

DIGITAL ARCHIVING OF UNCOLLECTED AFRICAN HISTORICAL SOURCES: AN IMPERATIVE INNOVATION

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Abstract

The place for primary sources for historical sciences is sacrosanct. Africa, African History and Historians need to search for the unadulterated primary sources and save them from impending extinction. The current rapid loss of irreplaceable documents among African societies put in limbo the re-writing of authentic African history. By and large, the larger African population is at a crossroads from overreliance on oral historical heritage to written literature. The written documents containing African history are expediently documentable, easily preservable and constantly verifiable. Satirically, the global north, racing miles ahead, is speedily shifting from physical to digital preservation of archival materials to evade the risk of invariable obliteration. African archival practices have experienced deficiencies ranging from poor preservation to privation of historical intuition on the invaluableness of historical documents. Urgent digital intervention is not a choice lest history sinks into oblivion. Digital archiving of uncollected African historical resources is one of the most secure ways to immortalize the sources thus furnishing history with a future. This academic corpus seeks to appraise the purpose, nature, methods and practical approaches for the collection, preservation and rendering of uncollected historical documents available for researchers and educators on a digital platform with universal accessibility.

Keywords: Archives, digital archives, historical research, African history, repository, written documents, records, and historical sources.

Introduction

According to *Data Reportal*, a total of 5.18 billion people, which translates to 64.6 per cent of the total world population, were able to access the internet by the second quarter of the year 2023. According to International Telecommunication Union, internet usage has surged from one billion people in 2005 to 5 billion in 2023. These statistics confirm that the world is exponentially becoming technologically connected. If all factors remain constant, the world shall not resist becoming technologically dependent. Additionally, the statistics

inspire confidence that the internet is the infrastructure to chase after while internet-based services have seized the future. Online absence shall virtually be the same as absence from humanity. Regrettably, the African continent trails behind in the access and usage of the internet. In fact, according to *the International Finance Corporation-World Bank Group*, only 22 per cent of Africans have access to internet connections. It is worth noting that, despite having the lowest percentage, Africa has had the fastest growth in regional connectivity and the future can only get brighter. Verily, the advent of satellite internet rescues hinterlands from isolation.

Given that the internet infrastructure has reached out to over two-thirds of the world's population, the time has also dawned for the world to invest in its utilization in all spheres of human life. This academic corpus seeks to explore ways and means that can be employed to initiate, promote and sustain the digitization of archival materials for research and other noble purposes. Digitization is the process by which analogue content is converted into a sequence of 1s (ones) and 0s (zeros) and put into a binary code to be readable by a computer (Hughes, 2004). Digital documents created by converting documents originally in analogue media are often described as born analogue or reborn original. Digital documents created in electronic form are described as born-digital (R. P. Moses, 2005). In a nutshell, digitisation is the transformation of analogue information from any form and support to digital code using technological appliances. Digital archives are collections of numerical data, texts, images, maps, videos, and audio files that are available through the Internet. An archival information resource is a retrospective resource. Its essential attributes are originality and recordability.

Heidi Abbey notes that Archivists have long been progressive stewards of our society's cultural and intellectual heritage. He continues to argue that the Archivists as curators of artefacts, ephemera, manuscripts, records, and digital assets in various formats, are deeply rooted in the theory and practice of preservation and care for the long-term needs of primary resources in their custody (Heidi, 91). The Archivists of all times, therefore, have a noble mission rightly placed on their hands to up their game on environmental stewardship.

In the global north countries, physical materials are gradually giving way to electronic print and online public access catalogues (OPAC) hence obliterating the need for users to physically visit the library or archival buildings to access their collections (Asogwa, 2011). Exploratory studies within Africa confirm that the Continent is already predisposed to tread on the same path as technology diffuses into the interior and hinterlands. Despite the African unique reality, the digital culture is a global language that none would wish to remain dumb.

In the African context, B. Amollo observes that digitization is a topic that is on the agenda of most forums for librarians and archivists, as a tool for enhancing the capture, dissemination, retrieval, storage and preservation of information (Amollo, 2011). Africa is

at crossroads as it migrates from oral literature into literacy. The latter requires materials that may contain the history of people, things and places to be collected and preserved for consultation. In the yester centuries, oral narratives transmitted and conveyed the histories with a degree of success. Without prejudice to the dynamism of raw human memory in Africa, such methods are not only getting outdated but also, their demerits are too costly to ignore especially as pertains to the loss of irrecoverable materials or information. To guard our history from oblivion, the acquisition and preservation of archival materials need to be given ruminative attention and more importantly, the digitization process should be embraced as a categorical imperative.

