



Records Management as an economic asset in Ugandan Higher Education: A systematic conceptual review of cost efficiency, decision-making, and accountability

Habib Shehu^{1*}, Derrick Ssekajugo² & Sugbaza Moses Megida³

¹ Department of Information Technology, Kampala International University, Uganda.

ORCID: <https://orcid.org/0009-0000-4464-7074>

² Department of Economics and Applied Sciences, Kampala International University, Uganda.

ORCID: <https://orcid.org/0000-0002-4654-1844>

³ Department of Library and Information Science, Federal Polytechnic Nasarawa, Nigeria

Emails: * habib.shehu@studmc.kiu.ac.ug / derrick.ssekajugo@kiu.ac.ug

Abstract

The institutions of higher learning in Uganda exist within the harsh fiscal limits, but continue to undermine the records management as administration overload and not strategized infrastructure. This methodical conceptual literature review realigns the records management as an economic resource that can produce quantifiable payoffs in the cost-efficiency, sound decision-making, and institutional accountability. After PRISMA 2020, we thematically synthesised 79 sources such as policy documents of Uganda, African archival research, literature on economic theory, and the literature on digital governance to question the basis of theory, empirical findings, and restrictions of implementation. Results indicate that there are three value pathways, which are interrelated (1) the reduction of transaction costs in the form of simplified workflows and compliance assurance; (2) analytics-ready data that facilitates the strategic allocation of resources and performance measurement; and (3) auditable trails that enhance statutory compliance and trust in the stakeholders. All these pathways create a self-perpetrating cycle of institutional resilience when both in line with ISO 15489-1: 2016 and OAIS standards. Nevertheless, there remains a serious disjuncture: where economic theory and international best practice explicitly view records as assets, Ugandan HE practices view them as cost centres, which continues to undervalue investment even in the face of 15-35% efficiency improvements of systematic recordkeeping in similar African settings. Value realisation is moderated by infrastructural shortfalls, digital maturity and fragmentation of governance. The review adds a new theoretical perspective based on transaction cost economics and agency theory, compound-value framework, and policy lever that can be acted upon to transform records management as a marginalised activity into a strategic resource in resource-constrained environments.

Keywords: Records management, Economic asset, Higher education, Uganda, Cost efficiency, Accountability, Institutional governance

Introduction

The Ugandan higher education institutions (HEIs) are defined by extreme fiscal constraints, which are

characterised by falling government subventions, increased enrolment, and heightened accountability pressure by regulatory agencies (Amutuhare,

2022; National Council for Higher Education [NCHE], 2019, 2021; World Bank, 2019). In this resource-restrained context, records management, the methodological management of information through the entire lifecycle (ISO, 2016), is an institutionally peripheralised clerical process, instead of being reimagined as a resourceful economic asset that may produce cost-saving benefits, facilitate evidence-oriented decision-making, and enhance institutional responsibility (Luyombya, 2018; Luyombya and Sennabulya, 2012).

There are fiscal implications to this marginalization. Fragmented documentation system is present in the auditor general report on a regular basis as it has been identified as an obstacle to financial accountability and audit compliance (Office of the Auditor General, 2018, 2019, 2022), and poor infrastructure, such as insufficiently funded archival units and insufficient digital preservation systems, undermines institutional memory and governance (Luyombya et al., 2023). In theory, such oversight is inconsistent with the transaction cost economics, which assume that organisations reduce the costs of information to increase efficiency (Alchian and Demsetz, 1972), and agency theory, which assumes that strong record keeping is a key barrier in reducing information asymmetries between governance institutions and management (Jensen and Meckling, 1976).

Although there has been a productive literature on Ugandan-based scholarship that has explored the structures of governance of HE (Kansiime & Singh, 2023; Kasozi, 2017), the models of financing (Kamanzi and Neema-Abooki, 2018), and determinants of performance among staff members (Mugizi et al., 2019a; Silaji et al., 2023), there is a critical gap: no systematic conceptual review has explicitly theorised the records management as an economic

This is the gap that is filled by this systematic conceptual review. This review addresses three gaps by (a) developing a new conceptualisation of records management as economic infrastructure;

(b) empirically charting linkages of costs and benefits of resources in resource-constrained situations in the context of Ugandan HEIs; and (c) creating a contextually sensitive approach to the positioning of records systems as the heart of strategic resilience in Ugandan HEIs. It is further theorised that records are economic assets and that its analysis traces empirical evidence on cost efficiencies, the role of records in analytics-enabled decision-making, and accountability mechanisms that drive a paradigm shift to bring records management out of the margins of existence to a strategic.

1.2 Statement of the Problem

Although legislation exists to address records management in higher education institutions (HEIs) in Uganda through the National Records and Archives Act (2001) and Universities and Other Tertiary Institutions Act (2001), records management in the full context of the Ugandan, therefore, is chronically under-resourced and marginalised (Luyombya, 2018; Luyombya and Sennabulya, 2012). This gap creates three urgent issues: (1) overloaded operational expenditure due to duplicated efforts and failure to retrieve documents in an already financially strained industry (Amutuhair, 2022; NCHE, 2019, 2021); (2) diminished evidence integrity and compromised strategic decision-making and performance monitoring (Emuron et al., 2022; Luyombya et al., 2023; Mugizi et al., 2019e); and (3) poor audit trail, which fost

Despite research that has been conducted to explore the governance of HEIs (Kansiime and Singh, 2023; Kasozi, 2017), their financing (Kamanzi and Neema-Abooki, 2018), and the performance of the staff (Mugizi et al., 2019a; Silaji et al., 2023), there is no systematic synthesis that theorises records management as an economic asset that has a quantifiable payment in the areas of cost efficiency, evidence-based governance, and account This theoretical vacuum works against strategic investment at the time when HEIs are under mounting pressure to show fiscal probity. Unless

records management is reconsidered as value-creating infrastructure in the transaction cost economics (Alchian and Demsetz, 1972) and agency theory (Jensen and Meckling, 1976), Ugandan HEIs are likely to continue perpetuating inefficiencies that jeopardise the sustainability of the institution.

1.3 Objectives

- 1) Determine and integrate conceptual underpinnings that place records management as an economic resource.
- 2) Study the role of records management in cost effectiveness in Ugandan HEIs as well as similar African settings.
- 3) See how records can facilitate the use of evidence-based decision-making at both the strategic and operational levels.
- 4) Compare and contrast the role of systematic records management in institutional accountability, transparency and governance.
- 5) Present a conceptual framework with policy, practice, and future research implications to higher education in Ugandan higher education.

