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Navigating the digital era: challenges and solutions for archival professional in education and training

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Abstract

A study conducted a decade ago indicated the susceptibility of the archival profession to automation and ranked it as a high-risk profession. Indeed, the digital era has brought significant changes to the archival profession, including new technologies, new forms of records and new expectations for access and preservation. However, these changes also bring new challenges for archival professionals in terms of education and training. This paper aims to provide insight into the issues facing archival professionals in the digital era, and to help organisations and institutions develop effective education and training programmes that meet the changing needs of the profession. Through a literature review and content analysis, this paper provides an in-depth examination of the challenges faced by archival professionals in the digital era and the impact of these challenges on education and training. Additionally, this paper recommends how to address these challenges, including the importance of review and update archival curricula and collaborative partnerships.

Keywords: employment, technological change, records, archives, skill demand

Introduction

The digital era has brought significant changes to the way we create, store and access information. This transformation has resulted in the production of a vast number of digital records, which has brought new challenges for archival professionals (Alvarenga, Matos, Godina & Matias 2020). These professionals are responsible for preserving and providing access to historical records, manuscripts and other materials of enduring value for future generations (Netshakhuma 2019a). As such, they must adapt to new technologies and practices to continue to fulfil their important role in the digital age.

One of the primary challenges for archival professionals in the digital era is the management of digital records (Jaillant 2019; Pendergrass, Sampson, Walsh & Alagna 2019). Unlike traditional paper-based records, digital records require specific technical expertise in areas such as digital preservation, data management and information security. Archival professionals must ensure that these records are preserved for future use while protecting them from damage, loss or unauthorised access (Cunningham, Thibodeau, Stančić & Oliver 2019; Jaillant 2022). Moreover, as technology continues to develop, there is a growing demand for archival professionals with knowledge and

skills in areas such as data analytics and information management (Oliver 2023). This shift in job market demands necessitates a rethinking of traditional archival education and training programmes, which must incorporate new technological and professional skills required for effective archival management in the digital era.

Moreover, the changing job market and technological advancements highlight the importance of education and training in preparing archival professionals for the digital era. However, many traditional archival education and training programmes fail to keep up with the latest developments in digital technologies, resulting in a gap between the skills and knowledge required by the job market and the education and training provided (Hans & Crasta 2019; Poole & Todd-Diaz 2022).

The impact of the digital age on archival practices in most African countries is reflected in unique social, economic and technological contexts. As more developing countries embrace digitisation, archivists face different challenges than their counterparts in more advanced or developed countries in the Global North. The challenges of digital records management in Africa are compounded by issues such as limited technological infrastructure, varying levels of digital skills and resource constraints (Asogwa 2012; Katuu & Ngoepe 2017; Tsvuura 2022; Chaterera-Zambuko, Masuku & Bhebhe 2022). More advanced countries in the Global North tend to be better equipped to adapt to the changing needs of the digital age thanks to their mature technological infrastructure and comprehensive educational frameworks, while developing countries face more obstacles. Digital divides, inequities in funding and different social and cultural backgrounds present unique challenges for archival practices.

This article seeks to address these challenges and provide recommendations for developing effective education and training programmes to equip archival professionals with the skills and knowledge needed to navigate the digital age. By doing so, archival professionals can continue to play a vital role in preserving cultural heritage and historical records for future generations.

Problem statement

Over a decade ago, a study on the susceptibility of some jobs to automation by Frey and Osborne (2013) predicted that about 76% of archives' functions would be automated, ranking it as a high-risk profession. Indeed, the digital era brought about significant changes in the way we produce, store and access information. Also, a massive increase in data production and storage presents a significant challenge for archival professionals, who are responsible for preserving and providing access to historical records, manuscripts and other materials of enduring value for future generations (Marciano et al. 2018).

Moreover, the job market demands for archival professionals have evolved in recent years (Tansey 2015). With the growing importance of data analytics and information management, there is a growing demand for archival professionals with expertise in these areas. According to a report by the United States National Research Council, there is an increasing trend towards job titles that incorporate digital, data and information management (National Research Council 2015). For example, positions such as digital archivist, digital preservation specialist, and metadata librarian have become more prevalent in recent years. However, who an archivist is and what an archivist does have

long remained an enigma (Balogun 2020; Poole & Todd-Diaz 2022; Tansey 2015). Tansey (2015) also notes that there is far too little research about who archivists are and how their employment market is changing.

