

# Utilization of Digital Humanities in Managing Archives and Records in the Public and Private Sectors in Zambia

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Publication Date: 2025/04/10

**Abstract:** This study investigated the use of digital humanities in managing records and archives within Lusaka's public sector, focusing on identifying the challenges hindering its adoption. The main objective of this study was to examine how digital humanities are used to manage records and archives in public and private sector organizations in Lusaka, Zambia. Specifically, the study focused on To analyze current practices for managing archives and records within the Zambian public sector; evaluation on how digital humanities are utilized in managing archives and records; the potential benefits of implementing digital humanities for archives and records management and to identify the challenges that hinder the adoption of digital humanities in the public and private sectors. A mixed research design was employed, incorporating both quantitative and qualitative methods. The study's population included records and archives staff in Zambia's public and private sectors. Stratified and simple random sampling techniques were used to select 125 respondents from a population of 689. Data were collected through an online questionnaire, with quantitative data analyzed using SPSS version 23.0 and qualitative data analyzed thematically. The study revealed that most respondents, predominantly female, were inadequately qualified to use digital humanities tools. Many relied on paper-based systems for managing records and archives, citing insufficient technical expertise and inadequate funding as significant barriers to adopting digital humanities. The study recommends that both public and private sectors develop policies promoting training and orientation on digital humanities utilization in archives and records management.

**Keywords:** Digital Humanities, Utilisation, Records, Archives, Public Sector, Private Sector.

**How to Cite:** Chembe Kaluba; Wezi Nyirenda; Richard Sililo. (2025). Utilization of Digital Humanities in Managing Archives and Records in the Public and Private Sectors in Zambia. *International Journal of Innovative Science and Research Technology*, 10(3), 2514-2519. <https://doi.org/10.38124/ijisrt/25mar1470>.

## I. INTRODUCTION

Digital Humanities (DH), an interdisciplinary field merges the traditional approaches of the humanities with digital technologies. It involves the application of computational tools and methods to the study, creation and dissemination of humanities research (Dalbello, 2011) and (Svensson, 2010).

Several studies around the world have explored the application of digital humanities (DH) methodologies in the management of archives and records. Hawkins (2022) conducted a literature review in examining both archival and digital humanities scholarship to understand the impact of Linked Data on archival practices. Hawkins discusses the challenges and barriers that currently prevent digital humanists from fully utilizing digitized and born-digital archives. The study also examines the role of AI tools, such as Wikidata, in scaling up the production of Archival Linked

Data. The study shows that linked data and AI tools, such as Wikidata, can significantly improve the accessibility and usability of digital archives by creating structured, integrated, and machine-readable data. Further, Hawkins emphasizes the importance of collaboration between DH and archival disciplines to overcome existing barriers and maximize the benefits of digital tools and methodologies (Hawkins, 2022).

In a literature review by Jaillant, Aske, Goudarouli, and Kitcher (2022), the study addresses the challenges and opportunities presented by the digitization of archival materials and the emergence of born-digital archives. Findings reveal that technological advancements have transformed access to archival collections, with digitization and born-digital archives becoming increasingly accessible online.

Asundi, Reddy, and Krishnamurthy (2023) conducted a study that aimed to provide insights into the applications, techniques, and methodologies used in digital humanities research. The main objectives of this study were to highlight the significance of digital humanities as a key research area globally, to emphasize the role of libraries, information science professionals, and related fields in advancing digital humanities, and to discuss emerging areas within digital humanities, including metadata, semantic mapping, ontology, and digital curation. The study shows various library techniques and methods applicable to digital humanities, such as knowledge organization, search and retrieval design, and education. Findings of this study show the relevance of historical informatics alongside digital humanities.

Using literature review methodology, Araújo, Aguiar, & Ermakova (2024) conducted a study on the role of DH in today's interconnected world. The study emphasizes the intersection of DH with data science and big data, discussing the application of digital tools and methodologies in resolving societal challenges, including those related to archives and records management. The researchers argue that the application of digital tools and methodologies in DH can help resolve societal challenges, including those related to archives and records management.