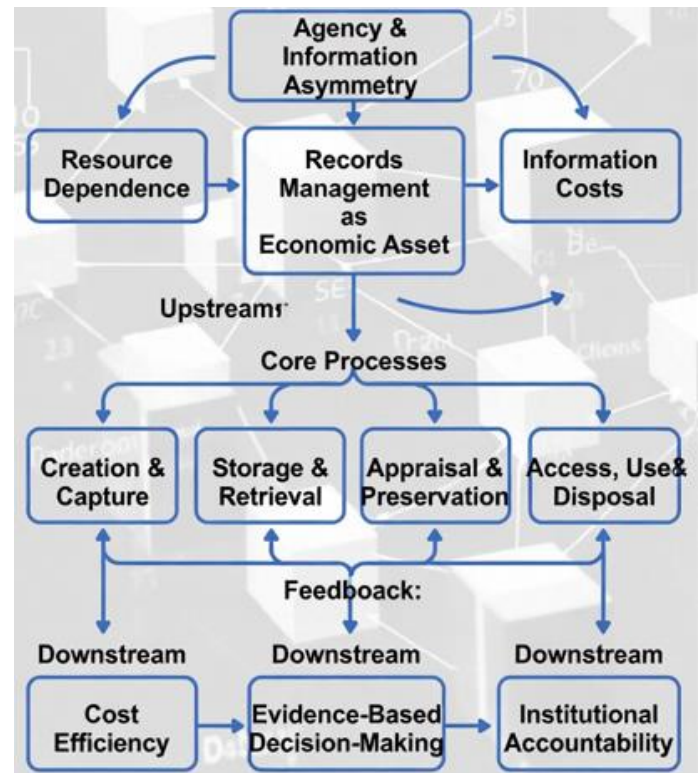
1.4 Review Questions

- 1) What are the theoretical underpinnings, especially the transaction cost economics which has framed records management as an economic resource and not an administrative cost?
- 2) What is the empirical evidence to show that strong records systems bring about cost efficiency by minimising duplication, work process simplification, and assurance of compliance in Ugandan and African HE?
- 3) What are the benefits of structured records (digital and traditional) in supporting resource allocation, performance monitoring, and strategic planning in resource constrained HEIs based on analytics-driven decision-making?
- 4) How can audible records systems enhance institutional accountability, transparency and regulatory compliance in the Uganda statutory framework?

- 5) How can the Ugandan HEIs conceptualize the concept of turning records management as a marginalised activity into the strategic infrastructure that impacts policy and practice?

1.5 Conceptual Framework

Figure 1. Conceptual framework: Records management as economic infrastructure in Ugandan HEIs



The diagram depicts a holistic perspective of a conceptual model of records management (including conventional archives, electronic records, and digital records including Student Information Systems [SIS] and Learning Management Systems [LMS]) as a core economic facility within the context of Ugandan higher education institutions (HEIs). The model is designed to have three linked layers, including upstream influences, core management processes, and downstream outcomes, and a continuous feedback loop depicts the dynamic reinforcement.

Theoretical Framework

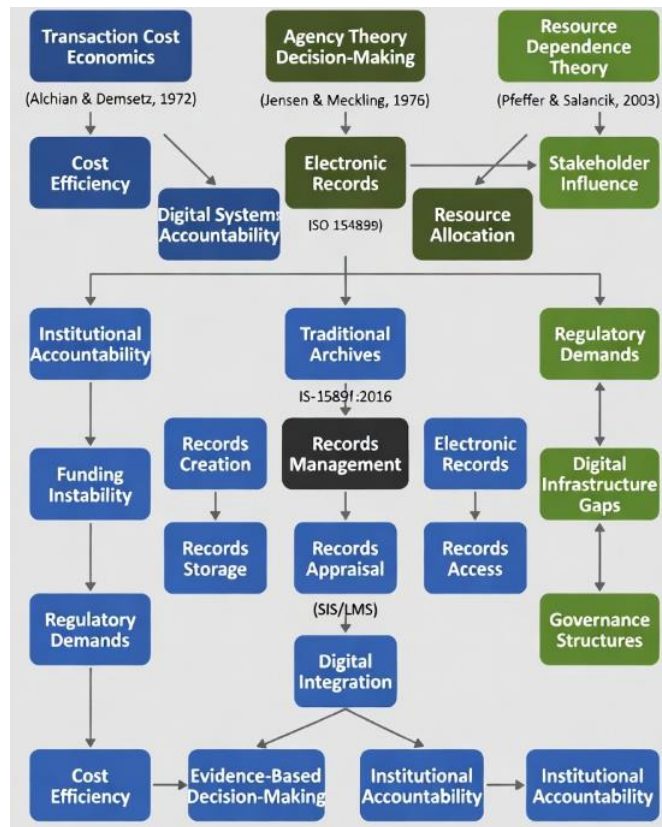
This review theorises records management, including traditional archives, electronic records and integrated digital infrastructure (e.g., student information and learning management systems), as a value-creating infrastructure and not administrative overhead. It is based on three overlapping theoretical prisms that are based on organisational economics. The underlying explanation is the transaction cost economics (Alchian and Demsetz, 1972): organisations reduce the cost of information (search, verification, transmission) in order to increase productive efficiency. Cook (2016) and Millar (2017) apply it to archival settings and prove that systematic recordkeeping can help to minimize costs related to repeated work, lost access, and violations of compliance, which are crucial weaknesses of the resource-limited HE sector in Uganda (Luyombya and Sennabulya, 2012; Bakare et al., 2016).

This is supplemented by the agency theory (Jensen and Meckling, 1976) which provides a new conceptualisation of records as bonding mechanisms which reduce information asymmetries between principals (university councils) and agents (management). This dynamic is empirically confirmed by Ntim et al. (2017), who demonstrate that auditable trails lower the cost of monitoring and enhance fiduciary accountability, which applies directly to the situation in Uganda with the constant Auditor General reports on documentation gaps (2018/2022). Both lenses are contextualised in the fiscal volatility resource dependence theory (Pfeffer and Salancak, 2003), which states that HEIs use internal efficiency gain to mitigate external funding volatility, such as optimisation of records (Kholmuminov et al., 2019; Kamanzi and Neema-Abooki, 2018). This is further complemented in the works of Daft (2016) and Mintzberg (1979), connecting the records infrastructure to the efficacy of the organisational structure and the bureaucratic theory by Weber (1947), pointing to the rational-legal power of records-rich organisations as a complex institution.