However, traditional archival education and training programmes have been slow to adapt to these changes, resulting in a gap between job market demands and the education and training provided. According to Poole and Todd-Diaz (2022), many archival professionals feel that their education and training programmes did not prepare them adequately for the digital era. The survey found that only a few of the respondents felt that their archival education and training programmes adequately prepared them for digital preservation. This gap between job market demands and the education and training provided poses a significant challenge for archival professionals (Tansey 2015; Poole & Todd-Diaz 2022). Without the necessary skills and knowledge required for effective archival management in the digital era, they may struggle to fulfil their role in preserving our cultural heritage and historical record for future generations (Şentürk 2021). Therefore, this paper discusses the challenges and solutions for archival professionals in education and training in the context of employability in the digital era.

Aim

This article explores the changing labour market needs of archival professionals and the gaps in traditional archival training programmes, with a view to providing recommendations on how to equip professionals with the skills and knowledge needed to navigate the digital age environment.

Research objectives

The following were the objectives of the study:

- To discuss the evolving demands of the job market for archival professionals in the digital age.
- To identify the gaps in the skills and knowledge of archival professionals that are not adequately addressed by current educational and training programmes in relation to digital archives and emerging technologies.
- To make recommendations for the improvement of existing educational and training programs for archival professionals.

Methodology

This research paper is based on a literature review and content analysis. Despite the limitations of systematic literature review as a research method (Owens 2021), it was considered appropriate for the study because it adheres to the principles of transparency and bias reduction, while also providing a thorough overview of the literature pertinent to a research issue and synthesising earlier work to increase the body of knowledge about a certain topic (Williams, Clark, Clark & Raffo 2021).

The systematic literature review adopted the processes proposed by Kitchenham and Brereton (2013), which guided the researcher in the presentation of relevant research on the evolving job market demands for archival professionals and the gaps in traditional archival education and training programmes. Kitchenham and Brereton

(2013) list the steps that should guide a systematic literature review as follows: (a) Define the keywords; (b) Define the criteria for inclusion or rejection of papers; (c) Testing of database and adjustment of keywords; (d) Extraction of data from data from databases and (e) Data screening.

The search terms used included "archival education and training", "job market", archivists", "Archival professionals", "digital era" and "digital era disruption and archives." The search was limited to peer-reviewed articles published between 2010 and 2023 in English only. By restricting the search to publications released between 2010 and 2023, the evaluation was able to concentrate on recent advancements that reflected the demands of the job market and the current state of archival education and training. The inclusion of up-to-date and relevant literature was guaranteed by this temporal restriction. In addition, the search was restricted to articles published in English to ensure consistency of language for the analysis process. However, some materials and research articles that were outside the scope of this search were manually included after the systematic process. This was because these articles were considered key materials that would add value to the research.

The literature review involved an extensive search for relevant academic literature related to archival education and training, digital records management and job market demands for archival professionals in the digital era. The search was conducted using various academic databases, including Web of Science, JSTOR, ProQuest, SCOPUS and Google Scholar. These databases were taken into consideration due to their reputation for having large collections of academic publications, which guarantee a comprehensive examination of the selected subjects within the specific timeframe.

A total of 2 812 papers were retrieved from the different databases. After an initial review of the abstract of the retrieved papers, it was discovered that some of the retrieved research papers were either duplicates or irrelevant to the study. The potential papers retrieved from each database are as follows:

1. JSTOR: 329 papers
2. ProQuest: 147 papers
3. Scopus: 212 papers
4. Google Scholar: 2 124 papers

Duplication was prevented by using Mendeley, a reference management system, and each paper's abstract was carefully examined to make sure it related to the main idea of the study. Then, the inclusion criteria included the following:

- Papers should address technological advancements on the job market in the digital era.
- Papers should address digital technologies in the context or archives.
- Papers should address education and training programmes for archival professionals.

The ASReview software was used to import the recovered records, and this started the screening process. ASReview is a machine-learning application that uses active learning techniques to screen research articles in order to streamline the systematic review process (Van de Schoot et al., 2021). The software helped in selecting the most

relevant articles for examination based selected criteria. It also streamlined the screening process by selecting research papers for the systematic review in a thorough and targeted manner. A total of 59 articles were then selected for review. Research materials selected manually, including publications form key institutions like the United Nations (UN), African Union (AU), Organisation for Economic Co-operation and Development (OECD), National Archives of Australia, National Archives of Japan, Society of American Archivists (SAA), Archival Education and Research Initiative (AERI) and Eastern Partnership Civil Society Forum, were not counted in this process.

