

## Assessment of Information Governance Availability and Protection Principles in Records Management: A Qualitative Study of Four Selected Federal Universities in Northwestern Nigeria

By

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### Abstract

*This study assesses the implementation of Information Governance Availability and Protection Principles in records management across four selected federal universities in Northwestern Nigeria. Using a qualitative multiple case study approach, semi-structured interviews were conducted with eight records management experts, including Deputy Registrars, Archivists, senior registry staff, and a University Librarian. Data were transcribed using AI tools and analyzed deductively within a pre-conceptual framework. Findings revealed challenges with the Availability Principle, including limited records inventory, staff attitudes, storage constraints, inconsistent retrieval practices, and the absence of formal access policies, despite some successes in standardized arrangements and catalog use. Regarding the Protection Principle, the findings highlighted that protective strategies for electronic records, such as IT support and password systems, were robust, whereas physical records relied on basic secured storage measures. However, gaps were identified, including the absence of CCTV, monitoring teams, and inconsistent disaster preparedness plans. The study concludes that while strengths exist, deficiencies hinder full alignment with best practices. It is recommended that the universities studied engage in comprehensive staff training, implement standardized records arrangement processes, improve storage facilities, conduct regular sensitization, and establish formal access policies to enhance security, efficiency, and consistency in records management.*

**Keywords: Availability Principle, ARMA International, Information Governance, Protection Principle, Records and Information management.**

### Introduction

The management of institutional records in higher education plays a critical role in ensuring accountability, compliance, and effective decision-making. Federal universities in Nigeria generate, manage, and store substantial volumes of administrative, academic, and financial records that require proper governance. To this end, Information Governance (IG) principles, such as the Availability Principle and the Protection Principle, as defined by the ARMA International

framework, provide standards for the efficient management and safeguarding of records (ARMA International, 2021; Smallwood, 2019).

The Availability Principle emphasizes that information must be systematically managed and readily accessible to authorized users when needed. In the context of records management, availability ensures that records are properly organized, stored, and retrievable for operational and administrative purposes. Effective strategies for implementing this principle include the use of retention schedules, digitization, and organized filing systems (Katu, 2021; Ngulube, 2021). However, universities in developing regions, such as Northwestern Nigeria, face significant challenges in ensuring availability due to poor technological infrastructure, inadequate training, and a lack of standardized systems for records management (Ojo & Okunlola, 2023).

The Protection Principle focuses on safeguarding records from unauthorized access, theft, loss, and environmental hazards. Protection strategies include the implementation of security protocols, access control mechanisms, data encryption, and disaster recovery plans (Akanbi & Idowu, 2022). Despite the growing importance of records protection, studies indicate that many universities in Nigeria have not fully adopted international best practices for securing records. Weak governance policies, insufficient funding, and a lack of awareness of security frameworks contribute to the vulnerability of institutional records (Yusuf & Chell, 2020).

Federal universities in Northwestern Nigeria must develop and implement effective strategies for applying both the Availability and Protection Principles to align their records management practices with ARMA International standards. By ensuring records are accessible and protected, institutions can enhance decision-making, meet regulatory requirements, and safeguard sensitive information.

This study seeks to examine the strategies adopted by federal universities in Northwestern Nigeria for applying the Information Governance Availability and Protection Principles as outlined by ARMA International. Through a qualitative approach, the study aims to provide insights into current practices, challenges, and opportunities for improving information governance in records management systems.

### **Statement of Problem**

In an ideal situation, records and information within an organization are effectively managed and protected throughout their entire life cycle, ensuring their accessibility, security, and confidentiality. According to ARMA International (2009a), a well-structured recordkeeping program should guarantee that all records, whether private, confidential, or essential to business continuity, are adequately protected from creation through to their final disposition. Protection measures, such as encryption, strong passwords, data backup, and secure storage, are systematically implemented in both electronic and manual systems to prevent unauthorized access, damage, or loss (ARMA International, 2010; Read & Ginn, 2010). In the university context, for instance, electronic records are secured with information security protocols, and manual records are stored under controlled conditions to safeguard against physical deterioration and unauthorized access (Information Solution Group, 2000).