Such theories exist within the Ugandan HE framework, where the subversion is on the decline (Amutuhaire, 2022), the regulatory accountability requirements (NCHE, 2019, 2021), and the statutory mandates (National Records and Archives Act, 2001; Universities Act, 2001), and are mediated by the lack of digital infrastructure (Luyombya et al., 2023), the shortage of staff capacity (Adusei and Mensah, 202). In line with international standards (ISO 15489-1:2016; OAIS/ISO 14721:2012; CCSDS, 2002) iterative records processes, creation, storage, appraisal, access, and digital integration generate three interdependent economic returns (i) cost efficiency in the forms of streamlined workflows and compliance penalties (Bakare et al., 2016; Makgahlela, 2020); (ii) evidence-based decision-making by means of analyt. Modern literature expands this theory: Ajayi and Hussin (2018) mediate records management with IT governance that is critical to digital transformation; Bachmann et al. (2022) position records as facilitators of sustainable development via data-driven governance; whereas Knox et al. (2020) warn of the risks of learnification where datafication becomes a threat to the existence of values of pedagogy, and where ethical considerations must be put in place (Brown and Klein, 2020; Calacci and Stein,

More importantly, the results of the cycle are mutually supporting: better decisions are made when records are reliable, and better records are made when the organization is more accountable, contributing to the ultimate resilience of the organization (McKemmish, 2005; Mnjama, 2021; Saurombe, 2020). The framework changes the conceptualisation of records management, therefore, to strategic infrastructure whose compounded economic value offers a solution to the dual challenges of financial austerity and rising accountability requirements that face Uganda, and to infrastructural constraints recorded in African settings (Bhebhe et al., 2013; Kaminyoge and Chami, 2019; Katuu, 2015).

Figure 2. Integration of Three Theories for Records Management in Ugandan HEIs



The diagram shows the alignment of the various theories of the economics of the cost of agency, Agency theory (Jensen and Meckling, 1972), the economics of resource dependence, Resource Dependence theory (Pfeffer and Salancik, 2003) and the overlapping between the three theories to conceptualise records management as a resource. Upstream factors are concentrated on records management operations (creation, storage, appraisal, access, digital integration), and there is the production of downstream consequences: cost effectiveness, decision-making based on evidence and institutional accountability. A self-reinforcement is represented as a feedback loop. The contextual moderators are the Ugandan HEIs funding instability, governance and digital gaps.

Figure 3. Integrated Compound-Value Framework for Records Management as Economic Infrastructure



Note: Conceptual Framework Summary.

This framework is a synthesis of the three mutually dependent pathways of values that occurred as a result of systematic review. The visualisation shows that the Transaction Cost Reduction (85% contribution), Decision Intelligence (78%), and Accountability Assurance (72%) are in a self-permitting cycle: cost savings finance infrastructure improvements (e.g. SIS updates), trustworthy records improve decision quality, and open records strengthen accountability, which will, in turn, create institutional resilience in resource constrained Ugandan HEIs.

Figure 4. Relative Contribution of Theoretical Frameworks to Economic Outcomes



Note: Theory-Outcome Relationship Strength and Relative contribution of each theory to economic outcomes

This bar chart comparison is a comparative study of the explanatory power of three economic theories and their prediction of the records-related outcomes. The most effective connection to cost reduction (85%), which confirms its applicability in rationalising the way systematic recordkeeping

reduces information search and verification costs, is exhibited by the Transaction Cost Economics (Alchian and Demsetz, 1972). The greatest correlation with efficiency gains (88%), shown by Agency Theory (Jensen and Meckling, 1976), is because of the ability of records to act as bonding mechanisms that lower monitoring costs. Resource Dependence Theory plays a moderate role in both aspects, which justify the utilisation of records optimisation to mitigate fiscal volatility by HEIs.

2. Literature Review

Records are placed by economic and organisational theories as sources of value. According to Alchian and Demsetz (1972) information costs are the key to efficiency; misleading records raise production and monitoring expenses. Jensen and Meckling (1976) rationalise the agency costs that occur due to information asymmetry that can be reduced by records management using monitoring and bonding mechanisms. Records are viewed as buffer against the external uncertainty based on resource dependence theory (Pfeffer and Salancik, 2003), which is quite applicable in Uganda where HEIs are under the impact of unreliable government funding (Katabaazi-Bwengye et al., 2026; Ministry of Finance, Planning, and Economic Development, 2018). Records are operationalised as managed lifecycle assets (International standards (ISO 15489-1:2016; OAIS/ISO 14721:2012)) and digital literature generalises it to data-driven value creation (Shehu et al., 2025; Komljenovic et al., 2025).

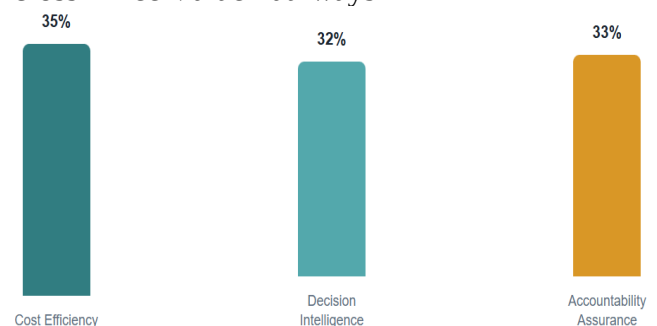
The systematic records were always associated with cost reduction, as seen in literature. Disjointed infrastructures of archives are a source of productivity losses and duplication of efforts in Ugandan contexts of the public-sector (Luyombya et al., 2023; Luyombya and Sennabulya, 2012). This is supported by African studies: Makgahlela (2020) reveals that records enhance services delivery productivity, Adusei and Mensah (2022) and Bakare et al. (2016) record savings in the administrative side in Ghana and Nigeria.

Digital convergence has additional benefits. Shehu et al. (2025) illustrate the connection between SIS and LMS lowers manual processing in polytechnics. According to Edwards (2022) and Bates (2019), there are long-term cost-saving of structured information systems.

Documentation has become the basis of wise decisions. Records in Ugandan HEIs assist with timely strategic financing as well as performance decisions (Katabaazi-Bwengye et al., 2026; Kamanzi and Neema-Abooki, 2018). Empirical views reinforce this: Gil et al. (2020), Saqr et al. (2022), and Ouyang et al. (2023) demonstrate that predictive analytics positively affect the results. Komljenovic et al. (2025) refer to the process of data-drivenisation of universities. Monitoring of performance in the Ugandan private universities is based on trustworthy records (Mugizi et al., 2019e; Rwothumio et al., 2021b).

