



Journal of Education, Learning, and Management (JELM)

ISSN: 3079-2541 (Online)

Volume 2 Issue 2, (2025)

 <https://doi.org/10.69739/jelm.v2i2.1046>

 <https://journals.stecab.com/jelm>



Published by
Stecab Publishing

Research Article

Electronic Record-Keeping and Management Efficiency: A Case Study of Sokoine University of Agriculture, Tanzania

*¹Emmanuel Joseph Kitinya

About Article

Article History

Submission: September 02, 2025

Acceptance: October 08, 2025

Publication: November 08, 2025

Keywords

Digitalization, Electronic Records, Higher Education, Records Management, University Efficiency

About Author

¹ Department of Management Studies,
Tanzania Institute of Accountancy, P.O
Box 9522, Dar Es Salaam, Tanzania

Contact @ Emmanuel Joseph Kitinya
emmanuel.kitinya@tia.ac.tz

ABSTRACT

This study explores the role of electronic record-keeping practices in enhancing the management efficiency of public universities in Tanzania, with Sokoine University of Agriculture (SUA) serving as the case study. As universities expand and become more complex, the need for efficient, accurate, and accessible information systems becomes critical. Traditional paper-based records, though still dominant in many institutions, have been shown to be slow, prone to damage, and inefficient in terms of retrieval and storage. The study aimed to examine three main aspects: the current record-keeping practices at SUA, the university's preparedness in adopting electronic systems, and the impact of these systems on management efficiency. A Quantitative and qualitative research design was employed using semi-structured interviews and document review. Fifteen purposively selected university staff members from key departments such as Hr, Bursar, Registry participated in the study. Quantitative and qualitative analysis was used to interpret the data. Findings revealed that SUA operates a hybrid record management system where paper-based filing remains dominant, but electronic systems are increasingly used in departments such as finance, ICT, and student services. Electronic platforms like LAWSON, SUASIS, and GEPG are in use, albeit with varying levels of adoption. The benefits of electronic systems were found to include faster document retrieval, improved communication, reduced operational costs, and increased transparency. However, challenges such as insufficient infrastructure, dependence on IT personnel, inconsistent internet connectivity, and limited staff training hinder the full utilization of these systems. Additionally, a lack of formal guidelines and policies further weakens the integration and sustainability of electronic record management. The study concludes that while electronic record-keeping has clear potential to improve management efficiency in public universities, its success depends on adequate investment in infrastructure, capacity building, and policy development. It recommends full automation, regular training, and strong institutional support to ensure effective and sustainable implementation of digital record-keeping practices in higher education institutions.

Citation Style:

Kitinya, E. J. (2025). Electronic Record-Keeping and Management Efficiency: A Case Study of Sokoine University of Agriculture, Tanzania. *Journal of Education, Learning, and Management*, 2(2), 324-328. <https://doi.org/10.69739/jelm.v2i2.1046>



Copyright: © 2025 by the authors. Licensed Stecab Publishing, Bangladesh. This is an open-access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

1. INTRODUCTION

Electronic record-keeping refers to the process of creating, storing, managing, and retrieving records in digital formats using information and communication technologies (Mulauzi, 2019). In the context of higher education, electronic record-keeping practices are essential tools for improving the efficiency, accessibility, and security of administrative and academic records (Yidana, 2022). This study, titled “*The Role of Electronic Record Keeping Practices in the Management Efficiency of Public Universities in Tanzania*,” explores how digital records management contributes to institutional performance, focusing on Sokoine University of Agriculture (SUA) as a case study (Mnzava *et al.*, 2018).

Efficient records management is a cornerstone of organizational effectiveness, enabling timely decision-making, transparency, and accountability. Traditionally, universities have relied on paper-based systems, which often result in inefficiencies such as delays in information retrieval, storage limitations, and risks of data loss. With the global advancement of technology, the shift toward digital record-keeping systems has become vital for modern university operations.

In Tanzania, the government has made efforts to modernize public institutions through the adoption of electronic management systems. However, implementation in many universities remains inconsistent due to challenges like limited infrastructure, lack of skilled personnel, and inadequate policy frameworks (Sooklal, 2006).

