SCHOOLOF LIBRARY, ARCHIEVES AND DOCUMENTATION STUDIES (SLADS-BAGAMOYO)

A RESEARCH REPORT ON:

AN ASSESSMENT OF LEVERAGE OF ICT FOR EFFICIENT RECORDS MANAGEMENT IN PUBLIC INSTITUTIONS: A CASE STUDY OF THE AGENCY FOR THE DEVELOPMENT OF EDUCATION MANAGEMENT (ADEM).

BY:

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A Research Report Submitted at the School of Library, Archives and Documentation Studies for the Partial Fulfilment of the Award of Ordinary Diploma in Records and Archives Management.

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CERTIFICATION

The undersigned certify that he has read and hereby recommend for acceptance by the School of Library, Archives and Documentation Studies (SLADS) Bagamoyo. A Research Report entitled "***Assessment on Leverage of ICT for Efficient Records Management in Public Institutions".*** A case study at The Agency for the Development of Education Management **(ADEM)**, in Fulfilment of the Requirements for Award of Ordinary Diploma in Record and Achieves Management.

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DEDICATION

I dedicate this research report to my family and who encouragement and enthusiasm during this period while providing all necessary support to my studies.

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LIST OF ABBREVIATIONS

BDC	Bagamoyo Municipal Council
ERM	Electronic Records Management
ICT	Information and Communication Technology
ISO	International Standard Organization
PO-RALG	President's Office – Regional Administration and Local Government
RAMD	Records and Archives Management Department
RM	Records Management
RMA	Records Management Assistant
RMS	Records Management System
SLADS	School of Library Archives and Documentation Studies
SLADSSO	School of Library, Archives and Documentation Studies Students Organization
URT	United Republic of Tanzania

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ABSTRACT

This study assessed the leverage of Information and Communication Technology (ICT) for efficient records management in public institutions, using the Agency for the Development of Education Management (ADEM) as a case study. The study was conducted to examine the use of ICT in records management, identify the ICT tools used in managing records, assess the contribution of ICT towards improving records accessibility and efficiency, and determine the challenges affecting the effective utilization of ICT in records management. Effective use of ICT is essential for improving records creation, storage, retrieval, security, accessibility, and overall service delivery in public institutions.

The study adopted a case study research design and employed a mixed research approach. Data were collected from 25 respondents through questionnaires and interviews. Quantitative data were analyzed using frequencies and percentages with the aid of Microsoft Excel and presented in tables, while qualitative data collected through interviews were analyzed thematically and supported by respondents' quotations.

The findings revealed that ADEM uses ICT tools such as computers, Internet/Wi-Fi, online databases, and email systems to support records management activities. The study further found that the majority of respondents use ICT in accessing and managing records, and that ICT has improved records retrieval, reduced the time required to access information, and enhanced the management of digital records compared to manual records. However, the findings also identified several challenges affecting effective ICT utilization, including poor internet connectivity, inadequate ICT equipment, security and privacy concerns, .

The study concludes that ICT plays a significant role in improving the efficiency of records management at ADEM by enhancing accessibility, reducing time spent on records retrieval, and supporting digital records management practices. However, strengthening ICT infrastructure, providing continuous staff training, improving

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system security, and ensuring reliable technical support are necessary to maximize the benefits of ICT in records management.

The study recommends that ADEM should invest in modern ICT infrastructure, provide regular ICT training programs for staff, improve internet connectivity, strengthen electronic records management systems, and develop effective measures to ensure the security and sustainability of digital records management practices.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.0 Introduction

This chapter comprised the following aspects: the background to the study, statement of the problem, objectives of the study, research questions, significance of the study, scope of the study, limitations of the study, and definitions of key terms. These sections provided a foundation for understanding the study on the leverage of ICT for efficient records management in public institutions, with a case study of the Agency for the Development of Education Management (ADEM).

1.1 Background of the study.

The term ICT (Information and Communication Technology) originated as an expansion of the concept of Information Technology (IT). While "Information Technology" became widely used in the mid-20th century to describe computer-based data processing and storage. (Laudon & Laudon, 2020; UNESCO, 2021). During the 1960s and 1970s, the development of computers, satellite communication, and networking technologies (such as ARPANET, the precursor to the internet) brought computing and communication together. By the 1990s, with the rise of the internet and the World Wide Web, the integration of information and communication technologies became so significant that the term ICT was formally adopted by educators, policymakers, and researchers to describe this combined field. (Laudon & Laudon, 2020; UNESCO, 2021).

Globally, the use of ICT has transformed the way organizations manage records and information. Many institutions have shifted from traditional paper-based record systems to electronic records management systems that allow faster storage, retrieval, and sharing of information. In many developed countries, including those in Africa, public institutions still face challenges in managing records effectively due to limited infrastructure, inadequate ICT skills, and reliance on manual systems. According to

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mutual and wamukoya (2009),the adoption of ICT in records management improves efficiency,accessibility,and transparency in public sector organizations.

ICT in Tanzania has grown steadily from the early 1990s when public institutions relied mainly on manual records and limited telecommunication services, to today where digital systems play a central role in governance and service delivery. The government introduced the National ICT Policy in 2003 (updated in 2016) and invested heavily in infrastructure such as the National ICT Broadband Backbone, which expanded internet access across the country. Mobile penetration and services like mobile money further accelerated ICT adoption, while laws such as the Cybercrimes Act and Data Protection Act provided a regulatory framework. Despite challenges like limited skills, high costs, and unequal access between urban and rural areas, ICT has become a key driver of efficiency, transparency, and citizen engagement in Tanzania's public institutions. (Laudon & Laudon, 2020; UNESCO, 2021).

Institute such as ADEM handle large volumes of records including student information ,staff records, and administrative document. ICT also helped improve transparency and accountability. Digital records are harder to tamper with compared to paper files, and they can be tracked easily. For citizens, this meant better access to services like applying for IDs, paying taxes, or checking land ownership without having to queue for hours. In short, ICT brought government services closer to the people. (Laudon & Laudon, 2020; UNESCO, 2021). Of course, the journey hasn't been perfect. Some institutions still struggle with challenges like poor infrastructure, lack of ICT skills among staff, or cybersecurity risks. But overall, the shift from manual to digital records has been a big step forward. It shows how technology can make public service more efficient, reliable, and citizen-friendly. (Laudon & Laudon, 2020; UNESCO, 2021).

1.2. Statement of the problem.

Public institutions generate and manage large amounts of records that are essential for administrative functions, decision making, and service delivery. Effective records management ensures that information is accessible, secure, and properly maintained. However, many public institutions still rely on manual or partially digitized record management systems. These systems often lead to problems such as slow retrieval of

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records, misplacement of files, and difficulties in accessing information when needed. Although ICT has the potential to improve the efficiency of records management through electronic storage, faster retrieval, and better security of information, its adoption in some public institutions remains limited. Therefore, this study seeks to assess how ICT can be effectively leveraged to improve records management efficiency in public institutions, focusing on the Agency for the Development of Educational Management (ADEM).

1.3. Objective of research.

This section was based on two categories of objectives, namely the general objective and specific objectives**.** The general objective of the study was to assess the leverage of ICT for improving records management efficiency in public institutions, using the Agency for the Development of Education Management (ADEM) as a case study**.**

1.3.1. Specific objective.

i. To identify ICT tools used in records management in public institutions.
ii. To examine the role of ICT in improving storage and retrieval of records.
iii. To assess the effectiveness of ICT in reducing time and cost in records management.
iv. To evaluate the challenges faced in using ICT for records management.
v. To analyse the level of ICT skills among staff involved in records management.

1.4 Research Questions

1. What ICT tools are used in records management in public institutions?
2. How does ICT improve storage and retrieval of records?
3. What benefits are obtained from using ICT in records management?
4. What challenges do institutions face when using ICT for records management?
5. How can ICT be improved to enhance records management?

