The Elephant in the Room: The Implications of Information and Communication Technology (ICT) proliferation in Kenya for Archiving and Historical Research

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Abstract: This paper analyzes the implications of ICT for the preservation of publicly owned digital records in Kenya. It examines both efforts to digitize traditional records and the issue of the preservation of born digital records. The study finds that there is a considerable lag between the rate at which the Kenyan government is digitizing its operations and that at which it is developing and implementing protocols and systems for preserving digitally born records. This will impact both historical research and national heritage in future.

Un problème incontournable: les implications des Technologies de l'information et de la Communication (TIC) pour les archives et la recherche historique au Kenya

Résumé: Cet article analyse les implications des TIC pour la préservation des archives numériques publiques au Kenya. Il se penche à la fois sur les efforts de numérisation des documents traditionnels et sur la question de la préservation des documents nés sous forme numérique. Cet article révèle qu'il existe un décalage considérable entre le rythme auquel le gouvernement kenyan numérise ses opérations et celui auquel il développe et met en œuvre des protocoles et des systèmes de préservation des

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documents nés numériquement. Cela aura à l'avenir un impact à la fois sur la recherche historique et sur le patrimoine national.

Email is a story keeper and a storyteller; more than 2.6 billion people currently use email, and on an average day, 215 billion messages are sent and received. Behind the daily chatter, email evidence accumulates, and the future historian bides her time, awaiting the day when she can sift through the email archives, piecing together tomorrow's histories of today. Council on Library and Information Resources (CLIR)¹

Because already we have lost so many records which have been generated electronically. We are already too late [with preservation]. Nathan Mnajama on Eastern and Southern Africa Branch of the International Council of Archives (ESARBICA) member countries²

In recent years, more and more of the Kenyan government's daily operations have been digitized, which means an increasing number of records are born digital.³ These changes have been rapid, even for a developing country, and in some areas, such as fintech especially, as it pertains to mobile phone transactions, the country is actually a world leader. According to the government's *National Information, Communications and Technology (ICT) Policy of 2019*, one of the government's main development objectives within the next decade is "the achievement of an industrialized information society and knowledge economy."⁴ It hopes that the realization of this goal will create more job opportunities in addition to spurring innovation and increased growth. The path towards the achievement of this objective not only includes a shift toward the provision of all government services to online platforms but

¹ Council on Library and Information Resources (CLIR), "The Future of Email Archives: A Report from the Task Force on Technical Approaches for Email Archives" (Washington, DC: CLIR, 2018), 1, https://www.clir.org/wp-content/uploads/ sites/6/2018/08/CLIR-pub175.pdf, (accessed 18 May 2022).

² Nathan Mnajama, Session on Resolutions at the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA), Gaborone, Botswana, September 2019. Mnajama is a professor in the Department of Library and Information Sciences at the University of Botswana. He specializes in archives and records management. https://en-gb.facebook.com/431798613573306/videos/ 969242846747602/?__so__=permalink&__rv__=related_videos), (accessed 15 June 2021).

³ Ministry of Information, Communications and Technology (ICT), *National Information, Communications and Technology (ICT) Policy* (November 2019), https://www.ict.go.ke/wp-content/uploads/2019/12/NATIONAL-ICT-POLICY-2019.pdf, (accessed 18 May 2022).

⁴ Ministry of ICT, *ICT Policy*, 4.

would also naturally entail the increased digitization of the state's bureaucratic structure. The ability of information technologies to produce significant rewards in terms of efficiency and expeditious service delivery are undeniable. However, they also pose a whole range of new challenges for the preservation of the government's e-records that are born of these electronic technologies. Research for this article, therefore, sought to determine the extent to which the Kenyan government has tackled this challenge. This focus is important as born digital records are highly mutable, and there is a risk of losing a great amount of data in the intermission between the digitization of administrative operations and the establishment of protocols, as well as adequately resourced systems for the preservation of resulting records. The argument in this article is that the absence of planning as well as the dedication of resources toward the preservation of born digital records, such as email, does not augur well either for the country's heritage preservation needs or for historical research in the future.

Background and Theoretical Framework

Thus far, a lot of scholarly attention has been focused on the digitization of archives in Africa and hardly any on the archiving of data that is born digital. This academic output by scholars such as Keith Breckenridge, Peter Limb, and Premesh Lalu has delved into critical issues – ranging from the rationale and challenges of digitization to the implications of sovereignty and funding sources behind initiatives, such as those that emerged in South Africa's digitization and Aluka projects, which were funded by the US Mellon foundation.⁵ In addition, scholars have explored issues related to the technological and related human capital challenges facing digitization initiatives in Africa and the extent to which Africans benefit from the digitization of African archives or whether such initiatives may even broaden the digital divide between the Global South and the Global North. Similarly, in March 2020, *History in Africa* published a landmark volume that explored these issues

⁵ Keith Breckenridge, "The Politics of the Parallel Archive: Digital Imperialism and the Future of Record-Keeping in the Age of Digital Reproduction," *Journal of Southern African Studies* 40 (2014), 499–519; Fabienne Chamelot, Vincent Hiribarren, and Marie Rodet, "Archives, the Digital Turn, and Governance in Africa, *History in Africa* 47 (2020), 112–113; Premesh Lalu, "The Virtual Stampede for Africa: Digitization, Postcoloniality and Archives of the Liberation Struggles in Southern Africa," Divya Dwivedi and V. Sanil (eds.), *The Public Sphere from Outisde the West* (London: Bloomsbury Academic, 2015), 225–239; Peter Limb, "The Digitization of Africa," *Africa Today* 52–2 (2005), 3–19; Jurg Schneider and Paul Weinberg, "No Way Back – Reflections on the Future of the African Photographic Archive, *History in Africa* 47 (2020) 167–194; Edgar Taylor, Ashley Brooke Rockenbach, and Natalie Bond, "Archives and the Past: Cataloguing and Digitization in Uganda's Archives," in Terry Barringer and Marion Wallace (eds.), *Dis/Connects: African Studies in the Digital Age* (Leiden: Brill, 2014), 163–178. further beyond South Africa, which has been the main focus of debates on digitization. However, contributors were also focused on the digitization of preexisting archives of various kinds – from texts to photographs and audiovisual content.⁶ An article by Benjamin Lawrance, Erin Corcoran, and Louise Hooper touched on born digital data alongside other forms of data because they were concerned with the issue of digital dispersal as it pertains generally to the legal records of African asylum seekers in the West.⁷ The issues these scholars highlight are of relevance for both digitized and born digital data. This article engages both but focuses on the latter more elaborately so as to promote discourse on the implications of born digital data for archiving and research in the field of history.