In Zambia, the Endangered Archives Program (EAP), sponsored by the British Library, undertook a digital humanities (DH) project that aimed at digitization of the documentary collection of the United Nations Independence Party (UNIP) housed in Lusaka. The project permanently preserved and saved the UNIP archives from being destroyed due to neglect and decay that threatened them. The project employed a digitization methodology to preserve the UNIP records. The findings of the project indicate that the digitization of the UNIP archives successfully addressed several inadequacies of post-colonial collections at the National Archives of Zambia. The project ensured the preservation of historically significant materials that were at risk due to neglect and decay. By storing the digitized documents on DVDs and revising the catalogue, the project enhanced the accessibility and usability of the UNIP archives for researchers (EAP121, 2007).

Despite the evidence of DH initiatives worldwide, the application of digital humanities in Zambia's public sector is still in its nascent stages, facing several obstacles such as lack of technical expertise, inadequate funding and resistance to change. This study focused on practical applications of DH, its benefits and challenges. With this background, it was found necessary to explore the extent to which Zambia's public sector utilized the digital humanities tools to enhance the management of archives.

## II. STATEMENT OF THE PROBLEM

Despite the potential benefits, the public sector in Zambia has not fully utilized the digital humanities tools to enhance the management of archives and records. Failure to take advantage of the benefits that come with the application of the DH tools has consequences that prolong the

inefficiencies, limited accessibility, preservation challenges, and a lack of transparency and accountability in the management of public sector records and archives. The problem to be addressed is the identification of the barriers to the adoption of digital humanities in the public sector of Zambia and the development of strategies to overcome these barriers to enhance the management of archives and records.

### A. Purpose of the Study

The purpose of this study was to examine the utilisation of digital humanities in managing records and archives within Lusaka's public and private sectors.

#### ➤ The Study was Guided by the Following Specific Objectives;

- To analyze current practices for managing archives and records within the Zambian public and private sectors.
- To evaluate how digital humanities are utilized in managing archives and records.
- To assess the potential benefits of implementing digital humanities for archives and records management.
- To identify the challenges that hinder the adoption of digital humanities in the public and private sectors.

### B. Research Questions

- What are the current practices for managing archives and records within the Zambian public and private sectors?
- How are digital humanities utilized in managing archives and records?
- What are the potential benefits of implementing digital humanities for archives and records management?
- What challenges hinder the adoption of digital humanities in the public and private sectors?

### C. Significance of the Study

The application of digital humanities in managing archives and records in Zambia's public and private sectors offers significant potential for preserving cultural heritage, enhancing accessibility, improving management efficiency, and fostering innovation. The findings of this study are crucial for policymakers in both sectors, as they seek to modernize the management of archives and records in line with global trends. Additionally, the study's insights provide valuable guidance for archivists and records managers on leveraging digital humanities to transform the archival landscape in Zambia, ultimately contributing to the country's cultural, educational, economic, and administrative development. Lastly, this study contributes to the existing body of knowledge in the field.

### D. Research Methodology

This study employed a mixed research design, utilizing both quantitative and qualitative approaches. The population included public and private sector organizations in Lusaka, Zambia. Stratified and simple random sampling techniques were used to select 125 respondents from a total population of 689. Data collection was conducted via an online questionnaire, chosen for its efficiency, cost-effectiveness, and broad reach. The questionnaire was designed to capture

both quantitative and qualitative data through a combination of closed-ended structured and open-ended questions.

Quantitative data were analyzed using SPSS version 23.0 while qualitative data were analyzed thematically.

### III. FINDINGS AND DISCUSSION

Table 1: Demographic Characteristics of Respondents

Demographic characteristics		Frequency	Percentage
Gender	Male	49	39
	Female	76	61
Occupation	Librarian	3	4
	Records manager	9	9
	Registry assistant	29	23
	Senior Registry officer	49	38
	Senior information officer	17	12
	Archives officer	5	4
Level of education	Senior archivists	13	10
	No response	67	54
	Certificate	28	22
	Diploma	14	11
	Degree	11	9
	Master's degree	5	4
	PHD	0	0
Work Experience	Above 10 years	81	65
	6-10 years	3	10
	1-5 years	17	14
	Less than 1 year	14	11
Sector	Private	29	23
	Public	96	77

In table 1, the current study revealed that that 76 (61%) of the respondents were female and 49 (39%) were males. Hence, the participation of females was higher compared to their male counterparts. The researcher also sought to know the job position of the respondents, the study revealed that 49 (38%) of the respondents were Senior Registry officers, 29 (23%) were Registry Assistants, 17 (12%) were Senior Information Officers, 13 (10%) were Senior Archivists, 5 (4%) were Archive Officers and only 3 (4%) were librarians.