1.5 Scope of the study

The study focused on assessing how Information and Communication Technology (ICT) was used to improve records management efficiency at the Agency for the Development of Education Management (ADEM). It explored the use of ICT tools in

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the storage, organization, management, and retrieval of both physical and digital records, while examining the benefits and challenges associated with the application of technology in daily administrative activities.

The study was limited to ADEM and provided a practical understanding of how ICT was applied within the institution to enhance records management efficiency, accuracy, accessibility, and security. The study did not cover private institutions or the technical development of ICT software systems; instead, it focused on how existing ICT systems supported records management processes, improved workflow, reduced time spent on records retrieval, and contributed to better service delivery at ADEM.

1.6 Significant of the stud

This study was significant to the Agency for the Development of Education Management (ADEM) because it provided an understanding of how ICT could be utilized more effectively to improve records management practices, increase efficiency, enhance accessibility, and support better administrative operations. The findings also assisted government institutions and policy makers by providing useful information on the importance of adopting and strengthening ICT-based records management systems to promote accountability, transparency, and improved service delivery in public institutions.

Besides, the study contributed to academic knowledge by providing additional information on the relationship between ICT and records management efficiency. It served as a useful reference source for researchers and students conducting studies in the areas of records management, information studies, and ICT applications in organizations. The findings may also support future researchers in exploring other aspects related to digital transformation and electronic records management in public institutions.

1.7 Limitations of the Study

One of the limitations of this study is **inadequate funding**. The budget allocated for the research was not sufficient to cover all necessary costs, such as data collection materials

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and transportation. To address this limitation, the researcher carefully planned and utilized a sustainable budget to ensure that the study objectives were achieved within the available resources.

Time constraints also limited the study. The time allocated for conducting the research was relatively short, which restricted the depth of investigation into all aspects of staff awareness and records handling practices. As a result, the study focused on the most relevant variables to ensure meaningful findings within the available timeframe.

Lack of research experience on the part of the researcher, as this is the first time conducting a formal research study. This limitation was minimized through regular consultation with the supervisor and guidance from experienced researchers, which helped to improve the quality and reliability of the study.

Technological constraints posed a challenge during data collection. Variations in internet connectivity, digital infrastructure, and access to technological devices among respondents may have influenced participation and responses. This could have introduced some level of bias, as respondents with better access to technology may have been more able to participate fully in the study. Efforts were made to reduce this limitation by using alternative data collection methods where possible.

1.8 Definition of Key Terms

1.8.1 Information and Communication Technology (ICT):

ICT refers to the use of digital tools and systems, such as computers, software, networks, and the internet, to store, manage, process, and communicate information. In this study, ICT focuses on tools that help in managing records efficiently in public institutions.

1.8.2. Records Management:

Records management is the process of systematically controlling the creation, receipt, maintenance, use, and disposal of records. It ensures that records are accurate, secure, accessible, and retained for the required duration. (Alhassan, Sam &Asare, 2020).

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1.8.3. Efficiency:

Efficiency refers to the ability to perform tasks or achieve goals with minimum wasted time, effort, or resources. In this study, it relates to how ICT can streamline records management processes in public institutions. (Laudon & Laudon, 2020; UNESCO, 2021).

1.8.4. Public Institution:

A public institution is an organization that is owned, operated, or regulated by the government to provide services to the public. In this study, it refers to ADEM as the institution where the research was conducted. (Alhassan, Sam &Asare, 2020).

1.8.5. Leverage:

Leverage, in the context of this study, means making effective use of ICT tools and systems to improve the management of records, making the processes faster, more accurate, and more secure. (Laudon & Laudon, 2020; UNESCO, 2021).

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CHAPTER TWO

LITERATURE REVIEW

2.0 introduction

This section reviews literature related to the use of Information and Communication Technology (ICT) in records management within public institutions.in this chapter consist reviewed literature, role of ICT for efficient records management in public institution, Ways of Using ICT to Access and Manage Records in Public Institutions, challenges facing application of ICT in records management and their solution to overcome those challenges.

2.1 Reviewed Literature

Previous studies indicate that ICT improves records management efficiency by found that ICT has really helped improve records management. Electronic systems make it much easier to store, organize, and find documents compared to the old paper-based methods (ISO, 2016). Staff explained that using ICT has reduced lost files, made work faster, and improved transparency and accountability (IRMT, 2009; World Bank, 2015). However, there are still challenges like limited infrastructure, maintenance costs, and the need for regular staff training (Laudon & Laudon, 2020). Overall, in line with the research title "Leverage of ICT for Efficient Records Management in Public Institutions," ICT is clearly a key tool for making work more efficient and improving institutional performance.

2.1.1 Role of ICT fore efficient records management in public institution

In this study, ADEM was selected as the main research area because it is a public institution that handles many academic and administrative records every day. These records include students' information, staff personal files, financial documents, and examination records. According to IRMT (2009), public institutions need proper ICT systems to manage large volumes of records effectively and to improve service delivery. Due to the large number of records handled at ADEM, the institution was suitable for examining how ICT helps in improving records management. The use of

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computers and electronic systems at ADEM supports storing, organizing, and retrieving information more easily, which agrees with the views of ARMA International (2015) that electronic record systems increase efficiency and accountability in institutions.

However, this research did not focus on ADEM alone. The researcher also interacted with other public institutions to compare how ICT is applied in managing records. Studies show that many public institutions experience similar benefits and challenges when using ICT, such as improved access to information but also facing problems like limited infrastructure and lack of training (Mutula&Wamukoya, 2009; Mnjama, 2003). By interacting with other institutions, the researcher was able to understand whether the situation at ADEM is the same as in other public offices. This made the study more meaningful and reliable because it connected practical findings with what other scholars have discussed. Therefore, although ADEM was the main area of study, information gathered from other public institutions helped to strengthen and support the research findings

2.1.2 Ways of Using ICT to Access and Manage Records in Public Institutions

One-way ICT is leveraged in public institutions like ADEM is through electronic storage and retrieval of records. Staff and trainees use computers, databases, and document management systems to keep important records such as student files, staff information, financial documents, and examination results. Using these digital systems helps organize the records in a proper way, making it easy to find and use them whenever needed. It also protects the records from being lost, damaged, or misplaced, which makes managing information faster, more reliable, and less stressful for the staff (IRMT, 2009; Ngulube, 2012).

Another way ICT is applied is to improve security, accountability, and sharing of information. Digital tools like passwords, access controls, and backup systems keep sensitive records safe from unauthorized use or accidental loss. At the same time, emails, internal networks, and messaging platforms help staff share information quickly between departments. This makes work more coordinated, ensures everyone has the latest information, and improves transparency and accountability in managing public records (ARMA International, 2015; World Bank, 2016).

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2.1.3 Challenges Facing the Application of ICT in Records Management

Despite the benefits of ICT, public institutions like ADEM face several challenges in applying technology for efficient records management. One major challenge is limited ICT infrastructure. Many offices do not have enough computers, servers, or reliable internet connections to manage large volumes of records effectively. Without proper infrastructure, staff cannot fully utilize ICT systems, which reduces efficiency and slows down administrative processes (IRMT, 2009; Mutula&Wamukoya, 2009).

Another challenge is lack of ICT skills and training among staff. Some employees are not adequately trained to operate digital record systems, which can result in errors, poor organization, or underutilization of ICT tools. This affects the accuracy, reliability, and overall efficiency of records management (Mnjama, 2003; Ngulube, 2012).

Resistance to change is also a concern. Some staff prefer manual filing systems due to habit or fear of using new technology. This attitude can slow down the adoption of ICT tools and limit their impact on improving records management (Mutula&Wamukoya, 2009).

Finally, security and maintenance issues pose challenges. Weak access controls, poor backups, or software failures can expose records to unauthorized access, loss, or corruption. Institutions need proper security measures and regular system maintenance to ensure that ICT tools function effectively and safely (ARMA International, 2015; World Bank, 2016).