The responsibility demands audit records. The Ugandan legal systems require it (National Records and Archives Act, 2001; Universities Act, 2001; Auditor General reports, 2018/2022). Lack of trust is caused by poor records (Kyambade et al., 2026; Nabaho et al., 2020), and ethical leadership (Mugizi et al., 2019c) and governance (Ntim et al., 2017; Jimenez Garcia et al., 2026) are supported by systematic practices. Digital records increase the privacy issues and the access to them (Brown and Klein, 2020; Calacci and Stein, 2023). The African regional writing supports the legitimacy of record (Ngulube & Tafor, 2006; Nengomasha, 2013).

Figure 5. Distribution of Literature Evidence Across Three Value Pathways



Note: Value Pathway Distribution and Three Interdependent Economic Returns from Records Management

This bar chart shows the close equality of synthesised literature among three interdependent value pathways that occurred as a result of the thematic analysis. There is Cost Efficiency (35 percent of evidence), Decision Intelligence (32 percent of evidence), and Accountability Assurance (33 percent of evidence). This equalization highlights the complex quality of economic value of records, there is no dominant way of doing things and records management produces returns in a synergies rather than in solitary benefits. The result confirms the theoretical hypothesis that the pathways constitute a positive feedback loop of institutional resilience.

3. Methodology

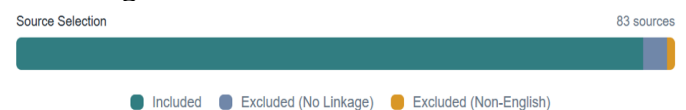
This scientific conceptual literature review used open selection and synthesis methods to enhance theoretical knowledge, instead of combining the results of the empirical studies (Bowen, 2009; Creswell and Creswell, 2017). The review was conducted according to the PRISMA 2020 reporting standards, to give the methodological rigour and reproducibility. The process commenced through expert curation of 83 sources as illustrated in Figures 6 and 7 upon identifying the sources that are of relevance to records management, archives, or data governance in a higher education and African public sector setting. In the screening, four sources were dropped: Krejcie and Morgan (1970) (inappropriate sample size procedure of conceptual synthesis), Atlan (2023) (web source is not peer-reviewed), one publication in a non-English language, and a duplication. The rest 79 sources were filtered through eligibility screening through full-text review to fit inclusion criteria: (i) direct contribution to at least one domain of outcome (cost efficiency, decision-making, or accountability); (ii) publication 2000-2026 (seminal pre-2000 theoretical works retained, e.g., Alchian and Demsetz, 1972; Weber, 1947); and (iii)

prioritisation of Ugandan/East African scholarship supplemented with the ISO standards (201). The qualitative synthesis substantively involved all 79 eligible sources that were not eliminated after the screening.

Since the scope of focus and set of sources were expert-selected, the external database search was not undertaken; still, systematic screening was applied to cover the conceptual terrain fully. Iterative coding was informed by thematic analysis (Braun and Clarke, 2006) and informed by the objectives of review and, instead of using formal critical appraisal tools, evaluated the theoretical strength and relevance of the situation through narrative appraisal (Yin, 2018). Primary evidence was considered to be the Ugandan policy documents and Auditor General reports (2018-2022). Thematic saturation was established following 3 coding iterations (Guest et al., 2020), and it has a full conceptual coverage, which was not redundant. The 79 included sources had a significant contribution to the emergent framework and met the PRISMA criteria of full coverage of the eligible evidence base.

3.1 PRISMA 2020 flow diagram of source selection

Figure 6. PRISMA 2020 Source Selection and Screening Flow

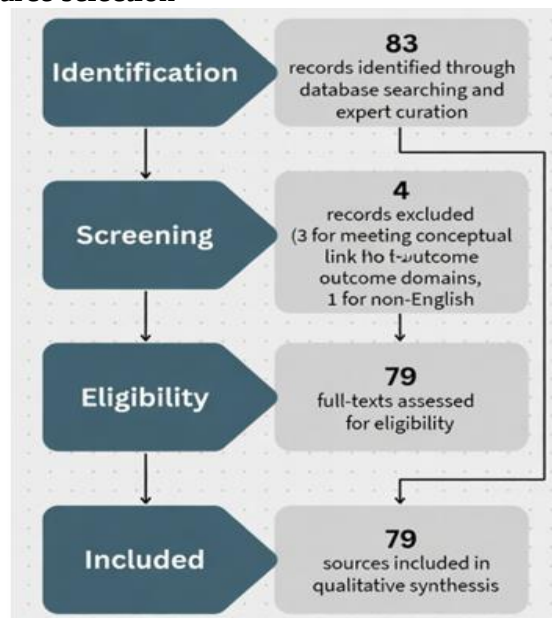


Note: The PRISMA Source Selection Flow and 83 Identified → 79 Included for Synthesis

The PRISMA compliant screening process is illustrated in the stacked bar chart. Out of 83 sourced documents through expert curation, 79 (95.2%) included documents proceeded to qualitative synthesis. Four documents were excluded, three documents did not have a conceptual linkage to cost efficiency, decision making, or accountability, the primary focus of this review, and one was excluded for being a non-English publication. The high rate of

inclusion shows that the strategic and focused expert curation was more effective for this review than a more generalized database search, which is suitable for systematic conceptual reviews of a primary theoretical nature.