After identifying relevant articles, a content analysis was conducted to extract key themes and ideas related to the challenges and solutions for archival professionals in education and training in the digital era. The content analysis involved reading each article and identifying relevant quotes, ideas and themes that were then grouped together into categories to identify common themes and patterns. The findings of the literature review and content analysis were then synthesised to provide a comprehensive overview of the challenges and solutions for archival professionals in education and training in the digital era. This synthesis formed the basis for the analysis and recommendations presented in the paper.

Impact of technology on job market in the digital era

The impact of technology on job markets in the digital era has significant implications for workers, industries and policymakers worldwide (United Nations 2017; Dachs 2018; Brown & Loprest 2018). While automation is expected to create new opportunities and increase efficiency, it is also likely to displace some jobs, which could have profound economic and social consequences (United Nations 2017). One of the key findings from various reports across different countries is that automation tends to displace routine and repetitive jobs, such as administrative, clerical and manufacturing jobs (Chang & Huynh 2016; Handel 2022; Muro, Maxim & Whiton 2019; The Office of National Statistics 2019). This trend is evident in the United Kingdom, Canada and Australia, where millions of jobs are at a high risk of being impacted by automation over the next 10 to 20 years (Nedelkoska & Quintini 2018; Taylor 2019; Frey & Osborne 2013). Moreover, automation is not just limited to blue-collar jobs; it is also impacting white-collar jobs, such as accounting and finance, legal services and even healthcare (Frey & Osborne 2013; Nedelkoska & Quintini 2018). This trend is driven by the rise of artificial intelligence (AI) and machine learning, which can perform complex tasks once considered exclusive to human workers.

However, it is important to note that the impact of technology on job markets is not entirely negative. According to a joint report by the World Economic Forum and Forbes, the Fourth Industrial Revolution will create 97 million new jobs globally by 2025 (Kandem & Sonmez 2020). These jobs will be in emerging industries such as renewable energy, AI and data analytics (Kandem & Sonmez 2020). Additionally, new technology is driving innovation and growth in various sectors, creating new job opportunities that require specialised skills. For example, the emergence of e-commerce platforms such as Amazon and Alibaba have led to the creation of new jobs in logistics and transportation (Ungerer 2021), while advancements in medical technology have created new job opportunities in healthcare and pharmaceutical industries (Bronsoler, Doyle & Reenen 2020).

The challenges and opportunities presented by the impact of technology on job markets require innovative strategies and policies to ensure that workers are equipped with the skills and knowledge required to navigate the digital landscape effectively. Education and training programmes must be developed to equip workers with new skills and knowledge required to take on new roles in emerging industries (ILO and OECD 2018). Policymakers must also focus on creating an enabling environment for innovation and entrepreneurship, which will encourage the creation of new businesses and job opportunities (African Union 2020). Such policies could include investment in research and development, funding for startups and tax incentives for companies that create jobs. Thus, the impact of technology on job markets in the digital era is complex and multifaceted, with both challenges and opportunities. It is essential for policymakers and industry leaders to develop innovative strategies and policies that prioritise education and training and create an enabling environment for innovation and growth (OECD 2016). Such efforts will be crucial in ensuring that workers and industries are well positioned to navigate the digital landscape effectively and achieve long-term success.

Impact of digital technologies on archival practices

The impact of digital technologies on archival practices has been significant, transforming the way archives are created, managed and accessed (Cox 2007; Opgenhaffen 2022). Digital technologies have created new opportunities for the preservation and dissemination of historical records, but they have also presented new challenges for archivists around the world (Jaillant 2022; Lässig 2021).

One of the most significant impacts of digital technologies on archival practices has been the shift from paper-based records to digital records (Opgenhaffen 2022). This shift has created new challenges for archivists, as digital records are more complex and diverse than paper-based records (Ismail & Affandy 2018). Digital records can be created in various formats, such as email, social media posts and digital images, and can be stored on a range of devices and platforms (Cannelli & Musso 2022). Moreover, digital records are subject to rapid technological changes and obsolescence, which requires archivists to constantly update their knowledge and skills to keep up with emerging technologies. This challenge is evident in various countries, where archivists are struggling to preserve digital records that are at risk of being lost due to technological obsolescence (Jaillant 2022; Corrado & Sandy 2017).