African Traditional Archival Methods and Evolution from Oral Literature to Literate Literature

It is undeniably true that enormous quantities of historical materials remain uncollected within Africa. Prof. Mazrui poses to wonder and argues; why was the archival tradition weak in Africa? Firstly because most indigenous African cultures refuse to regard the past as a bygone or the present as transient. The ancestors are still with us and we will be ancestors. If the present is not transient why bother to record it? (Mazrui, 1985). He implied that the reality of transiency and our nature as mere mortals can easily escape our attention and run business with faux confidence at the expense of the history of man. In his originality, the African man needs to record his story and preserve historical documents as well as tap oral information received from the natural custodians and convert it into digital forms. In addition, the widespread documentary deficit within Africa due to the late assumption of Western methods of literacy has been partially occasioned by being oblivious to the uniqueness of African history. Since not all the traditional methods are contemporarily tenable, spirited efforts are necessary to salvage whatever little or much that has survived and jealously preserve it as a cultural heritage.

Bisschoff attests that digitization has the potential to new kind of relationship between place and time (Bisschoff, 2017). When applied in the development of history, digitization evolves as the new link between today's man and the past man, today's culture and yesterday's one, today's understanding and the mindset of the men and women who lived before. Moreover, as the world moves towards the actualization of a borderless world, the digitization of histories shall render a generous opportunity for man to adore his common thread. As the contemporary generation adjusts to the beauty of the digital world, the history of man shall not be left behind.

Brendan Asogwa confirms that information emanating from governments, institutions, organizations, scholars as well as private individuals, is increasingly appearing online and being demanded electronically consequently creating a new environment that challenges libraries and the archival profession (Asogwa, 2011). It is time for the paper-archival practices to evolve into digitization or resign to the fate of obsolescence. Paperwork that

happens to be electronically generated should overpass the printing phase and directly move into a digital file and later mature into an archival record. Besides time-saving, the resources spared by sidestepping the handling of physical papers are enormous. If the same resources would be channeled to digitization for archival purposes, then the evolution would also qualify as a profitable venture.

Biographical writings have gained popularity not only within Africa but globally. As genres of reflective narratives, they provide insights into the magnitude of available historical documents that are preserved, or worse, jumbled up within private homes and offices. Grateful that the biographies provide secondary sources of information within private archives, it is uncertain whether, after the demise of the biographers, their families shall attach any value to such historical materials or they shall face extinction. The digitization process shall thus become the rescuer of records otherwise marked for ruination.

Decay and Involuntary Destruction of Unpreserved Historical Materials

All over the world, persons of public stature, at a particular moment of their lives, nobly commit themselves to the publication of biographies. These publications come with superabundant information that baffles many given their originality, context and influence. By and large, the contents of their publications reveal that they hold into their private use thousands of records, documents and archival materials. These sources could be reserved in their family archives, offices, and other places that are inaccessible to the public. Of concern is the fact that such documents may be lost upon the demise or descension of such personalities from places of societal influence. Strategic digital archiving should therefore be embraced as a necessary and archival indemnity.

Technical knowledge is not common sense since it presupposes an explicit process of cognition. Innumerable primary historical sources have been condemned to extinction as victims of ignorance since not all and sundry have the aptitude to apprehend materials of historical importance from otherwise. Where such requisite knowledge is absent, annihilation happens through dumping, discarding, committing to fire, and the reuse of physical copies for other incongruent needs, among others.

A person devoid of historical intuition can easily think of any printed material lying in a heap as good and ready for destruction unless there is a spirited effort for supererogation. Such involuntary destruction of primary sources has cost humanity an unimaginable information deficit. Digital archiving of historical materials shall help not a little in the reduction of such irrecoverable destructions. Furthermore, more than imaginable, a huge percentage of precious historical records undergo natural decomposition without notice. Such happens when records are heaped into certain locations without sustained vigilance. Others are escorted into oblivion by natural disasters such as fire, landslides, hurricanes, floods and other catastrophes.

Digital Archiving

Digital preservation is defined as long-term, error-free storage of digital information, with means for retrieval and interpretation for the entire time span the information is required (Osedo, 2013). There are all indications that in future, all records shall be exclusively digital and their storage shall demand a digital preservation. Electronic records and the born-digital (digital records) appear to be the language of the future. Already, today more than ever before, the majority of techno-savvy persons prefer digitally transmitted documents to physical records. Given that history is the storyteller of all generations, it would be an agonizing kick in the teeth if the primary historical sources do not make it into the digital world. The day has dawned for record experts to prepare and trek the path of digitization since the era of virtual archives is as unstoppable as the wind.