As the information age dawned, it cast its rays over both developed and developing countries. Many developing countries viewed ICT as a medium that could enable them to leapfrog over developmental hurdles in the journey to build stronger, sustainable economies. Mobile telephony, for instance, quickly surpassed landline usage in several countries. Several governments have also embraced ICT with gusto as a way of improving government efficiency and bridging the gap between the state, its services, and citizens. The repercussions of this shift has been the production of evergreater quantities of born digital records that are famous for the relative ease of their creation and infamous for their volatility, particularly as records management and archival practice race to grapple with this sort of data all over the world.

This author's interest in born digital records came as a consequence of obtaining a fellowship for hands-on training at the University of California, Los Angeles' (UCLA) Center for Primary Research and Training (CFPRT) in the processing of the records of US Navy veteran, author, and journalist Donald R. Morris while a graduate student.⁸ Although undertaking doctoral studies in history at the time, the prospect of eventually facing an even more challenging job market in the aftermath of the 2008 crisis had pushed me to consider ways of diversifying my job market options after graduation. Initiatives such as the American Historical Association's Career Diversity program

⁶ In addition to those included in the preceding footnote, see also Flora Losch, "Preserving Public Broadcasting Archives in the Digital Era: Circulatory Stories and Technologies, the Digital Turn, and the Return of the Past in West Africa," *History in Africa* 47 (2020), 219–241; Nora El Qadim, "Born Digital? Digitization and the Birth of the Moroccan Archives," *History in Africa* 47 (2020), 195–218.

⁷ Benjamin Lawrance, Erin Corcoran, and Louise Hooper, "Asylum Courts, Transnational Petitioning, and Digital Dispersal in Africa." *History in Africa* 47 (2020) 243–267.

⁸ For metadata on Morris (Donald R.) Papers, see its finding aid on the Online Archives of California website: https://oac.cdlib.org/findaid/ark:/13030/kt4f59r7qt/, (accessed 18 May 2022). For more on UCLA's CFPRT, which is located within the school's Young Research Library, see https://www.library.ucla.edu/location/library-special-col lections/destination/center-primary-research-training-cfprt, (accessed 18 May 2022).

would later encourage history departments to consider and articulate broader ways of framing the purposes of a graduate education in the discipline.9 Not only did the fellowship present me with the opportunity to explore the possibilities of an alternative career, but I was also intrigued by the chance to go behind the archival scene to see and experience how the collections I had accessed elsewhere were processed. In addition, this was my first opportunity to engage with specialists in library and information science in a substantive manner. The collection spanned several decades, mostly dating back to the 1940s (it also included a number of images and memorabilia that Morris had collected from the first quarter of that century). Donald Morris was a prolific writer and a meticulous record keeper. As I worked on the collection under the supervision of archival staff, it was possible to visualize the manner in which he had lived and worked vividly. Once one gets to the 1990s, email makes its debut in the collection, and the conscientious record-keeper that he was shows in his effort to print out and preserve email. However, as time went by and email became ubiquitous as a form of correspondence, he tired of printing and preserving it, and the collection becomes thinner and markedly less rich as time progresses towards the end of his life in the early noughties. Not even his website was in existence any more. An internet search for it revealed that it had vanished in its entirety without a trace. The experience prompted me to think about the impact of ICT proliferation in our lives for researchers of the future. What will be available to them and how accessible will such records be? My thoughts centered most heavily on the national archives in Kenya where I had conducted a considerable amount of research over the years. To what extent was the organization prepared for the digital age? What are the implications for national heritage?

As a historian addressing historians in a paper that engages information sciences, a clarification of key terms is necessary. In information sciences, "records" refer to "documents created, received or maintained by an agency, organization, or individual in pursuance of legal obligations or in the transaction of business."¹⁰ "Records management" is therefore "the application of systematic and scientific control to all the recorded information that an organization needs to conduct its business."¹¹ This means that a "records

⁹ American Historical Association, "About Career Diversity," https://www. historians.org/jobs-and-professional-development/career-diversity-for-historians/ about-career-diversity, (accessed 28 June 2021). The initiative was launched in 2011.

¹⁰ See Michelle Caswell, "The Archives is not an Archives: On Acknowledging the Intellectual Contributions of Archival Studies," *UCLA*, https://escholarship.org/ uc/item/7bn4v1fk,10-11, (accessed 18 May 2022), on why it is important for humanities scholars to engage archival theory and scholarship in general; see also Tyler O. Waters, "Rediscovering the Theoretical Base of Records Management and its Implications for Graduate Education: Searching for the New School of Information Studies," *Journal of Education for Library and Information Science* 36–2 (1995), 142.

¹¹ Waters, "Rediscovering the Theoretical Base," 142.

manager" is the person charged with the application of those systematic and scientific methods to manage the "life cycle" or records within an organization.¹² Personnel charged with managing such documents within a government ministry are therefore records managers who will determine how to organize the ministry's documents and how to store them in a manner that preserves their integrity; they will also ensure that the documents are retrievable and facilitate their disposal according to law when they are no longer required or their transfer to national archives. Archives are thus "documents created or received and accumulated by a person or organization in the course of conduct of affairs, and preserved because of their continuing value."13 This means that an archivist is "a person professionally educated, trained, experienced, and engaged in the administration of archives."14 This article pays particular attention to the relationship between records management and archival management at the state level because, first, it considers it key for the state to marshal resources for the proper management of electronic records and archives - not only for national heritage purposes but also to set "best practice" models for non-governmental entities. Second, the volatility of electronic records requires an even closer collaboration between the two parties (records management and archives management) to maintain their integrity.

As ICT continued to feature ever more prominently in human communications, archivists shifted their attention to developing best practice models for the processing and storage of digital data. In the field of archival studies, discourses on the challenges that new forms of data pose with regards to their capture, processing, storage and accessibility have resulted in what Fredierick J. Stielow referred to as "new paradigm theories."¹⁵ These theories are particularly important to this article as they provide a structural background of analysis for the issues discussed with regard to state management of records. This is especially the case since these theories have been articulated with macro-level archival processes in mind. The two main models in existence are the life-cycle model and the records continuum model.

