

Assessment of Modern Preservation Practices at the Federal University Otuoke Library, Bayelsa State

Kolawole Francis Ogunbodede

<https://orcid.org/0000-0002-5518-7787>

University of Africa, Nigeria

kolawole.ogunbodede@uat.edu.ng

Ebere Edith Onah

<https://orcid.org/0009-0009-2356-0290>

Federal University Otuoke Library, Nigeria

mebere32@yahoo.co.uk

Abstract

The study titled 'Assessment of Modern Preservation Practices at the Federal University Otuoke Library, Bayelsa State, Nigeria' was conducted to evaluate the contemporary preservation practices at the library, identify challenges in implementing modern preservation methods, and propose recommendations for improvement. The assessment aims to ensure the protection of collections and fulfil the library's role as a custodian of knowledge. Qualitative research methodology was employed, and data were collected through interviews with five librarians from the electronic library, focusing on the study's relevant questions. The study included the entire population due to its small size, eliminating the need for sampling. Content analysis was utilised to analyse the collected data, and the results were summarised in a comprehensive research report. The findings revealed that the library's current preservation method is its website, with efforts underway to establish an institutional repository. However, the library faces challenges in adopting the institutional repository and other advanced preservation techniques due to limited financial resources and lack of administrative support. In conclusion, the study highlights the importance of effectively addressing financial constraints and gaining administrative support to adopt modern preservation methods. Through advocacy efforts, seeking external funds, and establishing partnerships, the Federal University Otuoke Library can enhance the preservation of its digital holdings and ensure their long-term accessibility. Based on the findings, the researchers recommended that the library establish strategic advocacy approaches to underscore the significance of digital preservation and institutional repositories and take practical measures to garner support from the university administration. Additionally, budgetary constraints should be addressed by securing financing from external sources and collaborating with institutions dedicated to digital preservation practices.

UNISA 
University of Africa
Press

Southern African Journal of Security

#15899 | 18 pages

<https://doi.org/10.25159/3005-4222/15899>

ISSN 3005-4222 (Online)

© The Author(s) 2024



Published by Unisa Press. This is an Open Access article distributed under the terms of the Creative Commons Attribution-ShareAlike 4.0 International License
(<https://creativecommons.org/licenses/by-sa/4.0/>)

Keywords: preservation; security of information resources; University Library; Federal University Otuoke Library; Bayelsa State

Introduction

The Federal University, Otuoke Library in Bayelsa State, Nigeria, is an institution that aids academic pursuits by providing a wide range of information resources that stand as the bedrock of teaching and learning as well as research undertakings (Ogunbodede and Okwu 2023). Among these resources are e-books, periodicals, databases, and maps, which are essential for students and lecturers within the academic community. Though these resources may have great value, they are prone to depreciation due to wear and tear from extreme use and exposure to various environmental conditions. Osunride and Adetunla (2016) opined that the deterioration of library resources has been one of the greatest challenges plaguing libraries. As a result, librarians must preserve the intellectual and cultural heritage because the effective dissemination of information resources can only happen when the documents are in good and usable condition. To guarantee their sustainability and continued availability for posterity, detecting and managing these vulnerabilities is necessary (Oyeniyi 2015). Protecting these resources is crucial, and it is also an obligation to preserve the intellectual heritage for generations to come, especially in the digital age.

The above statement necessitates investigating modern preservation practices at the Federal University Otuoke Library in Bayelsa State, Nigeria. This study aims to assess the modern preservation methods used in the library and the challenges in implementing modern preservation practices. By understanding the challenges, suitable approaches can be formulated to improve the library's capacity to preserve and extend the lifecycle of its vital information resources. This paper intends to bridge the knowledge gap in the literature on modern preservation practices adopted at the Federal University of Otuoke University library. The study hopes to advance the continuing conversation on effective preservation tactics university libraries use by conducting a detailed analysis of the current situation. The main aim is to provide a platform whereby the library's resources are accessible, relevant, and in good shape for the scholars and researchers of now and those of future generations.