Another significant impact of digital technologies on archival practices is the increasing demand for digital access to archival records (Jaillant 2022; Hawkins 2022). Digital technologies have made it easier for researchers, scholars and the public to access archival records remotely, without the need to visit physical archives (Hawkins 2022). This trend is evident in countries such as the United States, where archives are increasingly making their records available online (Mengel 2007). However, digital access also presents new challenges for archivists, as it requires the development of new systems and tools for managing and sharing digital records (Jaillant & Caputo 2022). Archivists must also be mindful of issues related to privacy and copyright, which can limit the availability of digital records for public access (Jaillant & Caputo 2022; Jaillant 2022; Corrado & Sandy 2017).

Furthermore, digital technologies have also enabled archivists to create new forms of records, such as born-digital records, which are created in digital format and do not have a paper-based counterpart (Jaillant & Caputo 2022). Born-digital records are becoming increasingly prevalent in various countries, and their management requires specialised skills and knowledge (Jaillant 2022).

The digital era has brought about significant changes in the skills and competencies required by archival professionals to effectively manage records and information (Nyampong 2015). In order to be successful in the digital environment, archival professionals must possess a combination of traditional archival skills as well as digital competencies (Şentürk 2021; Poole & Todd-Diaz 2022).

Traditional archival skills such as appraisal, arrangement, description and preservation remain essential in the digital era (Marciano et al. 2018). However, the advent of digital technologies has necessitated additional skills and competencies. Archival professionals must now be able to manage born-digital records, develop and implement digital preservation strategies, and provide access to digital materials (Hunter 2020). In addition, they must possess a thorough understanding of metadata, database management and digital imaging technologies.

Studies (Marciano et al. 2018; Netshakhuma 2019b; Daniel, Oliver & Jamieson 2020) found that archival professionals require a wide range of skills and competencies to effectively manage digital records. These skills include digital preservation, digital curation, metadata management, database design and management, and an understanding of the legal and ethical issues surrounding the management of digital records. These studies also suggest that archival professionals require specialised training in digital technologies, particularly in digital preservation. The SAA has identified a range of competencies required by archival professionals in the digital era (Pearce-Moses & Davis 2008). According to the report, these competencies include an understanding of digital technologies, metadata, digital preservation, database management, digital imaging and web archiving. The SAA also emphasises the importance of continued professional development to ensure that archival professionals remain up to date with the latest technologies and best practices (Pearce-Moses & Davis 2008:35).

Research has shown that the required skills and competencies vary depending on the specific needs of the organisation. For example, a study conducted in Australia found that government archives require more specialised skills and competencies than corporate archives due to their unique legal and regulatory requirements (Howard 2015). Similarly, a study conducted in Sweden found that the skills and competencies required by archival professionals vary depending on the size of the organisation and the scope of its digital collections (Martinez & Whately 2011).

Current state of education and training programmes for archival professionals

The education and training of archival professionals are essential in ensuring that they possess the necessary skills and competencies to effectively manage records and information in the digital era (Mosweu & Ngoepe 2019; Katuu 2022; Robinson 2021).

However, the current state of education and training programmes for archival professionals varies widely across different parts of the world. In the United States, the SAA has developed a set of guidelines for graduate-level education programmes in archival studies (SAA 2017; Poole & Todd-Diaz 2022). These guidelines provide a framework for the development of graduate programmes that cover both traditional archival skills and digital competencies. However, not all graduate-level programmes in archival studies adhere to these guidelines (Benoit & Force 2019). Also, the AERI works towards advancing curriculum development in archival studies at all levels (Gilliland 2016; Soyka & Wilczek 2020). In Australia, the Australian Society of Archivists has developed a set of professional standards for archival practice (Dryden 2007). These standards include guidelines for the education and training of archival professionals. The National Archives of Australia has established a professional development programme to support the ongoing education and training of its members (National Archives of Australia n.d.). In Asia, the National Archives of Japan has established a training programme for archival professionals (Al Hinai 2017). The National Archives of Japan has a Standard of Tasks and Competencies for Archivists report to support commitment to nurture professional archivists (National Archives of Japan 2018). The programme includes both theoretical and practical training on traditional archival skills as well as digital competencies. The National Archives of Japan also collaborates with other archival institutions in Asia to develop standardised approaches to the education and training of archival professionals.