According to the traditional life-cycle model, the "document creators, records managers and archivists are responsible for creating or keeping the archival value at different steps of the process."¹⁶ This model tracks the development of records from their creation as documents, as well as the record management processes that either dispose of expired temporary records or transfer an organization's permanent records to the archives where archivists then take over their creation and processing. A major feature

- ¹² Waters, "Rediscovering the Theoretical Base," 142.
- ¹³ Waters, "Rediscovering the Theoretical Base," 142.
- ¹⁴ Waters, "Rediscovering the Theoretical Base," 142.
- ¹⁵ Frederick Stielow, quoted in Chiu-yen Lin, "Toward a Holistic Model for the Management of Documents, Records and Archives," *Archival Issues* 37–1 (2015), 1.
 - ¹⁶ Chiu-yen Lin, "Toward a Holistic Model," 24.

of the life-cycle model is "the clear distinction of responsibilities between records managers and archivists."¹⁷ This bifurcation of roles means that there is a considerable chasm between archivists and the processes that generate the records that they are expected to process at the end of a document's active life. Such delineations can make it very difficult for archivists to influence records management processes of highly mutable and vast stores of digital data before they are deposited for processing at archives. This sort of distance can be very damaging as far as electronic forms of data are concerned as their relative novelty, mutability, and increasing vastness complicates their processing, storage, and retrieval.

The records continuum model attempts to close this chasm. It was initiated by Frank Upward and then further articulated by scholars such as Sue McKemmish. The model has a "multi-dimensional view of the creation of documents in the context of social and organizational activity (proto recordas-trace), their capture into records systems (record-as-evidence), organization within the framework of a personal or corporate archive (record as personal/corporate memory) and pluralistic as collective archives (recordas-collective memory)."¹⁸ This results in a broad continuum along which a record is "always in a process of becoming" even though the structure of the actual document does not change.¹⁹ Thus, a document, which was capable of change as it moved through various human-interactive processes, becomes "fixed" via archival processes that end up "disembedding them from their immediate context of creation, and providing them with ever broadening layers of contextual metadata."²⁰ The act of archival description is therefore one that is complex and multifaceted.²¹ Chiu-yen Lin notes that contemporary archival thought and practice has thus pushed archivists to engage the contexts in which records are created and to pay close attention to their upkeep due to the "volatility and technological obsolescence of records," the freedom of information act compliance and practice, as well as the "wholeprocess management' that integrates 'the management of documents, records and archives' no matter the format in which the data is initially produced or the medium that produced it."22

Not surprisingly, therefore, archivists in various countries have sought to adjust the bounds of traditional archival theories to enable them to cope with the demands of processing and storing digital data in systems that facilitate their efficient retrieval. The United States' Federal Enterprise Architecture (FEA), published by the country's National Archives and Records

²¹ McKemmish, "Placing Records," 336.

¹⁷ Chiu-yen Lin, "Toward a Holistic Model," 24.

¹⁸ Sue McKemmish, "Placing Records Continuum Theory and Practice," Archival Science 1 (2001), 335.

¹⁹ McKemmish, "Placing Records," 335.

²⁰ McKemmish, "Placing Records," 336.

²² Chiu-yen Lin, "Toward a Holistic Model," 32.

Administration and the Federal Chief Information Officers Council, among others, bases its archival practice on a modified life-cycle model that emphasizes the integration of document-handling procedures that occur before and after records government agencies deposit records at archives.²³ It identifies the cycles of the traditional life-cycle models' three stages: "creation or receipt of the record; maintenance and use of the record; and disposition of the record (either destruction or transfer to the permanent holdings of the National Archives)."24 However, FEA also states that, although federal records exist as "records," once they have been handed over to the states' archival institution, the life-cycle model it outlines is critical as it attempts to harmonize record management process from the agency level to the point of their transfer to the archives for processing. That is, there is an emphasis on the implementation of coherent processes throughout the entire lifespan of a record instead of waiting to trigger records management processes simply because records are no longer required at the agency level and are therefore ready for "disposition."25

Consequently, according to FEA, it is essential that government agencies "address records management requirements for all records regardless of the format or media in which they are created or maintained."²⁶ In addition, FEA states that it is imperative for agencies "to consider record keeping requirements for records (and systems of records) *before* they are created."²⁷ Agencies must therefore ensure that the relevant staff have developed the necessary systems and processes for the management of diverse records "before designing and implementing the processes and systems that produce them."²⁸ This sort of framework demands that a state pays attention to the capacity of its archival institutions to process, store, and retrieve digital data at the same time as it is implementing policies that expand the use of digital systems in its day-to-day functions.

We can see the impact of the push for more holistic operational frameworks for records management and archival practice on ongoing articulation of "new paradigm" theories. To the existing models, archivist Chu-yien Lin for example, added her own: Interactive and Integrated Model for the Management of Documents, Records and Archives (I²DRA), which she argues is a more accurate reflection of modern archival practices. This model is comprised of the full span of a document's "lifespan" – "Conception-

²³ National Archives and Records Administration (NARA), Office of Management and Budget, Architecture and Infrastructure Committee, *Federal Chief Information Officers Council, Federal Enterprise Architecture Records Management Profile, Version 1.0* (USA: 15 December 2005).

²⁴ NARA, Records Management Profile,7.

- ²⁵ NARA, Records Management Profile, 7.
- ²⁶ NARA, Records Management Profile,8.
- ²⁷ NARA, Records Management Profile,8. (Italics are mine).
- ²⁸ NARA, Records Management Profile, 8.

Creation-Maintenance-Access" (CCMA) – and is "situated in a matrix of archival value enacting relationships that consist of social context, organizational functions, business activities, and individual identity (SOBI)."²⁹ She is particularly keen on emphasizing the manner in which CCMA and SOBI are integrated from one end to another in a seamless fashion. In this way, her model molds and builds on the strengths of the life-cycle and records continuum models in a bid to capture the actual or, in other instances, the ideal *modus operandi* for government protocols for records management and archival protocols.

These holistic and integrated approaches to records management as well as archival practice provide the framework of analysis for the approach of the Kenyan government to its handling of digital data in this paper. This article considers these approaches as ideal for the rapidly evolving situation the country finds itself in as ICT continues to make inroads into government operations as well as the lives of its citizens. Where such approaches are lacking, it can be reasonably conjectured that the gaps and damage resulting from the lack of sufficient state attention to records management and archiving will result, and is already resulting, in a pernicious state of affairs from which it will be difficult to recover further down the road.