In that sense, preservation signifies the preventive steps to prevent information resources from having destructive consequences. Goswami (2018) described preservation as protecting library collections from injury or destruction. Preservation is paramount to guarantee that the succeeding generations can access the library information resources at any time (Echem and Okwu 2023). In this era of digital advances, it is becoming increasingly important for university libraries to adopt modern techniques of information resource preservation. Modern preservation of information resources in libraries has become possible due to the use of many advanced technologies and procedures that ensure the long-term preservation of resources (Normamatova 2023; Oluranti et al. 2023). These modern strategies include digital preservation, digitisation, cloud computing, and institutional repositories. Modern preventive

methods in libraries today have diverse benefits over traditional methods, such as convenience, durability, and longevity. Incorporating advanced preservation methods in libraries today symbolises a key step toward the sustainability and accessibility of the necessary academic collections (Michelle 2023; Yeni et al. 2022).

In today's digital age, society uses digital technologies to create and share knowledge. Preserving the digital materials of today is critical to preserving the nation's history and culture (Mukherjee and Das 2023). As libraries are committed to collecting and preserving cultural heritage and historical documents, they must also collect and preserve digital heritage for current and future generations. In developed countries, university libraries widely implement modern preservation techniques to protect their collections (Njeze 2012). These cutting-edge practices are essential in slowing the rate of deterioration, thereby ensuring that library resources are available for future generations. Despite the apparent benefits of novel techniques for preservation, the researchers observed that most university libraries in Nigeria still use traditional methods. These old-fashioned practices include temperature and humidity control with acid-free products, pest management practices, etc. Nevertheless, the persistent, constant usage of old-fashioned methods has substantially deteriorated some library collections (Zintah et al. 2017; Olatokun 2008). Vital information that was supposed to be preserved for future generations has been deleted.

This stressed the need to conduct a comprehensive study on the preservation approaches used in Nigerian universities to keep them up-to-date with the rapidly changing technology environment. Such integration is vital to maintaining important library information resources. Nigerian university libraries should use 21st-century preservation methods to preserve valuable information sources that will be available to future generations (Ifijeh 2014). Using the latest preservation techniques in Nigerian university libraries is very significant for preserving Nigeria's intellectual and cultural heritage. This inheritance is invaluable for education, research, and artistic life. These contemporary techniques secure valuable information sources and maintain their availability for researchers, students, and scholars, stimulating educational and intelligence-related aspects of society.

Despite many surveys conducted by researchers across the international community on preservation techniques in libraries worldwide, there are only a few literature on recent preservation methods employed in university libraries across Nigeria (Oluranti et al. 2023). Nevertheless, available studies often draw attention to the barriers these libraries have faced rather than providing details on the current preservation trends and how modern techniques are being implemented. The Federal University of Otuoke is owned by the federal government and is in Otuoke, Bayelsa State, Nigeria. It was founded in 2011 under the administration of President Goodluck Jonathan as a Public University. The university library plays a catalyst role in the teaching, learning and research process and is closely associated with the university's academic programme. Most specifically, the Library of the Federal University Otuoke is poised

to arouse a reading culture and establish the foundation for lifelong learning. As a result, the university library has dedicated facilities and resources for conserving and preserving information materials (Etim 2022). The Federal University Otuoke Library, like many university libraries in Nigeria, face challenges when it comes to preserving collections, often due to limited funding and resources. Common issues include a lack of temperature and humidity controls, pest management programs, proper storage facilities and digitisation efforts (Oluwole 2023). At the same time, likely efforts are being made to implement more modern preservation techniques on limited budgets. However, to the best of the researchers' knowledge, there is a dearth of studies or information on the library's modern preservation methods, which motivated the need for this study. This study, therefore, examines the preservation and security of information resources in the digital age at the Federal University Otuoke Library, Bayelsa State, Nigeria.

