

UTILISATION AND MANAGEMENT OF ELECTRONIC RESOURCES IN SELECTED
ACADEMIC LIBRARIES IN SOUTH-WEST, NIGERIA

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Abstract

The focus of this study is on the utilization and management of electronic resources in selected academic libraries in South-West Nigeria. The study design used was a descriptive survey. The population of the study comprised librarians in six (6) selected academic libraries which cut across all the South-Western states in Nigeria. A total enumeration sampling was applied. A total of 103 of the 105 copies of the questionnaire were returned and valid for data analysis. The data gathered was subjected to descriptive statistics i.e. frequency, percentage, mean and standard deviation. Results showed that academic websites, electronic journals, electronic books and full text databases were the main types of electronic resources accessible at the two selected university libraries located in South-West, Nigeria. The libraries employed android phones, laptops, smart phones, portable devices, and smart wristwatches as main electronic resource access devices. The major strategies for the management of electronic resources are collection development policies, huge information reservoirs, easy citations, archive and installing air-conditionals. Collection development policies, air conditioning installation, large information reservoirs, simple citations, and archiving were the main techniques used to manage their electronic resources. Lack of access to the internet, poor resource collection, restricted access to computer terminals, and non-availability of electronic resources are the main issues with the creation and administration of electronic resources. It was recommended that university libraries should provide trained staff to assist patrons in utilizing electronic resources and expand access to diverse electronic materials, including databases, conference proceedings, and electronic theses, to enhance navigation, academic productivity, and research opportunities for staff and students.

Keywords: Utilisation of electronic resources, Management of electronic resources, Electronic information resources

Introduction

Electronic resources are a basic part of most university libraries' electronic collections and are vital academic instruments that support teaching, learning, and research (Oladapo, 2018). Particularly for users who heavily rely on internet resources for information to collaborate with other undergraduates worldwide for intellectual progress, electronic resources offer accurate and timely information. Electronic resources refer to information materials available in an electronic format. These include Internet resources, electronic books, electronic newspapers, and electronic journals (Wan, 2021). Electronic resources are resources that need to be accessed through a computer, according to Olalla-Soler (2018). They can also be any electronic product that provides a collection of data, whether it be text (including full text databases), electronic journals, image collections, other multimedia products, or numerical, graphical, or time-based information.

Remote locations may quickly access electronic resources, which also alleviate storage issues and manage the deluge of information. Information is now more widely disseminated worldwide as a result. Academic libraries must subscribe to electronic resources including e-books, full-text e-journals, and online bibliographic databases to satisfy users' growing need for information access from a distance. Electronic journals, standards, technical specifications, reports, patents, full text articles, trade reports, and hosts of other electronic resources are among the many kinds and types of electronic resources that are readily available online and are becoming more and more popular (Ahmed, 2021).

The notions of electronic resources used because of the information and communication technology industry's explosive expansion. Various authors have given differing descriptions of it (Heaton, 2018). Electronic collection, according to Haruna and Kassim (2019), is the gathering of data that is only accessible via the use of technological devices. Electronic resources are those that need to be accessed via a computer, be it a mainframe, a desktop computer, or a portable mobile device, according to Becker (2024). They can be viewed locally or remotely over the internet.

The phrase "management of electronic resources" frequently refers to the instruments and procedures utilised in the arrangement of administrative information, including vendor contracts, usage statistics, and licensing conditions. The traditional library organization was being forced to start changing by the deluge of internet materials (Carson and Ou, 2019). The management of the acquired digital resources presented libraries with several difficulties, including a sluggish internet connection, discomfort, a lack of expertise, and non-subscription of pertinent resources (Adegboye, Okwilagwe and Salaam, 2013). The tasks involved in selecting and supporting e-resources include creating and managing alphabetical and subject lists of journals and/or databases; negotiating, tracking, and communicating license terms; involving multiple staff members and departments in workflows and problem-solving activities, such as escalating or triage support; conducting planned, cyclical product reviews or reviews related to unplanned changes (such as when a product is moved between publishers); and conducting systematic usage reporting and tracking (Acharya, 2024).