This study aims to assess the current record-keeping practices, evaluate institutional preparedness, and analyze the impact of electronic systems on management efficiency in public universities.

2. LITERATURE REVIEW

Effective records management is critical to the operational success of higher education institutions (Yidana & Akuna, 2022). It ensures that accurate, reliable, and timely information is available to support decision-making, accountability, and service delivery (Ringold *et al.*, 2011). As institutions grow in size and complexity, the need for a robust and efficient record-keeping system becomes increasingly essential. Farotimi *et al.* (2023) Electronic record-keeping (ERK), which involves the use of digital systems to manage institutional data, has emerged as a solution to the limitations of traditional paper-based systems. (Brohi *et al.*, 2023).

Chinyemba and Ngulube (2005) emphasize that digital records enhance accessibility and accountability, enabling quicker retrieval of information and better service delivery. Brendan (2013) supports this view, noting that universities with established electronic records systems demonstrate greater operational efficiency and transparency. However, despite the potential benefits, several studies have highlighted implementation challenges. Fiebelkorn (2012) and McDonald (2006) argue that many institutions face barriers such as inadequate infrastructure, lack of skilled personnel, and resistance to technological change.

The Technology Acceptance Model (TAM), as discussed by Brendan (2013), posits that perceived usefulness and ease of use significantly influence the adoption of digital systems.

Moreover, organizational readiness and external support are essential for successful technology integration (Chinyemba & Ngulube, 2005).

In the African context, Joseph (2016) found that while some universities in Tanzania, South Africa, and Malawi have made strides in adopting electronic records, most still rely on hybrid systems combining paper and electronic formats. This often leads to inefficiencies, inconsistencies, and poor data management. The absence of clear regulatory frameworks further complicates implementation.

The literature reveals that electronic record-keeping can transform university management by improving efficiency, reducing operational costs, and enhancing data security. However, successful adoption depends on institutional preparedness, resource availability, policy support, and ongoing staff training (Graham *et al.*, 2013).

This study builds on these findings by investigating the specific case of Sokoine University of Agriculture to provide contextual insights into ERK practices in Tanzanian public universities (Ngai *et al.*, 2008).

3. METHODOLOGY

A qualitative case study design was employed at SUA. Fifteen staff members from various departments were purposively selected. Data collection methods included semi-structured interviews and document review. Thematic analysis was applied to identify patterns and draw conclusions about the institution’s record-keeping practices, preparedness, and perceived benefits. A quantitative and qualitative research approach was adopted to investigate electronic record-keeping practices in public universities. The study was conducted at Sokoine University of Agriculture (SUA) using a case study research design. Data collection involved semi-structured interviews, observations, and document reviews. A purposive sampling technique was used to select 15 SUA officials, including records managers, administrative officers, and IT personnel. Thematic analysis was employed to analyze quantitative and qualitative data by identifying patterns and emerging themes.

Mathematical models and statistical techniques were applied where necessary to analyze data trends. Descriptive statistics, such as frequency distributions and percentages, were used to summarize demographic characteristics of the respondents. For instance, 60% of the interviewees were male, while 40% were female. The average work experience of the participants was 10 years, indicating familiarity with records management practices at SUA.

4. RESULTS AND DISCUSSION

4.1. Demographic characteristics

Out of 15 respondents, 60% were male, with a mean age of 39.8 years. Most held master’s degrees (53.3%) and had more than 10 years of work experience (66.7%). Job titles ranged from record assistants to directors.

4.2. Current record-keeping practices

SUA operates both paper and electronic record systems, though traditional filing remains dominant in many departments, especially registries. Electronic systems are used more actively



in departments dealing with finance and academics, such as the bursar's office, ICT, and student directorates.

Table 1. Electronic record keeping practices.

Department/College	E-record keeping practices
Human resources	Staff records management in LAWSON, receiving, processing and issuing permits travelling outside the country
Open registry	Updating staff employment records every year
Confidential registry	No any electronic practices
Bursar's office	" <i>VOTE BOOK FINANCIAL MANAGEMENT INFORMATION SYSTEM</i> " to communicate financial information among various departments, use of EFD, SUASIS, sim banking and GEPG (at initial stage)
Humanities & Social Sciences	Email communications
Planning office	Electronic budgeting system (at initial stage)
Undergraduate studies	SUASIS and students online application
Library	E-books, e-journals, e-conference papers, e-dissertations
Postgraduate studies	SUASIS and students online application

Source: Field Data, 2025.

