

## Availability and Accessibility of Digital Record Keeping among University Administrators in Nigeria

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### Abstract

The research work ascertains the availability and accessibility of digital records keeping among university administrators in Nigeria. To accomplish the survey's goal, two research inquiries were put forward, and two corresponding alternative hypotheses were developed to direct the investigation. A survey research approach was employed. The respondents consisted of 498 university administrators. The instrument used for the study was the Availability and Accessibility of Digital Record Keeping among University Administrators Questionnaire (AADRKUAQ). A trial test was carried out on 50 administrative staff at Ebonyi State University that yielded an overall reliability coefficient of 0.85. Mean and standard deviation were used to answer research questions, and the t-test was equally used to test the research hypotheses at the 0.05 level of significance. According to the findings, digital record keeping is widely available and accessible. Whereas the alternate hypothesis revealed no significant difference in the extents of availability and accessibility of digital record keeping among gender, it was strongly recommended, along with many other things, that the school administration should embrace international standards for accessibility and availability of digital record keeping.

**Keywords:** Availability, Accessibility, Digital, and Records keeping

### Introduction

Digital records require access to or reading from relevant machines, such as software and hardware used for computers, such as, datasets, and keyboarding, are included in digital record keeping. "Digital records are digital proof of individual or organizational transactions" (Adekunle, 2006). An information and communication technology (ICT) system is used to generate, handle, communicate, and sustain a digital copy, which is a soft, unquantifiable document. Digital records and online recording are often used interchangeably. It is also known as web-based recording, online data, or distributed recording. Among its many applications were indeed digital mail, online content, worksheets, paintings, computer systems, and prerecorded photos (Adekotia, 2000). Record keeping is a subcategory of the more recent ICT that further includes the use of technological advancement and about their connectivity via an advanced digital strategy.

Adeyemi (2008) defines "digital-recording" as the practice of employing software devices to enhance in digital record management. "Digital recording" is defined by Kaplan as a broad range of procedures that include internet recording, software recording, digital collaborative partnerships, sound and video compilations, and CD-ROMs. He continued by arguing that automated record keeping is a device that enables for more adaptable, captivating, and long-lasting gathering and analyzing of information. Digital record components, according to Atah and Bessong (2019), include more than just intermediate, information, and active engagement. A digital record is data that is created and saved in a database using technological advances (Adekotia, 2000).

The act of utilizing something makes it accessible. The possibility to obtain access to and advantage from a device or institution is described. The network slicing on facilitating people to gain access by taking advantage of assistive devices; however, accessibility development and research advantages everybody else. User experience, which is the measure of the extent to which a product (such as a gadget, service, or surroundings) is capable of enabling individual people to accomplish particular objectives with effectiveness, performance, comfort, and fulfillment in a particular circumstance of use, is distinct from access and availability. Accessibility of digital records keeping closely related to "inclusive design," which refers to the method for developing products that are accessible to learners and educators of all abilities and in a wide range of circumstances. It is about making everything available to everybody, regardless of their disability. Except as otherwise authorized person, digital information resources at the higher education institution, such as computers, are to be used solely for academic, research, and reporting purposes (Atah, Ushie, Chukwurah, Idike and Uchui 2023)

The availability of these digital records may aid in the saving of lives. It has also contributed to reducing worker issues by storing all information gathered during decision-making on digital devices for quick accessibility, enabling for process improvement concerning the organization's success. The hard copies records can be stored in a computer's memory for many years without being damaged, as opposed to records stored in files or human memory, where any eventuality could result in the loss of some, if not all, of the contents of the records. Osakwe (2009) consented that digital records are information digitized documents that are generated and preserved using machine gadgets. Computer equipment and operating system goods are preserved in numerous digital and magnetic devices as record keeping. According to Osakwe, an automated document's structure somehow doesn't alter the reality that it is a record, however its digital signature but instead heavy dependence on automated systems for conception but instead allusion to do change how well these documentations are digested and controlled.

