FEDERAL UNIVERSITY GUSAU (FUGUS), ZAMFARA STATE, NIGERIA
FUGUS INTERNATIONAL JOURNAL OF LIBRARY AND INFORMATION SCIENCE (FIJLIS)
VOL.2. NO.2 (DECEMBER) 2025 DOI: https://doi.org/10.57233/fijlis.v2i2.03
ISSN PRINT:1595-3432 A Publication of the University Library.

Management of Electronic Information Resources (EIRs) by Library Personnel of Selected University Libraries in Ogun State

Dr. B. A. Ajiboye
University Librarian
Ajayi Crowther University, Oyo, Oyo State
baajiboye@acu.edu.ng

E. O. Fayomi
estherfayomi2016@gmail.com
Communications and General Studies Department

M. K. Alawiye
Lecturer I,
Library and Information Science Department
alawiyemk@funaab.edu.ng

A. A. Adebamiro
Assistant Librarian
'Nimbe Adedipe Library
adebamiroaa@funaab.ed.ng
Federal University of Agriculture, Abeokuta

Received on: 11th Nov., 2024 **Revised and Accepted on:** 27th Sept., 2025 **Published on:** 1st Dec., 2025

Abstract

Management of Electronic Information Resources (EIRs) require digital skills and strategies which are the hallmarks of digital preservation; thus, it is imperative that library personnel are found to be versed in these skills and strategies to be able to cope with the demands of the modern electronic information and emerging technology age. The study examined the management of EIRs by library personnel of university libraries in Ogun State, Nigeria. A simple random sampling technique proportionate to size was adopted to select 168 respondents, using a structured questionnaire for data collection, out of which a total of 149 copies were found useful, giving a response rate of 88.6%. Descriptive statistics: namely, Pearson Product Moment Correlation (PPMC) and Ordinary Least Squares regression technique (OLS) were used to analyse the data. Results of the demographic information revealed that a larger percentage (61.4 %) of the respondents were female. Results also revealed that e-journals($\bar{x} = 1.95$), online pubResearch4Lifegue($\bar{x} = 1.93$), electronic journals, books, magazines and bulletins made available through electronic databases such as the Research4Life, Ebscohost and ScienceDirect were available in the university libraries studied. Results further revealed that provision of backup and barcode($\bar{x} = 3.19$) and software emulation($\bar{x} = 3.12$) were the most prominent preservation strategies employed in the libraries. Financial constraints ($\bar{x} = 1.76$) and obsolete technology ($\bar{x} = 1.67$) were the major challenges faced in the preservation and management of EIRs. The study concluded by recommending that stakeholders and university

administrations should build the capacity of library personnel for enhanced management of EIRs.

Keywords: Electronic information resource management, Preservation skills, Strategies, Digital libraries, Library personnel

Introduction

Libraries have evolved over time and undergone a lot of technological transformations such that university libraries that have erstwhile held in stock, considerable number of printed documents are gradually migrating to electronic collections, with the capacity for limitless volumes of document in digital formats. Since the 1990s, developments in technologies have changed how information is managed, stored and accessed, which has led to the migration of libraries' collections to computer-mediated platforms. The introduction of EIRs is part of these developments. The emergence of e-resources has forced a change in library operational and organisational procedures. EIRs are computer readable files that occupy less space compared to the traditional library resources. Acharya (2024) opined that access and usage of electronic resources can only be from a computer or other related technologies and devices. Microcomputers, mainframes, mobile phones and many others are means through which individuals or groups could access electronic resources via a local or remote area network (Abiodun-Asanre, 2023). Little wonder, libraries nowadays are referred to as 'Virtual Library', Digital Library' and 'Electronic Library'.