4.3. Institutional preparedness

Preparedness is uneven. Departments such as ICT, postgraduate, and systems like SUASIS. Other departments lack infrastructure and library are better equipped with computers, internet access, and guidelines.

Table 2. Specific preparedness indicators/activities on e-record keeping

Department/college	Activities	Staff training On e-record	E-record keeping guidelines	Preparedness status
Human resources	Availability of internet connectivity, computers, scanners, flash disks, CDs, LAWSON, travelers e-permits	Not provided	Not available	Underdeveloped
Open registry	Availability of a Computer	Not provided	Not available	Not developed at all
Confidential registry	No any electronic devices	Not provided	Not available	Not developed at all
Bursar's office	Availability of Computers, use of "vote book financial management information system, EFD, GEPG, sim-banking, SUASIS	Provided	Not available	Underdeveloped
Humanities & Social Sciences	Availability of computer and internet connectivity	Not provided	Not available	underdeveloped
Planning office	Availability of computers, internet connectivity, electronic budgeting system	Not provided	Not available	Underdeveloped
Undergraduate studies	Availability of computers, flash discs, CDs, scanners, external hard disks, internet connectivity, SUASIS	Provided	Backup policy available	Developed
Library	Availability of computers, flash discs, CDs, scanners external hard disks, internet connectivity, COTUL, e-library services	Provided	Library guidelines available	Developed
Postgraduate studies	Availability of computers, flash discs, CDs, scanners, external hard disks, internet connectivity, SUASIS	Provided	Backup policy available	Developed

Source: Field Data, 2025.



Training was limited across departments, and few had formal e-records management policies in place.

4.4. Impact of E-Record Systems

4.4.1. Positive Effects

Table 3. Positive and Negative Effects of Using e-record Keeping at SUA

Positive effects	Frequency	Percent
Easy in retrieving documents	8	88.9
Portability of the documents	8	88.9
Short time required to keep records	7	77.8
High efficiency and effectiveness	6	66.7
Improved decision making	5	55.6
Easy of information sharing	8	88.9
Empowers users	6	66.7
Reduced cost	7	77.8
Improves information safety	6	66.7

Source: Field Data, 2025.

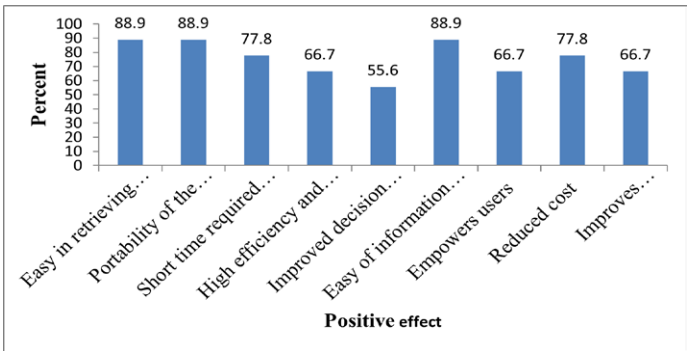


Figure 1. Positive Effect of e-record Keeping's.

Source: Field Data, 2025.

4.4.2. Negative effects

Challenges include: While electronic record-keeping offers significant benefits, its implementation at Sokoine University of Agriculture faces notable challenges. One key issue is the heavy reliance on IT personnel. Most systems require technical expertise to operate and maintain, and in the absence of trained staff, service delivery is often delayed or halted entirely. This dependency poses a risk to continuity and efficiency. Interview with one of the librarian staff “ Most systems require technical expertise to operate and maintain, and in the absence of trained staff, service delivery is often delayed or halted entirely “(interview with librarian staff 5th 2024). Another common problem is frequent power outages and unstable internet connectivity, which disrupt access to digital records and hinder smooth system operation. These technical limitations undermine the reliability of electronic systems and reduce user confidence. The high initial cost of adopting electronic record-keeping is also a barrier. Procuring equipment such as computers, scanners, servers, and establishing network

infrastructure demands significant financial resources. Many departments struggle with limited budgets, delaying the full transition to digital systems. Additionally, limited user training affects effective system utilization significant number of staff members have not been adequately trained in electronic records management, resulting in under-use or misuse of the systems. This can lead data loss, inefficiencies, and resistance to digital adoption. Addressing these challenges through improved infrastructure, training, and policy support is essential to realizing the full potential of electronic record-keeping in university management.

