

# The Inadequacy of Current Records Management Education in Preparing Zambian Professionals for Electronic Records Management

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## ABSTRACT

Zambia's "Smart Zambia" initiative prioritises the digital transformation of public services, a goal contingent on the effective management of electronic records. However, the deployment of an Integrated Electronic Records Management System (IERMS) has been stalled for over a decade. While infrastructural and policy challenges exist, this paper argues that a primary cause is the systemic failure of current records management education in Zambia to equip professionals with the necessary skills to manage electronic records. This study presents a needs assessment survey that juxtaposes the skills gap among practicing records officers against the curriculum offerings of Zambian training institutions. Findings reveal that most records officers lack fundamental e-records competencies, such as identifying core EDRMS and metadata standards. Concurrently, an analysis of existing educational programmes shows a significant lag in incorporating digital curation, information and communication technology (ICT), and contemporary electronic records management content. The study concludes that a fundamental rearticulation of records management education in Zambia is urgently required. It recommends a shift from traditional, paper-based paradigms towards practice-oriented, technology-integrated training programmes developed in partnership with industry and international experts to build a workforce capable of supporting national digital governance goals.

**Keywords:** Records Management Education, Curriculum Development, Digital Skills Gap, Electronic Records Management, E-Government, Zambia, Higher Education

## 1. INTRODUCTION

The Zambian government's ambitious National Electronic Government Plan (2023-26) envisions a fully digitalized public service under the "Smart Zambia" banner (The Republic of Zambia, 2023). This vision, however, rests on a fragile foundation if the evidence base of government—its records—remains trapped in analog systems. The Government of Zambia's 2012 Records Management Policy explicitly committed to implementing an Integrated Electronic Records Management System (IERMS), yet this commitment remains unfulfilled. While factors such as funding and infrastructure are often cited, a growing body of evidence points to a more profound, human-centric problem: a critical shortage of professionals equipped with the skills to manage electronic records (Bwalya & Akakandelwa, 2023; M'kulama et al., 2024; Ntalasha, 2024). This paper posits that this skills deficit is not an accidental gap but a direct consequence of the failure of the current records management education system in Zambia. The curricula of universities and colleges have not evolved at the pace of technological change, leaving graduates ill-prepared for the demands of a digital workplace. As Mkulama and Bwalya (2024) observed, there is a "lack of inclusion of digital curation content in archives and records management programmes in institutions of higher education," rendering these programmes unresponsive to industry needs. This educational failure creates a vicious cycle: without skilled professionals to advocate for

and manage digital systems, digitalization projects are deprioritized or fail, further entrenching outdated practices.

This study presents a needs assessment survey that serves as a stark indictment of the status quo. By examining the specific skills gaps among practicing records officers and contrasting them with the offerings of educational institutions, it builds a compelling case for the urgent and fundamental reform of records management education in Zambia.

### **1.1 Statement of the Problem**

The current paradigm of records management education in Zambia is predominantly rooted in traditional, paper-based methodologies. Curricula in institutions offering Library and Information Science, Archives, and Records Management have been slow to integrate critical digital competencies. This misalignment has produced a workforce that is largely incompetent to participate in, let alone lead, the digital transformation of the records sub-sector. This failure of the education system is a critical bottleneck, directly impeding the realization of the "Smart Zambia" agenda and undermining public sector accountability and efficiency.

### **1.2 Objectives of the Study**

This study aims to demonstrate the inadequacy of current records management education in Zambia and to define the path for reform. The specific objectives are to:

- i) assess the specific e-records management skills gap among practicing records officers in Zambia;
- ii) evaluate the alignment (or misalignment) between identified skill needs and the current curricula of Zambian training institutions; and
- iii) propose a framework for a restructured educational programme that addresses the digital skills gap.

### **1.3 Research Questions**

- i) What is the nature and extent of the electronic records management skills gap among records officers in Zambia?
- ii) How have current educational programmes in Zambia failed to address these skill requirements?
- iii) What are the essential components of a revised curriculum that can adequately prepare records professionals for the digital era?