Prof. Ali Mazrui describes Archives as a cultural preoccupation of keeping records, a tradition of capturing the past through preserved documentation (Mazrui, 1985). His description denotes archival preoccupation as a cultural undertaking and since no human can exist devoid of a culture, then archiving is indispensable for man. Some cultures have made giant strides in embracing technological archival science from digitization to green archives. While there have been laudable efforts on erecting eco-friendly structures and practices, digital archiving, which is a sublime achievement, is yet to become the much-desired paradigm shift. However, it is worth noting that every innovation comes with its share of obstacles and hurdles. It is not unsurprisingly to note that, U.K. National Archives, as of now, has only managed to digitize approximately 5 per cent of its collection.

The establishment of digital archives favours the improvement of efficiency, modernization of archives, ascertaining permanent storage of digital archives, improving security, promoting the expansion of public archive service capacity and realizing the social sharing of archive information resources. Established archives are better placed to continue scanning and uploading their relevant archival materials and thus rendering them borderless available to researchers and learners. Each digitized item shall have to be catalogued and arranged in a vast online cataloguing system. In the case of fragile records, the digitization, above making them digitally alive, also imparts a preservation quality thus increasing their lifespan.

The order, integrity, readability, and security of the material contained in the archives must be improved, which necessitates making full use of database technology to rationally arrange and handle the resources (Antonacopoulos & Karatzas, 2017). Xiao underscores that any system security of digital archives should mainly include three aspects: information content security, system security, and network security (Xianghua Xiao, 2022). These are highly recommended and plausible cautions that aim at insulating digital archives from malicious intruders. In an absolute sense, documents are sacrosanct and therefore deserve

elaborate protection. While cyber security is not inexpensive, the cost of repairing the damage emanating from negligence is non-proportional.

It remains an uphill task for Archivists to discern and determine what materials qualify for digitization and which among them should enjoy priority. Some materials, though archived, may have lost their historical or cultural significance. Given the arduous nature of digitization work, such materials may be condemned to oblivion to offer chances to those that are extremely pertinent and can potentially fill in an existing knowledge gap.

Providentially, the technology has developed archival software or Enterprise Information Archiving (EIA) systems that have become propitious in promoting archival technology. There exists a significant dissimilarity between archiving software and backup software. The latter deals solely with original historical data while the latter duplicates files and data from one system to another with the aim of swift restoration in case of foundering. The archival software is the game-changer tool for records and files that carry the histories of the people.

Authenticity and genuine information happen to be the efficacious factors that beget true and reliable research conclusions that are meant to fill the ascertained knowledge gap. Digitizers are implored *ex abundatia cautela* to critically examine the credibility of every source before approving the uploading processes with both scrupulosity and fastidiousness. In instances of suspected documentary inauthenticity and there exist no immediate solutions for ascertainment, such a source may be uploaded with a terse-worded disclaimer. Such a precaution alerts any researcher of the grey areas that come along with the particular document. If authenticity is established at a later date, the disclaimer should be pulled down.

The commanding majority of African countries underwent the colonial epoch in the 20th century. Given that the colonizers descended from countries with archival civilization, they committed a sizeable amount of their time and resources to the collection of African historical patrimony. The good news is that a vast majority of such items and documents are safely preserved and the sad news is that they are largely inaccessible to the bona fide proprietors. Since they are preserved in archives and museums spatially away from the African populace, then their expected service to the continent has been minimal hence objectionable. It, therefore, becomes imperative for the African governments to swiftly begin the process and procedures for repatriation. In the previous decades, a clarion call for repatriation would not have been feasible given the infrastructural developments needed to host the retrieved documents. With the era of digitization, then the exigency can be justified given that the fear of repatriation for disintegration shall be dissipated.

Merits and Demerits of Digital Archiving

The environmentally friendly revolution earnestly calls for sustainable paperless practices in all branches of science and liberal arts. Archival science, which largely deals with paperwork, cannot be exempt. It is certainly a herculean task given that over 99% of admissible archival materials survive on paper. Remarkably, the library and museum sciences have made giant strides towards establishing and sustaining green practices by going digital. Archival science, understandably though, is swiftly keeping the pace given the onerous work that has to be done to turn green and rightfully assume the title of an eco-friendly science.

In the 1960's, the reality of *global village* as understood by M. MacLuhan, sounded like a far-fetched technological achievement. Today, the world is more closely knit than ever imagined. Branches of knowledge too should imperatively make learning become an essential element of what constitutes a stable global village. Archival science too, through digitization, shall be an added building block in the realization of a global village. Practically it means that historians, scholars, researchers and interested persons shall be able to access digitized archival materials from their geographical comfort zones and with convenience. Besides the comfort, the accessibility shall also immensely contribute towards the promotion of research hence the growth of knowledge for humanity. One of the greater goods for digitized archives can be attributed to the convenient accessibility that comes without border straitjacketing.