Expertise in managing systems that are more complicated than library management systems is required for the administration of electronic resources. (LMS) Setting priorities for staff time is necessary, as is determining who oversees overseeing the operation of all electronic systems, including dark archives, federated search

engines, A-Z lists, e-journals, abstracting and indexing databases, and ERMs (Electronic Resource Management Systems). It also entails giving library employees the resources to manage them and giving patrons easy methods to locate and access them (Ong and Johnson, 2020). The term was expanded by Higgins (2024) to put emphasis on a method of managing budgets, providing administrative services, and keeping track of license agreements. Additionally, they discussed electronic resource management from the viewpoints of planning, policy, and workflow problems that libraries face. Providing the appropriate information to the right people at the right time is essential to the effective administration of electronic resources. Li and Ensafjoo (2024) claim that the advancement of e-resources improved the print version by facilitating access to and display of them. Numerous interactive media formats are contained and arranged by them. Text, still images, illustrations, animation, audio-visual elements, multi-media, etc. are all included. Therefore, any papers on electronic or digital medium are considered electronic documents, sometimes referred to as electronic resources. Guided by the above background, this study therefore tends to examine the utilisation and management of electronic resources in the selected university libraries in South-West, Nigeria.

Statement of the Problem

In today's fast-paced world, library workers, like librarians and information experts, need to make sure that information is easy to find. Library users, such as students, researchers, and teachers, often have little time to search for documents by hand; this makes it important for libraries to use electronic tools to help find information quickly. Even though these electronic tools are available, there is still a question about how well people use them and how well library workers can help them. This study tends to look into these issues and show why it is important for library workers to get better training on using these electronic tools. The use of information and communication technology in libraries has created enough opportunity to produce electronic resources and allowed them to be distributed according to user preferences. However, the management and use of electronic resources in the selected libraries have faced significant challenges, impacting both library professionals and users. While electronic resources are intended to enhance access to information, many library professionals lack the necessary training to effectively manage and assist users with these technologies. Furthermore, users, including students and faculty, often struggle to navigate and utilize the available electronic resources due to inadequate support and guidance. This research aims to investigate these issues, examining the effectiveness of current management practices and identifying barriers to the optimal use of electronic resources in the selected libraries. Guided by this, this study tends to examine the utilisation and management of electronic resources in the selected university libraries in South-West, Nigeria.

Research Questions

The following research questions were answered in the study.

- (i) What are the available electronic resources in the selected university libraries in South-West, Nigeria?
- (ii) What are the gadgets used to access electronic resources in the selected university libraries in South-West, Nigeria?
- (iii) What are the strategies for the management of electronic resources in the selected libraries?
- (iv) What are the problems associated with the utilisation and management of electronic resources in the selected university libraries in South-West, Nigeria?

Literature Review

Ishioma (2023) investigated how librarians in South-South Nigerian universities manage electronic information resources (EIRs) and apply collection development policies. The study assessed librarians' understanding and application of these policies for EIR management. Using a quantitative, correlational descriptive survey, data was collected from librarians through a systematic questionnaire covering budget allocation, user requirements, selection, acquisition, and evaluation of electronic resources, and collection development policies. Descriptive and inferential statistics were used to analyze the data. Findings indicated that librarians' understanding of collection development policies significantly influenced EIR management, with a strong correlation. The study emphasised the need for professional development and training to enhance EIR management.

Yahaya, Firdausi, and Lami (2020) explored Electronic Information Resources (EIR) management in federal university libraries in North-Western Nigeria using a qualitative narrative research design. Data from 50 librarians, collected via focus group interviews, revealed that these libraries hosted various EIRs such as databases, theses, dissertations, and e-journals. Challenges included low funding, lack of policy guidelines, inadequate user education, insufficient training, unstable power supply, slow internet due to low bandwidth, and lack of technically trained personnel. The study recommended the adoption of modern ICTs and continuous training for librarians to improve EIR management.

Dutta (2023) examined the management of electronic resources in university libraries, highlighting the importance of Electronic Resource Management (ERM). The study, based on literature review and practical experiences, emphasised that ERM technologies are essential for managing the increasing volume and diversity of electronic materials. Collaboration between suppliers and libraries is crucial to create effective electronic resource systems. The study underlined that efficient ERM is vital for providing high-quality electronic resources to library users and addressing e-resource management challenges.

Winifred, Chern, and Brenda (2022) investigated the use and management of electronic resources (ERs) in Ghanaian university libraries. Using a mixed methods design, data was collected from library consortium officials, library staff, faculty members, and postgraduate students. The study found that ER management and utilisation were interdependent, affecting selection, evaluation, publicity, training, and access. Key recommendations included ensuring proper funding, marketing the value of ERs, and providing training and usage assessment.