## **2. LITERATURE REVIEW**

This section reviews and analyse the available literature on records management training in Zambia and other countries.

### **2.1 The Global Shift to Electronic Records Management**

The management of records has undergone a paradigm shift globally, moving from physical custodianship to digital governance. Effective Electronic Records Management (ERM) is now recognised as the backbone of e-government, ensuring transparency, accountability, and operational efficiency (Smallwood, 2013). Countries that have successfully digitalised their records management, such as the United States and Austria, have done so on a foundation of a skilled workforce capable of working with Enterprise Content Management (ECM) systems, metadata schemas, and digital preservation strategies (Katu, 2016; Krabina & Stoeckler, 2010).

## 2.2 The Educational Imperative for Digital Skills

The challenge of managing digital records is primarily intellectual, not just technical (Keith, 2005). As Wang (2009) noted in the context of China, when archivists are only familiar with traditional methods, a disconnection forms between management and technology, leading to system failures. This underscores the need for education that blends traditional records management principles with modern ICT competencies. The International Council on Archives (ICA) has consistently emphasised the need for educational programmes to evolve, advocating for curricula that include digital preservation, data management, and system design (ICA, 2021).

## 2.3 The African Context: A Continent-Wide Educational Deficit

The skills gap in Sub-Saharan Africa is a continent-wide crisis. Asogwa (2012) argued that there are "few or no countries in Sub-Saharan Africa where archivists and records managers have acquired all the basic skills and competencies in readiness for electronic records management." Studies from Botswana (Mosweu, 2023), South Africa (Matlala & Maphoto, 2022), and Zimbabwe (Tsvuura, 2022) consistently cite inadequate pre-service and in-service training as a root cause of ERM failures. In Zimbabwe, Tsvuura (2022) found a "worrisome" lack of knowledge despite the existence of training programmes, suggesting a systemic curricular failure.

## 2.4 The Zambian Case: A Symptom of Systemic Failure

In Zambia, the problem of inadequate or a lack of digital skills to manage e-records is acute. Research indicates that the public service continues to employ personnel without formal training in e-records management (Bwalya & Akakandelwa, 2023). More damningly, even those with formal qualifications often lack the requisite digital skills. A study by Ntalasha (2024) found that 64% of registry staff rated their knowledge of ERMS as "very poor." This failure to acquire ERMS skills points directly to the quality and content of the education they received. The continued recruitment of secondary school leavers into records roles, while now changing, further highlights a historical undervaluation of professional education in this field, a mindset that has likely permeated the design of the educational programmes themselves. The consequence is that digitalisation projects, such as the one initiated by the Smart Zambia Institute, proceed without meaningful input from records professionals, ensuring they are not fit for purpose (Bwalya & Akakandelwa, 2023).

## 2.5 Theoretical Framework

This study is based on Robert Katz's Skills Theory (1955), which states that effective professionals and leaders need three core skill types:

- i) *Technical skills*- proficiency in specific tasks or technologies (e.g., using software like MS Excel or managing electronic records systems).
- ii) *Human skills*- The ability to interact and work well with others.
- iii) *Conceptual skills*- The capacity to think strategically and plan.

The framework emphasises that for records management officers in Zambia to successfully digitalize and manage electronic records, they must develop strong technical skills. These include using scanning and imaging technologies, electronic records management systems (ERDMS), creating file plans (taxonomies), and generating metadata for efficient record retrieval. Additionally, skills in database and web development are crucial, as modern ERDMS are database-driven and web-based.

In all these, the education institutions providing training in records management should offer an academic programme that encompasses digital skills in general and e-records management specific skills. Therefore, failure by these institutions to provide a

digitally relevant curriculum, records officers will not be able to support the digital transformation of the records sector in Zambia, ultimately hindering national digitalization efforts, as highlighted by Katz's theory.