Affordability in a research project is a factor that affects the exercise and the outcome. Researchers with meagre resources end up limiting themselves to secondary sources in places where obtaining primary sources costs a fortune. It is imaginable why a poorly funded researcher, who needs to travel miles away to obtain primary sources yet cannot afford the costs, settles to consult and work with secondary sources. In such cases, where research ethics are shrugged off, the researcher falls into the temptation of overreliance on secondary sources or at worst, tailoring of information. While the ephemerality of such academic dishonesty is certain, the harm caused by providing incorrect information can only be graver. The alternative for honest researchers has always been to abandon otherwise precious research or resign to the employment of secondary sources thus compromising the quality of research. The digitized archives provide solace for deprived researchers as well as enable well-funded researchers to double or triple the magnitude of their work if not adding quality to their research findings.

Digitization contributes to the preservation of fragile objects that can thus be protected from wear and tear. Among the fragile, some fall within the category of precious, priceless, valuable, and or, irreplaceable. Additionally, an increase in the longevity of such information material is secured. While digitized materials cannot perfectly replace the original texts and materials, the former complements the latter by reducing manual manipulation that easily accelerates the rate of deterioration. In cases where certain

materials have partially decomposed, digitization can render them more legible not excluding those that have been grossly damaged or whose ink has faded (Ogilvie, 2016).

On the flip side, Osedo observes that digital obsolescence is a major setback in digitization given long-term access to data. Needless to mention, digitization is not an inexpensive pursuit, however, the benefits outweigh the cost. Digital information is also threatened and risks loss due to technological obsolescence whereby the physical supports, logical formats, as well as software for searching and displaying the information fall into disuse. Considering that digital technology mutates daily, retrieval and playback technologies can become obsolete in a matter of few years (Osedo, 2013). The advanced technology yields faster-enhanced capabilities plus a less expensive processing and storage capacity. The older versions are subsequently condemned to obliteration. Such an effacement sounds like the death knell for records contained in outdated technologies. This fatality is known as digital obsolescence. To evade the loss, Archivists shall require to be well-funded to keep the appliances in use ever upgraded to the ever-evolving technology. To achieve this, lots of resources are certainly required hence ballooning the cost of digitization.

Inversely, the digitization of archives shall yield loss of employment to some archives-attendants and officers given that the human resource required to manage an archive shall be significantly reduced. Observably, the world job market has embraced a working-from-home model buoyed by internet infrastructure. Archival science cannot afford to be an exemption. With capitalism at the helm of global business practices, every employer shall gladly embrace digital archiving which, in the long run, shall be a cost-effective undertaking. However, human potentiality is infinite and thus, those affected can smoothly transition into consilient specializations and technology. More constructively, the excess archival human resource could venture into the privatization of archives. With digitization, individuals can seize the opportunity and impactfully run private archives containing records collected from the community or about a specialized category or persons.

Rustic researchers too are highly disadvantaged due to lack of technological infrastructure within their geographical locations. Accessibility of digital archives requires the availability of the internet and possession of requisite gadgets. In places where such infrastructure is unavailable or unstable, then the efficacy of digital archiving can be greatly reduced. Nevertheless, the world is becoming more connected through technology and thus such a challenge is not insurmountable.

The legal issues of archives involved in digital archives from the aspects of the legal definition of digital archives, legal documents, utilization, publication, utilization fees, and the protection of copyright and privacy can create hurdles in the actualization of digitized archives. The setback emanates from the dearth of policies, laws and particular regulations that ought to address matters of archives and digitization. While the law of the jungle is unwelcome, certain grey areas have always turned to become battlefields. As technology

continues to build up, those whose responsibility it is shall have to provide the necessary and comprehensive legislative framework. Purposively, professional archivists should continue employing archival creditable practices that are both progressive and globally accepted.

Digital archivists shall require compound skills serving as a hybrid of archival science and technology. It would be a waste of time, resources and even a generation if any institution until now remains traditional in the archival academic programs. Tertiary institutions shall need to imperatively create academic programs that prepare graduates with the aforementioned training. As the world moves into the paperless epoch, spatial archives shall become obsolete. Longsighted archivists need to sight the unstoppable wind of change and warm up for a new world order in archival practices.