Digital recording keeping is a component of the field of ICT that includes the use of technological advancement for information gathering via digital equipment, according to Igboke (2005). it's an excellent device to enhance algorithms and offering decent information accessibility to the globe. The World Wide Web (WWW), according to Agomuo (2005), is beginning to transform the world into an interconnected community, and documentation, as the stock-in-trade and information cornerstone, must be system and processing in the possible aspect through the handling of digital records. He simply defined digital record keeping as the implementation of all record keeping fundamentals in an digital world, typically backed by highly specialised computer systems, despite the fact that the processes only do as good as the standards and processes used in both automated and traditional recordkeeping.

The primary goal of record keeping oversight is to guarantee that records, irrespective of their form or format, move and through phases of conception, consumption, stockpiling, and decommissioning, or perpetual retention, in an effectual and cost-effective manner. As a direct consequence, proper university record handling is essential in institutions. Academic institutions might very well discover oneself in an uncomfortable spot. due to inadequate systems for maintaining records. The main issue with effective managing records in Nigerian universities is an absence of supervisory strategies.

When it comes to recordkeeping, some academic institutions do not follow record management principles. There has seemed to be an absence of university records handbook, no consolidation and treatment of waste timeframe, professionals ability to handle the documentation appear to be undertrained in recordkeeping, totally inadequate amenities for record conservation and protection, storage, and information extraction, no filling manual, completely inadequate computer systems to handle the quantity of information produced, and the authorities' mindset forward into record keeping and record keeping all contribute to negative issues with record keeping in universities. As a consequence, there has been inappropriate documentary evidence of student and staff employment records, as well as poor handling of academic achievement, inadequate documentation, and information extraction of vital administrative data such as admission and endorsement lists. This is accessible in some Nigerian universities; however the situation in the state of Cross River

universities is unknown. Against this background, this research was aimed at evaluating the availability and accessibility of digital records keeping among administrators.

### Research Objectives

The research objective was to ascertain the availability and accessibility of digital record keeping among university administrators. The study specifically ascertains:

1. Availability of digital record keeping among university administrators.
2. Accessibility of digital record keeping among university administrators

### Research questions

Below research questions guided the investigation:

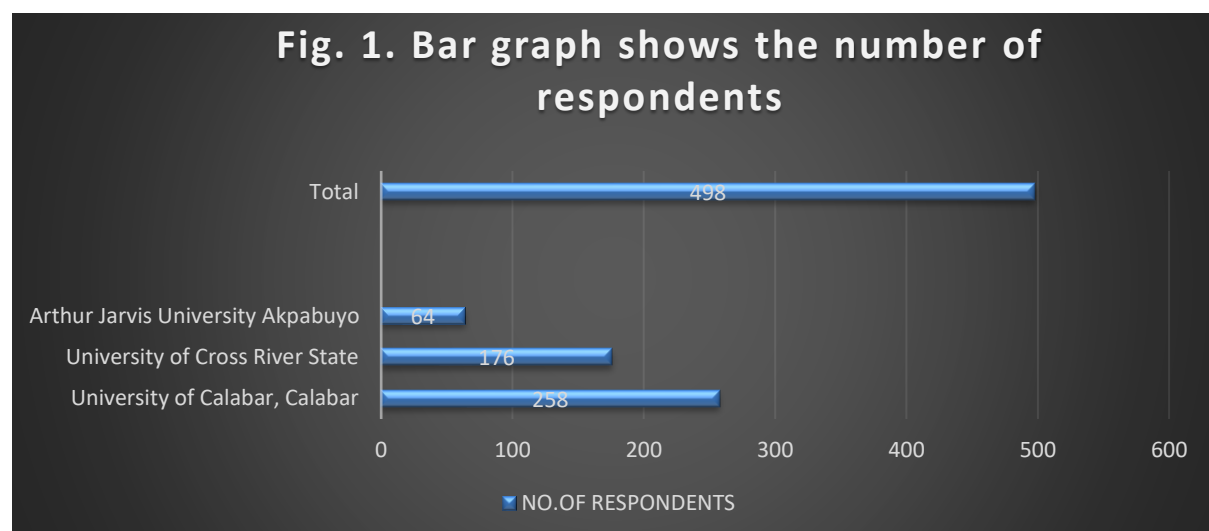
1. How widely is digital record keeping available among university administrators?
2. To what degree do university administrators have access to digital record keeping?