### 3. METHODOLOGY

This study employed a mixed-methods approach within a pragmatic research design to triangulate data on both practice and education. A survey strategy was used to collect data. In assessing skills gap, quantitative data was collected using an online questionnaire from a sample of records management professionals in Zambia (n=70), identified through the Zambia Archives and Records Management Association (ZARMA). The questionnaire assessed their awareness of e-records policies, their self-rated competency, and their objective knowledge of EDRMS, standards, and metadata.

On the other hand, qualitative data was collected through curriculum analysis. In this regard, a systematic document analysis was conducted of the curricula and course outlines for the three (3) higher education institutions (HEIs) that offer records management, archives, and library science programmes in Zambia. This analysis focused on identifying the presence or absence of digital skills modules.

Furthermore, semi-structured interviews were held with 8 key informants, including curriculum developers from Zambian universities, representatives from the Smart Zambia Institute, and senior records and archives officers from the public sector, to understand the challenges and opportunities in curriculum reform.

### 4. FINDINGS AND DISCUSSION

#### 4.1 Characteristics of the Respondents

As indicated above, a total of 70 records management officers answered the questionnaire. Out of these, 60% were male while 40% were female. In terms of age, the majority (46%) were between 31 and 40, as shown in the table below.

*Table 1: Demographic Characteristics of Respondents*

SN	Variable	Value	Frequency	Perce
1	Gender	Female	28	40
		Male	42	60
2	Age	21-30	9	13
		31-40	32	46
		41-50	25	36
		Above 51	4	6

Figure 1 below presents the job titles of the respondents. A considerable number of respondents (31%) were records officers, 28% were records clerks, while others were records managers, registry supervisors, lecturers, documentalists, librarians, archivists, and ICT personnel.

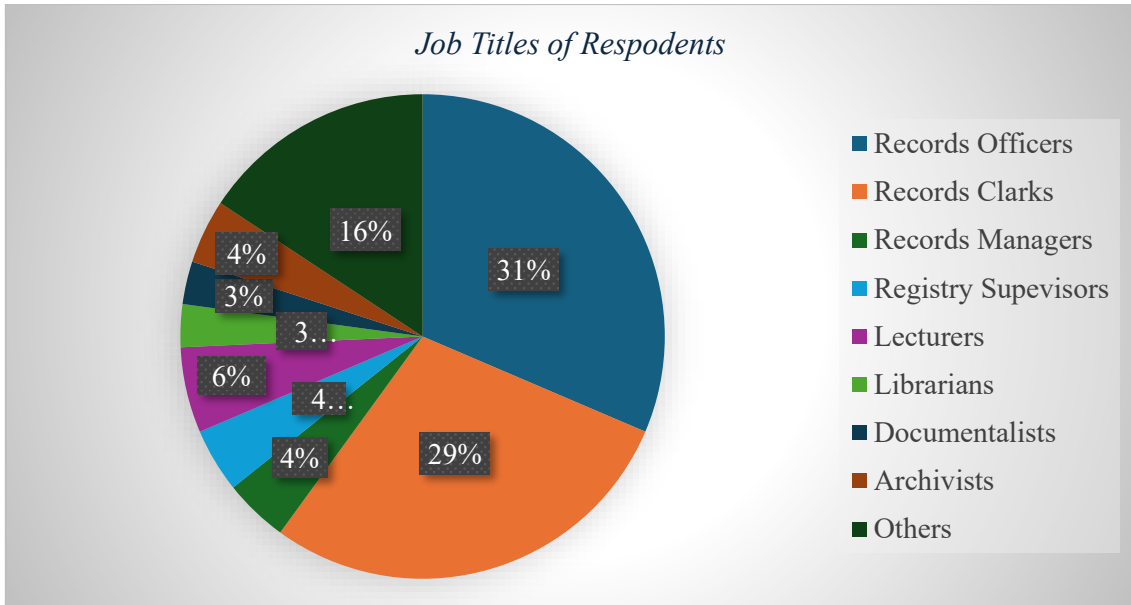


Figure 1: Job Titles of Respodents

The majority (57%) of the respodents came from government line ministries, 38% were from quasi-government institutions, and 5% came from the private sector, as shown in the bar chart below.