5. CONCLUSION

The study concludes that electronic record-keeping significantly improves institutional efficiency, decision-making, and transparency. However, limited infrastructure, lack of policies, and inadequate training hinder full implementation. SUA shows moderate readiness, with varying degrees of system usage across departments. This study concludes that electronic record-keeping significantly enhances management efficiency in public universities by improving data accessibility, decision-making, and operational transparency. Despite these benefits, adoption at Sokoine University of Agriculture remains partial, with some departments still relying on paper-based systems. Challenges such as inadequate infrastructure, limited staff training, and lack of clear policies hinder full implementation. To realize the full potential of digital record management, universities must invest in technology, build staff capacity, and establish comprehensive e-record policies. Strengthening support from the government and integrating with national systems will ensure sustainable and efficient records management across higher education institutions in Tanzania.

RECOMMENDATIONS

Public universities in Tanzania should fully adopt electronic record-keeping systems to improve management efficiency. This requires investment in digital infrastructure and consistent staff training to enhance technical skills. Institutions must also develop clear policies on data management, security, and backup to ensure consistent and accountable practices. Furthermore, the government should provide financial and technical support to facilitate this digital transition. Integrating with national systems like Lawson and GEPG will enhance operational efficiency and transparency. A coordinated approach involving infrastructure, training, policy, and support is essential for effective and sustainable digital records management in higher education institutions.

ACKNOWLEDGEMENT

The author wish to acknowledge The Tanzania Institute of Accountancy management for their support financially, materially and morally while undertaking this paper.

REFERENCES

Brohi, K. B., Memon, S., & Shaikh, K. H. (2023). Navigating Barriers to Successful Implementation of Digital Record Management System: A Case Study of Pakistani Public Sector

- Universities. *Journal of Entrepreneurship, Management, and Innovation*, 5(3), 414-429.
- Farotimi, A. V., Adegoke, O., & Akeroro, O. (2023). Emerging role of information and communications technology in effective and efficient records management. *Journal of Professional Secretaries and Office Administrators*, 30(1), 27-38.
- Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher education. *The internet and higher education*, 18, 4-14.
- Mnzava, E. E., & Chirwa, M. N. (2018). Usage of Sokoine University of Agriculture institutional repository among academic staff at the College of Veterinary Medicine and Biomedical Science in Tanzania. *Global Knowledge, Memory and Communication*, 67(8/9), 510-522.
- Mulauzi, F. (2019). *Application of information and communication technologies (ICTs) in records management*.
- Ngai, E. W., Law, C. C., & Wat, F. K. (2008). Examining the critical success factors in the adoption of enterprise resource planning. *Computers in industry*, 59(6), 548-564.
- Ngulube, P. (2005). Managing records at higher education institutions: a case study of the University of KwaZulu-Natal, Pietermaritzburg Campus. *South African Journal of information management*, 7(1).
- Phiri, M. J. (2016). *Managing university records and documents in the world of governance, audit and risk: Case studies from South Africa and Malawi* (Doctoral dissertation, University of Glasgow).
- Ringold, D., Holla, A., Koziol, M., & Srinivasan, S. (2011). *Citizens and service delivery: assessing the use of social accountability approaches in human development sectors*. World Bank Publications.
- Sooklal, S. S. (2006). *The structural and cultural constraints on policy implementation: a case study on further education and training colleges in south africa* (Doctoral Dissertation, University of Pretoria).
- Yidana, P., & Akuna, E. (2022). academic records management practices in africa higher education institutions: empirical review. *Contemporary Education*, 5(1), 93-113.
- Yidana, P., & Akuna, E. (2022). Academic Records Management Practices In Africa Higher Education Institutions: Empirical Review. *Contemporary Education*, 5(1), 93-113.