### Research Hypotheses

1. The respondents' perceptions on the availability of digital record keeping do not differ substantially based on university ownership.
2. The respondent decision on the accessibility of digital record keeping does not differ based on gender

### Research Methodology

The study adopted a descriptive survey design. The target audience was 498 administrative staff in universities in the CRS. The entire population of administrative staff was engaged in the study. A questionnaire was used as an instrument for the study, with 26 items. The Instrument Availability and Accessibility of Digital Records Keeping among University Administrators Questionnaire (AADRKUAQ). Three experts determined the measurement tool. The object's reliability was tested using twenty respondents at Ebonyi State University, and the data obtained was analyzed using Cronbach's alpha quantitative techniques. Furthermore, the total internal consistency was 0.85. Using direct administration techniques, the research instrument was given to the study participants and tracked down as needed. To respond to the research inquiries, the standard deviation as well as the mean were used, and the independent t-test was used to verify the hypothesis of the study. At the 0.05 level of significance, the hypotheses were examined. As a decision level, 2.50 were used. Any item with a mean score of 2.50 or higher in the instrument was construed as having a high level of availability and accessibility in digital record keeping, since any item with a score of 2.50 or less was perceived as not being accessible or readily available. At the 0.05 level of significance, the t-test was used to evaluate the null hypothesis. The calculated t-value was then especially in comparison to the t-table; if it is less, the hypothesis is embraced (i.e., significant); if it is higher, the theory is disregarded (i.e., not significant). Figure 1 depicts the survey respondents as a bar graph.



## Findings of the study

### Research question one

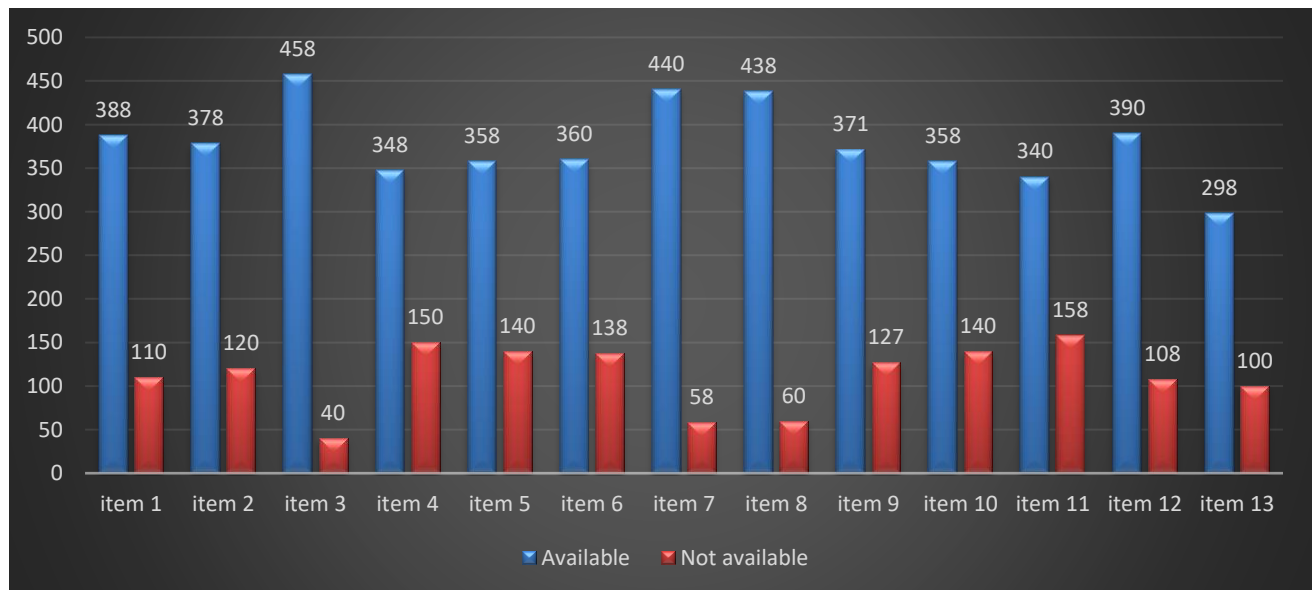
How widely is digital record keeping available among university administrators?