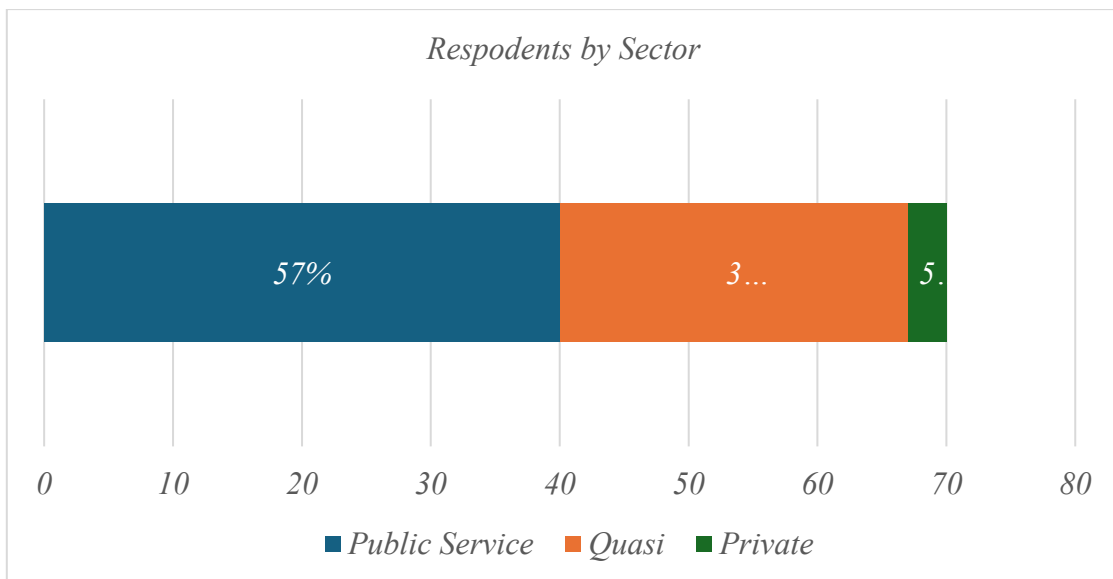


Figure 2: Respodents by Sector

In terms of qualifications, the majority (57%) of the respodents hold a bachelor’s degree, mostly in library and information science/records management. Further, 30% of respodents hold a diploma in library studies/records management, as shown in Figure 3 below.