ESARBICA archivists conducting research on the impact of ICT on records management in various African countries have found significant deficits between the rate at which institutions have integrated ICT into every aspect of their operations and the management of digital records born of those technologies.³⁰ A survey of e-record management within the Ministry of Health in Nigeria found that not only was the ministry lacking in ICT infrastructure, funding, and human resources necessary for the proper management of digital records, but it had not even brought its management of paper records under control.³¹ Furthermore, new problems have emerged and persist in instances where governments and institutions have invested in Electronic Document and Records Management Systems (EDRMS). In Botswana, for example, a government ministry invested in an EDRMS, but the rollout of the system suffered from poor change management, a lack of adequate state legal infrastructure to support the management of electronic records, inadequate training, etc. As a consequence, the objectives of the system were not realized, including the bid to enhance record management, which will in turn result in the loss of digital records before they ever get to

²⁹ Chiu-yen Lin, "Toward a Holistic Model," 33.

³⁰ Segomotso Masegonyana Keakopa and Tshepho Lydia Mosweu (eds.), *Cases on Electronic Record Management in the ESARBICA Region* (Hershey, PA: IGI Global 2020).

³¹ Rexwhite Tega Enakrire, "Impact of ICTs in the Practice of Records Management in Ministry of Health, Nigeria," in Keakopa and Mosweu, *Cases on Electronic Record Management*, 7. archives.³² Another study of born digital records in Kenyan universities found that as email and other forms of digital communication became the norm, universities also invested heavily in Enterprise Resource Programmes (ERPs) to enhance service delivery, resulting in the creation of vast amounts of digital records generally. However, the study labelled the handling of all digital records "ludicrous" and noted a "general apathy toward electronic record keeping in institutions of higher learning in Kenya."³³ In South Africa, utility company Rand Water is noted for being amongst the first organizations to introduce an EDRMS system into its operations in 1991. However, its use of different EDRMS systems over the years has resulted in data losses as the organization graduated from one system to another. Operations have also been complicated by the existence of two unintegrated systems operating concurrently, resulting in additional data loss and duplication. Equally serious, the system deployed has "no infrastructure to ingest digital records into archival custody," which "poses challenges to institutions such as Rand Water as they are forced to create an interim solution for electronic records preservation."³⁴ The general result is that records that ought to have been transferred to the national archives have never been transferred and remain vulnerable to the obsolescence of the electronic systems in which they are stored.

The Increasing Digitization of Kenya's Public Sector

According to the Kenya government's *National ICT Policy of 2019*, the state has four main policy objectives to enable the country to achieve its Vision 2030 goal of becoming an industrialized, knowledge-based economy.³⁵ First, policy objectives are geared towards the establishment of the infrastructure that is necessary to ensure high-speed internet connectivity for citizens all over the country. This sort of infrastructural investment would then enhance connectivity (the internet of things) and enable commercial applications based on the internet to expand and promote innovation. The government estimates that by 2030, the country will have a population of 66 million with about 200 million devices connected to the internet.³⁶ Second, the government wants to ensure that by 2030, ICT is contributing at least 10 percent to the

³² Olefhile Mosweu, "Managing Change in EDRMS Implementation at the Ministry of Investment, Trade and Industry in Botswana," in Keakopa and Mosweu, *Cases on Electronic Record Management*, 18–48.

³³ Lilian Gisesa, "Management of Electronic Records in Universities: A Case Study of Selected Universities in Kenya," in Keakopa and Mosweu, *Cases on Electronic Record Management*, 264.

³⁴ Vincent Maesela Mello and Mpho Ngoepe, "Yesterday, Today and Tomorrow: Management of Electronic Records at a South African Untility Company," in Keakopa and Mosweu, *Cases on Electronic Record Management*, 160.

³⁵ Ministry of ICT, National ICT Policy, 4.

³⁶ Ministry of ICT, National ICT Policy, 7.

overall economy of Kenya. It envisions such growth as engendering higher rates of employment, higher incomes, and a better quality of life for the people in its charge.³⁷ Third, the government plans on approaching regional and international partnerships and agreements strategically to ensure that the country is well-placed to tap into ICT-related opportunities at a global level. Fourth, policy objectives ought to ensure that adequate resources are invested in the education of the youth as well as in enhancing the skills of citizens in general to ensure that there is a well-trained populace that can capitalize on emerging ICT opportunities and innovate. Lastly, the government plans to use ICT to enhance public service delivery and gain a global reputation for efficiency (presumably to encourage more foreign investment in addition to creating an environment conducive to local investors and start-ups).³⁸ The digitization of private and public services means that in the past 10-15 years, Kenyans have encountered an increasing number of digital interfaces in their interactions with the state and private businesses at a pace that many did not expect in a developing country. This means that the government is not only increasingly digitizing its interactions with ordinary members of the public but also that of the entire government bureaucracy at a steady clip. This has created a number of opportunities for historians and other researchers who can also access certain records with ease.

Verbatim records of parliamentary proceedings, the Hansard, are now available online on the Kenya Law website.³⁹ Kenya Law is a state corporation that was established in 2001 under the judicial arm of government, and it is charged with the publication of the country's legislation.⁴⁰ Online and searchable access to the legislature's records means that citizens and other interested parties no longer have to make a trip to the parliamentary library in Nairobi's central business district to examine physical copies of these records. The search engine of the Hansard records was developed by Kenya's

³⁷ Although the government's National ICT Policy paper makes reference to its intention to contribute to the creation of dignified employment opportunities and financial stability for Kenyans, it does not specify how it will avoid abusive, dangerous, and exploitative labor practices that have become an integral part of the gig economy in the West. This is particularly the case for low-income employees and "subcontractors" of companies like Amazon and Deliveroo. See, for example, Callum Cant, *Riding for Deliveroo: Resistance in the New Economy. Cambridge* (UK: Polity Press, 2020) and Rupert Shakespeare, "I Struggled as a Self-Employed Amazon Driver – While the Company Boomed," *The Guardian UK* (4 February 2021), https://www.theguardian.com/commentisfree/2021/feb/04/self-employed-amazon-driver-company-delivered, (accessed on 9 February 2021).

³⁸ Ministry of ICT, National Information, ICT Policy, 5.

³⁹ Kenya Law, Where Legal Information is Public Knowledge, http://kenyalaw. org/kl/index.php?id=852, (accessed 15 June 2021).