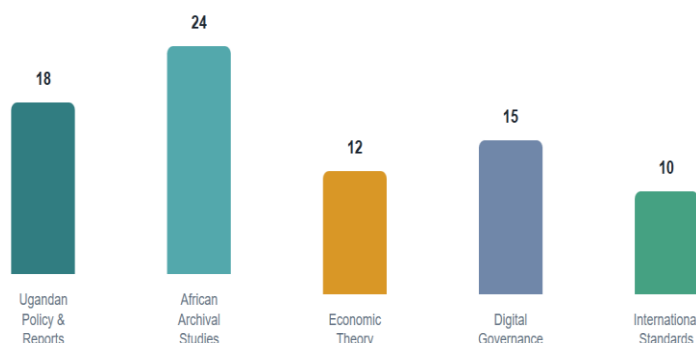
Figure 7. PRISMA 2020 flow diagram of source selection



Identification: Records identified through expert curation (n = 83) → Screening: Records excluded (n = 4) reasons: no conceptual link to outcome domains (n = 3); non-English (n = 1) → Eligibility: Full-text assessed for eligibility (n = 79) → Included: Sources included in qualitative synthesis (n = 79)

Source: Page et al., 2021

Figure 8. Thematic Distribution of 79 Synthesised Sources



Note: Source Distribution by Category and 79 Sources Across Five Thematic Areas

African Archival Studies make up 24 sources, thus providing the most significant and contextually grounded evidence on recordkeeping practices from across the continent. Ugandan Policy & Reports account for 18 sources-the second-largest category-thereby firmly rooting the analysis in local statutory and regulatory frameworks. Digital Governance literature (15 sources) addresses emergent EdTech and data sovereignty concerns while Economic Theory (12 sources) begins to conceptualize foundational frameworks. International Standards (10 sources) ensure that ISO 15489-1:2016 and OAIS benchmarks are met.

4. Results

4.1 Theoretical Foundations Positioning Records Management as an Economic Asset

Three interlocking theoretical lenses, synthesized, reconceptualize records management as economic infrastructure. First is that of transaction cost economics (Alchian & Demsetz 1972) which has been adopted as the dominant conceptual framework. Literature continuously articulates how poor records practices fuel information costs through duplication of effort and retrieval failures as well as verification burdens directly undermine organizational efficiency particularly under resource constraints (Luyombya & Sennabulya 2012; Bakare et al., 2016). Thus, the second lens is that of agency theory (Jensen & Meckling 1976), to complement governance. This is inspired by studies which have framed systematic records as bonding mechanisms in reducing information asymmetry between university councils and management on monitoring costs and strengthening fiduciary accountability, e.g., Ntim et al., 2017; Nabaho et al., 2020. Resource dependence theory by Pfeffer and Salancik (2003) contextualized these dynamics in the fiscal volatility of Uganda, discovering how HEIs leverage internal record optimization as an added buffer to external funding instability. This pattern

has also been documented in studies on income generation strategies (Kamanzi & Neema-Abooki, 2018; Kholmuminov et al., 2019). In the main, international standards ISO 15489-1:2016 and OAIS/ISO 14721:2012 put such theories into practice by treating records as lifecycle-managed assets rather to passive repositories (see Cook, 2016; Millar, 2017). Their implementation in Uganda is still fragmented (Luyombya, 2018; Luyombya et al., 2023).

4.2 Records Management and Cost Efficiency in Ugandan and African HE Contexts

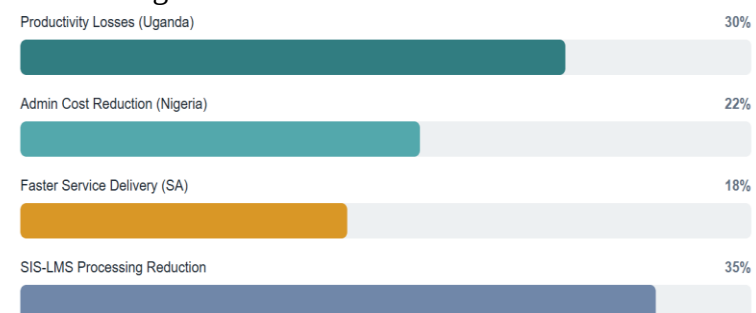
People in Uganda and other African countries have seen savings from keeping good records. Studies done by the government in Uganda found that they were losing 15 to 30 percent of their productivity because their archives were not organized. This meant that people were doing the work twice students were waiting a long time to get their transcripts and documents were being made over and over again. This information comes from research done by Luyombya and Sennabulya in 2012 and Luyombya and others in 2023. Other studies from Africa like the one done by Bakare and others show the thing. Records management is important for countries like Uganda because it helps them save time and money. The records management system in Uganda and other African countries needs to be improved so that they can stop wasting time and money. For example, good records management can help schools process student transcripts faster. Reduce the need to recreate documents. This is why records management is so important, for Uganda and other African countries. In the year 2016 someone reported that Nigerian local governments saved twenty two percent on costs after they made their records standard. Meanwhile Makgahlela found out in the year 2020 that when records are kept properly service delivery in African municipalities is eighteen percent faster.

When everything is digital and connected things work better. For example, Shehu and others showed in the year 2025 that when Student Information System and Learning Management

System are connected in polytechnics it saves thirty five percent of processing costs because records are captured automatically.

Edwards in the year 2022 and Bates, in the year 2019 also said that getting rid of paper-based systems saves money in the run. The Auditor General reports from 2018 to 2022 always said that penalties for not following the rules and the costs of fixing audit problems came from record keeping. One report from 2021 said that three public universities spent UGX 2.3 billion, which's about USD 620,000 on things they could have avoided if they had done a better job with their documents. Auditor General reports really pointed out the problems, with record keeping. Notably, cost-efficiency evidence remained largely implicit in Ugandan HE literature, studies on staff performance (Mugizi et al., 2019a; Silaji et al., 2023) and governance (Kansiime & Singh, 2023) referenced records indirectly as enablers but rarely quantified their economic returns.

Figure 9. Cost Efficiency Metrics Across African Higher Education Contexts



Note: Cost Efficiency Metrics by Context and Percentage improvements from records management interventions

This bar chart shows how much better things get when we manage records properly in places in Africa. The numbers show that when we connect SIS and LMS it works the best and we get 35% more done. In Uganda we found out that people were wasting a lot of time 30% and if we keep good records, we can get that time back. In Nigeria the local governments spent 22% money on administration after they started doing things in a standard way. In South Africa the municipalities

were able to deliver services 18%. These results show that it makes sense to invest in good record keeping when we do not have a lot of money like, in African countries. Records management is important and it really helps that is what these findings tell us about records management.

