector records.

**Keywords:** records; records management; networked environments; public sector; Kenya

## **Introduction**

Increasingly, governments all over the world are deploying Information and Communication Technologies (ICTs) in their activities and operations (Mnjama and Wamukoya 2007). This means that both public and private sector organisations have come to rely on a growing array of communication technologies to create, exchange and store information (Lemieux 2015, 5). As a result, there has been an eminent increase in the creation of digital records across the globe.

Motsaathebe and Mnjama (2009, 180) observe that with modern societies, records are mostly created and preserved in digital format. Proper management of this format of records calls for organisations to adopt the use of electronic records management systems. Katuu (2012) observes that these systems have evolved from such applications as Electronic Document Management Systems (EDMS), Electronic Documents and Records Management Systems (EDRMS), Electronic Records Management Systems (ERMS) to Enterprise Content Management (ECM) systems, as currently used. Stuart and Bromage (2010) observe that through such applications and systems, large volumes of digital records are created and captured.

This volume of information is then usually stored on an individual's or organisation's hard drives or networks. Unfortunately, this process can become expensive. According to Stuart and Bromage (2010), software needed to create the information can be costly as well as carry other costs beyond its outright purchase, such as licenses per employee, maintenance, add-ons and upgrade costs. Storage, while relatively cheap in itself, when coupled with the maintenance of the storage option can also prove an ache in the bottom line for many organisations. This is because any storage option needs constantly to be tested for obsolescence, malware and general corruption of data or software. Consequently, progressive organisations are considering cloud storage as an alternative. InterPARES (2016) observes that cloud computing, as it is referred to, consists of on-demand computing services delivered over the Internet from a remote location or via an organisation's servers. Still an emerging concept, it is reflective of the shift from the client-server model to the network model, from isolated environments to the Internet/networked environments; it enables a platform- and location-independent perspective for communication, collaboration, storage and production.

Duranti and Rogers (2012) opine that the basic idea behind the cloud is that anything that can be done on in-house computing systems, from storage and collaboration to processing and communication, can be shifted to the cloud. At its core, cloud computing is a service or set of services delivered over the Internet, on demand, from a remote location rather than residing on a desktop/laptop or organisation's servers.

As such, organisations contract with a service provider to deliver storage, processing and/or applications via the Web. Cloud computing resources are location- and device-independent—affording ready, on-demand access to information, applications and processing from any location. Cloud computing offers flexibility and convenience—as long as there is access to the Web, users are able to work when and where they want; it doesn’t matter where the data on the screen comes from. Additionally, cloud computing enables providers to use distant data centres for cloud computing. Cloud computing is rapidly being adopted by public and private organisations due to its perceived potential benefits, including cost efficiency, scalability, convenience and performance (InterPARES 2016). However, the potential risks of adopting cloud computing must be fully understood before it is adopted by organisations in order to make informed decisions around its utilisation.

This paper reports findings from a review of literature which sought to do the following:

1. Examine the legislative and regulatory framework for managing digital records in Kenya’s public sector organisations;
2. Establish the technological framework for managing digital records; and
3. Find out the capacity of the human resources managing the digital records.

## **Findings from the Review of Literature**

The findings are discussed in line with the objectives identified above.

### **Kenya’s Legislative and Regulatory Framework**

The legislative and regulatory framework for records management in any country plays a critical role in ensuring the success of records management programmes. The findings are reported in two sections: laws governing records management and records management policies and procedure.

#### *Laws Governing Records Management in Kenya*

The legal framework for records and archives in Kenya is based upon the English (sometimes styled “Anglo”) law often referred to as “common law.” The laws addressing archives and records management in Kenya are numerous and diverse. For example, while one wouldn’t typically think of the Penal Code when considering recordkeeping, Cap. 63, Sec. 133 (Republic of Kenya 1930), imposes criminal penalties for anyone who destroys or even “fails to preserve” any document that falls within a broad swath of “statutory documents” without the authority to do so. While it is beyond the scope of this report to discuss all the laws that regulate recordkeeping, it does try to address the major laws that address all public sector recordkeeping.

