

Chapter 2

Leveraging Artificial Intelligence for Enhanced Public Records Security in Zimbabwe

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ABSTRACT

This chapter explores the potential of leveraging Artificial Intelligence (AI) to enhance the security of public records in Zimbabwe. Using systematic literature review, the chapter aims to establish how AI can be leveraged to enhance the security of public records in Zimbabwe. By integrating AI technologies such as anomaly detection, automated compliance monitoring, and intelligent document management, public institutions can significantly reduce the risks of data breaches, unauthorized access, and mismanagement of records. The chapter highlights the current challenges faced in records security, including inadequate infrastructure and limited resources. The findings suggest that adopting AI technologies cannot only bolster the security of public records but also improve operational efficiency and transparency in public administration.

INTRODUCTION

In the contemporary digital landscape, the security of public records has emerged as a critical element of governance, particularly in developing nations such as Zimbabwe. Public records encompass various documents and information generated

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and maintained by government agencies (Chaterera, 2016). This category includes official reports, operational procedures, policies, minutes of meetings, audio-visual materials, databases, correspondence, and more. These records are foundational to ensuring transparency and accountability in government activities and expenditures, necessitating enhanced security measures. Public records are the cornerstone of transparency, accountability, and public trust within governmental institutions (Chaterera, 2016). Public records management is fraught with challenges, including inadequate physical security, susceptibility to data breaches, and reliance on outdated technological infrastructures (Chikomba et al., 2021). As Zimbabwe grapples with the complexities of modern governance, it is imperative to explore innovative solutions that can bolster the protection and accessibility of public sector records.

Public records management involves the documentation of actions, transactions, and decisions by government agencies and their representatives across various ministries and departments in Zimbabwe. The management of these records is governed by the National Archives of Zimbabwe Act of 1986, which mandates that records managers adhere to the records lifecycle until their disposal as archives, ensuring security controls at every stage (Chaterera, 2016). Public records exist at national, provincial, and district government levels, with several ministries legally obligated to maintain records in Zimbabwe. However, the demise of record safety and security is often attributed to a lack of fundamental skills and knowledge regarding record security standards and policies, poor infrastructure, and poor records management practices among others (Katekwe & Mutsagondo, 2017). Public records are integral to effective governance, and their security is paramount for maintaining transparency, accountability, and trust in governmental institutions (Modiba, 2024). However, public records in Zimbabwe are vulnerable to several security threats, including unauthorized access, data breaches, and physical damage. Records management security refers to the strategies a government uses to protect its records from unauthorized access, loss, or damage (Johnson, 2025). It includes physical measures like lock-and-key as well as digital measures such as encryption and role-based access control. In an era characterized by globalization and an increasing reliance on technology, many critical documents including personal identification records, judicial documents, hospital records, academic credentials, and financial records remain predominantly paper-based in Zimbabwe since most of these public institutions are still digitalizing their records. The continued reliance on paper records poses significant challenges in terms of security, efficiency, compliance, and environmental sustainability, especially in an interconnected and technology-driven world (Bakke & Castro, 2023). Organizations that have completely digitized do not have enough facilities to secure their digital records (Modiba, 2024). The compromised security of public records can have far-reaching consequences, undermining public trust, diminishing organizational integrity, and adversely affecting the overall

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