To answer the above research question, table 1 provided the answer

**Table 1: Mean rating of respondents decision on the availability of digital record keeping**

S/No	Item Statement	N	mean	SD	Decision
1	Digital students admission records	498	3.76	0.65	Highly Available
2	Digital academic and non-academic payroll records	498	3.47	0.69	Highly Available
3	Digital academic and non-academic promotion records	498	3.21	0.77	Highly Available
4	Digital students SUG office record	498	3.84	0.58	Highly Available
5	Digital project management record	498	3.66	0.67	Highly Available
6	Digital students health information records	498	3.4	0.70	Highly Available
7	Digital university Security records	498	3.2	0.63	Highly Available
8	Digital Management financial records	498	3.72	0.58	Highly Available
9	Digital academic committees reports records	498	2.62	1.05	Highly Available
10	Digital university management board meeting records	498	3.13	0.96	Highly Available
11	Digital Students discipline record	498	2.68	1.11	Highly Available
12	Digital library record	498	2.57	1.21	Highly Available
13	Digital management stock control record	498	2.63	1.24	Highly Available
	<b>Grand mean</b>		<b>3.21</b>	<b>0.48</b>	<b>Highly Available</b>

Table 1 shows that all thirteen items d-students admission records, d-academic and non-academic payroll records, d-academic and non-academic promotion records, d-students SUG office allocation records, d-management project records, d-students health information records, d-university security records, d-management financial records, d-academic committees reports records, d-university management board meeting records, d-students discipline records, d-library record and d-management stock control record received mean scores greater than 2.50, bunch mark. The overall mean of 3.21 disclosed that digital records are readily available in Nigerian universities. The standard deviations for all components are within the same range, denoting that the survey participants' average scores are ethnically homogeneous. The result is further showed in figure 2 and 3.



*Figure 2 bar graph showing the respondents responses on the level of the availability of digital records keeping*