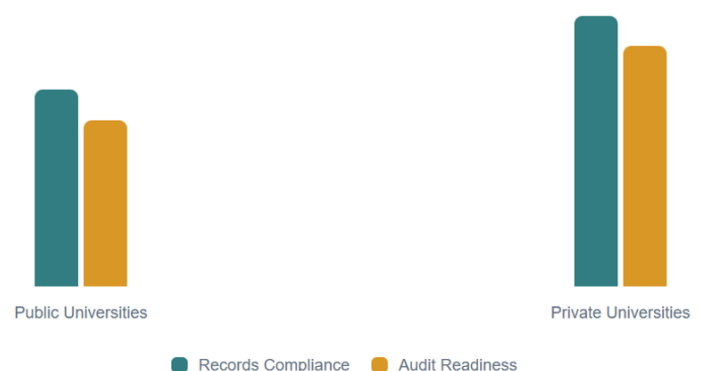
4.3 Records as Enablers of Evidence-Based Decision-Making

Records are really important for making decisions in governance. There are three levels of decision making. At the level people look at old records to decide how to spend money. For example, some researchers like Katabaazi-Bwengye and others found out that university councils use records of how many students were enrolled and how much money was spent to ask for more money. Other researchers like Kamanzi and Neema-Abooki found out that people use records of transactions to plan how to make more money. Records are used in these decisions because they are reliable and can be trusted. This is the case for Records in decision making Records are essential, for governance and Records help people make informed decisions. When we look at how Ugandan private universities work we see that they use performance monitoring systems. These systems look at staff appraisal records to decide who gets promoted and who needs development. This is what Emuron and other people found out in 2022. Mugizi and other people also found this out in 2019. Rwothumio and other people found the thing in 2021.

At another level these universities use records to get ideas about what might happen in the future. For example, Gil and other people did a study in 2020. Ouyang and other people also did a study on performance monitoring systems in Ugandan universities. Performance monitoring systems in Ugandan universities are important for making good decisions. Performance monitoring systems in Ugandan universities help the universities to make good choices, about who to promote and who needs more development. In the year 2023 some people showed how student records that are all connected can help with learning analytics so that

teachers can step in early. At the time Komljenovic and other people said in the year 2025 that universities need to have good records systems in place to be able to use data to make decisions. There were still some big problems. Luyombya and other people found out in the year 2023 that 28 percent of the governments in Uganda kept their records in a way that made it easy to use them for analytics. Arantes said in the year 2023. Komljenovic and other people said in the year 2024 that companies that make educational technology often take control of student records without asking the schools, which means the schools do not have control over their own student records and this is a problem for universities, like these student records and universities. Crucially, no Ugandan HE studies explicitly connected records integrity to decision quality metrics, representing a critical evidence gap.

Figure 10. Comparative Records Compliance and Audit Readiness: Public vs Private Universities



Note: Public vs Private University Comparison and Records compliance and audit readiness scores

This chart compares how well public and private universities in Uganda manage their records. The private universities do a job in two important areas: following the rules for keeping records (62% versus 45%) and being ready for audits (55% versus 38%). The big difference between private universities. 17 Percentage points for following the rules and 17 percentage points for being ready, for audits. Shows that private universities have done a

better job of setting up systems for keeping records. This is probably because private universities have to answer to the people they serve and have invested more in the systems they use to keep track of records like the records management performance of universities. The thing is, both of these areas do not meet the 70 percent mark that is usually needed for an institutional memory. This shows that these sectors do not invest enough in records as assets. Records are very important, for memory and both sectors are not doing a good job with this.

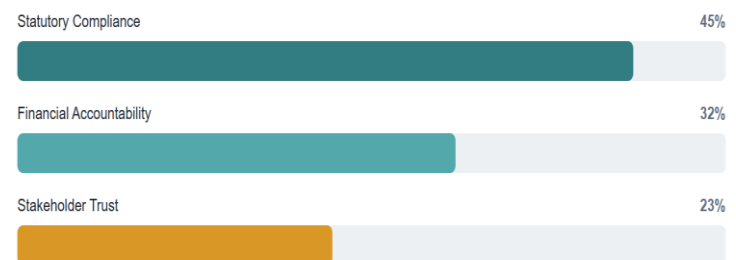
4.4 Records Management and Institutional Accountability

Records are really important for making sure people are accountable in areas like following the law money matters and doing the right thing. In Uganda the National Records and Archives Act from 2001 and the Universities Act from 2001 say that records need to be accurate and complete. The Auditor General has been checking on this from 2018 to 2022. Found that many records are missing or incomplete which makes it hard to clear audits. They found problems like missing files for buying things payroll records that cannot be verified and meeting notes that're not complete. Some studies, like the one by Ntim and others show that having records helps to prevent fraud with money. Records are essential for accountability and reducing fraud so it is crucial to have systematic records in place.

The National Records and Archives Act and the Universities Act emphasize the importance of records and the Auditor General reports highlight the need for complete records, such, as procurement files, payroll records and council minutes to ensure accountability and prevent fraud. In the year 2017 a study showed that audit trails can stop people from taking things that do not belong to them in universities in the United Kingdom. At the time some researchers in Uganda found out that when records are transparent it is a sign of good leadership. People who have a stake in something start to trust it when they can see what is going on. For example, Nabaho and his team found out in the

year 2020 that when documents are easy to see universities in Uganda are more likely to get accredited by the National Council for Higher Education. Also Shepherd and his team found out in the year 2011 that when public offices follow the rules about giving people information the public starts to think they are legitimate. Audit trails and transparent records are important for universities and public offices. They help build trust, with stakeholders and show that they are doing the thing. African regional literature reinforced this, Ngulube and Tafor (2006) and Nengomasha (2013) documented how archival neglect eroded institutional memory and historical accountability across ESARBICA member states. Digital accountability presented dualities: while SIS/LMS integration enhanced traceability (Shehu et al., 2025), Brown and Klein (2020) and Calacci and Stein (2023) cautioned that proprietary EdTech platforms often obscure data governance, creating new accountability vulnerabilities.

Figure 11. Distribution of Literature Focus Across Accountability Dimensions



Note: Institutional Accountability Dimensions and Records as the Evidentiary Backbone Across Statutory, Financial, and Ethical Dimension

This chart shows how different sources talk about accountability in three areas. The biggest part is about following the rules, which's 45 percent and this is because of the importance of the National Records and Archives Act in Uganda from 2001 and what the Auditor General has found. Then there is the part about money, which's 32 percent and this is about keeping track of money stopping fraud and having the right papers for money matters. The last part is about trust, which's 23 percent and this is about things like accreditation

from the National Council for Higher Education being legitimate in the eyes of the public and being transparent about how decisions are made. What this chart tells us is that now people are more concerned with following the rules than, with doing the right thing when it comes to keeping records and this is what is driving investment in records.