EIRs comprise information that is written on magnetic tapes or optical media and can only be accessed electronically. The sources which are originally created in electronic formats are called born digital resources, while those that were originally in paper form and converted into electronic formats are termed, digitised resources. There are various types of EIRs, the popular ones are electronic books, electronic journals, databases, electronic theses, dissertations and scanned resources). Over the several years, libraries have been faced with changing systems and user needs with requisite technical expertise capable of influencing the library's strategy for responding to these factors. Some strategies have been identified to ease the burden of digital management and preservation to actively combat the loss of EIRs.

These strategies include migration, which is the periodic conversion of data from one hardware or software configuration to another or from one generation of computer technology to a subsequent generation, preserving the essential characteristics of the data. In migration of data, it helps develop more robust standards, clearer workflows, and better practices. Migration focuses on the information resource itself, and its objective is to change the EIRs in such a way that software and hardware updates will not alter the ease of access of electronic information. Another preservation strategy is emulation which is the process that seeks to preserve the environment by using an up –to- date technologies to pretend to be like the original environment that was used to create the EIRs. A good example of emulation strategy is the creation of Windows that tries to emulate MS DOS. Moreover, migration of the information to a new standard or application programme is time-consuming, costly and much more complex than simple refreshing.

Refreshing involves periodically moving a file from one physical storage medium to another to avoid the obsolescence or degradation of the storage medium. Because physical storage devices decay and technological changes make older storage devices inaccessible to new computers, it is important to check if the hard drive is still functional. When the drive becomes several years old, the data it holds should be refreshed by moving it to a new hard drive. This strategy may need to be combined with migration, hence, the software or hardware

required to read the data will no longer be accessible. Conversion is defined as the process of changing records from one medium to another or from one format to another. This happens when a record format or medium has become obsolete, for example, in cases where a particular software developer discontinues a product or goes out of business leaving the application unsupported.

Emulation, according to Akwaowo and Enyioko (2021), is the process that seeks to preserve the environment by using up-to-date technologies to pretend to be like the original environment that used to create the EIRs. A good example of emulation strategy is the creation of Windows that tries to emulate MS DOS. *Emulation* is like migration, but focuses on the application software, rather than the files containing the data. If a digital object is complex, it is highly likely that some information might be lost during migration to new formats. This has led to some researchers suggesting that for such cases emulation might be a better technique. It involves creating programmes that are compatible with contemporary technology, yet mimic the hardware components of older, obsolete technologies while encapsulation method maintains that preserved objects should be self-describing virtually linking content with all the information required for it to be deciphered and understood. Encapsulation is usually applied to collections that will be used for extended periods of time.

Management of EIRs is very vital within any given library but it becomes increasingly challenging if the duration for which information needed is to be preserved (Becker, 2023). This means that EIRs will only survive for the period not beyond the supported life of the application device used to preserve them. Thus, the need for a constant and continuous research and reportage on the management of EIRs in terms of hardware and software skills and knowledge. This is with a view to overcoming the day-to-day changes in EIRs preservation and management methods. Successful digital preservation management could be achieved through weeding obsolete and outdated equipment, updating software and hardware, installation of backup storage systems, backup and bar coding, license renewal with the software vendors, acquisition of modern gadgets, equipment and facilities, training and retraining of electronic library personnel and disaster preparedness.

Statement of the Problem

The management of EIRs is very crucial in the library setting, especially with the proliferation EIRs and the desire of library users to have their information needs met electronically. Despite this, preservation and management seem to be a herculean task judging by the duration over which information needs to be preserved (Becker, 2023). Furthermore, Dugonik, Dugonik, Marovt, and Golob (2020) had earlier hinted that information centers in the Third World countries are faced with issues in preserving and managing EIRs. Production of complex EIRs, rapid change in technologies as well as lack of expertise of the personnel preserving EIRs are among the challenges that have been identified. As the EIRs continue to grow exponentially, libraries are faced with the challenge of getting and sustaining adequate skilled staff in EIRs management. The increasing challenge of ensuring that library personnel are adequately skilled in management could be attributed to lack of preservation strategies. Furthermore, it has also been observed that there is little documented evidence on the strategies employed by university libraries in the management of EIRs. Hence, the study examined EIR among the library personnel of selected university libraries in Ogun State.