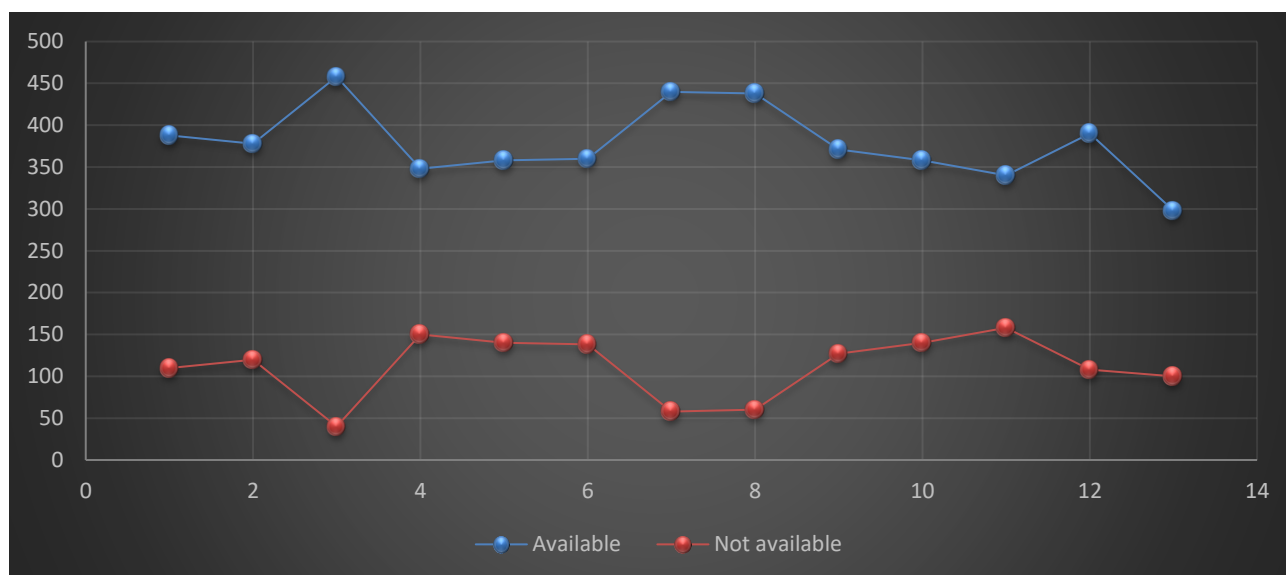


Figure 3 scatter graph showing the respondents decision

## Research question 2

What is the extent of accessibility of digital records keeping?

Data provided answer to the above question is shown in table 2

**Table 2: Mean rating of respondent decision on accessibility of digital record keeping**

S/No.	Item Statement	N	X	S.D	Decision
14	D-Students admission records	498	2.92	1.13	High Extent
15	D-Academic and non-academic payroll records	498	2.55	1.17	High Extent
16	D- Academic and non-academic promotion records	498	2.59	1.12	High Extent
17	D-Students SUG office record	498	2.75	1.28	High Extent
18	D- project management record	498	2.52	1.12	High Extent
19	D-Students medical record	498	2.58	1.13	High Extent
20	D-Management Surveillance record	498	2.52	1.23	High Extent
21	D-management Budgeting record	498	2.68	1.18	High Extent
22	D-Academic advisory boards record	498	2.61	1.11	High Extent
23	D-University management board meeting records	498	2.52	1.02	High Extent
24	D-Students discipline record	498	2.58	1.20	High Extent
25	D-PG library	498	2.76	1.19	High Extent
26	D-Management stock control record	498	2.57	1.04	High Extent
	<b>Grand mean</b>		<b>2.62</b>	<b>0.78</b>	<b>High Extent</b>

Table 2 shows that all 13 items, d-students admission records, d-academic and non-academic payroll records, d-academic and non-academic promotion records, d-students hostel allocation records, d-management project records, d-students SUG office records, d-project records, d-management financial records, d-academic committees reports records, d-university management board meeting records, d-management weekly bulletins records, d- library records and d-management stock control records received mean scores greater than 2.50, the bunch mark. The grand mean of 2.62 indicated that digital records keeping in Nigerian universities are digitally accessible. The standard deviations for all items are within an identical range, denoting that the mean ratings of the participants are homogeneous. The result is further showed in figure 4 and 5.