It should be borne in mind that when we approach the digitization of artefacts via their simulacra, some natural elements are lost. In particular, their three-dimensionality, physical characteristics such as paper quality, watermarks, the ways a letter was folded, and even inserted objects cannot be captured through the digitization process (Ogilvie, 2016). Despite that, to commensurate permanent loss of a record with loss of physical characteristics can only be a comparison of odious.

Archivists are alive of the fact that some branches of knowledge, such as diplomatics, palaeography, codicology, philately, and sigillography among others, require interaction with physical records or artefacts. While future technology has the potential to surprise, the requisite interaction with records shall keep the doors of the physical archives wide open. However, the multitude of persons seeking physical documents shall diminish significantly. Factually, the actual physical archives shall remain non-abolishable but the change of business model is on the offing.

Research Through Digital Archives

Just as a laboratory is a temple for scientists, archives are the temples of a historian. In conducting research based on primary sources, a historian finds archives indispensable. Besides, qualitative history research depends on how the researcher utilizes the available credible sources. M. Bolick argues that conducting historical research with primary sources has been traditionally reserved for scholars who had the means to physically visit historical sites, libraries, and archives (Bolick, 2006). It happens that Africa has remained largely dependent on the Archival sources preserved by countries in the global north, some of which are yet to be declassified. One of the dynamic solutions should be the establishment of African digital archives for preservation and research purposes.

Digital archives provide a progressive model of how technology can be used in the historical and related fields of knowledge. Its realization renders learning and teaching

effective and convenient. Imperatively, technology has to become an integral part of the learning process as well as research where the latter is the noblest chore of a scholar. M. Bolick observes that the creation of digital archives has shifted the dynamics of doing historical research by changing who can conduct the research and how historical research is done (Bolick, 2006).

Digital archiving, among other meritorious potentials, seeks to democratize the doing of history. It means that doing historical research shall no longer remain a prestigious sphere of professional historians, rather, with sources available to rank and file, historical research becomes utterly a liberal art. Indiscriminately, the empowered passionate researchers shall embark to conduct research without demurring on the authenticity of their primary sources.

At the epoch of widespread intellectual dishonesty including plagiarism, dedicated researchers have developed cold feet in dealing with uncertified historical sources. Research conducted through digital archives shall have to augment surveillance on the authenticity of the uploaded sources. Given the existence of deregulation on uploading of sources where there is little or no commitment to veracity, an incautious researcher may conventionally utilize uploaded historical sources and end up drawing spurious conclusions. It is, however, a noble obligation among researchers to promote a sense of fidelity to uploaders to curb the proliferation of distorted or mismatched sources. Such efforts shall contribute a great deal to ridding the internet of littering.

Concluding Remarks

Huge investments have been made that are intended to have outer space becoming the next internet. The satellite internet brightens up the world with the far-fetched locations lying in the peripheries of civilization making it in the list of beneficiaries. Based on the projected exponential growth of internet infrastructure in Africa, digitized archives are going to become the next revolution in research. Digitized collections can be made accessible in a reformatted/refined way which allows both simultaneous and faster browsing on the Internet by millions of users in different and remote locations.

Africa has millions of uncollected archival materials that, if no action is promptly taken, might be irrecoverably extirpated. Tertiary institutions within the Continent should keenly consider investing in the digital preservation of research materials. One of the initiatory staircases would be the establishment of a digitization team which should be led by a project manager. Among other fundamental duties, it should upskill the students and staff on the indispensability of digitization and its overwhelming merits. Furthermore, the lead-team should expeditiously formulate policies and strategic plans for the entire project.

Institutions within Africa should embark on collaborative missions to bring together their efforts and resources into a common pool. Given that the African Continent is the most

diverse in terms of cultural mosaic, the same wealth can be found in the documentary evidence. Additionally, among all the Continents, Africa leads the list of the continents with the least collected historical sources. On a scholarly level, the shortfall is directly proportional to the inaccuracy of the historical narratives of our people and culture. Needless to mention, both the exaggerated or mean historical narratives prevalent in the continent may continue unchallenged as a result of a deficiency of primary historical sources. A combined approach shall certainly yield results that are favourable to persons within and without the Continent. Thus, consolidated efforts are imperatively needed to collect and digitize African historical sources.

It should be borne in mind that any loss of a historic document shall not only be tragic for whichever generation but also a great disservice to humanity. The irreplaceability shall be the ever-pricking thorn in the conscience of men and women of the generation that sacrificed the future on the altars of contemporariness. The future generations shall describe the loss as emanating from either selfishness or short-sightedness or, worse still, both. Additionally, in case of inaction, authentic African history risks remaining marginalized. There is no better way to leave a legacy other than securing primary sources for generations to come through digitization.

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