However, in contrast, the reality in many organizations, particularly in university settings, often deviates significantly from this ideal. Many institutions face challenges in implementing comprehensive protection systems, resulting in gaps in record management practices. For example, Lewis (2000) highlighted that without adequate protection, records containing crucial historical or administrative data are at risk of deterioration and may eventually become inaccessible. Furthermore, studies like those by Matangira et al. (2013) and Pereira (2018) indicate that universities in Sub-Saharan Africa often lack standardized filing systems, and the absence of proper finding aids severely limits the ability to retrieve records. This insufficient protection of both digital and paper-based records undermines the reliability of information systems and compromises the overall integrity and accessibility of records in such institutions. It's against this backdrop the Researchers investigated Assessment of Information Governance Availability and Protection Principles in Records Management at Four Selected Federal Universities in Northwestern Nigeria.

### **Research Question**

The following research question guided the study:

1. What are the strategies used for application of the Information Governance Availability Principle in records management practice at the federal universities of the North Western States, Nigeria?
2. What are the strategies used for application of the Information Governance Protection Principle in records management practice at the Federal universities of the North Western States, Nigeria?

### **Review of Literature Review**

#### **Records and Information Availability Principle**

The ARMA Availability Principle emphasizes that records must be systematically organized, efficiently stored, and readily retrievable to support operational needs. According to ARMA International (2009a), "An organization shall maintain records in a manner that ensures timely, efficient, and accurate retrieval of needed information." Similarly, ISO 15489-1 (2016) states that records must be usable, meaning they can be located, retrieved, presented, and interpreted within a reasonable timeframe. For records to be considered available, they must be timely, well-organized, and supported by accurate retrieval tools to ensure accessibility and usability.

ARMA International (2010) highlights that poor system design, disorganization, and the overwhelming volume of records often hinder availability. Records may become unavailable due to incompleteness, corruption, or improper storage, which, as Phiri (2016) notes, compromises transparency and decision-making processes. To address these issues, organizations must adopt systematic workflows throughout the Records and Information Management (RIM) lifecycle to prevent records loss or inaccessibility.

A key step in ensuring availability is conducting a records inventory. Weise (2012) and Nwaomah (2020) describe inventory as a systematic process of identifying all records and non-record information, who uses or creates them, where they are stored, and their retention periods. An inventory provides a comprehensive picture of the information environment, facilitating classification, retrieval, and sensitivity management. Without standardized processes, records

management practices may vary across departments or units, particularly in decentralized organizations like universities (Phiri, 2016).

Standardized workflows must be implemented and validated across all departments. Processes and expected outputs must be properly documented to preserve organizational knowledge during restructuring or staff changes. Regular audits and remediation are essential to detect anomalies and validate adherence to records management processes (ARMA International, 2010).

The adoption of Records and Information Management Standards further reinforces the Availability Principle. Standards, whether internal (developed by the organization) or external (national or international benchmarks), provide clear specifications and procedures for safe, reliable, and consistent records management (Phiri, 2016). While guidance standards may initially be voluntary, they often become compliance benchmarks when performance measurement necessitates enforcement.

However, Standards serve as essential tools for benchmarking and improving records management programs within organizations. International records management standards, such as ISO 15489, are widely recognized and adopted across regions to establish best practices. Tough (2004) found that 70% of Commonwealth African heads of records services in the public sector, including Nigeria, were aware of ISO 15489, and 85% of those intended to use it. These standards, categorized as “external,” are developed internationally and serve as benchmarks for measuring performance. However, internal standards, which are created by an organization or national bodies, are equally important. In Nigerian universities, the Management and National Universities Commission (NUC) is expected to establish internal standards, though evidence from the literature suggests a lack of such frameworks in practice.

Tough (2004) further observed that while institutions in Sub-Saharan Africa appreciate the importance of records management standards, they often face challenges in accessing and implementing them. The cost of acquiring and operationalizing these standards remains a significant barrier. In such cases, records management manuals and standing office instructions act as de facto standards, providing operational guidelines and training support. Organizations such as the International Records Management Trust (IRMT) and ARMA International have played a crucial role in developing relevant manuals and facilitating records management training programs. These organizations have also been proactive in integrating records management functionalities into ICT platforms to modernize records practices (Bhana, 2008).