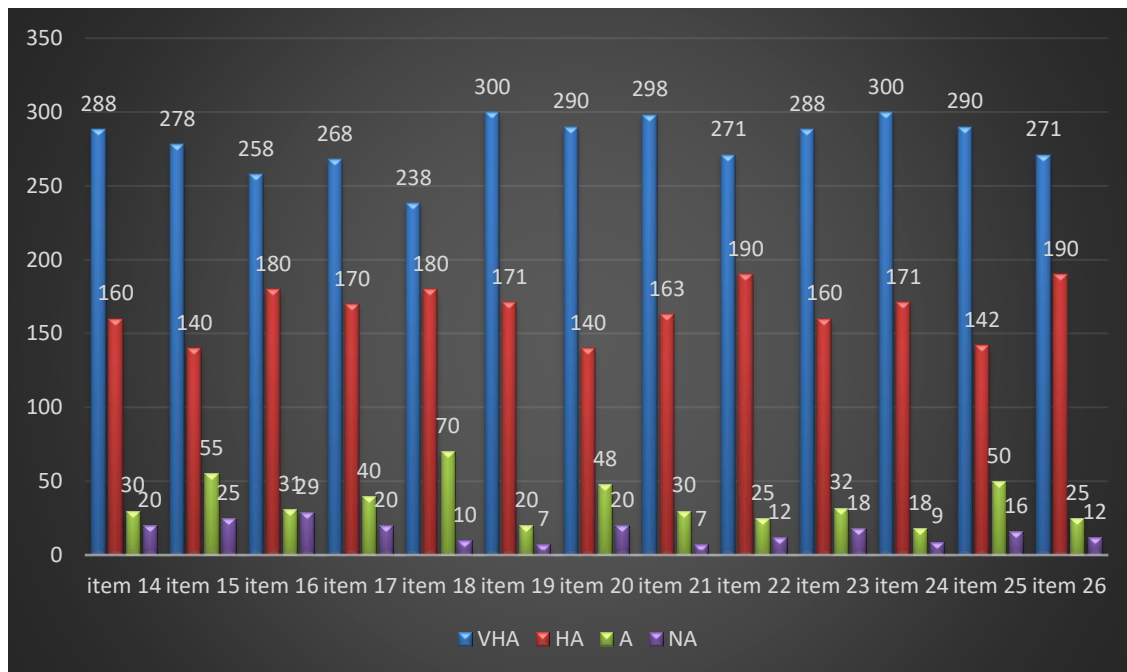


Figure 4 bar graph showing the respondents' decision

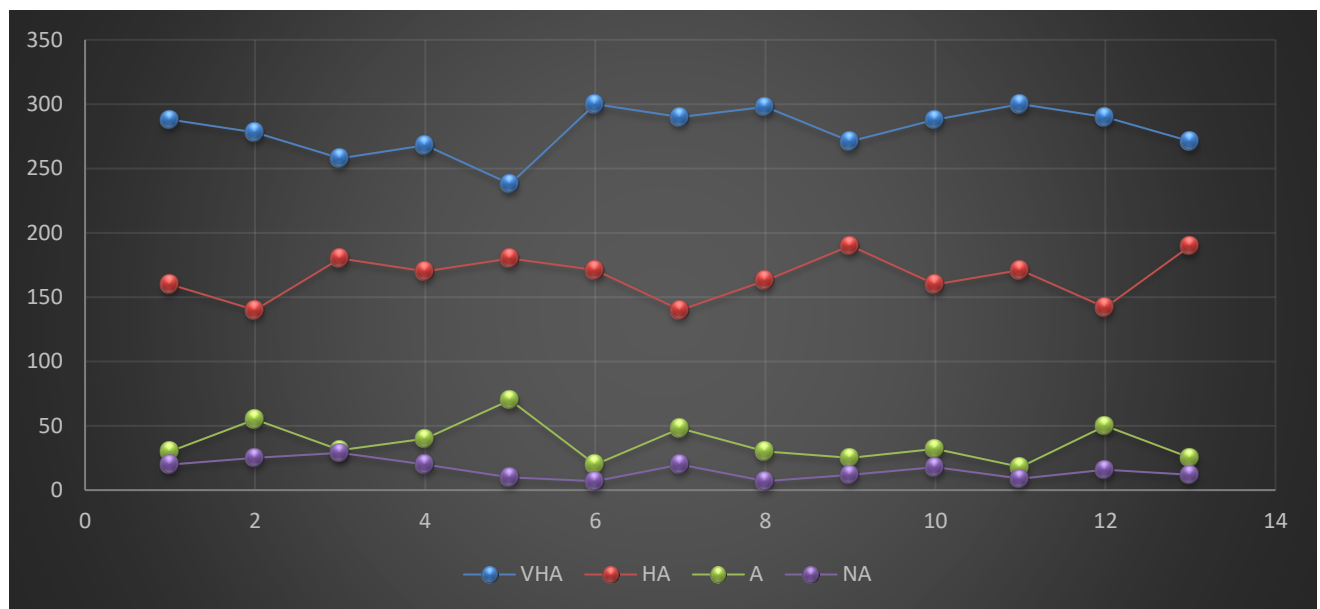


Figure 5 scatter graph showing the respondents decision

### Research Hypothesis One

The respondents perception on the availability of digital record keeping do not differ substantially based on university ownership