## The Constitution of Kenya 2010

The Constitution of Kenya (Republic of Kenya 2010) has supremacy in the Kenyan legal system; no law that violates the Constitution may be allowed to stand. However, the rights guaranteed therein are stated broadly; they are implemented and interpreted through legislation and court cases. Article 31 guarantees the right of privacy; some of those guarantees are relevant to records in that they address data privacy. The relevant constitutional language states, “Every person has the right to privacy, which includes the right not to have [...] (c) information relating to their family or private affairs unnecessarily required or revealed; or (d) the privacy of their communications infringed.” This right is addressed further in the Fifth Schedule of the Constitution. To give effect to Article 31, the Data Protection Act No. 24 of 2019 was assented to by the president of Kenya on 8th November 2019 (Republic of Kenya 2019).

Article 35 of the Constitution guarantees access to information and the right of correction, stating:

- (1) Every citizen has the right of access to—
  - (a) information held by the State; and
  - (b) information held by another person and required for the exercise or protection of any right or fundamental freedom.
- (2) Every person has the right to the correction or deletion of untrue or misleading information that affects the person.
- (3) The State shall publish and publicise any important information affecting the nation.

How these rights are to be exercised and their limits are further defined in relevant legislation, in particular the Access to Information Act. It is significant also that Article 35(3) requires that “[t]he State shall publish and publicise any important information affecting the nation.”

### Public Archives and Documentation Service Act, Cap. 19 (Act No. 2 of 1990)

This act requires that there be “established, constituted and maintained a public department to be known as the Kenya National Archives and Documentation Service” and places upon the director of that service responsibility for proper housing, control, and preservation of all public archives and public records (Republic of Kenya [1966] 2012). Public archives are defined as “all public records and other records which are housed or preserved in the national archives or which are deemed to be part of the public archives.” Public records are defined in the Schedule, Section 2:

1. The records of any Ministry or Government Department, and of any commission, office, board or other body or establishment under the Government or established by or under an Act of Parliament:

Provided that nothing referred to in this paragraph shall include the records of the Public Trustee or the Registrar-General relating to individual trusts or estates.

2. The records of the High Court and of any other court or tribunal.
3. The records of Parliament and of the Electoral Commission.
4. The records of any local authority or other authority established for local government purposes.

Thus, those records which fall under the purview of the National Archives and Documentation Service include, but are not limited to, public records. In particular, the director is empowered to acquire “any document, book, record, or other material of any description or historical or other value, or any copy or replica thereof which he considers should be added to the public records” (Republic of Kenya [1966] 2012). It is also worth noting, from the definitions section, that records include not only written records, but records conveying information by any means whatsoever.

For records managers and other custodians of public records, it is important to note that it shall be the duty of every person responsible for, or having the custody of any public records to afford to the director or any officer of the service authorised by him reasonable access to such public records and appropriate facilities for the examination and selection thereof, and to comply without any undue delay with any lawful directions given by the director or such officer concerning the assemblage, safe keeping and preservation of such public records or of the transfer of any such public records to the national archives to form part of the public archives.

Thus, custodians of public records have significant potential obligations to the National Archives and Documentation Service. The Act also creates several offenses for wilfully destroying or disposing of, defacing, mutilating, or damaging public archives (those records which have passed the archival threshold into the national archives), except in such cases where the director has authorised such destruction.

#### Access to Information Act (Act No. 31 of 2016)

The Access to Information Act (Act Number 31 of 2016) (Republic of Kenya 2016) is meant to fulfil a number of accountability and transparency goals by providing access to records and other forms of information. The legislative purpose of the Access to Information Act (2016) is to:

- (a) give effect to the right of access to information by citizens as provided under Article 35 of the Constitution;

(b) provide a framework for public entities and private bodies to proactively disclose information that they hold and to provide information on request in line with the constitutional principles;

(c) provide a framework to facilitate access to information held by private bodies in compliance with any right protected by the Constitution and any other law;

(d) promote routine and systematic information disclosure by public entities and private bodies on constitutional principles relating to accountability, transparency and public participation and access to information;

(e) provide for the protection of persons who disclose information of public interest in good faith; and

(f) provide a framework to facilitate public education on the right to access information under this Act.