⁴⁰ Abigail Steinberg, Peres Were, and Amolo Ng'weno, "Democratizing Legal Information Across Africa: An Inside Look at Digitizing Local Content," *Innovations* 9–3/4 (2014), 104. National Council for Law Reporting (NCLR) in conjunction with Google Inc. and the Department of History at Virginia Tech.⁴¹ The records cannot be downloaded, but researchers can use the print screen function of their electronic devices to print pages for closer examination. Not only is it possible to access Hansard records of postcolonial Kenya online, but it is also possible to access those of the Legislative Council (LEGCO) in what was once Kenya Colony and Protectorate. The NCLR website also facilitates access to the country's constitution, a database of Kenya's laws including an index to laws that courts have declared unconstitutional since the promulgation of the new constitution in 2010; laws that have been impacted by ongoing legislative processes; laws pertaining to the devolution of powers to counties that were created in 2010 and laws on various aspects of their functions; laws of relevance to Kenya as a member of the East African Community; the Kenya Gazette, which also includes an archive dating back to the colonial era and the cause lists of various courts and tribunals, among others.⁴² It is also possible for one to view live legislative proceedings online on the official website of the National Assembly of the Republic of Kenya. Recordings of each plenary session are thereafter uploaded to YouTube and are indexed next to their respective PDF Hansard copies on the Assembly's website. Also included are copies of statutory documents dating back to 2013, as well as Auditor General Reports and annual reports on various sessions of the National Assembly.⁴³ The latter two date back to just 2019, and it is not clear whether there will be an effort to expand these and other collections into the past, especially since at present, there is no provision for them on the NCLR website. It would be particularly helpful to have a complete database of the Auditor General's Reports online.

The Kenya National Archives and Documentation Services (KNADS) also launched an effort to digitize its holdings in the noughties. KNADS considered the exercise vital in enabling it to capture the information in records that were deteriorating due to high usage, among other issues.⁴⁴ For instance, a 2008 baseline survey of about 1.2 million records from what was once the Coast Province showed that up to 30 percent of them were in a fragile state and required specialized handling and equipment during digitization to avoid further deterioration.⁴⁵ The plan was to digitize hundreds of

⁴¹ National Council for Law Reporting (NCLR), Landing page, http://kenyalaw.org/kl/index.php?id=852, (accessed 18 June 2021).

⁴² NCLR, Landing page. http://kenyalaw.org/kl/index.php?id=852, (accessed 18 June 2021).

⁴³ National Assembly of the Republic of Kenya website, http://www.parliament. go.ke/, (accessed 15 June 2021).

⁴⁴ Ben Namande, "Digitization of Archival Records: The Kenya National Archives and Documentation Service Experience" (Second International Conference on African Digital Libraries and Archives, 2011), 5.

⁴⁵ Namande, "Digitization of Archival Records," 5.

millions of records, but the process has faced various challenges due to financial and human capital limitations.⁴⁶ In addition, copyright issues have also complicated the online display of the digitized documents, which is the step that is needed to make the archives accessible to the public in an unprecedented way.⁴⁷ Historians can only hope that KNADS will have the resources to safeguard that which it has digitized from technological obsolescence. The latter issue alone underscores the importance of having adequate government investment in the proper conservation of original hardcopy documents from the past.⁴⁸

The Kenyan judiciary also considers the digitization of its systems as a key step in its continued efforts at judicial reform to enhance transparency, accountability, and efficiency, particularly since the promulgation of a new constitution for the country in 2010. Once a new Chief Justice was in place (Willy Munyoki Mutunga), he launched the Judiciary Transformation Framework (JTF), 2012–2016, which was geared towards rejuvenating the judiciary by expanding its physical infrastructure throughout the country, as well as its human resources, with a view to making the judiciary more accessible to Kenyans and strengthening its capacity to function with efficiency.⁴⁹ Next, the judiciary launched a second program, Sustaining Judiciary Transformation (SJT): A Service Delivery Agenda to "shift focus away from institutional building and capacity enhancement to enhancing service delivery" that had greatly enhanced the judiciary's robustness in a physical sense to a new objective. Officials argue that "the real transformation of the Judiciary will only be achieved if the citizen experiences a qualitative difference in the services we offer them."50 SJT considers the digitization of the judiciary as one of its six pillars to further the eradication of problems that have bedeviled its functions over the years. The result of such challenges resulted in delayed justice for Kenyans and created loopholes, which the corrupt exploited as a consequence of inefficiencies that became ingrained in the institution. The judiciary was further hobbled by a lack of transparency and accountability to the public it was supposed to serve, and digitization is considered indispensable to righting the judiciary's ship. S/T's digital strategies are divided into five categories of implementation, many of which were already well underway by 2021 and each of which represents a major increase in digital data:

⁴⁶ Namande, "Digitization of Archival Records," 1, 8–9.

⁴⁷ Namande, "Digitization of Archival Records," 9.

⁴⁸ See, for example, Helge Kleifeld, "Digitization as Part of Traditional Conservation: Options of Digitization, Microfilming and Mass Conservation in Workflow," *ESARBICA Journal* 29 (2010), 272–278.

⁴⁹ The Judiciary, Republic of Kenya. *Sustaining Judiciary Transformation (SJT): A Service Delivery Agenda, 2017–2021* (Nairobi: Jomo Kenyatta Foundation, 2017), 3, http://kenyalaw.org/kl/fileadmin/pdfdownloads/Strategic_BluePrint.pdf, (accessed 18 May 2022).

⁵⁰ The Judiciary, *SJT*, 4.

- a) **Judicial Operations Support Systems:** These include registry management, case management, calendaring, and citizen-centric communications. Everything outside the courtroom that supports the delivery of justice is subsumed under this country. (This category also includes the installation of a new secure email system by February 2017.)⁵¹
- b) **Court Management Systems:** This category includes all the in-court systems that support the determining of cases and includes stenography and transcription, legal references and searches, note taking support and document composition, security and distribution.
- c) **Enterprise Resource Planning:** All administrative capabilities including financial management, asset management, facility management, human resource management and the common corporate support systems come under this category.
- d) **Document and Archive Management:** Digitization, archiving, curation, publication and distribution of extant legal documents are managed in this category.
- e) **ICT Infrastructure:** Supporting ICT infrastructure such as networks, internet access, security and disaster recovery capabilities are included in this category.⁵²

With these measures in place, not only would the judiciary's bureaucratic structure function with greater efficiency but ICT would enable it to engage the public in an open and optimal manner. The changes would enable the judiciary to function efficiently in the present even as it continued to deal with preexisting problems such as the tracking and eradication of a backlog of cases that had accumulated in the period leading to 2010. Similarly, the Executive and the Legislature have all moved to digitize their functions in line with the government's broader ICT policies. All these measures mean ever greater quantities of digital data are generated daily in the form of emails, state websites, and cloud data. But to what extent is the government thinking about and investing in the preservation of born digital records that will be of importance to historians, journalists, and ordinary citizens, among others, who are looking to hold the government accountable for its policies over time or to research various aspects of the past? To what extent has the judiciary and the other arms of government actually implemented document and archive management processes that will secure relevant data for future researchers, policy makers, and for national heritage purposes in general? Is it keeping pace with the principles of archival theories that advocate the integrated development of the digitization of government operations, records, and archival management?