Abiodun-Asanre (2023) assessed the knowledge and utilisation of e-resources among medical researchers at LASUCOM. The descriptive study involved 200 postgraduate students, research scholars, and resident physicians. Data collected through questionnaires showed high familiarity with electronic resources, including books (89.4%), theses/dissertations (82.3%), and journals (91.8%), mainly used for academic and research purposes. Popular resources included PubMed/MEDLINE (96.5%) and African Journals Online (92.9%). The study recommended training librarians to assist researchers and promoting awareness of available electronic resources and search strategies within the medical library.

Methodology

Research Design

For this study, a descriptive survey research design was used. Since opinions from a cross-section of target respondents are acquired through surveys, thus, the design is acceptable. The population of the study comprised librarians in six (6) selected academic libraries which cut across all the South-Western states in Nigeria.

Table 1: Population Distribution of the study

S/N	Name of the library	Number of librarians
1	Federal University of Agriculture, Abeokuta, Ogun state	23
2	Kenneth Dike library, University of Ibadan, Oyo state	30
3	Ekiti State University	16
4	Lagos State University, Ojo	25
5	Bowen University, Iwo, Osun state	6
6	Elizade University, Ondo state	5
	Total	105

Source: Librarians' office in each of the selected libraries

The total enumeration method was used to capture all the librarians in the selected academic libraries surveyed. A self-structured and closed-ended questionnaire served as the tool for collecting information from the respondents. There were two (2) primary sections to the questionnaire. While Section B included pertinent questions concerning the research topics that direct the study, Section A concentrated on the demographic data of the respondents. Data was gathered from the librarians at the chosen academic libraries using the questionnaire. The respondents were personally contacted by the researcher, who urged them to complete the questionnaire honestly and completely. To guarantee a high rate of return, the researcher visited the chosen academic libraries in a span of two (2) weeks. Nevertheless, the researchers discover that they were able to get 103 out of the 105 questionnaires that were given to librarians while assembling the questionnaire. The reason for the scarcity was that some respondents—whether on purpose or accidentally—took the questionnaire with them when they departed. To facilitate proper data collection, the researchers were there to explain to the respondents a few of the instrument's

questions. The researchers made three weekly journeys to the area under investigation to ensure the survey was completed on schedule. The Statistical Package for the Social Sciences (SPSS version 21) was used to arrange and illustrate the data using a frequency distribution table, mean score, standard deviation, and percentage.

Results

Research Question 1: What are the available electronic resources in the selected university libraries in South-West, Nigeria?

Table 2: Available electronic resources in two university libraries

Electronic resources	Available	Not Available
Electronic Books	78(75.7%)	25(24.3%)
Scholarly websites	76(73.8%)	27(26.2%)
Electronic Journals	75(72.8%)	28(27.2%)
Full text databases	71(68.9%)	32(31.1%)
Electronic Newspapers	64(62.1%)	39(37.9%)
Electronic Magazines	61(59.2%)	42(40.8%)
Conference proceedings	52(50.5%)	51(49.5%)
Electronic thesis	51(49.5%)	52(50.5%)
Electronic clippings	46(44.7%)	57(55.3%)
Indexing and abstracting databases	45(43.7%)	58(56.3%)
Reference databases	39(37.9%)	64(62.1%)

Table 2 shows that majority 78(75.7%) of the respondents indicated electronic books were available. The majority 76(73.8%) indicated that scholarly websites, 75(72.8%) Electronic Journals, and 71(68.9%) Full text databases were equally available. Hence, the electronic resources majorly available in the selected university libraries in South-West, Nigeria were electronic books, scholarly websites, electronic journals and full text databases.

Research Question 2: What are the gadgets used to access electronic resources in the selected university libraries in South-West, Nigeria?

Table 3: Gadgets used to access electronic resources in two university libraries

Gadgets	Mean	Std. Dev.	Decision
Android phones	3.79	.412	Significant
Laptop	3.48	.608	Significant
Smart phones	3.39	.795	Significant
Handheld devices	3.24	.880	Significant
Smart wristwatches	3.24	.785	Significant
Pocket PC	3.21	.681	Significant
Desktop computers	3.17	.909	Significant
Tablets	3.14	.960	Significant
Phablets	3.10	1.015	Significant
Ebook readers	3.08	.860	Significant
Average Mean	3.28	0.79	Significant

Decision: it has been adjudged that means score of $X=2.50$ and above is significant.