Statement of the Problem

One of the priorities for university libraries is preserving important information resources to ensure that the new generation has access to all the information they need. In this digital age, using digital technologies to safeguard vital information materials is essential for preserving a nation's history and culture. Njeze (2012) stated that Nigerian academic libraries must adopt modern technologies to provide access to crucial information to align with their counterparts in developed countries. Subsequently, university libraries are beginning to take more steps in implementing 21st-century preservation methods to safeguard their resources that contain vital information. According to research by Garba et al. (2019), digital information resources have a longer lifespan when preserved. The traditional methods of preservation mostly used by university libraries in Nigeria are no longer effective due to their inability to ensure long-term usability and accessibility of library collections, considering the technological advancement and dependence on digital resources. As a result, some university libraries have undergone substantial changes in adopting modern preservation practices. A study by Toyo (2017) discovered that the most important reasons for digitalising library resources at the John Harris Library at the University of Benin are to preserve library resources for long use and provide access to different collections simultaneously. It shows that university libraries are adopting modern preservation practices to safeguard vital information for posterity. These practices can add more to the life duration of academic information. However, their incorporation into library activities is not clear. This study will fill this gap by assessing the most recent preservation methods obtainable at the Federal University Otuoke Library. To this end, the research thoroughly evaluates the specific modern preservation strategies and challenges the university library faces in stepping into the digital realm of preservation.

Objectives of the Study

The study's main objective is to examine the assessment of preservation practices at the Federal University Otuoke Library, Bayelsa State, Nigeria. The specific objectives are:

- To ascertain the modern preservation practices used in the library.
- To examine the factors that interfered with implementing modern preservation practices in the library.

Research Questions

The following questions guided the study:

- What are the modern preservation practices used in the library?
- What factors interfered with implementing modern preservation practices in the library?

Literature Review

The literature review of this study was developed in line with the earlier research objectives. Modern preservation practices involve various processes and activities that ensure the protection and extend the lifecycle of library information resources for the entire period the information is required. Jan (2023) noted that modern preservation practices cover a variety of methods intended to protect and elongate the lifecycle of information materials. It not only promises longevity in accessing information resources but also overcomes the limitations of traditional methods (Mukherjee and Das 2023). The new and advanced preservation methods result from the emergence of the inherent limitations that traditional techniques have. The new techniques have many merits, including time efficiency and cost savings. Modern preservation strategies emphasise guaranteeing the availability of diverse information resources by making them accessible, usable, and safe for a long time. However, two main principles serve as the framework for this literature review: modern preservation practices in libraries and the challenges in implementing modern preservation practices in libraries.

Modern Preservation Practices in Libraries

Mubofu et al. (2022) explored preservation practices for information resources in public university libraries in Tanzania. Convenient and purposive sampling techniques were used, and data were collected through questionnaires and semi-structured interviews. The study established that digitisation was the only modern practice used in preservation. In another study, Bashorun et al. (2021) examined the preservation of information resources in the selected private university libraries in South-west Nigeria. The study employed a survey research design and collected data using a questionnaire. The findings revealed that the level of utilisation of digital preservation is low and is not extensively used in selected private universities.

Similarly, Saka et al. (2020) investigated the influence of preservation techniques and access to digital resources on the research output of librarians and lecturers in Federal university libraries in Northern Nigeria. The findings showed that digitisation is the

modern method of preserving paper-based library materials. Toyo (2017) investigated the impacts of library resource digitisation on the services of academic libraries using John Harris Library, University of Benin, Benin City. The sample size for the study was forty-seven (47) library staff. The findings revealed that the major reasons for digitising library resources include preserving library resources for long-term use and having better search and retrieval facilities for library materials. The study also noted that digitisation enables greater access to collections of all types and enables the ability to search for library resources electronically without difficulties. Olatokun (2008) studied the various techniques used to preserve and conserve library materials in selected university libraries in Nigeria. The results showed that although some libraries adopt digital preservation techniques, they are still not effectively used.