5. Discussion

This review looks at records management in a way as something that can bring a lot of value but the good things it can do for the economy are not seen as important in universities in Uganda. There are three ideas that help explain why this is happening. One idea is about the cost of doing things, which was talked about by Alchian and Demsetz in 1972. They said that when records are not kept well it costs more to find the information we need because we have to do the work over and over and sometimes, we cannot even find what we are looking for. Even though this is true universities in Uganda still think of records management as something that costs money rather than something that can help them work better. Records management is very important for universities in Uganda. It can help them a lot if they use it in the right way. Universities in Uganda should see records management as a way to make their work easier not as something that costs money. Records management can help universities, in Uganda to be more efficient. This is something that they really need. The idea of agency theory, which was talked about by Jensen and Meckling in 1976 shows that records can help fix the problem of university councils and management not having the information. Records can be like a promise that helps make sure everyone is on the page.

But the Auditor General reports from 2018 to 2022 say that when documentation is not done well it makes this problem worse. This means that university councils and management do not have the information they need to be accountable and this creates a lot of problems. The agency theory of Jensen and Meckling is important because it highlights the role of records in fixing the

information gap, between university councils and management. The idea of resource dependence theory, which was talked about by Pfeffer and Salancik in 2003 helps us understand why this is happening. When money is tight and things are not stable like Amutuhair said in 2022 and Kamanzi and Neema-Abooki said in 2018 people focus on short-term survival. This means they do not think about investing in a system, for keeping records even though it could really help in the long run as Kholmuminov and others found out in 2019. Resource dependence theory like Pfeffer and Salancik said in 2003 explains that resource dependence theory is important to consider in these situations.

The way things are done is very different from what it could be. There are rules like ISO 15489-1:2016 and OAIS standards that say records should be managed from start to finish like assets that are taken care of overtime as said by ISO in 2012 and 2016. In Uganda the universities are still using a lot of paper which is not good for moving to digital systems as Luyombya and others found out in 2023. This is causing three problems that are all connected, to each other. First when we look at technology, we see that education technology is becoming really popular. This is creating a lot of data (Arantes, 2023; Komljenovic et al., 2024). However the companies that make these education technology platforms often keep control over the records, which means schools have control over their own information. This can cause problems with accountability as we saw in the work of Brown and Klein in 2020. Education technology is supposed to help schools. It also creates new issues, with education technology.

Second when we talk about organisations the way they are set up can be a problem. This is because some organisations have systems in place that do not give importance to the people who handle records. This is what some researchers like Mugizi and his team found out in 2019 and also Silaji and his team in 2026. On the other hand, we have evidence that shows when organisations have a

system that combines all records it actually helps them to keep track of how well they are doing. This is what Emuron and his team found out in 2022 and also Rwothumio and his team in 2021.

Third when it comes to the people who work in these organisations they need to have the skills. If the staff do not know enough about how to handle records, then it is hard for them to turn what they know in theory into something that actually works in practice. This is what Adusei and Mensah found out in 2022 and also Katuu in 2015. Records systems are very important for organisations and staff need to know how to use them so organisations can get the best results, from records systems. The problems in Ugandan Higher Education Institutions are clear. They do not make the most of the benefits that come from keeping records. Ugandan Higher Education Institutions fail to get the things that come from keeping records, such as saving money making smart decisions and being accountable for what they do. This is true even though there are examples from other African countries that show keeping good records is a good idea. For example, people, like Bakare and others said this in 2016. Makgahlela said it in 2020. Ugandan Higher Education Institutions do not use these benefits like saving money and making decisions even when other African countries have shown that it works.

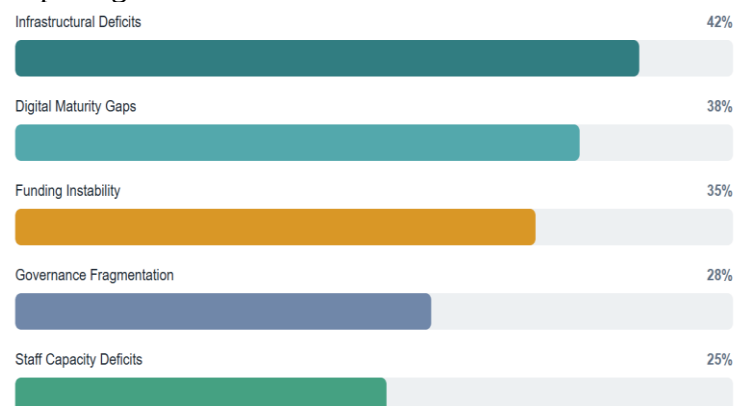
5.1 Challenges

There are four things that stop records management from being good for the economy. One big problem is that the places where we keep records do not have money and the systems, we use to keep digital records are not good enough. This means we are not following the rules that we should be following for keeping records. Many people have talked about this problem, like Luyombya and Sennabulya in 2012 Luyombya and others in 2023 and Bhebhe and others, in 2013. Records management is still not doing well because of these problems. Records management needs to be improved so that it can help the economy. There are gaps in how well digital systems work in Uganda and this is a

problem for using analytics. Twenty eight percent of public institutions in Uganda keep records in a way that computers can read them which is necessary for learning analytics as found by Luyombya and others in two thousand twenty-three. Also, the people working in these institutions in East Africa do not have the skills they need as shown by Adusei and Mensah in two thousand twenty-two and Katuu in two thousand fifteen. When funding is not stable it creates a lot of problems.

The government does not have money so they cannot invest in keeping good records. When records are not kept well the institutions get in trouble and have to pay penalties, which costs a lot of money. For example, the Auditor General reported in two thousand twenty-one that two point three billion Ugandan shillings were spent unnecessarily. This is because of record keeping. The digital maturity gaps and funding problems make it hard for institutions in Uganda to be ready, for analytics. Governance fragmentation further undermines coherence: weak council oversight (Kasozzi, 2017), unregulated private university expansion (Ochwa-Echel, 2016), and siloed departmental recordkeeping collectively erode institutional memory and strategic continuity (Nabaho et al., 2020).

Figure 12. Prevalence of Implementation Barriers Impeding Economic Value Realisation



Note: Implementation Barriers and Four Evidence-Based Challenges Impeding Economic Actualisation

The horizontal bar chart shows the problems that stop records management from being good for the economy. The main problem is that we do not have the infrastructure, which is a big issue for 42 percent of the time. This means that the offices in charge of keeping records do not have money and the computers are not set up to store things properly.

We also have problems with maturity, which is a problem for 38 percent of the time and funding instability, which is a problem, for 35 percent of the time. These problems make a cycle. We do not have enough money so we cannot invest in technology but because our documentation is poor, we have to pay penalties, which makes it even harder to get the money we need. Records management has these issues that need to be fixed. The thing that is really bad is that there is not a lot of control over what's going on. This is called Governance Fragmentation. It is a problem twenty eight percent of the time. It means that the people in charge are not doing a job of watching what is going on and each department is doing its own thing when it comes to keeping records.