Table 3 shows that the average mean of 3.28 is greater than the accepted mean of 2.50 indicating that all the items of measuring the mediums of access to electronic resources were all significant. The results show a mean score of ($\chi = 3.79$) for android phones, ($\chi = 3.48$) laptop, ($\chi = 3.39$) smart phones, ($\chi = 3.24$) handheld devices, ($\chi = 3.21$) smart wristwatches, ($\chi = 3.17$) and pocket PC. Moreover, ($\chi = 3.14$) for tablets, ($\chi = 3.10$), phablets and ($\chi = 3.08$) eBook readers. Hence, the major gadgets used to access electronic resources in two university libraries are android phones, laptop, smart phones, handheld devices and smart wristwatches.

Research Question 3: What are the strategies for the management of electronic resources in the selected libraries?

Table 4: Strategies for the management of electronic resources

Strategies	YES	NO
Collection development policies	94(91.3%)	9(8.7%)
Huge information reservoirs	84(81.6%)	19(18.4%)
Easy citations	81(78.6%)	22(21.4%)
Archive	80(77.7%)	23(22.3%)
Installing air-conditionals	74(71.8%)	29(28.2%)
License agreement	72(69.9%)	31(30.1%)
Backup	70(68.0%)	33(32.0%)
Installation of anti-virus	68(66.0%)	35(34.0%)
Ease in uploading and updating	63(61.2%)	40(38.8%)
Absence of proper ventilation	37(35.9%)	66(64.1%)

Table 5 shows that majority of respondents expressed strong support for various aspects of library resources and facilities. Notably, 91.3% of respondents favored collection development policies, while a minority of 8.7% held opposing views. Similarly, 81.6% valued the importance of vast information reservoirs, but 18.4% disagreed. In terms of specific library features, 78.6% appreciated easy citation options, whereas 21.4% did not. Archives received support from 77.7% of respondents, with 22.3% expressing dissent. Additionally, 71.8% advocated for installing air conditionals, while 28.2% did not share this view. Lastly, 69.9% endorsed license agreements, but 30.1% held opposing views.

Hence, the major strategies for the management of electronic resources in the selected libraries are collection development policies, huge information reservoirs, easy citations, archive and installing air-conditionals.

Research Question 4: What are the problems associated with the utilisation and management of electronic resources in the selected university libraries in South-West, Nigeria?

Table 5: Problems associated with the utilisation and management of electronic resources

Problems	YES	NO
Non-availability of electronic resources	85(82.5%)	18(17.5%)
Inadequate collection of electronic resources	80(77.7%)	23(22.3%)
Lack of internet access	76(73.8%)	27(26.2%)
Limited access to a computer terminal	70(68.0%)	33(32.0%)
Using electronic resources often detracts from doing academic work	63(61.2%)	40(38.8%)
Lack of effective information retrieval skills	56(54.4%)	47(45.6%)
Online / virtual crimes and security	55(53.4%)	48(46.6%)
Copyright issues	52(50.5%)	51(49.5%)
Limited time	50(48.5%)	53(51.5%)
Lack of IT knowledge to effectively utilise the services	48(46.6%)	55(53.4%)
Privacy / confidentiality	48(46.6%)	55(53.4%)
Lack of professional skills	33(32.0%)	70(68.0%)

Table 5 shows that majority 85(82.5%) of the respondents agreed to non-availability of electronic resources while 18(17.5%) of the respondents had a contrary view. Majority 80(77.7%) of the respondents agreed to Inadequate collection of electronic resources while 23(22.3%) of the respondents had a contrary view. Majority 76(73.8%) of the respondents agreed to Lack of internet access while 27(26.2%) of the respondents had a contrary view. Majority 70(68.0%) of the respondents agreed to Limited access to a computer terminal while 33(32.0%) of the respondents had a contrary view. Majority 63(61.2%) of the respondents agreed to Using electronic resources often detracts from doing academic work while 40(38.8%) of the respondents had a contrary view. Majority 56(54.4%) of the respondents agreed to Lack of effective information retrieval skills while 47(45.6%) of the respondents had a contrary view.