Research Questions

The study provided answers to the following research questions:

1) What are the EIRs available in the selected university libraries?

2) How are these resources managed?
3) What are the challenges faced in the process of managing EIRs in the examined university libraries?

Research Objectives

The main objective of this study was to investigate EIRs in the selected university libraries in Ogun State. The specific objectives were to:

i. identify the EIRs available in the selected university libraries;
ii. examine EIRs' management strategies in the selected university libraries; and
iii. identify the challenges faced by the selected university libraries with the management of EIRs.

Review of Related Literature

EIRs (EIRs) in libraries are considered an essential part of modern society. This is because they play a very important role in education. The provision of EIRs and services in libraries is important to any educational programme that intends to achieve objectives that are in line with the present-day best practices globally. EIRs are now recognised as being of greatest importance to even small academic libraries. The present supply of EIRs is made up of a range of products that may exist in different forms such as CD-ROMs, and resources available on the Internet such as online information resources, web pages etc. and they provide libraries with vast resources for their user populations (Dutta, 2023).

These EIRs are available on the Internet, which can be accessed free of charge or through university's subscriptions to provide free online information resources access to their customers to support academic activities especially in teaching, learning and research. Various scholars in the field of Library and Information Science have discussed how electronic resources have positively boosted the timely and accurate provision of information to users without delay (Dugonik *et. al.*, 2020). Dutta (2023) presents the fact that EIRs are significant parts of library collections. A large amount is invested in the development and management of electronic resources in the libraries. The study aims to examine the availability of electronic resources in the National Social Science Documentation Centre (NASSDOC) library in New Delhi, India, and determine their management strategies and barriers faced in managing them. The major findings of the study indicated that e-resources (e-books, e-journals, e-encyclopedias, e-theses, CD-ROM databases, email, Internet, OPAC) were available and managed by means of multiple storage facilities to enhance continuous access in the case of disaster and loss of any kind, and found that provisions were made to forestall any envisaged barriers that might arise in the process of its management.

Higgins (2024) pointed out that migration is the transferring of electronic materials from one technology to another or from one format to another while preserving their intellectual content as well as retaining the ability for users to retrieve and use them. She went on to state that migration focuses on the content or properties of digital materials and it usually attempts to maintain them over time by making them usable on new software and hardware. Stressing the same point, Li and Ensa Joo (2024) indicated that migration involves change in the configuration of the original EIRs without changing their intellectual content information**.** This approach is necessary when there is a change in the hardware and software which means that the EIRs may no longer be accessed unless they are migrated to the newer hardware and software (Sodipe Aarinola, Gbenga, Mahmud & Adeoye, 2024). The bits of the electronic information are copied exactly as they are, and no changes are made to the underlying EIRs. According to Sodipe et. al. (2024), this is done because digital storages have short lives

therefore EIRs must be moved periodically to new media to ensure their longevity. Azonobi (2023) submitted that refreshing has low risk of loss if performed and documented properly.

It is observed that EIRs that have been preserved by one generation of hardware and software cannot be accessed by a later generation in each short period of time. For those EIRs whose access technologies that are still available, chances of them being accessed in their original form are minimal and so, if possible, will have to be converted into up-to-date formats (Li & Ensa & Joo, 2024). According to Akwaowo and Enyioko (2021), the following strategies are needed when handling a media storage device for preserving information; moderating and making temperature and humidity stable helps keep storage alive; having a storage device that can read older media; having hardware that can connect to older media devices and also having software that can read older files from the storage devises. We have two categories of storage devices, magnetic tapes storage devices such as magnetic Hard Disk Drive (HDD) and optical storage devices such as Compaq Disk (CD) and Digital Video Disk (DVD) (Akwaowo & Enyioko, 2021).