**Table: 3: Independent t-test on the mean ratings of respondents' decision on availability of digital records keeping based on university ownership**

items	Private and Public Institutions	N	Mean	SD	t-cal	df	p-val	Decision
1	Private	122	3.71	.704	-.747	496	.456	NS
	Public	376	3.77	.649				
2	Private	122	3.37	.784	-1.474	496	.141	NS
	Public	376	3.49	.668				
3	Private	122	3.20	.819	-1.01	496	.920	NS
	Public	376	3.21	.761				
4	Private	122	3.78	.646	-1.096	496	.274	NS
	Public	376	3.85	.566				
5	Private	122	3.63	.725	-.454	496	.505	NS
	Public	376	3.66	.663				
6	Private	122	3.35	.751	-.668	496	.505	NS
	Public	376	3.41	.697				
7	Private	122	3.14	.607	-.872	496	.384	NS
	Public	376	3.21	.639				
8	Private	122	3.66	.670	-1.160	496	.244	NS
	Public	376	3.74	.558				
9	Private	122	2.57	1.066	-.459	496	.646	NS
	Public	376	2.63	1.057				
10	Private	122	3.09	1.018	-.477	496	.635	NS
	Public	376	3.14	.950				
11	Private	122	2.74	1.143	-.521	496	.602	NS
	Public	376	2.67	1.105				
12	Private	122	2.43	1.097	-.375	496	.708	NS
	Public	376	2.48	1.116				
13	Private	122	2.65	1.251	-.163	496	.900	NS
	Public	376	2.63	1.241				
	<b>Private</b>	<b>122</b>	<b>41.31</b>	<b>6.371</b>	<b>-.781</b>	<b>496</b>	<b>.435</b>	<b>NS</b>
	<b>Public</b>	<b>376</b>	<b>41.88</b>	<b>6.173</b>				

According to the t-test evaluation in Table 3, there is no significant distinction between the mean rating of private and public administrators who responded on the availability of digital records keeping. This is due to the fact that the p-value is higher than 0.05. The null hypothesis that there is no significant difference in the average rating of private and public poll respondents on the degree of digital availability of digital record keeping is supported since this p-values across all items are higher (.05).

### Research Hypothesis Two

The respondents' decision on the accessibility of electron record keeping does differ based gender

**Table 4: independent t-test of mean rating of respondents' decision based on gender on the digital records accessibility**

Items	Gender	N	Mean	SD	t-cal	Df	p-val	Decision
14	Male	228	2.90	1.140	-.250	496	.803	NS
	Female	270	2.93	1.128				
15	Male	228	2.59	1.210	.778	496	.440	NS
	Female	270	2.51	1.148				
16	Male	228	2.64	1.147	.935	496	.350	NS
	Female	270	2.55	1.107				
17	Male	228	2.86	1.264	1.750	496	.081	NS
	Female	270	2.66	1.291				
18	Male	228	2.57	1.153	.938	496	.349	NS
	Female	270	2.48	1.105				



19	Male	228	2.73	1.145	.754	496	.451	NS
	Female	270	2.65	1.132				
20	Male	228	2.84	1.189	1.629	496	.105	NS
	Female	270	2.66	1.272				
21	Male	228	2.68	1.170	1.858	496	.054	NS
	Female	270	2.49	1.197				
22	Male	228	2.64	1.132	.641	496	.522	NS
	Female	270	2.58	1.102				
23	Male	228	2.54	1.035	.420	496	.675	NS
	Female	270	2.51	1.023				
24	Male	228	2.70	1.186	2.123	496	.058	NS
	Female	270	2.47	1.212				
25	Male	228	2.84	1.191	1.390	496	.165	NS
	Female	270	2.69	1.201				
26	Male	228	2.63	1.018	.205	496	.497	NS
	Female	270	2.51	1.064				
	<b>Male</b>	228	<b>35.07</b>	<b>12.629</b>	<b>1.277</b>	<b>496</b>	<b>.202</b>	<b>NS</b>
	<b>Female</b>	270	<b>33.62</b>	<b>12.778</b>				