The availability principle in records management emphasizes efficient access to information when required. This principle necessitates the implementation of standardized filing systems, also referred to as records arrangement systems, storage methods, or classification systems. While librarianship uses standardized classification schemes, records management practitioners often create their own systems, adopting guidelines like the ARMA International indexing standards. According to Read and Ginn (2010), the primary goal of any filing system is to ensure easy retrieval of information. Effective records arrangement systems are categorized into four main types: alphabetic, subject, numeric, and geographic filing methods, with alphabetic filing being the most widely used. Abdulrahim (2024) extensively reviewed the principle of “Availability” and posited that for higher institutions to comply with this principle, the following measures must be in place:

- i. Higher institutions must document all records and information generated through comprehensive records inventories.
- ii. A standardized Records and Information Management (RIM) lifecycle must be established, understood, and communicated to all stakeholders.

- iii. Policies and standards must clearly define how records and information are stored, protected, and made accessible.
- iv. Filing and locator systems must be satisfactory, with well-documented policies and procedures.
- v. Finding aids, such as indexes and registers, must be prepared and used uniformly across the institution.
- vi. Policies and procedures for access restrictions must be developed and enforced.
- vii. Filing schemes must segregate vital records for protection and establish retention and disposal schedules that comply with legal and regulatory requirements.
- viii. Classification schemes must be systematic, logical, consistent, and scalable to ensure accurate and complete retrieval of records.
- ix. Appropriate systems and controls must be in place to facilitate legal discovery and responses to information requests.

Despite the theoretical frameworks for achieving availability in records management, several studies have highlighted significant challenges in practice. Chinyembe and Ngulube (2005) discovered that many stakeholders in universities cannot access records despite the existence of internal controls. Similarly, a study conducted at the University of Namibia by Matangira, Katjiveri-Tjiuro, and Lukileni (2013) revealed a lack of standardized filing systems, which made it difficult to manage, file, and retrieve records. Many organizational filing systems failed to meet records management criteria, particularly concerning retention periods and destruction schedules. At the University of Mpumalanga in South Africa, Netshakhuma (2020) observed that the absence of efficient tools, such as finding aids, hindered access to records. Likewise, Pereira (2018) reported that the combination of poor physical conditions and a lack of finding aids significantly impaired the ability to retrieve records. These studies underscore the critical need for institutions to implement standardized systems, effective controls, and accessible tools to ensure compliance with records management principles, particularly the principle of availability.

### **Records and Information Protection principle**

In university settings, records are safeguarded through electronic systems and manual systems. Protecting records in electronic systems requires robust information security protocols, including limited data access, strong passwords, encryption, data backup and replication, and securing storage facilities. Restricted access ensures that only authorized personnel can interact with sensitive data, while encryption protects data during transmission by scrambling it for security purposes. Data backups and replication help prevent loss in cases of system failure.

Facility security is equally important, with measures like restricting physical access to data storage centers and carefully managing IT infrastructure placement. Electronic records often include metadata, such as timestamps, author details, and file attributes, which must remain unaltered to avoid tampering accusations, especially in litigation (Complete Discovery Source, 2016). Access controls must also be updated promptly when employees change roles to prevent unauthorized access (ARMA International, 2009b). Implementing security policies further ensures safe and reliable operations. Tools such as firewalls, strong passwords, digital signatures, and encryption are essential for protecting electronic records, as highlighted by Read and Ginn (2010).

For manual systems, paper-based records require protection throughout their life cycle: current, semi-current, and non-current stages. At each stage, records must be safeguarded against loss, unauthorized access, mutilation, and deterioration. Effective preservation measures include

controlling temperature, humidity, and lighting in storage areas, using proper shelving and storage containers, and restricting access to secure physical storage locations. These steps ensure that records remain intact and accessible for administrative and cultural purposes.

Emergency planning is another essential aspect of manual records protection. Organizations must develop comprehensive plans to safeguard records during disasters, such as floods, fires, or earthquakes. This includes identifying vital records, which are crucial for the continued operation of the organization. Decentralized or regional offices should also create localized emergency plans to ensure the safety of records under their care (Information Solution Group, 2000).

The principle of protection highlights the importance of safeguarding records and information—whether digital or manual—throughout their life cycle. For electronic systems, security protocols like encryption, firewalls, and digital signatures are vital for ensuring data integrity and confidentiality. Manual systems require preservation measures and well-structured emergency plans to prevent damage and loss. A comprehensive Records and Information Management (RIM) program that integrates these measures ensures that organizational records remain secure, accessible, and resilient against threats.