The Absence of Government Protocols for the Preservation of Born Digital Data and Implications for National Heritage and Archival Research

One of the earliest documents outlining state policy on digital records management was published by the Ministry of State for National Heritage

- ⁵¹ The Judiciary, SJT, 46.
- ⁵² The Judiciary, *SJT*, 46.

and Culture in 2009. The ministry devoted a small segment of this document to electronic records management, particularly prior to their delivery to the national archives. Among its key provisions was a statement noting that it was essential for public officials "at all levels" to be equipped with the knowledge and training necessary to develop the capacity to manage electronic records.⁵³ This would presumably be the role of the government and would have to not only include staff of the KNADS but also start with them so that this body would be well prepared to set standards and offer guidance for the rest of the government, as is the case in various developed countries. This approach, if implemented, would have brought the government's electronic records policies in line with "whole-process management" in archival thought and practice. The ministerial document also expressed concern that "practical strategies are taken for the long-term preservation of electronic records in view of technological obsolescence," which was an important point given the cost implications of doing so for a developing country.⁵⁴

A review of electronic records preservation between 2000 and 2011 revealed just how much ground there was to be covered and the level of government organization, financial, and legislative support that would be necessary to bring the objectives outlined in the 2009 policy paper to fruition. The International Records Management Trust (IRMT), a UK charity, conducted a review of the five countries that constituted the East African Community (EAC) at that time, including Kenya. Their review "found that records management issues are not being addressed in relation to the ICT/e-Government and Freedom of Information initiatives that are being planned and implemented within the region, and that this situation placed these initiatives at risk."55 The situation in other EAC countries was also negative and, in all instances, even worse.⁵⁶ With regards to Kenya, the IRMT found that while KNADS was constitutionally charged with managing state records, "its lack of skills and expertise in electronic records management means that it is not recognized as having a role in managing electronic records, and other agencies are being assigned responsibilities for managing current paper and electronic records." Not surprisingly, therefore, although the process of drafting a Freedom of Information (FOI) bill was ongoing in 2007 (later Access to Information Act of 2016) and the country's new 2010 constitution gave Kenyan citizens the right to access state information, the state, generally, had

⁵³ Republic of Kenya, "National Policy on Records Management: Draft" (Nairobi: Ministry of State for National Heritage and Culture, 2009), 5–6, https://www.archives.go.ke/, (accessed 12 July 2019).

⁵⁴ Republic of Kenya. "National Policy on Records Management," 6.

⁵⁵ IRMT, Preamble to country reports, https://www.irmt.org/portfolio/ managing-records-reliable-evidence-ict-e-government-freedom-information-east-africa-2010-%e2%80%93-2011, (accessed 10 June 2021).

⁵⁶ IRMT, Preamble. This is also demonstrated in the individual IRMT country reports of each EAC country on the website.

made little progress towards developing well-harmonized and efficient records management systems for its born digital records.⁵⁷ The state had set up a number of bodies to formulate government-related policies on ICT and e-government. These included a cabinet committee in charge of Kenya's e-government strategy; a permanent secretaries committee that the head of public service led charged with implementing e-government policies; a Directorate of e-government also under the head of public service that served as the e-government's technical steering team; and the Communications Commission of Kenya, which is the chief regulator of the country's communications sector.⁵⁸ However, these bodies did not operate under the guidance and consultation of KNADS, and it is doubtful that the latter would have been able to inform and impact their activities in a robust manner even if it did given its own resource challenges. In addition, although the Kenya Communications (Amendment) Act, 2009 legally recognized electronic records and focused largely on the capacity of such records to greatly enhance commercial activity, "it does not stipulate requirements for capturing and managing authentic and reliable electronic records."59 Moreover, the government's attention appeared to have been focused on the digitization of paper records to enhance e-government, that is, to "increase the number of processes and transactions carried out on-line for increased efficiency of government offices," as was to be later reflected in the government's national ICT policy years later.⁶⁰ E-record processing generally appears to be a fleeting, second thought in many government circles, and the resulting neglect compounds the problem of the accumulation of, and possibly constant and unrelenting losses of, a large number of born digital records.

A few years later, a new government body made an effort to address the ever-widening gap between e-record generation and their preservation, but its policy papers mostly demonstrate the stasis that had set in with regards to e-records, resulting in a repetitive cycle of contradictory policies and a lack of action. In 2013, the government established the Information and Communication Technology Authority (ICTA) as a state corporation nestled within the Ministry of Information, Communications, and Technology. It is charged with "enforcing ICT standards in Government and enhancing the supervision of its electronic communication."⁶¹ All ministries, county administrative bodies, and

⁵⁷ IRMT, "Managing Records as Reliable Evidence for ICT/e-Government and Freedom of Information: Kenya Country Report," 2–13.

⁵⁸ IRMT, "Managing Records," 4–5.

⁵⁹ IRMT, "Managing Records," 5.

⁶⁰ IRMT, "Managing Records," 5. The ICT policy to which I am referring is that of 2019, referred to and referenced above (The Ministry of ICT's National ICT Policy).

⁶¹ ICTA, "About the ICT Authority," https://icta.go.ke/who-we-are/, (accessed 23 April 2021).

government agencies (MCAs) are supposed to adhere to these standards. It also has a mandate to "promote ICT literacy, capacity, innovation and enterprise," which makes it a key body in the planning and implementation of the government's ICT policies.⁶² In line with these objectives, the ICTA developed the Kenya Government's enterprise architecture.⁶³ The key principle for this enterprise architecture is "information is a national asset" and securing Kenyan citizens' access to it is "necessary to our democracy."⁶⁴ It also ensures that decision-makers have the information they need to work efficiently and effectively. Nevertheless, the ICTA does not appear to have had the convening power and resources to bring together key stakeholders to the table, including KNADS, for the formulation and implementation of a comprehensive e-records management plan.