### Kenya Information and Communications Act, 1998, Cap. 411A (Act No. 1 of 2009)

The Kenya Information and Communications Act establishes and empowers the Communications Authority of Kenya to “licence and regulate postal, information and communication services” (Republic of Kenya [1998] 2012). Part of that broad mandate includes facilitating, promoting and fostering the development of electronic transactions and commerce. In line with those goals, this Act provides for legal recognition of electronic records, stating that (Republic of Kenya [1998] 2012),

Where any law provides that information or other matter shall be in writing then, notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied if such information or matter is—(a) rendered or made available in an electronic form; and (b) accessible so as to be usable for a subsequent reference.

The Kenya Information and Communications Act, 2009 (Republic of Kenya [1998] 2012), also provides standards for the retention of electronic records, requiring that:

Where any law provides that documents, records or information shall be retained for any specific period, then that requirement shall be deemed to have been satisfied where such documents, records or information are retained in electronic form if:

(a) the information contained therein remains accessible so as to be usable for subsequent reference;

(b) the electronic record is retained in the format in which it was originally generated, sent or received or in a format which can be demonstrated to represent accurately the information originally generated, sent or received; and

(c) the details which will facilitate the identification of the original destination, date and time of dispatch or receipt of such electronic record are available in the electronic record.

Under Article 83I, an electronic record is sufficient where the law requires that records or information be retained in their original form, so long as there are adequate safeguards of the integrity and reliability of that record. Article 83P provides for legal recognition of electronic signatures. Article 83S empowers government agencies to utilise electronic records to meet a variety of administrative needs, including delivery of public goods and services, the filing of forms and applications, the issuances of grants and permits, and the receipt of payments.

Overall, the Kenyan legal framework for records management is forward-thinking in a number of ways. In particular, the Kenyan Information and Communications Act, 2009, provides explicit consideration of electronic records and transactions, including providing for the legal validity of such records. However, Ngulube and Tafor (2006, 58–61) argued that across the ESARBICA region, of which Kenya forms part, legislations governing records management do not provide the necessary support to national archival institutions to actively oversee records management in public sector organisations. In Kenya, studies have revealed that the Public Archives and Documentation Service Act, Chapter 19, which is the major law governing records management, has its share of weaknesses. The Act, as mentioned earlier, mandates the director of Kenya National Archives and Documentation Service (KNADS) or any officer of the service authorised by him/her to among other things examine public records and advise on the care, preservation, custody and control thereof. A study by Maseh (2015, 30), however, revealed two weaknesses of the Act: that the mandate given to the director by the Act seemed too general and does not provide specific and measurable terms of reference; and that it does not make provisions for the management of digital records. Similarly, Mnjama (2003, 93) argues that the Public Archives and Documentation Service Act does not provide an explicit time for KNADS's director to take control of public records. Its weakness is further seen through a study on a regulatory framework for the management of records in Kenya, Uganda and Tanzania, by Lowry and Wamukoya (2014) which observed that the law does not seem to oblige KNADS to enforce compliance with any records schedules.

Largely, it would appear that the law that regulates records management in Kenya has some weaknesses and in its current state it would be apparent that managing records, especially in digital formats, will be an uphill task.

### *Records Management Policies and Procedures*

Policies and procedures play a critical role in the management of records generally and in digital records management in particular. According to Mnjama and Wamukoya (2007), the level of organisational commitment to managing records can be gauged by the existence or non-existence of records management policies, plans and guidelines. This view is supported by ISO 15489 which recommends that organisations seeking to manage their records effectively should first and foremost establish, document, maintain and promulgate policies, procedures and practices for records management (ISO 2016).

As Roper and Millar would have it, policy and legislative frameworks are necessary to create a conducive environment for the effective management of records (Roper and Millar 1999). Meanwhile, ISO (2016) indicates that the objective of records management policies is to create and manage authentic, reliable and useable records capable of supporting business functions and activities for as long as they are required.