2.2 Conclusion

In conclusion, ICT plays a very important role in improving records management at ADEM. With the use of digital systems, staff can store, organize, and retrieve records more easily, which saves time and reduces mistakes. It also makes information more transparent and accessible, helping the institution run smoothly and make better decisions.

Despite these benefits, there are still some challenges. Limited computers, poor internet access, high costs, lack of training, and security risks sometimes make it difficult to use ICT effectively. To fully benefit from technology, ADEM needs to improve its ICT infrastructure, provide regular training for staff, encourage the use of digital tools, and strengthen security and backup systems. By doing this, ICT can continue to make

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records management more efficient, reliable, and transparent, helping ADEM deliver better services to its stakeholders.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter explained the research methodology that was used in conducting the study. It covered various aspects including the research design, research approach, and area of the study, target population, sample size, sampling techniques, and methods of data collection, sources of data, research instruments, data analysis, and ethical considerations. These methodological procedures described the activities and processes that were undertaken during the research process in the study area, which was the Agency for the Development of Education Management (ADEM)**.**

3.1 Research design

This study adopted a descriptive research design to examine the leverage of ICT in enhancing records management efficiency at the Agency for the Development of Education Management (ADEM). The descriptive research design was selected because it enabled the researcher to obtain a clear understanding of how ICT was being used in records management, the benefits associated with its application, and the challenges encountered by staff during its implementation.

The design allowed the researcher to collect data directly from respondents through questionnaires, interviews, and observation, which helped in describing the existing situation accurately. Through this design, the study focused on understanding the practical application of ICT in records management, how records were accessed and managed, and the extent to which ICT contributed to improving efficiency, accessibility, and decision-making within the institution.

3.2 Research approach/Type

This study adopted a mixed-methods research approach, which combined both quantitative and qualitative techniques. The approach was selected because it enabled the researcher to obtain both numerical data and detailed explanations regarding the

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leverage of ICT for efficient records management at the Agency for the Development of Education Management (ADEM).

Quantitative data were collected through questionnaires and analyzed using descriptive statistics such as frequencies and percentages. Qualitative data were collected through interviews and observation in order to obtain detailed information and a deeper understanding of ICT utilization, its contribution, and challenges affecting records management practices within the institution. The use of a mixed-methods approach enabled the researcher to obtain comprehensive findings by combining statistical results with respondents' experiences and opinions.

3.3 Area of the study

The study was conducted at the Agency for the Development of Education Management (ADEM). ADEM was selected as the study area because it is a public institution where staff members regularly use ICT tools in managing records and accessing information. The institution provided a suitable environment for examining how ICT was applied in actual records management practices.

Conducting the study at ADEM enabled the researcher to obtain first-hand information from respondents who directly interacted with ICT systems and records management processes. This made it possible to understand the benefits, challenges, and overall contribution of ICT towards improving records management efficiency within the institution.

3.4 Population of the study

The population of this study comprised all staff members and trainees at the Agency for the Development of Education Management (ADEM) who used ICT in their daily work and learning activities. This population was considered appropriate because the respondents directly interacted with ICT tools for managing records, accessing information, and performing various institutional activities.

The selected population provided relevant information regarding the use of ICT, its contribution to records management efficiency, and the challenges encountered during the implementation of ICT-based records management practices at ADEM. Their

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experiences and views enabled the researcher to obtain reliable data for achieving the objectives of the study.

3.5 Sample size

The study involved a sample size of 30 participants selected from the Agency for the Development of Education Management (ADEM). The sample size was chosen due to the manageable population size, limited research time, and available resources. It was considered adequate to provide relevant and reliable information required to achieve the objectives of the study.

The participants were selected because they were directly involved in the use of ICT for records management and information access within the institution. By involving these respondents, the study was able to obtain detailed insights into the application of ICT in records management, the benefits associated with its use, and the challenges encountered during daily institutional operations.

Category of Participants	Number of Participants
Staff	15
Trainees	15
Total	30

3.6 Sampling techniques

The study used a purposive sampling technique to select participants. This method was chosen because it allows the researcher to focus on staff and trainees who directly use ICT in managing records and accessing information. By selecting participants who have practical experience with digital tools, the study was able to gather relevant and meaningful information. Purposive sampling also helped save time and resources while ensuring that the data collected reflected the real experiences and challenges faced by users of ICT at ADEM.

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3.6.1 Simple random sampling

In this study, simple random sampling was used to select some of the participants from the population at ADEM. This method was chosen to give every staff member and trainee an equal chance of being selected, which helps make the study fair and unbiased. Using simple random sampling also allowed the researcher to gather information from a variety of participants, ensuring that different perspectives on the use of ICT in records management were included. This method made it possible to collect reliable data that represents the experiences and opinions of the whole population.

3.7 Methods of data collection

To gather relevant information for this study, both primary and secondary data were collected. Primary data were obtained directly from ADEM staff and trainees through questionnaires, interviews, and observation, while secondary data were gathered from existing records, books, journals, reports, and online sources. Using both types of data helped to ensure that the research findings were accurate, reliable, and well-supported by evidence.

3.7.1 Primary data

Primary data for this study were collected directly from the staff and trainees at ADEM. This type of data was obtained through interviews, questionnaires, and observation, which allowed the researcher to gather first-hand information about the use of ICT in records management and accessing information. Primary data is important because it reflects the actual experiences, opinions, and challenges of the participants. By collecting information directly from those who interact with digital tools every day, the study was able to get accurate and relevant insights for understanding the benefits and difficulties of using ICT at ADEM.

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3.7.2 Secondary data

In addition to primary data, this study also used secondary data to support the findings. Secondary data were collected from books, journals, reports, official records, and online sources related to ICT, records management,this type of data helped the researcher to compare the information gathered from participants with existing knowledge and studies. Using secondary data also provided background information, theoretical understanding, and evidence of best practices, which made it easier to analyse and interpret the primary data collected at ADEM.

3.8 Research Instrument

In this study, the researcher used several research instruments to collect accurate and relevant data from staff and trainees at ADEM. The main instruments included:

Questionnaires

These were used to gather information from trainees and staff about their experiences, opinions, and challenges in using ICT for records management and accessing information. Questionnaires helped collect data from a larger group in a structured and organized

Interviews

Face-to-face interviews were conducted with selected staff members to get detailed and in-depth information. Interviews allowed participants to explain their experiences and provide examples of how ICT is used in their daily activities.

Observation Checklist

The researcher also observed participants while they were using computers, online platforms, and other digital tools. Observation helped to verify the information from questionnaires and interviews and gave a clear picture of how ICT is applied in practice.

3.8.1 Questionnaire Method

In this study, the questionnaire method was used to collect information from trainees and staff at ADEM. Questionnaires consisted of a set of structured questions that asked participants about their experiences, opinions, and challenges in using ICT for records management and accessing information. This method was chosen because it allows the researcher to reach many participants at the same time and gather consistent

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information. It also makes it easier to compare responses and identify patterns in how ICT is being used. Questionnaires helped the researcher collect information quickly and efficiently, while giving participants the opportunity to express their views in their own words.

3.8.2 Interview Method

Interviews were conducted with selected staff members at ADEM to gather detailed and in-depth information about the use of ICT in records management. This method was chosen because it allows participants to explain their experiences, provide examples, and share opinions in a way that cannot always be captured through questionnaires. Interviews helped the researcher understand the challenges, benefits, and practical applications of ICT from the perspective of those who use it daily. The face-to-face nature of the interviews also allowed the researcher to ask follow-up questions and clarify responses, ensuring that the information collected was accurate and meaningful.

3.8.3 Observation Method

In this study, the observation method was used to see directly how staff and trainees at ADEM use ICT in managing records and accessing information. The researcher watched participants as they used computers, online platforms, and other digital tools in their daily activities. This method helped to verify the information collected through questionnaires and interviews by showing what actually happens in practice. Observation was important because it gave a clear picture of how ICT is applied, the challenges faced, and the benefits realized. It also helped the researcher understand real-life situations that participants might not always explain fully in interviews or questionnaires.