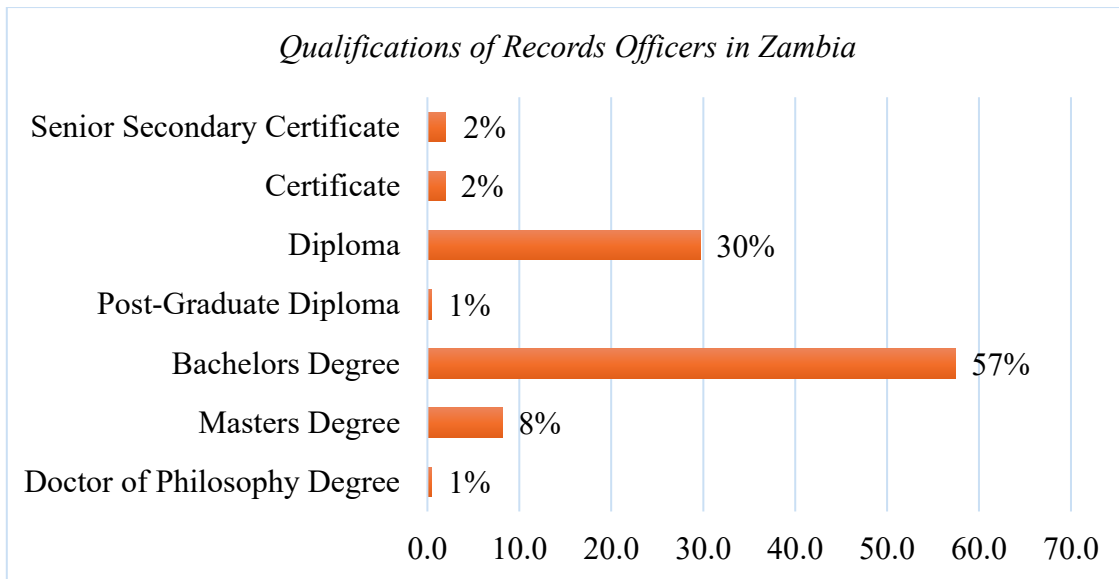


Figure 3: Qualifications of Respondents

The above findings show that the records management sector is dominated by men. More men are working as records officers compared to their female counterparts. This correlates with what Bwalya (2021) found, that more men were working as librarians in Zambia compared to women. Further, the above findings point to the fact that many records officers in Zambia are between the ages of 31 and 46. These findings, however, nullify the widely held view that most records officers in Zambia hold high school secondary certificates, as the majority (57%) of the respondents hold a bachelor's degree in library and information science or records management. Therefore, the lack of digital skills to digitalise the records sector is not due to a lack of academic qualifications among records officers, but to the inappropriate curriculum content.

#### 4.2 The Practitioners' Skills Gap: Evidence of Educational Failure

The survey results below provide compelling evidence of a severe skills gap, indicative of an educational system that has failed to modernise. There was a lack of competencies in e-records systems among some records officers, as exemplified by their inability to identify the core technologies (systems) in e-records management. When asked to identify true records management systems, a concerning number of respondents misidentified a database management system (MySQL, 37%), library management systems (Koha, 24.0%; OpenBilio, 20%), and web content management systems (Joomla, 14%; Drupal, 11%) as EDRMS.



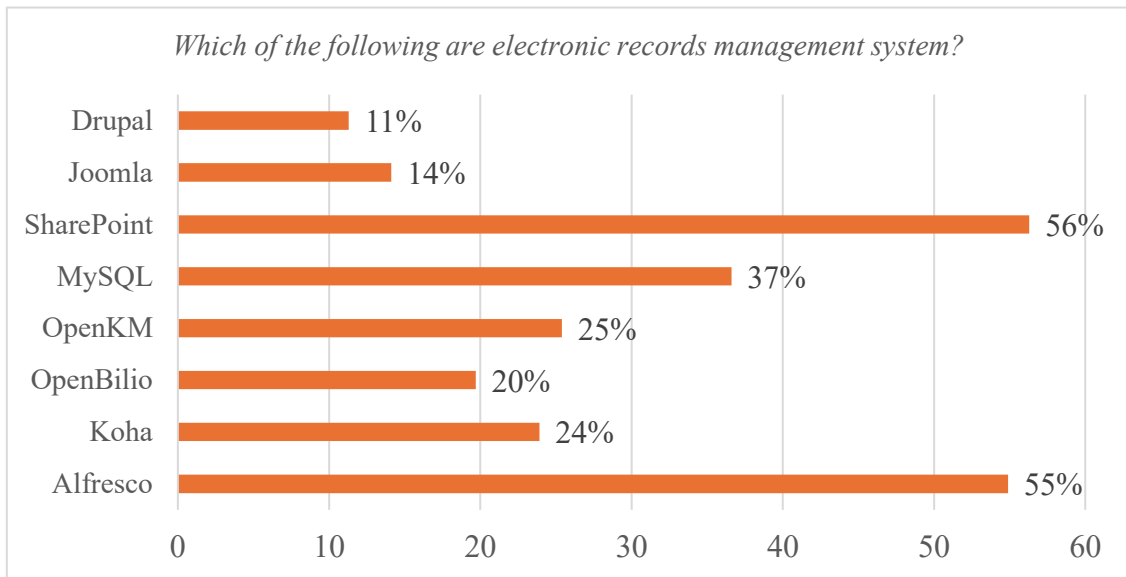


Figure 4: Identification of Records Management Systems

This fundamental confusion reveals a lack of exposure in the curriculum to core technologies or systems used in the management of e-records. This is indicative of the fact that almost all records management programmes in Zambia do not have, or contain limited content on, records management systems, needed to expose learners to systems that could be used to digitalise records management.