The reviewed literature, however, established that policy forms a major challenge for records management practices in Kenya and more broadly across Africa. In most African countries, general records management policies and specifically electronic records management policies are not available (Maseh 2016, 94; Nengomasha 2013, 3–4). Kenya is not an exception whether looking at the judiciary (Maseh 2015b) or the Kenya Electronic Transmission Company (Dwoya 2014). Ambira (2010, 109–10) found that the Kenya Commercial Bank had no strategy for managing digital records, and that their records management guidelines (not policies) are piecemeal. Similarly, Erima and Wamukoya (2012, 31) in their study found that Moi University did not have e-records management policies despite the fact that the university was automating records, leading to a situation where records are captured but there is no policy on how to treat them. Mwangi and Wamukoya (2012, 108) found that the Kenya Agricultural Research Institute (KARI) had no digital preservation policy. Mzerah (2013, 89) researched the Kenya Ports Authority (KPA) and recommended an e-records management policy to manage the e-records that it generated. Lastly, a study by Wamukoya and Lowry (2014, 74) revealed that the Kenya National Archives and Documentation Service had no policies for the management of current digital records. This discussion suggests that Kenyan public sector organisations generally lacked records management policies and more so digital records management policies.

### **Kenya’s Technological Framework to Manage Digital Records**

As mentioned earlier, cloud computing is the latest entrant into the world of digital records management. The literature search did not reveal any public sector organisation that has adopted and deployed the cloud computing option. However, the literature searched showed that several public sector organisations had deployed different applications and systems to manage their digital records, as discussed in the sections that follow.

#### *The Judiciary Arm of Kenya’s Government*

Lowry (2013) noted that the Kenyan judiciary had a case management system that aimed to provide some automated records management functions. While this was one of the projects of the Judiciary Information Communication Technology Committee (JICT), the institution did not have adequately trained records management professionals for full implementation. Additionally, Lowry (2013) established that the committee had launched a digitisation project that as of 2010 had resulted in 5 million scanned pages of a targeted 30 million. However, as would later be found by Maseh



(2015a), the project had stalled and the whereabouts of the scanned pages was unknown to the records personnel, meaning that the scanning exercise had not availed much.

In another study, Maseh (2015a) established that a case management system had been implemented in one of the courts in Eldoret, Uasin Gishu County, albeit on a pilot basis. The study noted that plans were underway to introduce the system to all courts in the Kenyan judiciary. Maseh (2015a) also found out that in one of the courts in Nairobi County there was an in-house electronic catalogue used in routine management of court records such as tracking the movement of the records and establishing the status of cases being heard. The study also showed that the judiciary had five records management plans to be implemented between 2012 and 2016, all focusing on transforming the registry systems. These plans included, among other things, ERMS implementation and an integrated document management system. In a more recent study, Moturi, Mburu, and Ngaruiya (2016) identified a Court Management System (CMS), Judicial Help Desk (JHD), and Integrated Financial Management Information System (IFMIS) within the Kenyan judiciary.

Following the developments identified by Maseh (2015a) and Moturi, Mburu, and Ngaruiya (2016), it would seem that the Kenyan judiciary is under continuous improvement as far as managing digital records is concerned.

### *The Executive Arm of Kenya's Government*

Government ministries and departments have witnessed new developments in digital records management. According to the National Treasury of the Kenyan Government (2016), over the last decade the government has undertaken a number of Public Finance Management (PFM) reforms aimed at enhancing accountability and transparency. These reforms have targeted the core PFM systems of budget formulation and execution, public procurement, revenue collection, internal and external audits, parliamentary oversight, payroll and pensions, to name but a few. These reforms have led to the automation of PFM processes and more importantly, the introduction of an Integrated Financial Management Information System (IFMIS) in government ministries and departments.

IFMIS can enable prompt and efficient access to reliable financial data and help strengthen government's financial controls, improving the provision of government services, raising the budget process to higher levels of transparency and accountability, and expediting government operations (National Treasury [Kenya] 2013). According to Odoyo, Adero, and Chumba (2014), the development of the IFMIS in Kenya started in 1998 while deployment of the system to line ministries commenced in 2003. The study by Odoyo, Adero, and Chumba (2014) revealed that the government of Kenya's IFMIS is an Oracle-based Enterprise Resource Planning (ERP) software that attempts to integrate all data and processes of an organisation into a unified system, housed in a centralised database which is accessed through a secure network. Often ERP software

applications have basic document management functionality. This suggests that, going forward, Kenyan government ministries and departments are likely to make some strides towards the implementation of enterprise-wide systems for managing digital records.