### **Research Methodology for the study**

This study employs a qualitative research method using a multiple case study approach. Interviews were conducted with eight records management experts selected from four universities. Participants were chosen based on their roles and significant contributions to records management processes within their institutions. These included Deputy Registrars, acting University Archivists, senior registry staff with a minimum of 10 years of experience, and one University Librarian. The selection aligns with Creswell (2016) and Onwuegbuzie & Collins (2007), who suggest that sample sizes between 3 and 50 are typical in qualitative research.

The study utilized a semi-structured interview approach, chosen for its flexibility in exploring issues and topics beyond the scope of a planned questionnaire. This method enabled the collection of in-depth comments and viewpoints from participants (Creswell, 2005). The semi-structured and open-ended nature of the interviews ensured the exploration of key themes while allowing for unforeseen insights. To ensure rigor and validity, the study employed deductive content analysis. As described by Krippendorff (2004), deductive content analysis uses a pre-conceptual framework derived from existing theory or literature to guide data interpretation. This approach identifies patterns or themes in the data that align with the original framework, with the aim of validating or testing theoretical concepts. The results are presented in a narrative format supported by quotes from the interview data. For data transcription, the researcher utilized an AI transcription tool. The pre-conceptual framework played a crucial role in directing data interpretation, ensuring alignment with the deductive content analysis method.

### **Findings and discussions**

The analysis of data was based on the narration of themes that emerged from interviews which lasted between 25 minutes to 1 hour. The participants were tag as participants 1 up to 8 in the narrative analyses. That is P1, P2, P3, P4, P5, P6, P7 and P8. This analysis is a presentation on Assessment of Information Governance Availability and Protection Principles in Records Management at Four Selected Federal Universities in Northwestern Nigeria. The section that

follows was a presentation of themes that emerged from the semi structure interviews .The emergent themes were highlighted with summarized quotes and excerpts taken from the interview base on each of the research questions. And then discussions of the themes were pertinent as follows.

### **Strategies Used in the Application of Information Governance Availability Principle for Records Management Practices in selected universities**

The study explored the availability principle in records management practices across selected universities, focusing on records inventory, arrangement, and retrieval tools. The findings, guided by a pre-existing framework and semi-structured interviews, align with previous studies that highlight both strengths and challenges in records management practices.

On records inventory, the study revealed inconsistencies in documenting generated records. For instance, one participant noted, *“all the records generated, we create inventory for that, even though not every registry staff understands it”* (p3), indicating a lack of understanding among staff. Another participant described the documentation process as *“fragmented”* (p1). These findings are consistent with Igwoku (2015), who reported similar knowledge gaps in records inventory among registry staff due to insufficient training. This implies that training and awareness programs are crucial to ensuring staff understand the importance of inventory systems in maintaining organized records.

Regarding records arrangement and retrieval, participants expressed mixed experiences. One participant observed that standardized filing systems are *“simple, but staff attitudes sometimes make retrieval difficult”* (p7). Another praised the arrangement and catalog use, stating, *“no issues”* (p4). However, storage space constraints emerged as a challenge, with one participant highlighting that *“the storage space here is too small for the materials”* (p3). Similarly, delays in timely retrieval due to human error were noted, as one participant stated, *“sometimes it takes a long time...depending on if the person was prompted to enter”* (p2). These findings align with Okoro and Dike (2017), who emphasized that human factors, such as staff attitudes and inconsistent adherence to filing procedures, impede records retrieval. Furthermore, limited infrastructure and storage constraints, as identified by Ngulube and Tafor (2006), are recurring issues that impact effective records management in higher education institutions.

On access restrictions, the absence of formal policies and reliance on verbal instructions were highlighted. One participant shared, *“I doubt much if there is any policy and procedures...though there are always verbal instructions or traditions”* (p5). This finding supports Adewumi and Olonade (2019), who found that informal practices often undermine access control and the security of records. The implication is that the development and enforcement of clear, written policies are essential for ensuring compliance with access restrictions and protecting sensitive records.

In summary, the findings align with previous studies that identify knowledge gaps, human factors, and infrastructure limitations as critical challenges in records management practices (Igwoku, 2015; Okoro & Dike, 2017; Ngulube & Tafor, 2006; Adewumi & Olonade, 2019). Positive efforts, such as standardized records arrangement and catalog use, were also observed in line with best practices. To address the challenges, universities need to prioritize comprehensive staff training,

standardized documentation processes, expansion of storage facilities, improvement of staff compliance, and establishment of formal policies to enhance the efficiency, security, and accessibility of records management systems.