Also, when preserving EIRs, one should always consider file formats. Selecting a file format that will not easily be affected by rapid change of technology is a very vital strategy. File formats that go unsupported within a short period of time for example those created on word processing document and saved as an ASCII file format should be avoided in digital preservation (Hunter, 2000). On the same point, Becker (2024) indicated that crucial information should not be held in files that will no longer be compatible with the future software because as electronic information becomes increasingly complex and integrated, the threat of file format obsolescence is set to increase. The file formats that are popular on the World Wide Web (WWW) are Hypertext Markup Language (HTML), Portable Document File (PDF) and Extensible Markup Language (XML). Hunter (2000) indicated that file formats that have open specifications, those which are basically independent of software should be considered for digital preservation (Hunter, 2000).

The EIRs environment is complex, and information is changing continually all the time. Now it should be imperative that all institutions should be providing leadership in looking for solutions that will ensure preservation and permanent access to the EIRs. The library should also focus on operating within the framework of an enabling governance policy framework. These solutions should encompass technological, scientific, research as well as documentation and archival skills. These solutions require an enabling policy framework both at institutional level and governmental level as well as at the continental level. The solutions should be spearheaded by all higher institutions. There are several strategies that could help libraries in making permanent, preservation of digital information scholarly resources.

Methodology

The descriptive survey research design was adopted. The questionnaire was the only instrument used for data collection. This was self-designed by researchers and subjected to both face and content validity. The reliability test was also run, this gives 0.78, which is acceptable reliability. The population of the study comprised of 336 library personnel (professional and para-professional) of federal, state and privately-owned university libraries in Ogun State, Nigeria. There is one federal, 2 state and 11 private universities in Ogun State with 140 and 196 Professional and Para-professional respectively, out of which 50 percent (70/98) of each category was drawn by a simple random sampling technique. This gives a total sample of 168 library personnel (Table 1). Data were collected by the Researchers themselves and analysed using simple percentages, frequencies and Standard Deviations

Table 1: *Population and Sample Size*

S/N	Name of Institutions	Population of Librarians	Sample Size of Librarians	Population of Lib. Officers	Sample Size of Library Officers	Total Sample Size
1.	Federal University of Agriculture, Abeokuta (FUNAAB)	24	12	28	14	26
2.	Olabisi Onabanjo University (OOU)Ago Iwoye	20	10	30	15	25
3.	Tai Solarin University of Education (TASUED) Ijagun	10	5	20	10	15
4.	Covenant University	16	8	20	10	18
5.	Christ land University	6	3	6	3	6
6.	Mountain top University, Lagos Ibadan Express way	6	3	10	5	8
7.	Christopher University	4	2	8	4	6
8.	Crawford University	6	3	10	5	8
9.	Hallmark University	4	2	10	5	7
1(	McPherson University	4	2	10	5	7
1:	Crescent University	10	5	8	4	9
1:	Bells University	8	4	12	6	10
1:	Babcock University	16	8	12	6	14
1⁴	South/Western University	4	2	12	6	8
	Total	**140**	**70**	**196**	**98**	**168**

Data Analysis and Results

Copies of the questionnaire obtained from respondents were collated and analysed, using descriptive statistics (frequency counts, simple percentages and standard deviation). A total of One hundred and sixty-eight (168) copies of the questionnaire were administered among the respondents. However, one hundred and forty-nine (149) copies, which represented 88.8%, were found useable.

Table 2: *Gender Distribution of the Respondents*

Gender	Frequency	Percentage
Male	58	38.6
Female	91	61.4
Total	149	100.0

The distribution of respondents by gender as presented on Table 2 revealed that a higher percentage of the respondents (91) 61.4% are female while (58) 38.6% are male. The result revealed that there are more female library personnel in the library than male in the selected university libraries.