3.9 Data analysis and presentation

After collecting data from questionnaires, interviews, and observations, the information was organized, examined, and interpreted to make sense of the findings. The study used qualitative data analysis, which involves identifying common themes, patterns, and trends in the responses from participants. Data collected through questionnaires will be

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analysed using descriptive statistics such as frequencies and percentages. The results will be presented in tables and pie charts.

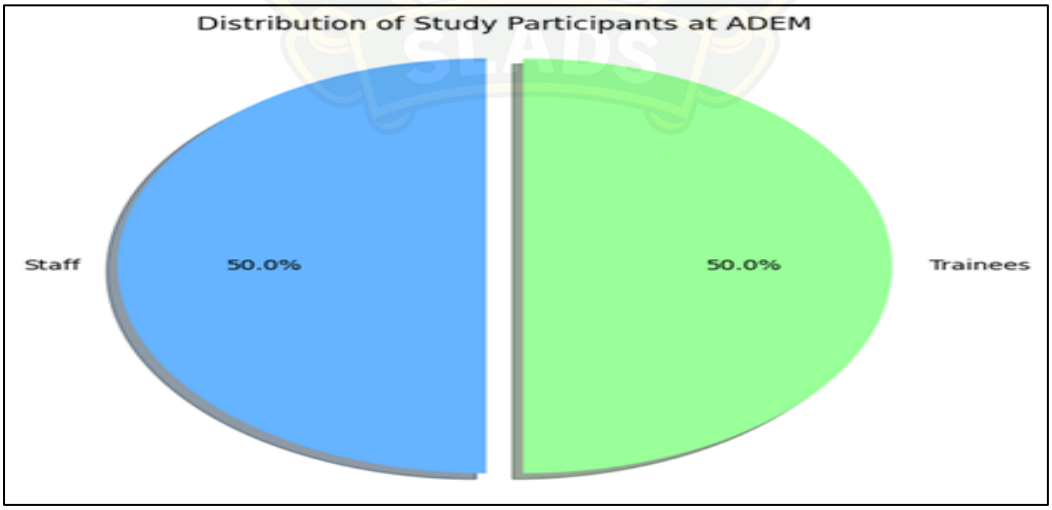
Qualitative data obtained from interviews and observation will be analysed using thematic analysis, where responses will be grouped into common themes related to ICT usage in records management.

Microsoft Excel will be used to organize and analyse quantitative data.The researcher carefully read through the answers, grouped similar ideas together, and summarized the results in a clear and understandable way.

The presentation highlighted key points about how ICT is used at ADEM for records management and accessing information, the benefits it brings, and the challenges faced by staff and trainees. This approach helped the researcher to explain the results in a way that is simple, clear, and directly linked to the research objectives.

Table 3.9.1: Distribution of Study Participants at ADEM

Category of Participants	Number of Participants	Percentage
Staff	15	50%
Trainees	15	50%
Total	30	100%



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3.10 Research ethics

In conducting this study at the Agency for the Development of Educational Management (ADEM), ethical considerations were carefully observed to ensure that the research was conducted responsibly and respectfully. The researcher sought permission from the management of ADEM before collecting any data, explaining the purpose of the study and how the information would be used. This helped to ensure transparency and build trust with the participants.

Participants, including staff and trainees, were informed about the objectives of the study and their voluntary involvement. They were assured that their responses would remain confidential and that personal information would not be disclosed in the report. The researcher also respected participants' rights to refuse participation or withdraw at any point without facing any consequent.

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CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter presents, analyses, and discusses the findings of the study on the assessment of the leverage of ICT for efficient records management in public institutions, with a case study of the Agency for the Development of Education Management (ADEM). The findings are presented and organized according to the specific objectives of the study. The collected data were analysed using frequencies and percentages with the aid of Microsoft Excel and are presented in the form of tables, frequencies, and percentages to facilitate interpretation and discussion of the findings.

4.1 Response Rate

The study distributed 30 questionnaires to respondents at the Agency for the Development of Education Management (ADEM). Out of the 30 questionnaires distributed, 25 questionnaires were successfully returned and properly completed by the respondents, representing a response rate of 83.3%. This response rate indicates a good level of participation and cooperation among the respondents in the study. According to Babbie (2007), a response rate above 50% is considered acceptable, above 60% is good, and above 70% is regarded as excellent for analysis and reporting purposes. Therefore, the response rate of 83.3% obtained in this study was considered excellent and adequate for data analysis, interpretation, and drawing valid conclusions.

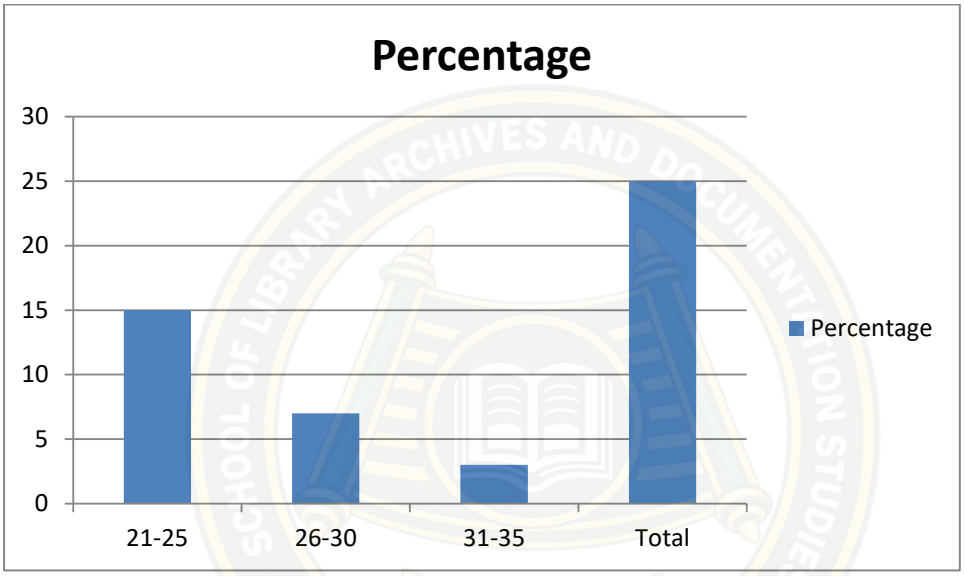
This implies that the majority of the selected respondents participated in the study by completing and returning the questionnaires. Although five questionnaires were not returned, the achieved response rate was sufficiently high to provide reliable and representative data for the study. The high response rate enhances the reliability and validity of the findings, as the collected data are likely to reflect the actual experiences and opinions of the respondents regarding the leverage of ICT for efficient records management at the Agency for the Development of Education Management (ADEM).

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4.2 Distribution of Respondents by Age.

The data also indicates that 25 (100%) were indicate 21 above years old. The results are presented in figure 4.1. Below;

Figure 4.1 Age of Respondents (N=25)



***Sources*:** Field Data (2026)

The findings from Figure 4.1 indicate that all 25 respondents (100%) were adults aged 21 years and above. This demographic characteristic is important because it ensures that the study collected information from mature individuals who are capable of providing reliable views and experiences regarding the leverage of ICT for efficient records management at the Agency for the Development of Education Management (ADEM). The involvement of mature respondents increases the credibility of the findings, as they are more likely to have direct experience with the use of ICT systems, policies, and procedures that support records and archives management within the organization.

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4.3 Gender of Respondents

The respondents were asked to indicate their gender. Information on the gender of respondents was necessary for the researcher in order to determine participation levels based on gender distribution. The study considered both male and female respondents so as to avoid bias and ensure balanced representation. More details are presented in Table 4.1 below.