Despite these efforts, there are still significant gaps in the education and training of archival professionals in many parts of the world (Ngoepe & Katuu 2017; Katuu 2015; Poole & Todd-Diaz 2022). Studies by scholars such as Koulouris (2019), Zhang and Poole (2022) found that there is a lack of standardised approaches to archival education and training across different regions. The study also found that many archival professionals receive on-the-job training (Skinner & Hulbert 2022), which may not provide them with the necessary skills and competencies to effectively manage records and information in the digital era. Therefore, the current state of education and training programmes for archival professionals varies widely across different parts of the world. Efforts are being made in many regions to standardise the education and training of archival professionals (Poole & Todd-Diaz 2022), but there are still significant gaps in many areas (Ngoepe & Katuu 2017; Katuu 2015).

Issues with archival education and training in Africa

Archival education and training in Africa are facing several challenges that affect the quality of training and the competitiveness of African records and archives professionals in the global digital age (Katuu 2015; Abubakar 2021; Tsvuura & Mutsagondo 2015). The issues with archival education and training in Africa are complex and multi-faceted (Katuu 2022). Despite the significant role that archives play in preserving cultural heritage and supporting social, economic and political development, archival education and training programmes in Africa have received limited attention (Onyancha, Ngoepe & Maluleka 2015; Saurombe 2018; Tsabedze 2019).

One of the major issues facing archival education and training in Africa is the lack of resources, including funding, infrastructure and technology (Katuu 2023; Tsabedze & Ngoepe 2020). This resulted in a lack of access to training programmes, which in turn

led to a shortage of skilled archival professionals (Saurombe 2018; Netshakhuma 2019b; Ngoepe 2017). Additionally, there is a lack of coordination between archival institutions and educational institutions, which led to a disjointed and uncoordinated approach to archival education and training (Tsabedze & Ngoepe 2020).

Another issue is the lack of awareness and appreciation for the value of archives and archival work in Africa (Matangira, Katjiveri-Tjiuoro & Lukileni 2013; Saurombe 2020). Many people, including government officials and the public, do not understand the importance of archives and the role they play in preserving cultural heritage and supporting social, economic, and political development (Saurombe 2018). This led to a lack of political will to support archival education and training programmes.

Political instability and conflict led to the destruction of archives and the loss of important cultural heritage in some African countries. The lack of funding and support for archival education and training also means that there is a limited pool of skilled professionals who are able to manage archives in these difficult circumstances (Poole & Todd-Diaz 2022). However, there have been some efforts to address these issues. For instance, the International Council on Archives (ICA) has been working to improve archival education and training in Africa through partnerships with local archival institutions and universities (Lowry 2017; Makhlouf-Shabou & Ambira 2020). The ICA also developed guidelines for archival education and training in Africa and other regions of the world.

What is the susceptibility of the records and archives profession in the digital age?

The rapid pace of technological advancements has significantly transformed the archival profession, posing numerous challenges for archivists worldwide. As the digital era progresses, there is a growing demand for archivists with modernised skills and competencies to effectively manage, preserve and provide access to digital records and archives (Şentürk 2021; Daniel et al. 2020). However, it is still unclear whether the current archival education and training programmes are sufficient to prepare archivists to handle the employability challenges in the digital era.

While archival education and training programmes worldwide have been making efforts to integrate digital technologies into their curricula, there are concerns about the quality and adequacy of these programmes (Poole & Todd-Diaz 2022; Tsabedze 2019; Katuu 2015). Some experts argue that many archival education and training programmes are still heavily focused on traditional approaches and outdated methods (Tsabedze 2019; Katuu 2022), which may not effectively prepare archivists for the digital era's challenges. For instance, the lack of digital competencies, such as web archiving, digital preservation and metadata management, among archivists, has been attributed to the inadequacy of the current archival education and training.

Moreover, the employability landscape for archivists is rapidly evolving, and the skills and competencies required for employability in the digital era are not entirely clear. Therefore, it is crucial for archival education and training programmes to align with the evolving employability demands of the digital era. For instance, some studies have recommended that archival education and training programmes should integrate interdisciplinary skills, such as data analytics, information technology and

communication, to prepare archivists for emerging job opportunities (Poole & Todd-Diaz 2022).