Table 3: *Distribution of the Respondents by Department/Section/Unit*

Department/section/unit held in the library	Frequency	Percentage
Reader services	44	29.5
Technical services	32	21.5
Collection development	22	14.8
E/Automation section	37	24.8
Reference and bibliographic	11	7.4
Reprographic and bindery	3	2.0
Total	**149**	**100.0**

The distribution of respondents by Departments/sections/units of work held in the library as reported by Table 3 shows that 44(29.5%) of the respondents were in Reader Services Department, 32(21.5%) work in Technical Services Department, 22(14.8%) work in Collection Development Department, 37(24.8%) work in E/Automation Section, 11(7.4%) work in Reference and Bibliographic and 3(2.0%) were in Reprographic and Bindery Section.

Table 4: *EIRs Available in the University Libraries*

S/N	Electronics Information Resources	Available	Not Available	$\bar{x}$	SD
1	E-journals	(95.3%)	(4.7%)	1.95	0.21
2	Online public access catalogue	(93.5%)	(6.5%)	1.93	0.25
3	E-books	(85.1%)	(14.9%)	1.85	0.36
4	AGORA	(81.9%)	(18.1%)	1.82	0.39
5	E-bulletins	(79.5%)	(20.5%)	1.80	0.40
6	E-magazines	(77.7%)	(22.3%)	1.78	0.42
7	Ebscohost	(76.7%)	(23.3%)	1.77	0.42
8	ScienceDirect	(74.9%)	(25.1%)	1.75	0.43
9	HINARI	(72.6%)	(27.4%)	1.73	0.45
10	OARE	(65.6%)	(34.4%)	1.66	0.48
11	GOALI	(63.3%)	(36.7%)	1.63	0.48
12	TEEAL	(60.9%)	(39.1%)	1.61	0.47
13	ARDI	(60.5%)	(39.5%)	1.60	0.48
	Weighted mean =1.76				

Subscribed EIRs such as E-books, E-bulletins, E-magazines, made available via licenses negotiated with Research4Life (AGORA, OARE, GOALI, ARDI and HINARI), TEEAL, Ebscohosts and access through the Online Public Access Catalogues were available in the examined libraries.

As shown on Table 4 above, the study established that there are various EIRs available to users in the various university libraries in Ogun State, such as E-journals, reference services, Online Public Access Catalogue, E-books, electronic databases and so on. The finding of this study reported that E-journals ($\bar{x} = 1.95$) was the most available item, and was followed in succession by online public access catalogue ($\bar{x} = 1.93$) and E-books ($\bar{x} = 1.85$) ARDI ($\bar{x} = 1.60$) was the least available EIR in the selected universities.

Using the weighted mean of 1.76 as the benchmark, the inference drawn from these findings was that E-journals, online public access catalogue, E-books AGORA, E-bulletins and Ebschost were the most available EIRs in the selected university libraries in the study.

Table 5

Electronic Information Resource Management Strategies employed by the Respondents

Key: FU= Frequently Used, PU= Periodically Used, SU =Seldom Used, NU = Never Used

S/N	Items	FU%	PU%	SU%	NU%	$\bar{x}$	S.D
1	Frequent updates of software and hardware	49.3%	42.3%	5.1%	3.3%	3.38	0.73
2	Weeding obsolete and outdated EIRs	46.0%	40.5%	6.0%	7.4%	3.25	0.87
3	Installation of backup storage systems	46.5%	36.7%	6.0%	10.7%	3.19	0.96
4	Backup and bar coding	43.3%	38.6%	8.8%	9.3%	3.16	0.93
5	License renewal with the software vendors	38.1%	39.1%	12.6%	10.2%	3.05	0.96
6	Acquisition of modern storage gadgets, equipment and facilities	29.8%	51.2%	10.7%	8.4%	3.02	0.86
7	Training and retraining of electronics library personnel	31.6%	43.7%	16.3%	8.4%	2.99	0.90
8	Disaster preparedness	16.7%	33.5%	23.3%	26.5%	2.40	1.05
	Weighted Mean=3.06						

