Chapter 4
Integration of Artificial Intelligence in Archives and Records Management:
A SWOT Analysis of the ESARBICA Community

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ABSTRACT

The digital era generates exponential volumes of data, making the management and preservation of archives more complex. Nonetheless, by supporting conventional archival procedures, guaranteeing more effective retrieval, and improving decision-making, AI presents promising possibilities. This chapter explores the readiness of the ESARBICA member countries to integrate AI into ARM, using a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis framework. With data collected from 34 interviewees, the study identified strengths and opportunities such as skilled ARM professionals, efforts in digital infrastructure improvement, data availability, strong regional leadership, and collaboration networks. However, AI skills gaps, fear of job displacement, outdated technological infrastructure, vulnerability to cyberattacks, fragmented research efforts, resistance to change, inadequate infrastructure, and regulatory concerns hinder AI adoption. The findings accentuate the need for capacity building, policy development, and strategic investment to enhance AI adoption.

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INTRODUCTION

Digital transformation has become central in all industries, with numerous nations placing artificial intelligence (AI) at the core of their transformation initiatives. AI is rapidly reshaping industries worldwide, with archives and records management (ARM) being a key sector poised for transformation; as ARM is associated with improved public service delivery, accountability and transparency of government services. As we transition further into the digital age, archives, records centres and records management units are confronted with an ever-increasing volume of data, which makes traditional methods of preservation and retrieval increasingly inadequate (Modiba, 2022). AI presents an opportunity to address these challenges by enhancing the efficiency, accuracy, and accessibility of archival processes, from automating routine tasks to enabling smarter decision-making. Through techniques such as machine learning, natural language processing, and deep learning (Shonhe, 2024), AI has the potential to streamline workflows, improve information retrieval and ensure long-term preservation of valuable records (Modiba, 2023).

Current research depicts that developed nations such as the United States of America (Mannheimer et al., 2024), China (Wang et al., 2024), the United Kingdom (Colavizza et al., 2021), Canada (Vogl, 2020), and Australia (Seethamraju & Hecimovic, 2022) have begun applying AI tools in ARM processes. However, such research is lacking in under resourced nations, such as African states. Therefore, this study establishes the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA) member states' readiness to adopt AI in ARM, by assessing the strengths, weaknesses, opportunities, threats (SWOT) within the region. The goal is to empower the ESARBICA community to strategically navigate the complexities of AI adoption, ensuring that AI integration not only enhances the management and preservation of cultural heritage but also positions the regions at the forefront of archival innovation in the digital era. The specific objectives of this chapter are to:

1) Identify the internal strengths within ESARBICA community that could support the successful integration of AI into ARM processes.
2) Assess the weaknesses that may act as barriers to AI adoption within the ESARBICA community.
3) Explore external opportunities that ESARBICA can leverage to facilitate AI integration in ARM.
4) Evaluate the external threats that could impede AI integration in ARM, within the ESARCBICA community.