Table 4.1: Gender of Respondent (N=25)

Gender	Frequency (n)	Percentage (%)
Male	10	40%
Female	15	60%
Total	25	100

Source: Field Study (2026)

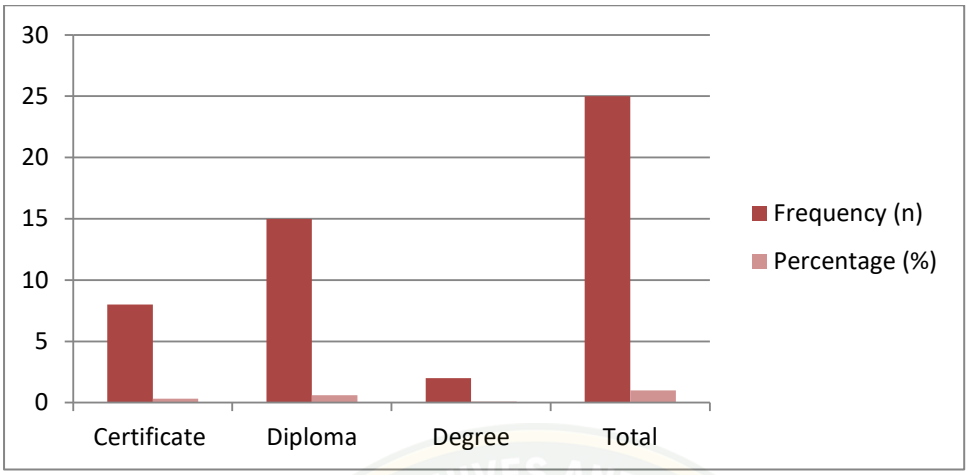
Table 4.1 shows that out of the 25 respondents involved in the study, 10 respondents (40%) were male while 15 respondents (60%) were female. The findings indicate that female respondents constituted the majority of participants in the study. However, the researcher successfully obtained information from both male and female respondents, which helped to ensure diversity of views and experiences regarding the leverage of ICT for efficient records management at the Agency for the Development of Education Management (ADEM).

4.4 Education Level of Respondents

The study investigated the level of education of respondents in order to understand their academic background and their ability to provide reliable information on the subject under study. Respondents were asked to indicate their highest level of education so as to determine their participation based on educational attainment. This information was important for the researcher because it helped in assessing whether respondents had sufficient knowledge and understanding of the use of ICT in enhancing efficient records management.

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Figure 4.2: Education Level for respondents (N=25)



Source: Field Study (2026)

Figure 4.2 shows that 8 respondents (32%) had a certificate level of education, 15 respondents (60%) had a diploma level of education, and 2 respondents (8%) had a bachelor degree level of education. The findings indicate that the majority of respondents were at diploma level compared to other education categories represented in the study.

However, the researcher obtained information from all categories of respondents, and all participants were considered capable of providing relevant and reliable information due to their educational background and their understanding of issues related to ICT and records management practices at the Agency for the Development of Education Management (ADEM).

4.5 Use of ICT to Access or Manage Records in the Institution

This section presents findings on respondents' use of ICT in accessing or managing records within the institution. The use of ICT in records management is essential for improving efficiency, accuracy, and timely access to information in public institutions. Respondents were asked whether they use ICT tools in the management or access of records in their organization.

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Table 4.2: Use of ICT in Records Management (N = 25)

Response	Frequency (n)	Percentage (%)
Yes	20	80%
No	5	20%
Total	25	100%

Source: Field Study (2026)

The findings in Table 4.2 show that 20 respondents (80%) indicated that they use ICT in accessing or managing records, while 5 respondents (20%) reported that they do not use ICT in records management activities. The results suggest that the majority of respondents have adopted ICT tools in the management of records within the institution.

This implies that ICT plays a significant role in enhancing records management practices at the Agency for the Development of Education Management (ADEM) by improving efficiency in record creation, storage, retrieval, and sharing of information. However, the presence of a minority who do not use ICT indicates that there may still be challenges such as limited skills, inadequate ICT infrastructure, or resistance to technological change that need to be addressed to ensure full integration of ICT in records management processes.

During the interview, one staff specified:

> *"..I use ICT systems such as computers and electronic databases to store and retrieve records, which make my work easier and faster."*

Also, another staff clarified:

> *"..ICT helps us to manage records efficiently because we can quickly search, update, and share information when needed."*

These responses indicate that ICT plays a significant role in improving efficiency in records management processes such as creation, storage, retrieval, and dissemination of information at the Agency for the Development of Education Management (ADEM). Though, a few respondents indicated that they do not use ICT in their records management activities. One respondent commented:

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"..I rarely use ICT systems because most of our records are still handled manually, and I am more familiar with paper-based filing."

This suggests that although ICT usage is relatively high, some staff members still rely on manual systems due to limited ICT skills, inadequate infrastructure, or lack of full integration of digital systems.

The findings indicate that the use of ICT in records management is generally high within the organization and contributes positively to efficient records management practices. Nevertheless, there is a need for continuous training, improved ICT infrastructure, and user support to ensure full adoption of ICT-based records management systems among all staff members.

4.6 Frequency of Using ICT to Manage Records

This section presents findings on the frequency with which respondents use ICT in managing records within their departments. The use of ICT in records management is important as it enhances efficiency in records creation, classification, storage, retrieval, and sharing of information. Respondents were asked to indicate how often they use ICT in managing records in their daily work activities.

Table 4.3: Frequency of Using ICT in Records Management (N = 25)

Level of use	Frequency (n)	Percentage (%)
Daily	10	40%
Weekly	8	32%
Monthly	2	8%
Rarely	5	20
Total	25	100%

***Source**:* Field Study (2026)

The findings in Table 4.3 show that 10 respondents (40%) use ICT to manage records on a daily basis, while 8 respondents (32%) use ICT weekly. In addition, 2 respondents

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(8%) indicated that they use ICT monthly, and 5 respondents (20%) reported that they rarely use ICT in managing records.

During conversation, a staff state that:

> *"..I use ICT systems every day because most of our records are now stored electronically, and I need to access them frequently for my duties."*

Another one explained:

> *"..I use ICT tools mainly when necessary, especially when searching or updating records, but not all tasks require daily use."*

These responses indicate that ICT is frequently used in records management activities, although the level of usage varies among staff members depending on their roles and access to ICT facilities at the Agency for the Development of Education Management (ADEM). Still, the presence of respondents who use ICT rarely or only occasionally suggests that some staff may still depend on manual systems or have limited access to ICT tools. This may be due to inadequate infrastructure, limited training, or the nature of their job responsibilities. The findings imply that while ICT usage in records management is generally moderate to high, there is still a need to strengthen ICT integration and provide continuous training to ensure consistent and effective use of ICT across all departments in the institution.

4.7 ICT Tools Most Frequently Used

This section presents findings on the ICT tools most frequently used by respondents in managing records at the institution. The use of different ICT tools supports efficient records management by facilitating the creation, storage, retrieval, sharing, and communication of information. Respondents were asked to indicate the ICT tool they use most often in their records management activities.

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Table 4.4: ICT Tools Most Frequently Used in Records Management (N = 25)

ICT tools	Frequency (n)	Percentage (%)
Computer / Laptop	6	24%
Internet / Wi-Fi	15	60%
Online databases	2	8%
Emails	2	8%
Total	**25**	**100%**

Source: **Field Study (2026)**

The findings in Table 4.4 show that 15 respondents (60%) reported using the Internet/Wi-Fi most often in their records management activities. This was followed by 6 respondents (24%) who mainly used computers or laptops, while 2 respondents (8%) relied primarily on online databases and another 2 respondents (8%) reported using emails most frequently.

During the interview, staff noted that:

> *"..The Internet helps us access electronic records and share information with other departments quickly, making our work more efficient."*

Another added that:

> *"..I mainly use a computer to create, edit, and store records, while email helps me send and receive official documents."*

These responses indicate that Internet connectivity and computers are the most essential ICT tools supporting records management activities at the Agency for the Development of Education Management (ADEM). They enable staff to access information, communicate efficiently, and manage records electronically.