Table 5 reports that questions raised on the management strategies employed by the respondents were placed on a 4-point scale were classified into Frequently Used, Periodically Used, Seldom Used and Never Used. Findings from the analysis show that frequent updates to Software and Hardware ($\bar{x} = 3.38$) as the highest among the management strategies adopted for prolonging the life span of EIRs in their libraries. This was followed in succession by Weeding obsolete and outdated EIRs ($\bar{x} = 3.25$) and Installation of backup storage systems ($\bar{x} = 3.19$). Disaster preparedness ($\bar{x} = 2.40$) was the least item reported to prolong the life span of EIR in their libraries. The inference drawn from this using the weighted mean of 3.06 as benchmark was that frequent update to software and hardware, weeding obsolete and outdated EIRs, installation of backup storage systems, backup and bar coding where the management strategies deployed in the preservation of electronics information resources among the selected university libraries.

Table 6: Challenges faced with the Management of EIRs

S/N	Challenges	HS%	AS%	NS%	$\bar{x}$	S.D
1	Financial constraints	20.9%	34.0%	45.1%	1.76	0.78
2	Technology obsolete	13.0%	41.4%	45.6%	1.67	0.69
3	Dependence of libraries on donor agencies for funds	11.2%	42.8%	46.0%	1.65	0.67
4	Vendor' bureaucracies	9.3%	46.0%	44.7%	1.65	0.65
5	Cost of software subscription renewal	9.8%	44.2%	46.0%	1.64	0.65
6	Lack of technical expertise on preservation skills	11.6%	40.0%	48.4%	1.63	0.68
7	Frequent renewal of EIR software	10.2%	42.8%	47.0%	1.63	0.66
8	Poor electricity supply	11.6%	38.1%	50.2%	1.61	0.69
9	Lack of personnel	10.2%	36.3%	53.5%	1.57	0.67
10	Poor physical working environment	11.2%	27.0%	61.9%	1.49	0.69
	Weighted Mean = 1.63					

Key: HS= Highly Severe, AV= Averagely Severe, NS= Not Severe,

As reported in table 6 above, questions raised on the challenges faced by library personnel in the preservation and management of EIRs were placed on a 3-point scale and were classified as highly severe, averagely severe and not severe. Finding from the analysis shows that, financial constraints ($\bar{x} = 1.76$) was the major challenge faced with preservation and management of EIRs, followed by technology obsolete ($\bar{x} = 1.67$), Dependence of libraries on donor agencies for funds ($\bar{x} = 1.65$), Vendor bureaucracies ($\bar{x} = 1.65$), Cost of software subscription renewal ($\bar{x} = 1.64$). However, poor physical working environment ($\bar{x} = 1.49$) was the least challenge faced. Using the weighted mean of 1.63 as the benchmark, the inference drawn from this finding was that financial constraints, technology obsolete, dependence of libraries on donor agencies for funds, Vendor' bureaucracies, Cost of software subscription renewal, lack of technical expertise or preservation skills and frequent renewal of EIR software are the major challenges faced with the preservation and management of EIRs.

Discussion of the Findings

A total of 168 copies of the questionnaire were administered among the respondents. However, 149 copies, which represented 88.8% were found useable, which is far above the percentage recommended by Aina (2024), who submitted that a response rate that is less than 60% is termed as poor. The finding on the availability of EIRs is in tandem with that of Ahmed (2021), who studied the extent to which faculty members use electronic reference resources available on the Internet. The study shows that the available and most used e-resources were the CAB Abstract, TEEAL, AGORA, e-granary and HINARI. This finding on the strategies for managing EIRS agrees with the findings of Becker (2024), which reported that managing EIRs is very vital which will only survive for the period not beyond the supported life of the application device used to preserve them. Therefore, there should also be constant nonstop

training of staff and updating software and hardware by those who manage EIRs in terms of hardware and software skills and knowledge. Frequent update to software and hardware, weeding obsolete and outdated EIRs, installation of backup storage systems, backup and bar coding where the management strategies were the additional management strategies reported by the study, this confirms the findings of Akwaowo and Enyioko (2021).