Further, the researcher wanted to compare statistics of those who worked in the public with the private sectors. The study revealed that 96 (77%) of the respondents were from the public sector compared to 29 (23%) who were from the private sector. This entails that there are many records personnel in the public sector compared to the private sectors.

In addition, the findings of the study show that 81 (65%) of the respondents had more than 10 years experience in the service, 17 (14%) had experience of 1 to 5 years, 13 (10%) had 6 to 10 years experience and 14 (11%) had experience of less than one year.

Unfortunately, the study revealed that 67 (54%) of the respondents did not respond to the question that asked for their education level. Only 28, (22%) indicated that they had certificates, 14(11%) had Diplomas, 11 (9%) had degrees, 5 (4%) had Masters degree and no one indicated of having a PhD. With the high non response rate on this question, it is quite difficult to to make a conclusion on the level of education of respondents. However, it can be said that out of

those who responded, 22% had certificates compared to the combination of 11% and 4% with diplomas and degrees, respectively.

#### A. Section 2: Current Methods of Managing Archives and Records

➤ How archives and records are currently stored in the private and public sectors hybrid

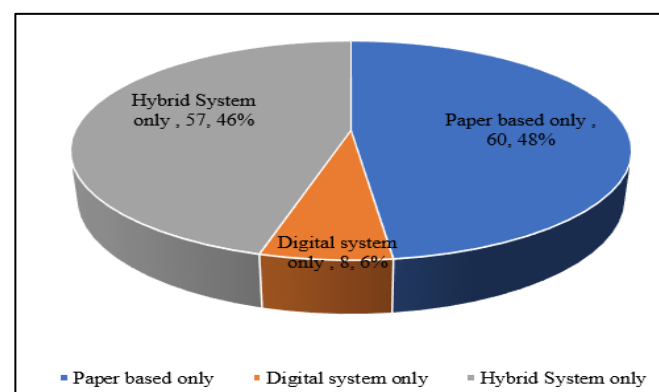


Fig 1: How Archives and Records are Currently Stored in the Private and Public Sectors

They study revealed that 57 (46%) of the respondents indicated that the hybrid system was used to store records, 60 (48%) used paper-based system and 8 (6%) used digital system only. These result suggest that many are still using the paper based system compared to a few who have migrated

to the digital system. These results suggest that despite the increasing global shift toward digital records management, many institutions continue to rely heavily on traditional paper-based systems. These results are in line with the study by Ngulube (2012) where it was revealed that the continued use of paper-based records may be attributed to various factors, including institutional inertia, lack of digital infrastructure and concerns over digital security

Table 2: Responses on the Types of Records Participants Managed

Types of Records	Frequency	Percent
Administrative Records	88	70
Financial Records	75	60
Educational Records	88	70
Legal Records	24	19
Medical Records	35	28
Engineering Records	4	3
Historical Records	51	41

In table 2, the study revealed that 88 (70%) of the respondents were of the view that the type of records they managed were administrative records, 75 (60%) managed financial records, 88 (70%) managed educational records, 24 (19%) managed legal records. Furthermore, the study revealed that 35 (28%) managed medical records, 4 (3%) managed engineering records and 51(41) managed historical records. These results suggest a strong emphasis on operational, academic and financial record-keeping within institutions, while specialized records such as legal and engineering records appear to be of lesser priority. The high percentage of respondents managing administrative records aligns with the critical role these records play in institutional governance, decision-making and day-to-day operations. The findings are in line with (Ngoepe, 2018).

Table 3: Frequency of How Records are Accessed or Retrieved in Department/Agency

Frequency	Frequency	Percent
Daily	110	88
Weekly	10	8
Monthly	2	2
Occasionally	3	3
<b>TOTAL</b>	<b>125</b>	<b>100</b>

The findings from the study revealed that 110 (88%) of the respondents accessed or retrieved the records daily, 10 (8%) retrieved the records weekly, 2 (%) retrieved the records monthly and 3 (3%) retrieved the records occasionally.