The t-test analyses shown in Table 4 above divulged no significant variation in the average rating of respondents' gender on the extent of digital records accessibility. This is because of the reality that the p-value in Table 4 is higher than 0.05. Because the p-values for all items are higher than p, the hypothesis that there is no distinction between the average rating of male and female respondents on the broad spectrum of digital record accessibility is retained (.05).

### Discussion of findings

According to the information in Table 1 on the large extent of digital record availability in Nigerian universities, participants' respondents claimed that all items associated with digital records were in the "high extent" category. In addition, the results of the hypotheses evaluated revealed no significant differences in respondents' decision to the availability of digital records kept in universities based on university ownership. The above result contradicts Asogwa's (2018) discovery that school records were not kept effectively. The findings of this study, on the other hand, are in agreement with the result of Modebelu and Onyali (2014), who's found that university digital record are widely available digitally. This finding adds to the work of Igwu (2004), who recognized various criteria of record keeping that school systems must make available in order to provide good academic government and academic prowess. School records, according to Okoli and Onuogbo (2014), include admission requirements records, construction project records, bank documents, payroll data, staff registers, inventory data, cataloguing records, and academic records. The availability of these digital records as demonstrated in academic institutions is critical for the overall administration of educational standards. Igwu (2004) identified that staff in Nigerian higher education institutions appear to have begun to obey education law, so they are trying to handle digital documents. Anticipated records, as well as any other activity records, should be available for enhancing instructional and instructional exercises, which happens to be the central objective of the public education system.

According to the data in Table 2 on the great extent to access university records digitally, participants replied that all the items related to the accessibility of digital record were "high extent" (HE). Moreover, the hypotheses tested revealed no significant difference in the decision based on gender of the respondents as well as no huge disparity in the degree of accessibility to digital record keeping by the respondents. This finding is important because students, staff, and other general users have access to academic digital records. This finding is in accordance with the results of Popoola (2000), who discovered a high level of accessibility of digital recordkeeping for effective management of universities. Nevertheless, Ifedili and Agbaire's (2011) findings contradict the recent evidence. Their findings revealed that the current prestige and use of digital records in universities remains extremely low. This could be why some universities have yet to implement digital record keeping. Considering the opinion of Ukah and Atah (2021), enabling access to digital records in any organization requires internet access to be enabled at various organizations. Tilton



and Rigby (2004) found that the lack of qualified staff to manage digital records and the apparent inadequacy of digital record facilities have led some institutions to still use traditional records systems.

### Conclusion

According to the report's results, the availability and accessibility of digital records keeping in Nigerian universities have greatly improved. A good digital record keeping system in Nigerian universities is extremely efficient. It has the potential to improve both internal efficiency and overall record management. This is due to the fact that having piles of physical documents and files lying around are both distracting and frustrating. As a result, one may be unable to locate the specific record you require at a later date, which may eventually harm the university's reputation. To maintain and support good compliance practices in digital records management, it may be cost-effective; however, having a good digital records management system could improve both internal efficiency and the overall workings of any organization, especially in the university environment. This is the fact that manual document management is time-consuming, and digital records management would be far better served by freeing up internal resources. Digital records management is a critical asset for any university's administrative functions, whether private or public. If there is any institution in the world that does not have or already has a digital records keeping process in place, it is imperative and urgent that one be established as soon as possible.

### Research recommendations

The following recommendations were made:

1. University administration should prepare as well as train up administrators to maximize productivity in digital records management.
2. The administration of universities should ensure a consistent power supply and implement internationally accepted standards for accessibility of digital record keeping.

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