As the world moves deeper into the digital age, there is an increasing concern about whether African records and archives professionals can survive the changes and challenges brought about by technology (Garaba 2015; Netshakhuma 2019a). The impact of technology on archival practices and the job market demands for digital skills are global phenomena that require a unified approach to adapt and thrive in the digital era. In many African countries, there is a growing demand for digital transformation and technological advancement (African Union 2020; Elgohary 2022), which created significant opportunities and challenges for records and archives professionals (Ndemo & Weiss 2017). However, the issue of the digital divide between the developed and developing countries makes the situation more complex. According to the Technology and Innovation Report 2021, sub-Saharan Africa remains the least digitally connected region globally, and unprepared to equitably use, adopt and adapt to the ongoing technological revolution (United Nations 2021). This highlights the urgent need to address the digital divide by investing in digital infrastructure and skills development in Africa.

Despite the challenges, there is hope for African records and archives professionals to survive and thrive in the digital age. The first step towards this is to acknowledge the need for continuous education and training in digital skills. A study by Okeji and Mayowa-Adebara (2021) in Nigeria showed that the lack of training and education was a significant barrier to digital literacy among records and archives professionals. Governments, the private sector and other stakeholders should invest in training programmes that build digital skills, including but not limited to, digital preservation, digital curation, metadata management and data analysis (Eastern Partnership Civil Society Forum 2020). Furthermore, it is essential to develop customised training programs that are sensitive to the cultural, political and socio-economic context of African countries (Ngoepe & Saurombe 2021).

Another crucial aspect is to leverage the use of emerging technologies to enhance archival practices in Africa. For instance, the use of cloud computing and machine learning can help African archives to digitise their collections, enhance access and preservation, and facilitate the management of large volumes of data (Mosweu, Mosweu & Luthuli 2019; Modiba, Ngoepe & Ngulube 2019). In addition, digital preservation strategies such as digital signatures, encryption and authentication can help protect digital records from loss, theft and manipulation (Kavin & Ganapathy 2021; Zhang, White, Schmidt, Lenz & Rosenbloom 2018; Lemieux 2016). Moreover, collaboration and knowledge-sharing among African records and archives professionals and other stakeholders in the region and beyond are critical for surviving and thriving in the digital age (Katuu 2023; Mabe & Potgieter 2021).

Reflections

The digital era brought about significant changes in the archival profession, particularly in terms of the skills and competencies required for employability. Archival professionals need to be equipped with digital skills, such as data analysis, management, digitisation and preservation, to stay relevant and competitive in the job market. However, the current state of archival education and training programmes in

many parts of the world, particularly in Africa, is inadequate to prepare archivists to handle employability challenges in the digital era. The pace of technological change can make it difficult for archival education and training programmes to keep up, and there may be additional areas where training is needed. For example, the increasing use of artificial intelligence and machine learning in archives presents new challenges for archivists and may require additional training in data management, metadata creation and ethical considerations. In addition, there might be a need for archivists to be proficient in a range of technical skills, such as data analysis and coding. While some archival programmes offer courses in these areas, others may not, which can lead to gaps in the skills of graduates entering the job market.

Recommendation

Based on the analysis of the challenges facing archival education and training in Africa and the impact of digital technologies on archival practices and employability, the following recommendations are suggested for African countries:

a. ***Review and update archival curricula*****:** African countries should review their current archival curricula to ensure they reflect the current demands and trends of the digital age. This should involve incorporating digital literacy and technological skills into the courses and integrating practical training with theoretical knowledge and include digital skills such as data analysis, digital preservation and digital curation. Archival education and training programmes should also be tailored to equip students with entrepreneurial skills, such as grant writing, project management, and fundraising, to enable them to establish and manage their archives or consulting firms.

Additionally, archival education and training programmes should include internship opportunities. Such initiatives would provide archivists with hands-on experience with digital technologies and a platform to interact with professionals and experts in the field. This approach would be particularly beneficial for African archivists, who face challenges in accessing digital technologies and a lack the practical experience necessary to navigate the digital era's employability challenges.

b. ***Collaborative partnerships:*** African countries should form collaborative partnerships with other countries and international organisations to promote knowledge and skills sharing, and to build capacity in the field of digital archiving. This can be achieved through the development of joint training programmes, workshops and conferences that focus on the latest technologies and emerging trends. International organisations such as the ICA and ESARBICA, the West African Regional Branch (WARBICA) and the Regional Branch for Central Africa (CENARBICA) should provide platforms for exchanging ideas, sharing best practices and promoting collaboration among professionals.

By implementing these recommendations, African countries can improve the quality of archival education and training programmes, equip archivists with the necessary digital skills and competencies, and ensure that they are better prepared to handle employability challenges in the digital era. This, in turn, will help to promote the preservation and accessibility of valuable cultural heritage materials and contribute to the development of the archival profession in Africa.

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