One of the tasks the ICTA undertook was the publication of the government's ICT standards for electronic records management, but it seems that the KNADS was not involved in the exercise nor had it developed the capacity to process electronic records. The government's ERMS is intended to cover various forms of e-data including email as well as still and moving images.65 However, an examination of the ERMS makes it evident that by 2019 the Kenya Government was yet to come up with a system to process electronic records, as the ERMS' introduction states that "Government of Kenya public agencies will need to deploy e-records management systems to manage the vast amount of e-records that are being generated."66 This is a statement of an urgent need, an aspiration expressed as a demand, and an indicator of the urgency with which a system needs to be put in place to prevent what will be a massive and irreversible loss of data. The reader is informed that Ministries. Counties, State Departments and Agencies (MCDAs) "shall establish a Records Management Committee" and that these bodies "shall maintain an electronic records management policy," but there is no mention of the human and financial resources that would be necessary to set up and operate these systems in all of the country's 47 counties.⁶⁷ Besides, the ERMS delegates the responsibility of outlining the roles and functions of records management staff to MCDAs when, in fact, it would be better for a well-trained and well-resourced national body (KNADS) to set standards for the entire country for purposes of maintaining countrywide uniformity. It generally appears that KNADS personnel did not even participate in the drafting of the standards, as there is not even

⁶² ICTA, "About the ICT Authority."

⁶³ ICTA, Government ICT Standards: Government Enterprise Architecture (Nairobi, ICTA: 2016), https://cms.icta.go.ke//sites/default/files/2022-02/General-guiding-principles-1-1.pdf, (accessed 18 May 2022).

⁶⁴ ICTA, Government ICT Standards, 26.

⁶⁵ ICTA, Government ICT Standards: Electronic Records Management Standard (Nairobi, ICTA: 2019), 6, https://www.icta.go.ke/, (accessed 23 April 2021).

⁶⁶ ICTA, *Electronic Records Management Standard*, 6. Italics are mine.

⁶⁷ ICTA, Electronic Records Management Standard, 12.

a consensus on a fundamental issue such as the model that ought to be followed in the government's e-records management system. The government's enterprise architecture loosely recommends the life cycle model or "applicable standard."⁶⁸ This view finds corroboration in a 2019 Kenyan study by Belator Dinah et al., which found that not only was there no agreement among archival personnel as to whether there was a policy on the management of e-records but also that a majority agreed that there was no ongoing implementation of e-records management. They also raised concerns about inadequate training and financial resources in general.⁶⁹ The picture that emerges, therefore, is of a country where e-records policy has not moved much beyond design for decades.

Where Do We Go From Here?

Where can the search for solutions to the present problems begin? What role can historians play? It follows that ending the repetitive cycle of uncoordinated e-records policymaking, coupled with a lack of implementation, must begin with a recognition of the central role that KNADS must play in the process and an injection of considerable resources into the body to enable it to play its leadership role in these functions. KNADS currently provides a small pool of the best-trained and most experienced professionals in archival sciences. However, they do need adequate funding to support the upgrading of their training in matters pertaining to the preservation of digital records, as well as to increase the pool of well-trained personnel in the country to ensure that there are adequate numbers of archivists with up-to-date knowledge and skills to steer preservation of digital records in all 47 counties of the country. Most recently, the International Council on Archives (ICA) organized fourday training sessions on the curation of digital records in Gaborone, Botswana (August 2019), and Dakar, Senegal (September 2019), for a couple of archivists in anglophone and francophone African countries, respectively (Kenya is a member).⁷⁰ This sort of initiative is a step in the right direction, but the need for their expansion and intensification is clear. At the September 2019 Eastern and Southern Africa Branch of the ICA (ESARBICA) conference held in Botswana in the same year, it was clear that

⁶⁸ ICTA, Government Enterprise Architecture, 39.

⁶⁹ Belator Dinah, Naomi Mwai, Jotham Wasike, and Cyprian Watemo, "Assessment of Electronic Records Management Readiness at the Kenya National Archives and Documentation Services (KNADS), Nairobi, Kenya," *European Journal of Research and Reflection in Management Sciences* 7–4 (2019), 77–79. See also Shadrack Katuu, "The Development of Archives and Records Management Education and Training in Africa: Challenges and Opportunities," *Archives and Manuscripts* 43–2 (2015), 96–119.

⁷⁰ ICA, "Digital Records Curation Programme (DRCP) – Study School for Archival Educators, Africa Programme," https://www.ica.org/en/digital-records-curation-programme-drcp-study-school-for-archival-educators-0, (accessed on 13 June 2021).

training remained a major concern for archivists in member countries.⁷¹ Also dominant were concerns that the governments of ESARBICA member countries had failed to acknowledge the role of national archives and consequently side-lined national archives in discussions on e-government and the preservation of digital records, which has been the case for KNADS.⁷² As such, it is imperative that training be accompanied by an acknowledgement of the central role that a well-resourced KNADS must play in these discussions in future.

At this point in time, it is clear that even archival institutions in developed countries are still experimenting with the best approaches and tools to employ in the race to find the most optimal means of processing and preserving born digital records.73 These experiments have resulted in the creation of various protocols to manage the processing of records from the government agency level to their accession to national archives. The United States' National Archives and Records Administration, for example, came up with the Capstone Approach in 2013 as a way of determining which emails to preserve as a consequence of "the difficulty in practicing traditional records management on the overwhelming volume of email that [f]ederal agencies produce."74 The approach recommends the preservation of email accounts of all agency employees in decision-making roles and those who report to them in their entirety on a permanent basis. The accounts of other employees are considered temporary and subject to preservation periods, as dictated by the needs of a particular agency.⁷⁵ The method does have its shortcomings – for instance, the amount of care that must go into the designation of accounts for permanent preservation. Nevertheless, it represents an ongoing effort to ensure that there are protocols in place to see that email records do not disappear in their entirety without any effort at preservation. The race to find ways of processing vast amounts of email have also led to the creation of software for "capturing email in native format" such as MBOX or EML as well as pre-appraisal tools such as ePADD, BitCurator, and FTK (Forensic

⁷¹ ESARBICA, Session on Resolutions at the Eastern and Southern Africa Regional Branch of the International Council on Archives, Gaborone, Botswana, September 2019, https://en-gb.facebook.com/431798613573306/videos/ 969242846747602/?__so__=permalink&_rv_=related_videos, (accessed 15 June 2021).

⁷² ESARBICA, Session on Resolutions at the Eastern and Southern Africa Regional Branch of the International Council on Archives (September 2019).

⁷³ J. Schneider et al., "Appraising, processing and providing access to email in contemporary literary archives," *Archives and Manuscripts* 47–3 (2019), 305–306; and CLIR, "The Future of Email Archives," 2018.

⁷⁴ NARA, Email Management, Bulletin 2013–02, 29 August 2013, 1–2, https://www.archives.gov/records-mgmt/bulletins/2013/2013-02.html, (accessed on 13 June 2021). See also CLIR, "The Future of Email Archives," 11.