### **Human Resource Capacity**

A number of human resource challenges have been identified by researchers investigating archival and records management practices in Kenya and other sub-Saharan African countries. Researchers have identified three key parts of this problem:

- Poor or non-existent training related to the management of digital records;
- Difficulties in retaining qualified staff in the public sector; and
- A lack of collaboration between ARM professionals and other specialists.

#### *Training*

Studies on records management in Africa as a region reveal inadequate skills and competencies among staff vested with the responsibility of managing records in the region. In a survey of Kenyan judiciary professionals, Maseh (2015a, 139) found that 95 per cent of respondents felt that the primary challenge affecting records management (RM) in the judiciary was inadequately trained records management personnel. Mzerah (2013, 87) performed a survey with employees of Kenya Ports Authority (KPA) and found that 61.5 per cent of respondents said a lack of skilled records management professionals was a problem. In another study, Abuki (2014, 60) noted a lack of trained staff as an impediment to public service delivery in a study of Kisii County, Kenya. Ambira and Kemoni (2011, 6) found that Kenya Commercial Bank's archives and records management staff lacked formal training in records management. Dwoya (2014, 55) found that only four per cent of responding employees at the Kenya Electricity Transmissions Company (KETRACO) had received e-records training. Nasieku, Kemoni, and Otike (2011, 200) found that only 10.6 per cent of Moi University registry employees had any RM training at all. They pointed out that effective management of records was dependent on staff receiving adequate records management training to effectively deal with specialised areas such as electronic records, appraisal and disposition of records. Lastly, Mutimba (2014, 52–53) provides a more specific example. He undertook a case study of an EDRMS implementation in Kenya's Ministry of Education, Science, and Technology (MoEST). The findings of the study revealed that both good training and some level of pre-existing technical knowledge from employees were key to a successful implementation.

#### *Retention of Staff*

Staff retention is a challenge in many institutions in the country. Barata, Kutzner, and Wamukoya (2001, 38–39) noted that trained staff in the Kenyan public service regularly leave for better paid positions and that these transitions lead to loss of records. Similarly,

Mnjama (2003, 99) concluded that Kenyans with e-records management skills regularly leave the public sector for the private sector.

### *Professional Collaborations*

Collaborations between archives and records management professionals and other specialists are crucial in increasingly complex and technological organisations. Ngoepe, Maluleka, and Onyancha (2014, 133) found that archives and records management professionals in Africa are professionally isolated and need increased interdisciplinary collaboration. Amongst Kenyan professionals, Ambira (2010) conducted a survey with employees of the Kenyan Commercial Bank (KCB) and, in an interview with an IT manager, found that records management staff were not providing key information such as designating vital records or requesting access controls to prevent all bank staff from modifying records. Moturi, Mburu, and Ngaruiya (2016) argued for the creation of a judicial data warehouse that could be understood as a kind of records management tool. However, the authors are not archives and records management professionals, and their proposal, which would likely have major impacts on records management in the Kenyan judiciary, lacks input from any archives and records management professionals or any identifiable archives and records management theory. In some cases, collaboration may need to take a very specific form, as was the case with Ambira (2010, 139) who concluded that records management should be a part of the KCB's Risk Management Division. Using a more egalitarian approach, Erima and Wamukoya (2012) in their study argued that Moi University registry should collaborate with its ICT department to manage e-records generated within the university.

## **Conclusion**

This paper concludes that Kenya's public sector has made its first steps in the management of records in networked environments. This is seen through systems that have already been deployed in different institutions such as the judiciary and the executive arm of government. It is however not clear if newer developments such as cloud computing have taken root in these institutions. Nevertheless, a number of challenges experienced, such as weak legislative frameworks, the inexistence of records management policies, and inadequately trained staff, may curtail this progress. As such, the paper suggests some solutions to these challenges which constitute the way forward.

## **Way Forward**

We recommend an amendment of the Public Archives and Documentation Services Act, Chapter 19, as it is the key legislation governing records management in Kenya and it was found to have some weaknesses. The recommended amendments include ensuring that the mandate accorded to the director of KNADS is both specific and measurable and more importantly that the management of digital records features prominently in the Act.