The finding on challenges with the management of EIRs is in consonance with that of Sodipe *et. al*. (2024) who argued that insufficient ICT infrastructure is characterised by, for example, frequent power rationing that brings serious bottlenecks to EIRs management in Africa, the situation of which has the effect of destroying EIRs. Other challenges to the management of EIR found by the study which agrees with that of Dugonik, Dugonik, Marovt, and Golob (2020) are financial constraints, technology obsolete, dependence of libraries on donor agencies for funds, vendors' bureaucracies, cost of renewing software subscriptions, lack of technical expertise or preservation skills and frequent upgrades of EIR management software. Also, Akwaowo and Enyioko (2021) reported that university libraries lack proper training of information professionals for preservation and conservation programmes. There is a shortage of skilled and experienced preservators and conservators. Also, where there is standby generator, then the cost of running such becomes high.

Conclusion

This finding of the study revealed that EIRs are available in the selected university libraries, but are inadequate, and that, the EIRs commonly found in all the selected university were e-journals, OPAC, e-books, AGORA, e-bulletins, e-magazines, Ebscohost, ScienceDirect and TEEAL in the selected universities. It also reported the EIRs' management strategies adopted in the studied libraries and the challenges encountered in managing the EIRs, major of which was the obsolete storage devices and funds.

Recommendations

Consequent to the findings of the study, the following recommendations are made:

1. The management of universities studied should provide funds to acquire more modern storage gadgets, equipment and facilities that will support the library personnel on preservation and management of EIRs.
2. Leaderships of libraries studied should explore other sources of fund for the acquisition of EIRs, aside the meagre ones available.
3. Issue of technology obsolescence should be critically addressed by the Management of the studied universities.
4. Library-organised training regarding the management of EIRs should be conducted for personnel involved with the management of EIRs. Such training should also cover metadata techniques, emulation techniques and migration techniques.

REFERENCES

Abiodun-Asanre, O.A. (2023). Knowledge and Use of E-Resources by Medical Researchers in Lagos State University College of Medicine: A Case Study. (2023). *Journal of Health Information and Librarianship*, 6 (1), 36-44. https://johil.org/index.php/johil/article/view/19

Acharya, K. (2024). University management system project. (May 1, 2024). Available at SSRN: https://ssrn.com/abstract=4814103 or http://dx.doi.org/10.2139/ssrn.4814103

Ahmed, Ahmed. (2021). "The extent to which faculty members use electronic reference resources available on the Internet". *International Journal of Library and Information Sciences.* 10.21608/ijlis.2021.100261.1114.

Aina , R. F. (2024). Awareness and use of electronic databases by postgraduates in the University of Ibadan: *Library Philosophy and Practice (e-journal).*retrieved from https://digital commons.unl.edu/libphilprac/2065/

Akwaowo, R. and Enyioko, N. (2021). Effective ICT Skills and Use of Electronic Information Resources by Lecturers in Captain Elechi Amadi Polytechnic, Port Harcourt, Nigeria (August 5, 2021). Available at SSRN: https://ssrn.com/abstract=3900065 or http://dx.doi.org/10.2139/ssrn.3900065

AzonobI, I. (2023). Impact of Digital Preservation of Information Resources on Academic Libraries. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology IJSRCSEIT,* 2023

Becker, C. (2023). Insolvent: How to Reorient Computing for Just Sustainability. Cambridge: MIT Press. 398 pp., 6 x 9 in, 20 b&w illus.

Dugonik, Bogdan & Dugonik, Aleksandra & Marovt, Maruška & Golob, Marjan. (2020). Image Quality Assessment of Digital Image Capturing Devices for Melanoma Detection. Applied Sciences. 10. 2876. 10.3390/app10082876.