Still, the relatively low use of online databases and email as the primary ICT tools suggests that these technologies may not yet be fully utilized by all staff members. This may be due to differences in job responsibilities, limited system access, or insufficient training on specialized ICT applications.

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The findings imply that ICT tools are widely used to support records management at ADEM, with Internet/Wi-Fi and computers being the dominant technologies. Therefore, the institution should continue investing in reliable ICT infrastructure and staff capacity building to promote the effective use of all available ICT tools for efficient records management.

4.8 Ease of Retrieving Records Using ICT

This section presents findings on respondents' perceptions of how easy it is to find or retrieve records using ICT within the institution. Efficient retrieval of records is one of the major benefits of ICT-based records management systems, as it enables users to access information quickly, accurately, and conveniently. Respondents were asked to indicate how easy it is for them to retrieve records using ICT.

Table 4.5: Ease of Retrieving Records Using ICT (N = 25)

Level of ease	Frequency (n)	Percentage (%)
Very easy	12	48%
Easy	6	24%
Moderate	5	20%
Difficult	2	8%
Total	**25**	**100%**

Source: **Field Study (2026)**

The findings in Table 4.5 show that 12 respondents (48%) reported that retrieving records using ICT is very easy, while 6 respondents (24%) indicated that it is **easy**. Furthermore, 5 respondents (20%) rated the process as moderate, and only 2 respondents (8%) considered it difficult. During the interview, one respondent stated:

> *"..Using the electronic system makes it very easy to retrieve records because I can search for a document within a few minutes."*

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Another respondent described:

> *"..ICT has improved the way we access records since files can be located quickly without going through manual filing cabinets."*

These responses indicate that ICT has significantly improved the speed and efficiency of retrieving records at the Agency for the Development of Education Management (ADEM). Most staff members are able to access the information they need with minimal effort, which enhances service delivery and decision-making. This suggests that despite the benefits of ICT, challenges such as system downtime, poor network connectivity, or limited user skills may occasionally affect the retrieval of electronic records.

The findings imply that ICT has made records retrieval easier for the majority of staff at ADEM, thereby improving the efficiency of records management. Nevertheless, there is a need to strengthen ICT infrastructure, improve system reliability, and provide continuous technical support to ensure that all users can retrieve records effectively and without interruption.

4.9 Training on the Use of ICT for Records Management

This section presents findings on whether respondents have received training on the use of ICT for managing records in their institution. Training is essential for equipping staff with the knowledge and skills required to use ICT systems effectively in records creation, storage, retrieval, and management. Respondents were asked to indicate whether they had ever received training on the use of ICT for records management.

Table 4.6: Training on the Use of ICT for Records Management (N = 25)

Response	Frequency (n)	Percentage (%)
Yes	21	40%
No	4	32%
Total	**25**	**100%**

Source: **Field Study (2026)**

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The findings in Table 4.6 show that 21 respondents (84%) had received training on how to use ICT for managing records, while 4 respondents (16%) indicated that they had never received such training. The results suggest that the majority of staff have acquired the necessary knowledge and skills to use ICT in records management.

During conversation, one staff specified:

> *"..I attended ICT training organized by the institution, and it helped me understand how to use electronic systems for creating, storing, and retrieving records."*

Another staff clarified:

> *"..The training improved my confidence in using ICT tools and made records management faster and more accurate."*

These responses indicate that ICT training has played an important role in enhancing staff competence and improving the effective use of ICT for records management at the Agency for the Development of Education Management (ADEM). Also, a few respondents reported that they had never received ICT training.

This finding suggests that although most staff have benefited from ICT training, a small proportion still lack formal training, which may affect their ability to use ICT systems effectively and consistently.

The findings imply that ICT training has contributed significantly to the effective use of ICT in records management at ADEM. Nevertheless, the institution should continue organizing regular training and refresher programs to ensure that all staff possess the necessary ICT skills required for efficient records management.

4.10 Using ICT save Time in Records Management

This section presents findings on respondents' perceptions of whether the use of ICT saves time when managing or accessing records. Time efficiency is one of the key advantages of ICT-based records management systems because it enables staff to create, store, retrieve, and share records more quickly than traditional manual methods.

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Respondents were asked whether using ICT saves them time in managing or accessing records.

Table 4.7: Using ICT Save Time in Records Management (N = 25)

Response	Frequency (n)	Percentage (%)
Yes	17	68%
No	3	12%
Not sure	5	20%
Total	**25**	**100%**

Source: **Field Study (2026)**

The findings in Table 4.7 show that 17 respondents (68%) agreed that using ICT saves time when managing or accessing records. In contrast, 3 respondents (12%) reported that ICT does not save them time, while 5 respondents (20%) were not sure whether ICT contributes to time saving in records management.

During the interview, a staff identified:

> *"..Using ICT has reduced the time required to search for and retrieve records because everything is available electronically."*

Another respondent noted:

> *"..With ICT, I can access records within a few minutes instead of spending a long time searching through paper files."*

These responses indicate that ICT has significantly improved the speed of records management activities at the Agency for the Development of Education Management (ADEM). Faster access to records enables staff to perform their duties more efficiently and enhances the overall quality of service delivery.

This finding suggests that although ICT generally improves efficiency, occasional technical challenges such as slow systems, poor internet connectivity, or system downtime may reduce its effectiveness.

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The findings imply that ICT has contributed significantly to saving time in managing and accessing records at ADEM. Nevertheless, there is a need to improve ICT infrastructure, maintain reliable systems, and provide technical support to ensure that all staff consistently experience the time-saving benefits of ICT in records management.

4.11: Frequency of Experiencing Problems When Using ICT for Records Management

This section presents findings on how frequently respondents experience problems when using ICT for records management. Although ICT enhances the efficiency of records management, users may still encounter technical or operational challenges that affect system performance and productivity. Respondents were asked to indicate how often they experience problems when using ICT for managing records.

Table 4.8: Frequency of Experiencing Problems When Using ICT (N = 25)

Frequency of Experience	Frequency (n)	Percentage (%)
Always	12	48%
Often	2	8%
Sometimes	8	32%
Rarely	3	12%
Never	0	0%
Total	**25**	**100%**

Source: **Field Study (2026)**

The findings in Table 4.8 indicate that 12 respondents (48%) reported that they always experience problems when using ICT for records management, while 2 respondents (8%) indicated that they often encounter such problems. Additionally, 8 respondents (32%) stated that they sometimes experience problems, whereas 3 respondents (12%) reported that they rarely face ICT-related challenges. None of the respondents indicated that they never experience problems.

During the interview, one staff identified:

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> *"..We sometimes experience system failures and slow internet connections, which delay access to electronic records and affect our daily work."*

Another staff added:

> *"..Power interruptions and occasional software errors make it difficult to manage records efficiently using ICT systems."*

These responses indicate that although ICT supports records management, technical challenges such as unreliable internet connectivity, system downtime, software malfunctions, and power interruptions continue to affect its effective utilization at the Agency for the Development of Education Management (ADEM). A respondent who reported rarely experiencing problems commented:

> *"..Most of the time the system works well, but occasional network issues can interrupt normal operations."*

The findings imply that ICT-related challenges remain a significant concern in records management at ADEM. Therefore, there is a need for the institution to strengthen ICT infrastructure, improve system maintenance, ensure reliable internet connectivity, and provide timely technical support to minimize disruptions and enhance the efficiency of ICT-based records management.

4.12 Challenges Faced When Using ICT for Records Management

This section presents findings on the challenges faced by respondents when using ICT for records management. Despite the benefits of ICT in improving efficiency, accuracy, and accessibility of records, users may encounter various obstacles that affect its effective utilization. Respondents were asked to indicate the main challenges they face when using ICT for records management in their institution.