Table 4: Showing Respondent's Responses on the Methods Used to Keep Records

Methods used	Frequency	Percent
Manual filing	75	60
Electronic databases	38	30
Spreadsheets	3	3
Dedicated Records Management Software	9	7
<b>Total</b>	<b>125</b>	<b>100</b>

In trying to solicit information on the methods used to keep records by the respondents, the findings from the study revealed that 75 (60%) were of the view that they used manual filling, 38 (30%) indicated electronic filling, 3 (3%) were of the view that they used spreadsheet and 9 (7%) indicated Dedicated Records Management Software.

### B. Section 3: Utilization of Digital Humanities

#### ➤ Awareness of Concept of Digital Humanities

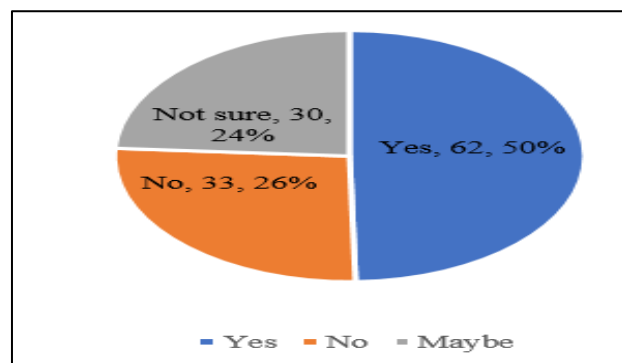


Fig 2: Awareness of Concept of Digital Humanities

The findings revealed that 62 (50%) of the respondents indicated that they were aware of digital humanities, 33 (26%) were not aware of the digital humanities and 30 (24%) were not sure.

#### ➤ Whether the Department/Agency were Currently using any Digital Humanities Tools or Methods to Manage Archives and Records

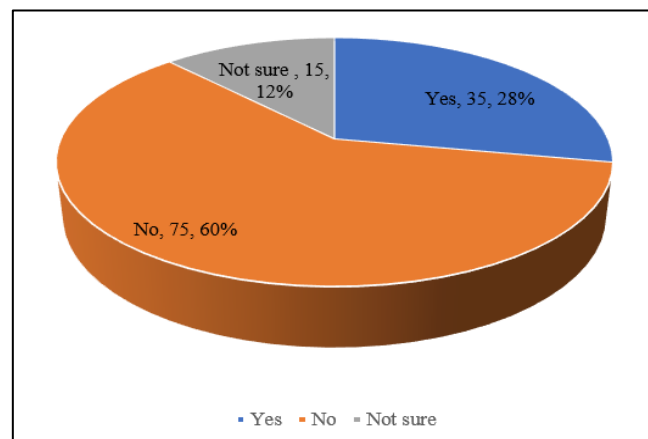


Fig 3: Showing Status on the Use of Digital Humanities

The findings from the study revealed 75 (60%) of the respondents were not using any digital humanities tools or methods to manage archives and records, 35 (28%) of the respondents were using and 15 (12%) were not sure.

If yes, please specify the digital humanities tools or methods being used.



➤ *Responses on the Frequency of using Digital Tools for Record Management*

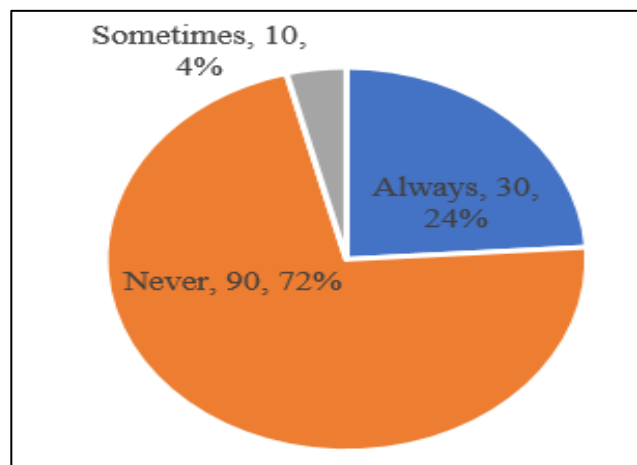


Fig 4: Frequency of using Digital Tools for Record Management

The study findings revealed that 90 (72%) of the respondents never used digital tools for record management, 30 (24%) used digital humanities tools and 5 (4%) sometimes used digital humanities.

C. *Section 4: Potential Benefits of Digital Humanities*

➤ *Digital Humanities and Improvement of Public Sector Service Delivery*

In trying to establish how digital humanities can improve public and private sector service delivery, the study revealed that the majority of the respondents were of the view that digital humanities can improve service delivery by facilitating easy access to records and hence making quick decisions.