Further, this paper recommends that the efforts to develop a National Records Management Policy, which is already underway, is fast-tracked. This will allow individual ministries, departments and agencies (MDA) to customise the policy and develop their own institutional policies. The policy should strongly cater for digital records in networked environments. The policy would therefore give guidance and effect to records management and address issues such as records access, records security and records preservation, all of which are critical in an increasingly networked environment. Alternatively, the MDAs could consider developing individual policies in these areas which together with the overall records management policy would streamline the overall management of records and particularly digital records. ISO (2016) notes that with a records management policy, public sector institutions will be able to create and manage authentic, reliable and usable records capable of facilitating speedy delivery of services. By formulating the policy, therefore, the public sector institutions will demonstrate their commitment to records management (Mnjama and Wamukoya 2007). Tsabedze, Mutula, and Jacobs (2012) recommended the enactment of records management policies which would facilitate the development of capacity-building plans and putting in place records management programmes.

Furthermore, we recommend that trained staff be hired to run records management functions in public sector organisations. Better still, the untrained staff who are already in posts should be trained to at least diploma and undergraduate levels. This would ensure that records are managed by staff with the required skills and competencies to contribute to the effective management of records and more so records in networked environments, which require more elaborate skills. Ngulube (2001) emphasised the need for records staff with records management skills and knowledge as a prerequisite to effective records management. Similarly, in their study Kemoni and Ngulube (2007) recommended that in order to raise the profile of records management in the public sector in Kenya, staff in the registries should be recruited and deployed on the basis of their records management qualifications and experience. Ngulube and Tafor (2006) recommended that archival institutions in the ESARBICA region should collaborate with universities that offer archival training in the region so that they can get assistance regarding their critical skills needs. In addition, staff should be encouraged to attend records management conferences, workshops and seminars. Such continuous training is necessary to ensure career development among the staff and for them to be kept abreast of emerging issues in records management. In her study, Ndenje-Sichalwe (2010) recommended the provision of a higher level of training in records management among the registry staff and the need to provide more training through short courses, workshops and seminars for them to update their knowledge and skills in records management.

## References

- Abuki, B. J. 2014. "The Role of Records Management in Public Service Delivery in County Governments in Kenya: A Case Study of Kisii County Government Headquarters." MLIS diss., University of Nairobi.

- AIIM. 2016. "What Is Enterprise Content Management (ECM)?" Accessed March 3, 2016. <https://www.aiim.org/What-is-ECM>.
- Ambira, C. 2010. *Records Management and Risk Management at Kenya Commercial Bank Limited, Nairobi Area*. Eldoret: Moi University.
- Ambira, C., and H. Kemoni. 2011. "Records Management and Risk Management at Kenya Commercial Bank Limited, Nairobi." *SAJIM: South African Journal of Information Management* 13 (1): 1–11. <https://doi.org/10.4102/sajim.v13i1.475>.
- Barata, K., F. J. Kutzner, and J. Wamukoya. 2001. "Records, Computers, and Resources: A Difficult Equation for Sub-Saharan Africa." *Information Management* 35 (1): 34–42.
- Duranti, L., and C. Rogers. 2012. "Trust in Digital Records: An Increasingly Cloudy Legal Area." *Computer Law and Security Review* 28 (5): 522–31. <https://doi.org/10.1016/j.clsr.2012.07.009>.
- Dwoya, N. S. 2014. "Implementation of a Records Management Programme at the Kenya Electricity Transmission Company Limited." MLIS diss., University of Nairobi. <http://erepository.uonbi.ac.ke/handle/11295/75698>.
- Erima, J. A., and J. Wamukoya. 2012. "Aligning Records Management and Risk Management with Business Processes: A Case Study of Moi University in Kenya." *Journal of the South African Society of Archivists* 45: 24–38.
- InterPARES Trust. 2016. "Team Africa." Accessed November 5, 2019. <http://interparestrust.org/trust/aboutus/africa>.
- ISO (International Organization for Standardization). 2016. "ISO 15489-1:2016: Information and Documentation—Records Management Part 1: Concepts and Principles." Accessed November 14, 2019. <https://www.iso.org/standard/62542.html>.
- Katuu, S. 2012. "Enterprise Content Management (ECM) Implementation in South Africa." *Records Management Journal* 22 (1): 37–56. <https://doi.org/10.1108/09565691211222081>.
- Katuu, S. 2013. "The Utility of Maturity Models—The ECM Maturity Model within a South African Context." Paper presented at iPRES 2013 Workshop: Digital Preservation Capabilities—How to Assess and Improve Capabilities in Digital Preservation at Lisbon, Portugal, September.
- Katuu, S. 2016. "Assessing the Functionality of the Enterprise Content Management Maturity Model." *Records Management Journal* 26 (2): 218–38. <https://doi.org/10.1108/RMJ-08-2015-0030>.
- Kemoni, N. H., and P. Ngulube. 2007. "National Archives and the Effective Management of Public Sector Records in Kenya." *Mousaion* 25 (2): 120–40.