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Table 4.9: Challenges Faced in Using ICT for Records Management (N = 25)

Challenges	Frequency (n)	Percentage (%)
Not enough computers or devices	6	24%
Poor internet connection	12	48%
Lack of training	2	8%
Security or privacy issues	5	20%
System errors or downtime	0	0%
Total	**25**	**100%**

Source: **Field Study (2026)**

The findings in Table 4.9 show that the most common challenge faced by respondents is poor internet connection, reported by 12 respondents (48%). This was followed by 6 respondents (24%) who indicated a shortage of computers or ICT devices. In addition, 5 respondents (20%) reported concerns related to security or privacy issues, while 2 respondents (8%) mentioned lack of ICT training. None of the respondents identified system errors or downtime as a major challenge.

During the interview, one staff commented:

> *"..The main challenge we face is unstable internet, which affects our ability to access and manage electronic records efficiently."*

Another staff added:

> *"..Sometimes we do not have enough computers, so staff have to share, which slows down the work process."*

These responses indicate that infrastructural limitations, particularly poor internet connectivity and insufficient ICT resources, significantly affect the effective use of ICT in records management at the Agency for the Development of Education Management (ADEM). A respondent who highlighted security concerns commented:

> *"..We are sometimes worried about unauthorized access to sensitive records when using online systems."*

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The findings imply that although ICT is widely used in records management, several challenges still hinder its full effectiveness. Therefore, the institution should improve ICT infrastructure, ensure stable internet connectivity, provide adequate equipment, strengthen data security measures, and offer continuous ICT training to enhance efficient records management practices

4.13 ICT Accessibility of Records

This section presents findings on whether ICT allows respondents to access records from anywhere or at any time. One of the major advantages of ICT in records management is its ability to support remote access and improve flexibility in retrieving information. Respondents were asked to indicate whether ICT enables them to access records from different locations and at any time when needed.

Table 4.10: ICT Accessibility of Records (N = 25)

Accessibility	Frequency (n)	Percentage (%)
Yes	16	64%
No	5	20%
Not sure	4	16%
Total	**25**	**100%**

Source: **Field Study (2026)**

The findings in Table 4.10 show that 16 respondents (64%) agreed that ICT allows them to access records from anywhere or at any time. In contrast, 5 respondents (20%) indicated that ICT does not provide such flexibility, while 4 respondents (16%) were not sure about this capability.

During the interview, one staff stated:

> *"..With ICT systems, I can access records even when I am outside the office as long as I have internet access."*

Another respondent added:

> *"..ICT has made it possible to retrieve records quickly without being physically present in the office."*

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These responses indicate that ICT has improved accessibility of records by allowing users to access information remotely, which enhances efficiency and flexibility in records management at the Agency for the Development of Education Management (ADEM). Then, a few respondents reported limitations in remote access. One respondent commented:

> *"..Sometimes we cannot access the system from outside the office due to network restrictions or system limitations."*

This suggests that although ICT provides improved access to records, full remote accessibility may still be limited by system design, security restrictions, or internet connectivity challenges. The findings imply that ICT has generally improved access to records at ADEM, allowing many staff members to retrieve information at any time and from different locations. Nevertheless, there is a need to strengthen system integration, improve network infrastructure, and enhance security frameworks to support fully reliable remote access to records.

4.14 Perceptions on Managing Digital Records Compared to Paper Records

This section presents findings on respondents' perceptions of whether digital records are easier to manage than paper/manual records. The use of digital records is one of the key benefits of ICT in records management because it improves record creation, storage, retrieval, sharing, and preservation while reducing dependence on paper-based systems. Respondents were asked whether they consider digital records easier to manage than manual records.

Table 4.11: Respondents' on Managing Digital Records Compared to Paper (N = 25)

Response	Frequency (n)	Percentage (%)
Yes	20	80%
No	3	12%
Not sure	2	8%
Total	**25**	**100%**

Source: **Field Study (2026)**

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The findings in Table 4.11 show that 20 respondents (80%) agreed that digital records are easier to manage than paper/manual records. Meanwhile, 3 respondents (12%) indicated that they do not find digital records easier to manage, while 2 respondents (8%) were not sure.

During the interview, one staff noted:

> *"..Digital records are much easier to manage because they can be stored, searched, and retrieved within a short time without handling physical files."*

Another staff added:

> *"..ICT has simplified records management by reducing paperwork and making it easier to update and share information electronically."*

These responses indicate that digital records have significantly improved the efficiency of records management at the Agency for the Development of Education Management (ADEM) by making records easier to organize, access, and maintain. Also, respondents expressed different opinions. One staff commented:

> *"..I still prefer paper records for some important documents because I am more familiar with the manual filing system."*

This finding suggests that although digital records are generally preferred, some staff members continue to rely on paper-based records due to personal preferences, limited ICT skills, or concerns about electronic systems.

The findings imply that the majority of respondents recognize the advantages of digital records over paper/manual records. Therefore, ADEM should continue promoting the adoption of digital records management systems while providing adequate ICT training and support to encourage all staff to effectively utilize electronic records in their daily operations.

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the key findings of the study on the assessment of the leverage of ICT for efficient records management in public institutions**,** with a case study of the Agency for the Development of Education Management (ADEM)**.** It also provides conclusions based on the research objectives and offers recommendations for improving the use of ICT in records management within the institution. In addition, the chapter highlights areas for further research to enhance understanding of ICT-enabled records management in public institutions.

5.1 Summary of Findings

The study aimed to assess the leverage of ICT for efficient records management in public institutions using the Agency for the Development of Education Management (ADEM) as a case study. The study focused on key areas including ICT usage, frequency of ICT use, ICT tools used, ease of records retrieval, ICT training, time efficiency, ICT-related challenges, accessibility of records, and the effectiveness of digital records management. Based on data collected from 25 respondents, the study presents the following key findings:

1. **Use of ICT in Records Management:** The findings revealed that 80% of respondents use ICT to access or manage records, while 20% do not. This indicates that ICT has been widely adopted for records management at ADEM.

2. **Frequency of ICT Use:** The study found that 40% of respondents use ICT daily, 32% use it weekly, 8% use it monthly, and 20% rarely use ICT. This shows that the majority of staff regularly use ICT in their records management activities.

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3. **ICT Tools Used:** The findings showed that 60% of respondents mainly use Internet/Wi-Fi, 24% use computers/laptops, while 8% use online databases and another 8% use email. This indicates that internet connectivity is the most frequently used ICT resource for records management.

4. **Ease of Retrieving Records Using ICT:** The study revealed that 48% of respondents found it very easy to retrieve records using ICT, 24% found it easy, 20% rated it as moderate, and **8%** found it difficult. This suggests that ICT has improved records retrieval for most staff.

5. **ICT Training:** Results showed that 84% of respondents had received ICT training related to records management, while 16% had not. This indicates that most staff have acquired ICT knowledge and skills necessary for managing records effectively.

6. **Time Saving through ICT:** The findings indicated that 68% of respondents agreed that ICT saves time when managing or accessing records, 12% disagreed, and 20% were not sure. This demonstrates that ICT contributes significantly to improving work efficiency.

7. **Problems Experienced When Using ICT:** The study found that 48% of respondents always experience ICT-related problems, 8% often experience problems, 32% sometimes experience problems, and 12% rarely experience problems. This indicates that technical challenges still affect ICT utilization.

8. **Challenges in Using ICT:** The findings revealed that 48% of respondents identified poor internet connection as the major challenge, followed by inadequate computers or devices (24%), security or privacy concerns (20%), and lack of ICT training **(**8%**).**

9. **Accessibility of Records through ICT:** The study showed that 64% of respondents agreed that ICT allows them to access records from anywhere or at

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any time, while 20% disagreed and 16% were not sure. This indicates that ICT has improved flexibility in accessing records.

10. **Digital versus Manual Records:** The findings revealed that 80% of respondents agreed that digital records are easier to manage than paper/manual records, while 12% disagreed and **8%** were not sure. This demonstrates positive perceptions toward digital records management.