Hence, the major problems associated with the utilisation and management of electronic resources are non-availability of electronic resources, inadequate collection of electronic resources, lack of internet access and limited access to a computer terminal.

Discussion of the Findings

The results demonstrated that electronic books, academic websites, electronic journals, and full text databases are the most common types of electronic resources found in several academic libraries in South-West, Nigeria. This outcome is in accordance with a research by Mulliken and Falloon (2019), which claimed that until the emergence of the internet, library users faced significant challenges due to their restricted access to current journals, books, full text databases, periodicals, and newspapers in the various fields. For him, accessing current information may be found on the internet. Furthermore, the outcome is in line with Gouri-Panicker's (2021) research, which found that the majority of respondents from Catalonia's consortium of university libraries said they only use electronic publications for their work. For academic and research purposes, electronic journals, periodicals, newspapers, and books are essential.

The results demonstrated that smartphones, laptops, smart watches, portable devices, and Android phones are the most common gadgets used to access electronic resources at two university libraries. This is in line with a research by Dugonik, Dugonik, Marovt, and Golob (2020), which suggested that capturing technologies use input devices to gather and digitize data. Keyboards, mouse, trackballs, touch displays,

speech recognition software, bar code readers, image scanners, and compact cameras are a few examples of these gadgets. Methods for storing and retrieving digital information that result in a range of gadgets. A few of these are optical disks (like CD-ROMs), magnetic tapes, floppy disks, hard drives, RAM disks, erasable disks, and smart cards—credit-card sized cards containing memory and processing power for financial transactions or medical data. The systems and application software needed for the operation of digital IT are also created by the processing technologies.

The results demonstrated that the installation of air conditioning, collection development policies, large information reservoirs, simple citations, and archiving are the main strategies for managing electronic resources in the chosen libraries. This is consistent with Xin and Xingdong's study from 2023, which stated that shifts in scientific and economic developments, along with the development of information technologies, changed collection development into collection management as a means of ensuring that users receive the information they require while maintaining standards of quality. University libraries use air conditioning, citations, archives, collection management rules, and other methods to manage electronic resources. Libraries employ precise methods for managing their collections. Assessment of collection is one such method. It assesses how well the collection, both physically present and accessible online, satisfies the objectives, requirements, and purposes of the library and its parent company. These methods can be quantitative or qualitative, and when applied methodically, collection management operations can be planned, managed, and carried out in a way that maximizes efficiency and effectiveness. The results demonstrated that the main issues pertaining to the creation and administration of electronic resources are their non-availability, their poor collection, their lack of internet connectivity, and their restricted access to computer terminals. The claim made by Akwaowo and Enyioko (2021), who listed some of the issues they believed to be present with electronic resources, is in support of this. They pointed out that the usage of electronic resources is significantly hampered by a lack of ICT proficiency, internet access, insufficient data gathering, IT expertise, and information retrieval abilities.

Conclusion and Recommendations

Electronic books, scholarly websites, electronic journals, and full text databases are the main electronic resources available in the two university libraries in South-West, Nigeria. However, the majority of users access these resources via Android phones, laptops, smart phones, handheld devices, and smart wristwatches. Furthermore, these resources are extremely advanced in the areas of resource acquisition, selection accountability, licensing, and restoration. The main tactics used in the chosen libraries to manage their electronic resources include collection development policies, air conditioning installation, large information reservoirs, simple citations, and archiving. Lack of access to the internet, poor resource collection, restricted access to computer terminals, and non-availability of electronic resources are the main issues with the creation and administration of electronic resources. The following recommendations were made from the findings;

1. University libraries should ensure trained staff members are available to assist patrons in utilizing electronic resources effectively, as this will enhance users' navigation and increase their overall academic productivity.

2. University libraries should expand access to more electronic resources, including databases, conference proceedings, and electronic theses, to enrich academic resources and provide broader research opportunities for both staff and students.
3. Knowledge and resource exchange among library staff and academic departments should be promoted to maximize the use of available electronic resources, as this will foster collaboration and prevent underutilization of resources.
4. Library staff should be encouraged to use phablets and e-book readers for accessing and managing electronic resources efficiently, which will improve mobility and ease of access, allowing staff to serve users more effectively.
5. University libraries should join or form consortiums to collectively purchase electronic materials at reduced costs, as this approach will enhance resource access while ensuring financial efficiency through bulk purchasing agreements.

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