Similarly, Ejiroghene (2024) explored the prospects of digitalisation practices in academic libraries in Delta State, Nigeria. The population consists of academic library workers, and the simple random technique was utilised to choose four schools in Delta State, with 40 library employees serving as the study's sample. The findings demonstrated that academic libraries' digitisation practices boosted access to library items, effective preservation of library materials, improved library service, quick retrieval of documents, and improved library exposure. Similarly, Oni et al. (2018) investigated the prospects and challenges of digitisation of academic library resources for effective service delivery in universities in Edo State. A survey research design was adopted, and a questionnaire was used for data collection. The data analysis revealed that increased access to library materials, effective preservation of library materials, improved library services, speedy retrieval of documents, and improved library visibility are the major purposes of digitisation of library resources. In another study, Akanwa et al. (2023) investigated information resource security and preservation in university libraries in the United States. The study population comprised 395 professional and paraprofessional staff members from university libraries selected at Imo State. The findings revealed that many modern preservation methods, such as digitisation, are not yet used in these libraries. Osunride and Adetunla (2016) noted that libraries should deploy modern preservation and conservation tools, such as technologically enabled ICT devices, which will aid in adequate storage and enhance the durability and longevity of information materials. Ifijeh (2014) opined that academic libraries in Nigeria should digitise these and adopt the cloud computing preservation model through the operations of institutional repositories. The use of library websites, cloud computing, and institutional repositories, among others, provide platforms that offer access to various electronic resources, which can boost user experience, thereby enhancing preservation and accessibility efforts and expanding the scope of materials available (Kumar 2023; Hamidreza et al. 2023).

In their study, Awamleh and Hamad (2022) noted that digital preservation requires new skills and collaboration among library staff to maintain long-term access to information resources. A study by Oluranti et al. (2023) on digital preservation skills of electronic information resources' management among library personnel in selected universities in

Nigeria found that the library staff generally possess a moderate level of digital preservation skills. However, many traditional librarians and archivists are conservatives and have a phobia of computers because of generation gaps between the new and old professionals; the old professionals see computers as a threat to their expertise and status (Jimada and Aduku 2015). Thus, they find it difficult to cope with or meet the digital age requirements and are, at the same time, too reluctant to leave the old practices for new ones. Ayoku (2008) stated that successfully applying information handling technologies and preservation practices requires overcoming staff and personal resistance to innovation. It is therefore important to educate librarians on the benefits and need of accepting the digital age to make their work easy, effective, and efficient. According to Akintonde and Awujoola (2022), adequate information and communication technology (ICT) skills are crucial for librarians to successfully perform digital preservation practices to ensure the prolonged use of information resources in university libraries. Oni et al. (2018) opined that librarians must undergo training and retraining to acquire all the relevant and up-to-date skills for effective digitisation. Librarians must engage in training and retraining programmes on using modern gadgets and facilities to curb security threats and preserve information resources (Akanwa et al. 2023). To promote digital preservation practices and ensure long-term access to information resources, it is essential to increase awareness among librarians about the substantial benefits of digital preservation. Therefore, the literature spotlights the role of digital preservation techniques in safeguarding information resources in the long run. It shows that the library staff need to develop new skills and work together to effectively promote digital preservation practices, as well as the need for training and retraining programmes on the use of modern gadgets facilities in curbing security threats and preserving information resources.

Factors that interfere in Implementing Modern Preservation Practices in Libraries

The adoption of modern preservation practices, however, has significant difficulties, especially in developing countries like Nigeria. Several studies have reported numerous challenges related to digital preservation across the globe. For instance, Ahmad et al. (2023) investigated the barriers to implementing digital preservation programs at Pakistani university libraries. The results highlighted that a lack of institutional/national policies, financial and technological resources, and administrative support are key barriers that hinder the implementation of digital preservation practices in Pakistani university libraries. Similarly, Masenya and Ngulube (2019) examined digital preservation practices in academic libraries in South Africa in the wake of the digital revolution. The findings revealed that academic libraries experienced difficulties preserving and sustaining their digital resources because of the absence of established standards, policies, and procedures, inadequate resources, and a lack of skills and training. They also had limited funding, poor technology infrastructure, and legal issues. Ifijeh (2014) identified the digital divide and poor technological infrastructure, inadequate funding, data security breaches, and issues revolving around copyright as