Further, the findings of the study show that knowledge of international standards was weak among records officers. While 62% identified ISO 30301, only 17% correctly identified Dublin Core, a fundamental metadata standard. Even more telling, 24% mistakenly believed the MARC cataloguing standard was used for e-records, suggesting an education overly focused on library practice, rather than records management paradigms.

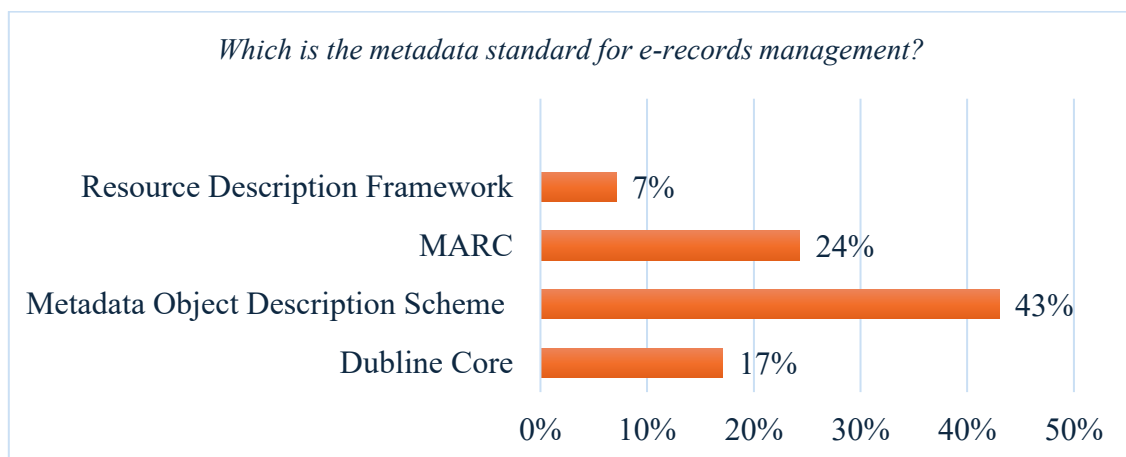


Figure 5: Metadata Standard for e-records Management

Further, key informants from the National Archives of Zambia (NAZ), Parastatals, Cabinet Office, Private Records Consulting Company, and Industry experts also provided their insights on the inadequacies of the current records management programmes in Zambia. Key informant 4 from a consulting company observed that:

“Something I observed when we were discussing with various stakeholders is that they don't really understand the difference between records management and document management. Sometimes they would say, we have SharePoint, so we have records management. You will find that there's always that confusion of what an EDMS is and what an ERMS is”.

Key informant 1 from the National Archives of Zambia also submitted that digital skills are inadequate among records officers in Zambia. Submitted that:

“The issue of metadata standards is Greek [foreign] to many of the officers. They do not know the metadata used in e-records management. There is a need to be trained for them to manage e-records.”

Submissions from key informant 4 revealed that due to inadequate practical skills on how to use e-records management systems, records officers at the Cabinet Office were unable to use SharePoint effectively.

“SharePoint is supposed to be used by everyone, but we are unable to use it until we are trained by Smart Zambia Institute,” Key informant 4.

These findings directly reflect the criticisms levelled by Mkulama and Bwalya (2024) and demonstrate that graduates are entering the workforce without the basic technical lexicon required for electronic records management. The findings are also in tandem with Mkulama and Bwalya (2024) findings, who observed that staff at NAZ were inadequately prepared for digital records curation as participants showed limited awareness, were not knowledgeable in digital records curation, and lacked the skills to champion digital records curation.