### **Strategies used in the Application of Information Governance Protection Principle for Records Management Practices in selected universities**

The research investigated the protection principle applied in records management practices across selected universities, focusing on strategies for safeguarding both physical and electronic records. Participants highlighted that hard copies are stored in files, properly numbered, and kept under lock and key. One participant explained: *“So the hard copies are stored in files, properly numbered, kept under lock and key, then the e-copies are stored in computers, usually pass worded, whenever it needs to be retrieved”* (p3). Another participant emphasized the role of IT in securing electronic records: *“Yes, you talked about something like that. They say that the systems are pass worded. Okay. That is for security. Okay. And of course, we have a robust IT team. Okay. Okay. And it is their responsibility to protect our documents”* (p4). These insights reflect good practices, such as password protection and IT oversight, which align with ISO 15489-1:2016 guidelines on ensuring controlled access and security of records.

Challenges regarding physical record management were also reported. One participant highlighted mishandling issues: *“Yes, actually this one, the problem we have here is that the records are manhandled occasionally by some individuals and we cannot know exactly the people because the records pass from one hand to another before they reach the final person who is to use the records”* (p1). This reveals a significant gap in accountability and access control, corroborating the findings of Yusof and Chell (2017), who emphasized the need for strict handling protocols to prevent such issues.

On monitoring systems, participants noted the absence of surveillance mechanisms like CCTV cameras and dedicated monitoring teams. A participant stated: *“No. There is a particular team that ensures that... No, we just have scheduled staffs that are in charge of records. This one is talking about a team responsible for... No, I don't think so”* (p2). Similarly, another added: *“We don't have. We don't have. The human being is the one that working here that is the CCTV”* (p1). Another reiterated: *“There is no closed-circuit television, CCTV camera”* (p2). This absence reflects a gap in proactive monitoring and oversight, which is essential for ensuring record security, as argued by Shepherd (2019).

Regarding disaster preparedness, some participants confirmed protective measures. One participant shared: *“Yes. There are those in charge of records and archives. Okay. Yes. Okay. The storage area, is it equipped with fire alarm and suppressing system? Yes”* (p3). Another affirmed the existence of a written disaster recovery plan: *“We have any written? Written plan. Written plan, yes. Yes, on salvaging records, important records. We call them vital records”* (p4). However, a participant expressed uncertainty: *“Is there a routine plan for salvaging important records if there is disaster? Well, for that, I will not be able to answer. Okay. I will not be able to provide information on that. Okay”* (p8). These responses reveal varying levels of preparedness, where the presence of fire suppression systems and written plans indicates progress, but uncertainty suggests

gaps in comprehensive disaster management practices, as also noted in Oladokun and Adegoke (2021).

### Summary of the findings

1. The findings revealed challenges in records inventory, staff attitudes, storage space constraints, inconsistent retrieval practices, and lack of formal access policies, despite some successes in standardized records arrangement and catalog use.
2. The findings underscore strong protective strategies for electronic records, supported by IT teams and password systems, as well as basic measures for physical records like secured storage. However, the absence of CCTV cameras, monitoring teams, and inconsistencies in disaster preparedness plans highlight gaps that need addressing to align fully with best practices in records management.

### Conclusion

In conclusion, the findings reveal that while the universities have implemented measures to ensure the availability and protection of records, such as proper storage, password protection for electronic records, and fire suppression systems, significant gaps remain. These include inconsistent access to records, mishandling of physical documents, absence of CCTV cameras, lack of dedicated monitoring teams, and uncertainty regarding comprehensive disaster recovery plans. Addressing these shortcomings is critical to enhancing both the availability and protection of records, ensuring they remain secure, accessible, and resilient against potential threats or disruptions.

### Recommendations

- The study recommends implementing comprehensive training programs for staff to enhance their understanding of records inventory and management, standardizing documentation and retrieval processes, addressing staff attitudes through regular sensitization and monitoring, expanding storage facilities to accommodate growing records, and establishing formal written policies and procedures for access control to ensure security, efficiency, and consistency in records management practices.
- It is recommended that the universities implement dedicated monitoring teams, install CCTV cameras for enhanced surveillance, develop and enforce a comprehensive disaster recovery plan for vital records, and improve accountability measures to prevent mishandling of physical records. Additionally, regular training should be provided to staff on records protection practices to strengthen overall security and preparedness.

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