Dutta, A. (2023). Management of E-resources in Academic Libraries: Some

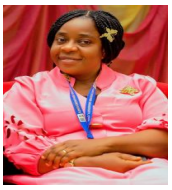
Higgins, S. (2024). "Data and Code for: Financial Technology Adoption: Network Externalities of Cashless Payments in Mexico." Mexico: American Economic Association, InterA-64 university Consortium for Political and Social Research. Available at: https://doi.org/10.3886/E202904V1.

Hunter, G. S. (2000). *Preserving digital information: a how-to-do-it manual*. New York: Neal-Schuman Publishers.

Li, J. & Ensafjoo, M. (2024). Media Format Matters: User Engagement with Audio, Text and Video Tweets. *Journal of Radio & Audio Media*. 1-21. 10.1080/19376529.2024.2303482. observations. *International Journal of Research in Library Science (IJRLS),* 9(4): 161-172

Sodipe, Oluseun & A.A., Aarinola, & Daniel, Gbenga & Aliyu, Mahmud & Adeoye, Bamgbose. (2024). Utilisation and Management of Electronic Resources In Selected Academic Libraries In South-West, Nigeria. *University of Ibadan Journal of Library and Information Science UI-JLIS* 7. 14-22.

AUTHORS' PROFILES



Dr. Bosede A. AJIBOYE, *CLN, MC,* holds the degrees of Master in Information Science and PhD with specialty in Records and Information Management, Information and emerging technology use and deployment both from the University of Ibadan. She started her career in Librarianship at the Olabisi Onabanjo University Library as a Librarian II in the year 2007, transferred her service to the 'Nimbe Adedipe Library of the Federal University of Agriculture, Abeokuta in 2010, and rose through the ranks to become an Associate Professor of Library Science, from where she was appointed as the University Librarian of the Ajayi Crowther University, Oyo, Oyo State, and assumed Office on June 1, 2024. Dr Ajiboye is both a Practicing Librarian and a Library Educator. She is well-published in highly rated local and international publishing outlets. She had supervised 11 Master degree dissertations: either as the lead or co-supervisor. She had also sat on the Panel of Examiners as the internal-external examiner of postgraduate dissertations. Dr Ajiboye is a Certified Librarian in Nigeria (CLN) and a Master E-Book Publisher and had worked at different Sections of the Library, heading a couple of such. She is an active member of the Nigerian Library Association, she served as the immediate past Vice-Chairman and acting Chairman of the Ogun State Chapter, she is also a member of the Society of Nigerian Archivists.



Esther Oluranti FAYOMI is a holder of a Master Degree in Library and Information Science from the Communications and General Studies Department of the Federal University of Agriculture, Abeokuta.



Mrs. Mariam Kehinde ALAWIYE (CLN) is a Lecturer I at the Department of Library and Information Science of the Federal University of Agriculture, Abeokuta, Ogun- State, Nigeria. She has her first Degree in Biochemistry, from Ogun-State University, Ago-Iwoye, Nigeria, Master in Library, Archival and Information Studies from the University of Ibadan, Nigeria. She is a doctoral student at the Department of Information Resources Management, Babcock University, Ilishan-Remo, Ogun-State, Nigeria. She has taught at almost all levels of education including full-time and undergraduate students. Her research interests include Library Resource Management and User Education, Preservation and Conservation of library materials. She has published widely in reputable journals and has contributed chapters in books. Mrs. ALAWIYE has presented papers at conferences and has also supervised and co-supervised undergraduates' projects. She belongs to professional association such as Nigerian Library Association, Nigeria School Library Association, Association of Women Librarians in Nigeria, Ogun-State Chapter, and a member of National Association of University Women.



Mrs. Ayokari Adenike ADEBAMIRO is an Assistant Librarian at the Federal University of Agriculture, Abeokuta, Ogun State. She has a Master degree in Library and Information Studies from the University of Ibadan. She is currently a doctoral student of the same department. Having obtained a Bachelor of Science Degree in Economics and a Diploma in Industrial and Labour Relations from the Olabisi Onabanjo University, Ago-Iwoye, Ogun State, respectively.