From the above findings, it can be argued that the current records management programmes in Zambia do not expose students to various metadata standards used in e-records management. Major e-records management systems such as Alfresco use the Dublin Core metadata to describe the record once it is uploaded onto the system. It is therefore essential that records management curricula in Zambia cover major metadata standards. In line with Robert Katz's Skills Theory (1955), records officers in Zambia need to possess technical, conceptual, and human skills for them to work effectively. However, the findings of the study point to the failure of the education system to impart digital skills to records officers. This has delayed the digitalization of the records sub-sector in Zambia. The findings above show that the current records management programmes in Zambia have failed to deliver records management training with the digital practical skills needed in the era of e-records management.

### **4.3 The Curricular Deficit: Root of the Problem**

The analysis of curricula from HEIs in Zambia that offer training in records management confirmed the hypothesis of a systemic educational failure. The findings of content analysis reveal the following:

#### **4.3.1 Outdated Course Content**

The programmes were found to be heavily skewed towards traditional archives management, paper-based filing systems, and manual classification schemes. Only one programme had a course on "Electronic Records Management". However, further investigations revealed the said programme was theoretically taught. There is no integration with practical, hands-on technology training.



### 4.3.2 *Missing Digital Components*

In all three programmes for records management, some critical areas identified as essential by the literature and this study's survey were conspicuously absent. None of the curricula had mandatory modules on EDRMS software (e.g., hands-on training with Alfresco or similar), digital preservation strategies, metadata standards implementation (e.g., Dublin Core, PREMIS), information governance frameworks, and basic cybersecurity for records.

### 4.3.3 *Lack of ICT Integration*

Further review records management programmes revealed that ICT is treated as a separate subject rather than as an integral component of every aspect of modern records management. Therefore, the ICT module (courses) that are available in these programmes are taught as an introduction to ICT, not as a tool for records digitalisation, and efficiency in records management. This siloed approach prevents students from developing the blended skill set required in the workplace.

The consequences of the botched records management programmes in Zambia are a workforce that is unprepared for "Smart Zambia". The interplay between the skills gap and the curricular deficit has tangible consequences. Ill-prepared records officers as regards e-records management are not in a position to spearhead records digitalisation programmes because they have no skill sets to do so.

Further, the capacity of records officers in Zambia, especially public service, is further constrained by the inability of Smart Zambia Institute to effectively guide as stipulated in the Electronic Government Act of 2021. In this survey, 70.4% of respondents indicated that they did not receive guidance from the Smart Zambia Institute on e-records management issues. This is not just an implementation failure; it is a capability failure. Records officers lacking digital skills cannot effectively engage with or provide input to digital governance bodies. This marginalises the records profession in critical national discussions, perpetuating a cycle where digital systems are designed without records management principles, leading to future accountability black holes.

## 5. CONCLUSION AND RECOMMENDATIONS

The evidence presented leads to an inescapable conclusion. The current records management education system in Zambia is obsolete and unfit for purpose. It has produced a generation of professionals unprepared for the digital demands of the 21st-century public service, directly contributing to the stagnation of the IERMS project and undermining the "Smart Zambia" vision. Tinkering with existing curricula is insufficient; a fundamental overhaul is required. To address this failure, the following recommendations are proposed:

- i) All HEIs offering records management should carry out a comprehensive review of records management programmes. This should be done in partnership with the Smart Zambia Institute, the National Archives of Zambia, and industry experts.
- ii) A new curriculum must be developed that is built around digital competencies. Core modules should include Database Fundamentals, EDRMS Applications, Digital Preservation, Metadata Standards, Information Governance, and Cybersecurity for Records. Theory must be tightly coupled with extensive practical, hands-on labs.

- iii) To help build capacity for servicing records officers, a post-graduate diploma in records management has been developed.
- iv) Introduce mandatory continuous professional development (CPD) courses for existing records officers to upskill them urgently. This is a critical short-term measure to bridge the gap while new graduates are being trained.

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