⁷⁵ NARA, Email Management, Bulletin 2013–02 (29 August 2013), 1–2. https://www.archives.gov/records-mgmt/bulletins/2013/2013-02.html, (accessed on 13 June 2021). Toolkit). The latter enable archivists to screen email collections for content that needs to be withheld for sensitive content or restricted material.⁷⁶ These software applications are not perfect and are constantly evolving, but more archivists from African countries need to be in a position to engage these technologies. This would enable them to determine how the tools and the overall approaches to preservation can best be adapted to suit the needs and circumstances of developing countries where state priorities may differ and vital resources, both technical and financial, are bound to be in shorter supply.

National archives in developing countries such as Kenya face resource concerns that are heightened by the modest sizes of their economies. Electricity is costly in Kenya, and digital archives, the servers, and cooling mechanisms that keep them functioning will raise the expenses of KNADS considerably.⁷⁷ Power supply must also be steady.⁷⁸ In addition, adequate resources on a recurrent basis will be necessary to ensure that the systems in which digital records are stored do not fall into technological obsolescence. There is therefore a need for consistent and committed government support on a considerable scale to ensure that KNADS is in a position to not only manage the records it has digitized from the era before the internet but also to oversee and manage the processes necessary for the preservation of born digital records.

Lastly, historians and archivists in Kenya and other developing countries need to come together to strategize and advocate for a more concerted governmental support for the preservation of born digital records.⁷⁹ At the moment, it appears that archivists are operating on their own where these issues are concerned, and we historians of East Africa, whether it be through various departments of history in institutions of higher education or historical associations, have been largely silent. While the passage of FOI laws and the increased digitization of government records in various arms of government represent critical strides forward for scholars of Kenya, the yawning gap

⁷⁶ CLIR, "The Future of Email Archives," 11 and 16.

⁷⁷ See, for example, Susan Nyawira, "Kenya's Electricity Cost Fourth Highest in Africa," *The Star*, 27 October 2021, https://www.the-star.co.ke/business/kenya/2021-10-27-kenyas-electricity-cost-fourth-highest-in-africa-study-shows/, (accessed on 3 March 2022).

⁷⁸ Namande, "Digitization of Archival Records," 8–10.

⁷⁹ See, for example, American Historical Association (AHA), "Actions by the AHA," in *Perspectives on History* 59–2 (2021), 32. The AHA joined the National Security Archive, the Society for Historians of American Foreign Relations, and the Citizens for Responsibility and Ethics in Washington "as plaintiffs in a lawsuit intended to prevent valuable presidential records from being irretrievably lost. The plaintiffs seek to ensure that the current administration and the National Archives and Records Administration (NARA) comply with the charge of the Presidential Records Act to preserve 'complete copies' of presidential records including relevant metadata and digital materials."

that exists vis-à-vis the preservation of email, cloud-based data, government websites, and so on should be of great concern to them. As CLIR cautions, with regard to email and other types of digital data, the elephantine volumes produced on a daily basis require human action for preservation of information that appears to be transient.⁸⁰ Not only are there considerable difficulties in determining what merits preservation in this era, but also "archivists and historians know only too well that large parts of our past are gone because no witness kept a record or because someone else did not want them to."81 Where even the most basic protocols and processes for preservation are absent, the situation is dire. Historians of Kenya should receive University of Botswana information sciences professor Nathan Mnajama's anguish at the lack of any substantive effort to preserve born digital records in ESAR-BICA member states as a call to urgent action. At the 2019 conference in Gaborone, Botswana, a number of archivists called for ESARBICA to lobby their governments on their behalf on various issues especially since "national archives ... are undermined."82 That is one possible approach, but historians and archivists have common cause here - and uniting can add critical mass to voices for what must be a monumental shift in the manner in which the government is approaching records management and archiving.

Conclusion

Technology has certainly made a lot of material more easily accessible to historians of Kenya, but it also threatens to limit what is available to them for research in the future if a way is not found to preserve records of the present. So many historians who have walked into an archive; scrolled through paper and digitized indices with anticipation; buried themselves in file after file as they disappeared into eras gone past; and even emerged with a serendipitous discovery that sent them scurrying excitedly in new directions, instinctively understand what will be lost if records management and archiving fails to keep up with the expansion of ICT in government. And yet, not many historians are operating in dialogue with our colleagues in the information sciences. In countries where state commitment to the preservation of records and archives is wanting, the need for such collaboration is even greater, as confronting a problem of this magnitude requires a concerted effort. This is even more so given the scale of resource challenges in ESARBICA countries and other developing countries. Strategies and unique solutions will need to be developed in response to these resource gaps and the sooner governments

⁸⁰ CLIR, "The Future of Email Archives," 7.

⁸¹ CLIR, "The Future of Email Archives," 7.

⁸² ESARBICA, Session on Resolutions at the Eastern and Southern Africa Regional Branch of the International Council on Archives, Gaborone, Botswana, September 2019. and all stakeholders get down to dissecting the nuances of the challenge at hand the better.

In conclusion, while this paper has focused on government records, it is still not lost to me that the "Digital Dark Age" has engulfed every aspect of our daily lives.⁸³ Not only are specialists grappling with the question of how to best process digital archives, but a lot of private, born digital information is not being preserved at all.⁸⁴ There are a lot of textual, audio, audio-visual, and visual records floating about in private email accounts, cloud storage spaces, smart phones, blogs, social media accounts, and so on, many of which will not be preserved. "Every year, it becomes just a bit less likely that someone will stumble across a file cabinet of important memos or a shoe box of revealing letters," as more and more of our lives migrate to digital platforms.⁸⁵ How to address records management in private spaces and private lives is a far more complicated question than that tackled in this article. Governments are held to legal standards that do not apply to individuals operating in a private capacity. Consequently, it is far easier for public sector leadership to develop state-wide policies for records management and archiving. But here, too, historians could play a role in working with information scientists who are encouraging various community archiving initiatives; lobby governments to launch initiatives to promote the preservation of personal records whether in digital form or transcribed oral records; use their associations to promote public history campaigns that encourage people to process and maintain some of their digital records in hardcopy formats such as photobooks; and so on.

The lack of preservation of born digital records is "the elephant in the room" – not only of governments such as Kenya but also of each and every historian's study and office. While we celebrate the ease with which we can conduct research on digitized records, let us remember that there are vast amounts of born digital records that are passing by without capture.

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⁸³ Francis Blouin, Jr., "Email as Archives: You Have to Have it Before You Worry About It," *Columbia Journal of Law the Arts* 34–1 (2010), 43–48.

⁸⁴ Blouin Jr., "Email as Archives," 43–48.

⁸⁵ CLIR, "The Future of Email Archives," 4.

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