challenges of digital preservation practices in Nigerian academic libraries. For libraries to adequately preserve their information resources, modern preservation tools such as technologically enabled ICT devices that will aid in adequate storage and enhance the durability and longevity of information materials should be utilised (Osunride and Adetunla 2017). Also, Jimada and Aduku (2015) investigated the challenges militating against the successful preservation of digital information resources in federal university libraries in the Northwestern States of Nigeria. A qualitative research method was adopted, and purposive sampling was adopted for the study; the instruments used to collect data were the interview and observation. The study revealed that the predominant challenges militating against successful preservation of digital information resources were lack of digital preservation policy, inadequate power supply, unskilled professionals, technological obsolescence, poor maintenance culture, technophobia, storage media degradation, inadequate funding, changes in technology and inadequate infrastructure.

Similarly, Ejiroghene (2024) noted that despite the benefits of digital preservation, librarians in academic libraries confront hurdles in developing successful digitisation practices. Oni et al. (2018) opined that inadequate funding, high cost of purchasing equipment, inadequate skilled personnel, erratic power supply, poor internet connectivity, and copyright issues/management are some of the major challenges inhibiting effective and efficient digitisation of library resources in academic libraries. In their study, Garba et al. (2019) found that the challenges militating against the preservation of digital information resources include a lack of interest in digital information resources, temperature, inadequate computer systems, computer systems crashes, lack of funds for routine maintenance, and computer phobia among others. Olatokun (2008) stated that inadequate funding was the most severe inhibitor to modern preservation activities in university libraries. Brenda (2011) stated that libraries face the challenges of inadequate and qualified professionals who are not fully equipped and qualified to train and retrain others on digital preservation.

Additionally, frequent power outages constitute a serious delay in digital preservation activities. Zulu (2008) reported that most African countries do not have an adequate and reliable supply of electricity, making it impossible to maintain a conducive and sustainable technological environment suitable for digitisation projects on the continent. These barriers may meaningfully influence the acceptance and success of contemporary preservation systems in any library (Pratama and Rukmana 2023; Ninis et al. 2023).

To address these challenges effectively, the government must show its unwavering commitment to the education sector, especially by providing a reliable power supply and adequate ICT resources, both currently unavailable in most Nigerian universities (Ogunbodede and Cocodia 2023). Anyaogu (2014) suggested the provision of standby generators, inverters, and solar systems as alternative power sources to overcome the problem of inadequate power supply in digital preservation. These alternate power supplies, such as high-capacity generators and usage of solar electricity, are required to

address the country's unpredictable power supply. Furthermore, Jimada and Aduku (2015) stressed the need for a digital preservation policy; standby generators and inverters must be provided, adequate professionals must be employed, file formats must be emulated, and storage media must be refreshed. By tackling these obstacles, the library can improve its capacity to adopt and maintain modern preservation techniques, ensuring the long-term preservation and accessibility of its collections (Ute et al. 2023). The review centred on the barriers to digital preservation practices in academic libraries. Different studies point to the most general hindrance issues like insufficient funding, absence of institutional policies, outdated infrastructure, lack of resources, and skilled labour scarcity. These stumbling blocks hamper the use of digital preservation programs and contribute to the difficulties in preserving and sustaining digital resources. The reports elucidate the need to tackle the problems and employ practical solutions designed to improve digital preservation in libraries. Consequently, the records and information sources would be available to posterity.