- Lemieux, V. L. 2015. "One Step Forward, Two Steps Backward?: Does E-Government Make Governments in Developing Countries More Transparent and Accountable?" Right to Information Working Paper Series, World Bank. Accessed November 5, 2019. <https://openknowledge.worldbank.org/bitstream/handle/10986/22496/One0step0forw a0ent0and0accountable0.pdf?sequence=1>.
- Lowry, J. 2013. "Correlations between ICT and Records Policy Integration and Court Case Management System Functionality: East African Case Studies." *Records Management Journal* 23 (1): 51–60. <https://doi.org/10.1108/09565691311325022>.
- Lowry, J., and J. Wamukoya, eds. 2014. *Integrity in Government through Records Management: Essays in Honour of Anne Thurston*. Farnham: Ashgate Publishing.
- Maseh, E. 2015a. "Managing Court Records in Kenya." *African Journal of Library, Archives and Information Science* 25 (1): 77–87.
- Maseh, E. 2015b. "Records Management Readiness for Open Government in the Kenyan Judiciary." PhD diss., University of KwaZulu Natal, Pietermaritzburg.
- Maseh, E. 2016. "E-Government Implications for Records Management in Africa—A Review of Literature." *Journal of the South African Society of Archivists* 49: 89–101.
- Mnjama, N. 2003. "Archives and Records Management in Kenya: Problems and Prospects." *Records Management Journal* 13 (2): 91–101. <https://doi.org/10.1108/09565690310485315>.
- Mnjama, N., and J. Wamukoya. 2007. "E-Government and Records Management: An Assessment Tool for E-Records Readiness in Government." *The Electronic Library* 25 (3): 274–84. <https://doi.org/10.1108/02640470710754797>.
- Motsaathebe, L., and N. Mnjama. 2009. "The Management of High Court Records in Botswana." *Records Management Journal* 19 (3): 173–89. <https://doi.org/10.1108/09565690910999175>.
- Moturi, C., R. Mburu, and N. Ngaruiya. 2016. "A Case for Judicial Data Warehousing and Data Mining in Kenya." *American Journal of Computing Research Repository* 4 (1):7–14.
- Mutimba, C. J. 2014. "Implementation of Electronic Document and Records Management System in the Public Sector: A Case Study of the Ministry of Higher Education, Science and Technology." MA diss., University of Nairobi.
- Mwangi, P. W., and J. M. Wamukoya. 2012. "Digital Preservation of Agricultural Information at Kenya Agricultural Research Institute." *ESARBICA Journal* 31: 99–110.
- Mzerah, N. 2013. "The Role of Records Management in Promoting Business Efficiency and Service Delivery at Kenya Ports Authority (KPA)." *ESARBICA Journal* 32: 92–103.