5.2 Conclusion

The findings of this study indicate that ICT plays a significant role in enhancing efficient records management at the Agency for the Development of Education Management (ADEM)**.** The majority of respondents uses ICT in their daily records management activities and acknowledged that ICT improves records creation, storage, retrieval, accessibility, and overall efficiency. Most respondents also confirmed that ICT saves time and that digital records are easier to manage than traditional paper-based records.

Though, the study also concludes that several challenges continue to hinder the effective use of ICT for records management. These include poor internet connectivity, inadequate ICT equipment, security and privacy concerns, and the fact that some staff have not received adequate ICT training. In addition, many respondents reported experiencing technical problems when using ICT systems, which may reduce operational efficiency.

Therefore, although ADEM has made considerable progress in adopting ICT for records management, further investment in ICT infrastructure, staff capacity building, and system improvement is necessary to maximize the benefits of ICT and ensure efficient records management.

5.3 Recommendations

Based on the findings of the study, the following recommendations are made:

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- **Strengthen ICT Infrastructure:** The institution should improve internet connectivity, increase the availability of computers and other ICT devices, and ensure reliable ICT systems to support efficient records management.
- **Provide Continuous ICT Training:** Regular ICT training and refresher courses should be organized to equip all staff with the knowledge and skills required for effective electronic records management.
- **Promote Full Adoption of Digital Records Management:** The institution should encourage greater use of electronic records management systems to reduce dependence on manual records and improve efficiency.
- **Enhance System Security:** Appropriate cybersecurity measures and access controls should be strengthened to protect digital records from unauthorized access and ensure information security.
- **Establish Regular Technical Support and System Maintenance:** The institution should provide timely technical support and conduct regular maintenance of ICT systems to minimize system failures and improve service reliability.

5.4 Suggestions for Further Research

Further studies are recommended in the following areas:

1. The effectiveness of electronic records management systems in improving service delivery in public institutions.
2. Factors influencing the adoption of ICT for records management in public sector organizations in Tanzania.
3. The impact of ICT infrastructure on records management performance in government institutions.
4. Cybersecurity challenges affecting electronic records management in public institutions.
5. The role of emerging digital technologies in improving records management and information accessibility in Tanzania's public sector.

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RESEARCH QUESTIONNAIRE

Dear respondents,

I am **Doctor Robert Moivan** a student of SLADS pursuing Diploma in Records and Archives Management. Currently I am conducting a research project titled "***Assessment of Leverage of ICT for Efficient Records Management in Public Institutions".***

I will highly appreciating your cooperation in filling this questionnaire, which will take not more than 20 minutes. All information provided was be kept confidential and only used for the purpose of the study.

(Tick the appropriate answer where necessary)

Section A: Demographic Information

1. Gender

a) Male ( )
b) Female ( )

2. Age Group

a) 18–30 years ( )
b) 31–40 years ( )
c) 41–50 years ( )
d) Above 50 years ( )

3. Education Level

a) Certificate ( )
b) Diploma ( )
c) Degree ( )
d) Postgraduate ( )

4. Position in the Organization

a) Records officer ( )
b) Registry staff ( )
c) Administrative staff ( )
d) Departmental officer ( )

5. Work Experience

a) Less than 1 year ( )
b) 1–5 years ( )
c) 6–10 years ( )
d) Above 10 years ( )

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6. Do you use ICT to access or manage records in your institution?

a) Yes

b) No( )

7. How often do you use ICT to manage records?

a) Daily

b) Weekly

c) Monthly

d) Rarely( )

8. Which ICT tools do you use most often?

a) Computer / Laptop

b) Internet / Wi-Fi

c) Online databases

d) .Emails ( )

e) Messaging apps (WhatsApp, Telegram, etc.)

9. How easy is it for you to find or retrieve records using ICT? ( )

a) Very easy

b) Easy

c) Moderate

d) Difficult

e) Very difficult

10. Have you ever received training on how to use ICT for managing records?

a) Yes

b) No ( )

11. Does using ICT save you time when managing or accessing records?

a) Yes

b) No

c) Not sure ( )

12. How often do you experience problems when using ICT for records?

a) Always

b) Often

c) Sometimes

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d) Rarely

e) Never

13. What challenges do you face when using ICT for records? ()

a) Not enough computers or devices

b) Poor internet connection

c) Lack of training

d) Security or privacy issues

e) System errors or downtime

14. Does ICT allow you to access records from anywhere or at any time? ( )

a) Yes

b) No

c) Not sure

15. Are digital records easier to manage than paper/manual records?

a) Yes

b) No

c) Not sure

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INTERVIEW GUIDE

(For Records Officers / Key Informants)

1. Can you briefly explain your role at ADEM?
2. How long have you been working at ADEM?
3. What types of records do you usually handle (e.g., students' information, staff files, financial documents)?
4. What ICT tools or systems do you use to manage records at ADEM?
5. How often do you use ICT in your daily work?
6. In your opinion, how has ICT made managing records easier or faster?
7. How does ICT help you organize, store, and find records?
8. Does ICT help in sharing information with other departments? Can you give an example?
9. What problems or challenges do you face when using ICT for records?
10. Have you received any training on using ICT for records management? Was it useful?
11. Do you think digital records are safe? Are there risks like data loss or unauthorized access?
12. What can be done to make ICT more effective for managing records at ADEM?
13. In your opinion, how can the institution improve record management using ICT in the future?

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APPENDIX I

REAEARCH WORK PLAN/ SCHEDULE TIME FRAME

The research was be conducted for the period of six (6) weeks as follow

ACTIVITIES PROGRAM	**1ST WEEK**	**2ND WEEK**	**3RD WEEK**	**4TH WEEK**	**5TH WEEK**	**6TH WEEK**
Reporting at the working place						
Familiarization and distribution of questionnaire						
Interview Schedules						
Collection of data and compilation						
Data analysis and presentation						
First draft proof reading and final report submission						

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APPENDIX II

BUDGET

The study was require money in order to achieve the goals for data collection. It includes stationery, transport expenses as well as daily expenses for researcher survival. The expenditure was be as the follow:

S/N	Item	Quantity	Cost
1	Pens	1box	8,000/=
2	Papers	1ream @ 15000	15,000/=
3	Questionnaire and interviews questions preparation	50 copies @ 200	10,000/=
4	Typing and printing proposal		45,000/=
6	Meals	45 days @ 5000	225,000/=
	TOTAL		**338,000/=**

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APPENDIX II
APPROVAL LETTER

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
AGENCY FOR THE DEVELOPMENT OF EDUCATIONAL MANAGEMENT

In reply, please quote:

Ref. No. AB.112/267/01A/228 **30th March, 2026**

Academic Officer,
School of Library Archives and Documentation Studies,
(SLADS),
P. O. Box 227,
BAGAMOYO.

Re: ACCEPTANCE FOR FIELD ATTACHMENT FOR THE STUDENT DOCTOR ROBERT MOIVAN TO COLLECT DATA FROM 24TH - 29TH MAY, 2026

Please refer to the above heading and your letter with **Ref. No. DA.201/457/VOL/1/20** dated **30th March, 2026.**

2. Agency for the Development of Educational Management (ADEM) was inaugurated in 2001 under the Executive Agencies Act, Cap.245 of 1997. ADEM is mandated to conduct Training, Research and Consultancy Services in Education Management, Leadership and Administration to all serving and prospective Education Managers and Administrators in Tanzania.

3. This letter is intended to inform you that **Doctor Robert Moivan** pursuing an Ordinary Diploma in Records and Archives Management have been granted permission to collect data as from **24th May, 2026 to 29th May, 2026.**

Thanks for your continuing cooperation.

Dr. Emmanuel S. Mollel
FOR CHIEF EXECUTIVE

For: CHIEF EXECUTIVE
AGENCY FOR THE DEVELOPMENT OF
EDUCATIONAL MANAGEMENT (ADEM)
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