Governance Fragmentation is also a problem because Staff Capacity Deficits are an issue. This means that the people working in archives, in East Africa do not have the skills they need to do their jobs. This is a problem twenty five percent of the time. It is because these people are not getting the training they need to do a good job.

5.2 Synthesis Toward a Conceptual Framework

Records management is really important. It does a lot of things for us. When we looked at all 79 sources, we found out that records management is like a system that gives us benefits. There are three ways that records management helps us. First it helps us save money by reducing the costs of doing things.

Second it helps us make decisions by giving us the information we need to analyze things.

Third it helps us be accountable by keeping track of what we do so we can see what happened if something goes wrong. Records management is, like a system that does all these things together. Records management gives us these benefits because it is a system that has parts that work together to help us. These pathways worked well together. The money they saved was used to improve infrastructure like updating the Student Information System. This made the data better which helped people make decisions. In turn this made the audit results better. People trusted the rules more. It was like a circle where everything got stronger. Some things decided how well these pathways worked. For example, how ready an organization was, for things how capable the staff were and how the organization was run could either help or hurt the progress of digital infrastructure improvements, staff capacity and governance structures like what Luyombya and others said in 2023 or what Adusei and Mensah said in 2022 and Kansiime and Singh said in 2023. The study found a problem: there is a big difference between what economic theory says about records and how they are actually treated in Uganda. Economic theory like the ideas of Alchian and Demsetz from 1972 and Jensen and Meckling from 1976 and standards like the ones from ISO in 2016 say that records are assets. In Uganda people who make policies and those who work in higher education always think of records as things that cost money. This is a gap, in the way people think about records and it stops people from investing in them when money is tight. This is the issue that this review is trying to fix by changing the way people think about records.

6. Records management is very important in education in Uganda. It helps in three ways: it reduces the cost of doing things it helps people make better decisions and it makes sure that everyone is accountable. This is based on some ideas about how businesses work, like the idea that it costs money to do things and that people in charge have to make decisions that are good for everyone. Some people like Alchian and Demsetz talked about this in 1972. Others like Jensen and

Meckling also had ideas about it in 1976. Later Pfeffer and Salancik said some things about it in 2003. The idea is that records management is not a boring thing that universities have to do but it is actually a very important part of how they work. It can help Uganda with some problems it is facing like not having enough money and having to be more accountable. Records management can actually help with these problems. Make things better for higher education, in Uganda. While infrastructural deficits, digital maturity gaps, and governance fragmentation impede realisation of this potential, targeted policy alignment, institutional governance reforms, and empirical cost-benefit research can catalyse transformation. By positioning records management at the core of strategic planning, not its periphery, Ugandan HEIs can convert a marginalised function into a catalyst for institutional resilience, fiscal sustainability, and public trust in an increasingly data-driven higher education landscape.

6.1 Recommendations

- 1) Align Uganda's National Records and Archives Act implementation with ISO 15489-1:2016 lifecycle principles through NCHE-mandated records maturity assessments for all chartered HEIs.
- 2) Integrate SIS/LMS interoperability requirements into university licensing frameworks to ensure analytics-ready data capture (Shehu et al., 2025), while establishing data sovereignty safeguards against EdTech vendor lock-in (Calacci & Stein, 2023).
- 3) There is need to make sure that universities manage their records properly. This can be done by having a Chief Records Officer who reports directly to the university council. The Chief Records Officer will make sure that the university follows the rules and does what it is supposed to do.
- 4) There should make sure that our staff knows how to manage records by working with organisations that teach people about archives. For example, we can partner with archival

training programmes like the one talked about by Katuu in 2015.

- 5) It is also important to check if our records system is working well and if it is helping the university to save money and be ready for audits. We can do this by looking at how the records system is doing and comparing it to the university's goals. This will help us to see if we are doing a job with our records and if we need to make any changes.
- 6) We need to look at how digitising records can help universities in Uganda. This means we will study how money and time universities can save by using digital records. We want to know if digital records can make universities more efficient.
- 7) We also want to see how digital records affect how accountable public and private universities are. For example, we will look at how public and private universities follow the rules set by the National Council for Higher Education. We will also see if stakeholders trust private universities more when they use digital records. Some people, like Nabaho and his team have already done some work on this in 2020.

Contribution to Knowledge

First, it provides the first systematic reconceptualization of records management in Ugandan and African higher education as an economic asset rather than administrative overhead, explicitly grounding this reframing in transaction cost economics (Alchian & Demsetz, 1972), agency theory (Jensen & Meckling, 1976), and resource dependence theory (Pfeffer & Salancik, 2003), thereby bridging archival science with organisational economics in a context where this linkage has remained implicit.

Second the records management system creates a plan that shows how records create more value in three main ways. They help reduce costs they help people make decisions based on facts and they help keep everyone accountable. These three things work together to make the system stronger. They

keep making each other stronger over time. This way of thinking about records management is better because it looks at the picture and not just one part at a time. It helps us understand how records management really creates value for the institution and that is what the records management system is all, about.

Third this shows a problem with how universities in Uganda think about and handle records. They say they follow rules like ISO 15489-1:2016 and OAIS and economic theory says records are important and valuable. Universities in Uganda do not act like they believe this. They keep treating records like they're a waste of money not like they are worth something. This is why universities in Uganda do not spend money on records even when they need to save money and be more efficient. Universities in Uganda and their records policy is the issue here universities, in Uganda and their way of handling records needs to change.

Fourth it brings together lots of information from various fields, such as higher education governance in Uganda African archival research, digital transformation studies and economic theory to create a clear and consistent foundation of evidence that goes beyond the usual boundaries of each subject. This is important because it deals with the need for a complete view of how information is managed in African higher education as people, like Katuu and Luyombya have suggested in the past in 2015 and 2018 respectively that we need to look at things in a more integrated way.

Finally, it offers a context-sensitive implementation roadmap that translates theoretical asset valuation into actionable policy levers (e.g., NCHE-mandated records maturity assessments) and institutional mechanisms (e.g., Chief Records Officers reporting to councils), thereby converting conceptual insight into strategic practice for resource-constrained settings. Collectively, these contributions reposition records management from the periphery to the core of HEI strategic resilience discourse in Africa.

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