*“Digital humanities can improve service delivery in the public and private sectors by providing quick accessibility to information needed in a quickest possible time,”* observed one responded.

Table 5: Showing Respondent’s Responses on the Potential Benefits of Implementing Digital Humanities in Managing Archives and Records in the Public and Private Sectors

Methods used	Frequency	Percent
Improved accessibility	87	70
Enhanced preservation	76	61
Increased efficiency	76	61
Greater Transparency	78	62
Better data security	76	61
Not sure	2	2

The findings revealed that 87 (70%) of the respondents were of the view that digital humanities improved accessibility of records, 76 (61%) indicated that digital humanities enhanced preservation 76 (61%) felt that digital humanities increased efficiency. Furthermore, 78 (62%) indicated that digital humanities greater transparency, 76 (61%) felt that digital humanities allowed better data security and 2 (2%) were not sure. The findings of this objective

indicate a strong consensus among respondents regarding the benefits of digital humanities in records management. The study found that the majority acknowledged that digital humanities improved accessibility to records. These findings are in line with Terras, Nyhan and Vanhoutte (2013) where it was discovered that digital humanities integrate information technologies with archival practices, enabling faster retrieval and remote access to records.

D. *Section 5: Challenges Hindering Adoption of Digital Humanities*

Table 6: Challenges Hindering the Adoption of Digital Humanities in the Public and Private Sectors

Methods used	Frequency	Percent
Lack of technical expertise	73	58
Inadequate funding	73	58
Resistance to change	62	50
Insufficient infrastructure	67	54
Data privacy concerns	47	38
Lack of awareness	64	51
Not sure	2	2

The findings of this study highlight several key challenges hindering the adoption of digital humanities in both the public and private sectors. The findings revealed that 73 (58%) of the respondents were of the view that there was lack of technical expertise, another 73 (58%) felt that inadequate funding was the issue hindering the adoption of digital humanities, 62 (50%) indicated resistance as the issue, 67 (54%) felt that it the issue of insufficient infrastructure. Furthermore, 47 (38%) indicated data privacy concerns, 64 (51%) felt that there was lack of awareness and 2 (2%) were not sure. These findings align with existing literature on digital humanities and records management, which emphasizes that the successful adoption of digital technologies requires skilled personnel, adequate financial support, infrastructural readiness, and user acceptance (Terras, Nyhan and Vanhoutte, 2013; Kirschenbaum, 2012).

➤ *Training or Resources Necessary to Facilitate the Adoption of Digital Humanities in your Department/Agency*

In an attempt to solicit information on training and resources necessary to facilitate the adoption of digital humanities in the private and public sectors, It was observed that the respondents were of the view that there should be deliberate orientations and training, adequate funding to facilitate the utilization of digital humanities in managing archives and records.

*“There is need to initiate orientations and training in the utilisation of digital humanities in managing records and archives”.*

Another respondent indicated that: *“More funding and proper infrastructure should be channeled towards the utilisation of digital humanities”.*

#### IV. CONCLUSIONS

- The majority of the respondents were females and furthermore majority of respondents came from the public sector.
- The majority of the respondents were lowly qualified to handle digital humanities tools
- The findings of the study also revealed that the majority of the respondents were of the view that they used manual filling a few indicated electronic filling, a small manageable number were of the view that they used both manual and electronic filing while a few others indicated that they used dedicated Records Management Software.
- They study revealed that majority of the respondents were using paper based system to manage records.
- The findings of the study also revealed the majority of the respondents were not using any digital humanities tools or methods to manage archives and records
- The majority of the respondents were of the view that digital humanities can improve service delivery by facilitating easy access to records and hence making quick decisions.
- Finally, it was established from the study that the majority of the respondents were of the view that lack of technical expertise and in adequate funding were major challenges in the utilization of digital humanities.

➤ *The Study Makes the Following Recommendations to Increase Utilization of DH in the Records and Archives Departments:*

- Both private and public sectors should deliberately put up a policy on orientations and training on the utilization of digital humanities in managing archives and records.
- Both private and public should collaborate with experts in universities and funding agencies to boost their funding to facilitate implementation of digital humanities.
- Train more staff at degree and master degree level to interact with digital humanities tools

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