

Chapter 3

Navigating the Double-Edged Sword: Exploring the Potential and Pitfalls of AI in Records Management in Zimbabwe's Public Sector

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ABSTRACT

This chapter explores the dual nature of Artificial Intelligence (AI) in records and archives management, examining both its transformative potential and inherent challenges. The increasing use of AI in records and archives management promises to revolutionize the way we approach data storage, retrieval, and analysis. The study used a qualitative approach and a multiple-case study strategy. Interviews were used to gather data. The findings revealed that the adoption of AI in records and archives management offers considerable benefits, such as increased efficiency, improved accuracy, cost savings, enhanced access to records, and better preservation of records. Identified risks associated with AI adoption, include data security concerns, the digital divide, high initial setup costs, job displacement, algorithmic bias, and system failures. The study recommends the Government of Zimbabwe prioritize investing in cybersecurity, addressing infrastructure disparities, and ensuring that AI adoption is inclusive and sustainable.

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INTRODUCTION

Traditionally, records management relied on manual processes and physical storage, leading to challenges in accessibility, security, and long-term preservation (Mutsagondo & Khumalo, 2023; Sigauke, 2022; Tsvuura et al., 2021). With the surge in digital data, managing vast amounts of information has become increasingly complex, highlighting the need for advanced technologies like Artificial Intelligence (AI) to improve efficiency and reliability in records management (Bhebhe, 2015; Magama, 2018; Magama & Nduna, 2020; Modiba, 2021; Nengomasha & Chikomba, 2018). AI offers significant advantages by processing large datasets quickly and accurately, automating tasks like record categorization, and ensuring compliance, which frees up professionals for higher-level tasks (Modiba et al., 2023). However, the integration of AI raises concerns regarding ethical implications, including algorithmic bias, data privacy, and the potential loss of contextual information (Adel, 2022; Modiba et al., 2019). Additionally, as AI becomes more sophisticated, the risks of inaccuracies and system failures pose challenges for organizations adopting AI in records management.

BACKGROUND

Artificial Intelligence (AI), as described by Modiba (2019), mimics human intelligence and has greatly enhanced records management by improving processes like data capture, indexing, security, and retrieval (Colavizza et al., 2022). It aids researchers by quickly gathering data from diverse sources and outperforms traditional methods, particularly in extracting data from digital and web archives (Chabin, 2020; Milligan, 2016). AI also speeds up digitization with robotic scanners and AI software and optimizes storage by transferring records to secure cloud storage, reducing errors and space limitations (Modiba, 2021; Modiba et al., 2023; Ripcord Company, 2019;). It enhances retrieval through fast, accurate searches and preserves records by identifying those needing long-term care (Modiba et al., 2023). Security is bolstered through encryption and access controls, while AI also ensures proper record disposal (Marutha, 2011; McHugh, 2019; Modiba et al., 2023). This intelligent approach makes records management more efficient and secure. Several studies have highlighted the impact of Artificial Intelligence (AI) on records and archives management, advocating its adoption due to its speed, accuracy, and efficiency (Colavizza et al., 2022; Jaillant & Rees, 2022; Modiba et al., 2019; Modiba, 2024). However, research on AI's use in records management in Zimbabwe is limited, with most discussions focusing on electronic records without much reference to AI. The adoption of AI in Zimbabwe's archival institutions is still in its infancy. This study

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