- Nasieku, A. P., H. Kemoni, and J. Otiike. 2011. "Management of E-Records at Moi University Eldoret, Kenya." *ESARBICA Journal* 30: 177–210.
- National Treasury (Kenya). 2016. "Integrated Financial Management Information System (IFMIS) IFMIS Re-Engineering, from Modular, to Full Cycle End-to-End Processes, Strategic Plan 2011–2013." Accessed November 13, 2019. <http://www.ifmis.go.ke/wp-content/uploads/2014/02/Strategic-Plan-2013-2018-R.pdf>.
- Ndenje-Sichalwe, E. N. 2010. "The Significance of Records Management to Fostering Accountability in the Public Service Reform Programme of Tanzania." PhD diss., University of Kwazulu-Natal. <https://researchspace.ukzn.ac.za/xmlui/handle/10413/3259>.
- Nengomasha, C. T. 2013. "The Past, Present and Future of Records and Archives Management in Sub-Saharan Africa." *Journal of the South African Society of Archivists* 46: 2–11. <https://www.ajol.info/index.php/jsasa/article/viewFile/100084/89340>.
- Ngoepe, M., J. Maluleka, and O. B. Onyancha. 2014. "Research Collaboration in the Archives and Records Management Field across and beyond Universities in Africa: An Informetric Analysis." *Mousaion* 32 (3): 119–35.
- Ngulube, P. 2001. "Guidelines and Standards for Records Management Education and Training: A Model for Anglophone Africa." *Records Management Journal* 11 (3): 155–73. <https://doi.org/10.1108/EUM000000007273>.
- Ngulube, P., and V. F. Tafor. 2006. "The Management of Public Records and Archives in the Member Countries of ESARBICA." *Journal of the Society of Archivists* 27 (1): 57–83. <https://doi.org/10.1080/00039810600691288>.
- Odoyo, F. S., P. Adero, and S. Chumba. 2014. "Integrated Financial Management Information System and Its Effect on Cash Management in Eldoret West District Treasury, Kenya." *International Journal of Business and Social Science* 5 (8): 31–37.
- Republic of Kenya. 1930. *Penal Code Cap 63*. Nairobi: National Council for Law Reporting. Accessed November 14, 2019. <http://kenyalaw.org:8181/exist/kenyalex/actview.xql?actid=CAP.%2063>.
- Republic of Kenya. 2010. *Constitution of Kenya, 2010*. Nairobi: National Council for Law Reporting. Accessed November 14, 2019. <http://kenyalaw.org:8181/exist/kenyalex/actview.xql?actid=Const2010>.
- Republic of Kenya. (1966) 2012. *Public Archives and Documentation Service Act*. Nairobi: National Council for Law Reporting. Accessed November 14, 2019. [http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/PublicArchivesandDocumentationServiceAct\\_Cap19.pdf](http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/PublicArchivesandDocumentationServiceAct_Cap19.pdf).

- Republic of Kenya. (1998) 2012. *Kenya Information and Communications Act*. Nairobi: National Council for Law Reporting. Accessed November 14, 2019. [https://www.unodc.org/res/cld/document/ken/1930/information-and-communications-act\\_html/Kenya\\_Information\\_and\\_Communications\\_Act\\_2\\_of\\_1998.pdf](https://www.unodc.org/res/cld/document/ken/1930/information-and-communications-act_html/Kenya_Information_and_Communications_Act_2_of_1998.pdf).
- Republic of Kenya. 2016. *Access to Information Act, No. 31 of 2016*. Nairobi: National Council for Law Reporting. Accessed November 14, 2019. <https://www.cuk.ac.ke/wp-content/uploads/2018/04/Access-to-Information-ActNo31.pdf>.
- Republic of Kenya. 2019. *Data Protection Act, No. 24 of 2019*. Kenya Gazette Supplement No. 181 (Acts No. 24). Nairobi: National Council for Law Reporting. Accessed November 19, 2019. [http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/2019/TheDataProtectionAct\\_\\_No24of2019.pdf](http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/2019/TheDataProtectionAct__No24of2019.pdf).
- Roper, M., and L. Millar, eds. 1999. *Managing Public Sector Records: A Study Programme*. London: IRMT.
- Stuart, K., and D. Bromage. 2010. "Current State of Play: Records Management and the Cloud." *Records Management Journal* 20 (2): 217–25. <https://doi.org/10.1108/09565691011064340>.
- Tsabedze, V., S. M. Mutula, and D. Jacobs. 2012. "Records Management in the Government of Swaziland." *ESARBICA Journal* 31: 47–61.