Theoretical Framework

This study is based on the Diffusion Innovations Theory (DIT) formulated by the famous researcher Everett M. Rogers in 1962. The DIT can offer insights into evaluating modern preservation practices at the Federal University Otuoke Library in Bayelsa State, Nigeria. This theory states how new information like technologies, inventions or practices can be adopted or transferred from one social system to another. From this point of view, the library preservation procedures, which are implemented as innovation in the library, can be treated as innovation, and the assessment helps know the implementation and barriers related to these practices. The specific objectives can be addressed through the lens of this theory as follows:

To ascertain the modern preservation methods used in the library: Applying the DIT to the case of introducing new preservation strategies is an eligible concept to assess how libraries adopt such strategies. The assessment will determine what modern preservation techniques are used and how far they have been implemented. To examine the challenges in implementing modern preservation practices in the library: The DIT can also be used to justify the difficulties that crop up while executing the modern preservation methods in the library. Libraries may face all kinds of restrictions, from budget constrictions to insufficient staff reluctance to change or lack of awareness of the latest techniques in preservation. Diffusion theory can bring to light various barriers influencing modern preservation initiatives. Through this analysis, it is possible to provide an all-rounded evaluation of the barriers interfering with the endeavours to preserve. Using the DIT to assess the modern preservation practices at the Federal University Otuoke Library, the knowledge gathered from the study can be used to develop ways of addressing the barriers associated with the modern preservation of information resources.

Methodology

The study adopted the qualitative research method, generally accepted and recognised in social sciences, humanities, and educational research (Suada et al. 2023; Daniele et al., 2022; Saleem, 2022). Various authors have utilised this method in different contexts. For instance, Suada et al. (2023) discussed the importance of qualitative research in the scientific and educational process, emphasising its role in improving literature and enhancing research value. Additionally, Asa et al. (2022) employed qualitative longitudinal research (QLR) to study health-related topics, focusing on temporality and change. Moreover, Daniele et al. (2022) analysed characteristics of PhD theses in education that adopted the qualitative approach, focusing on themes, research methods, data collection procedures, and data analysis techniques. These studies collectively showcase qualitative research methods' diverse applications and benefits in various fields. The semi-structured interview tools were utilised, and the study population consisted of five librarians working at the e-library.

No sampling was done as the entire population was used for the study due to its small size. The interview was the primary method of collecting data for the study. The content analysis was used to analyse the responses obtained during the interview. The interview was held for two days, and an average session lasted for 30 minutes, with the interviews taking place on October 4th and 5th, 2023. The research team conducted the interviews without any input from the research assistant. The objectives of the study were the focus of the research. The research procedures were conducted ethically during the interview. Initially, the researchers introduced themselves to the participants and obtained their consent. All the participants who participated in the interview process did it voluntarily. The study adopted the qualitative research method, using semi-structured interviews to obtain information from five librarians working at the e-library. The research procedures were conducted ethically while conducting the interview, and the researchers obtained informed consent from the participants. The interview was held for two days; an average session lasted 30 minutes. Additionally, the researchers highlighted the confidentiality of their responses and reminded them. The questions and the corresponding responses are given below:

Interview with the five librarians working in the e-library

Research Question 1: What are the modern preservation practices used in your library?

Table 1: Modern Preservation Practices

Variables	Frequency	Percentage %
Library website	5	100
Institutional Repository	-	-
Digitization	-	-

Table 1 shows that all the respondents agree that the library website is the modern preservation practice primarily used today. Kumar (2023) noted that a user-friendly library website is a platform that offers access to various resources, including electronic resources, which can boost user experience and empower easy access to electronic resources. However, the respondents also noted that the library is currently working on creating an institutional repository to enhance preservation and accessibility efforts. Creating an institutional repository alongside the library website reflects a commitment to enhancing preservation and accessibility efforts, expanding the scope of materials available (Hamidreza et al. 2023).

Research Question 2: What are the challenges in implementing modern preservation practices in the library?

Table 2: Challenges in Implementing Modern Preservation Practices

Variables	Frequency	Percentage (%)
Lack of approval for the proposal submitted to university management on adopting modern preservation techniques has been a significant barrier.	5	33.3
Financial limitations	5	33.3
Lack of administrative backing	5	33.3

Table 2 reveals that there are several obstacles to implementing modern preservation practices, including a lack of approval for the proposal submitted to university management on adopting modern preservation techniques 5(33.3%), financial limitations 5(33.3%), and a lack of administrative backing 5(33.3%). These challenges can negatively affect how modern preservation techniques are applied in the university library (Pratama and Rukmana 2023; Ninis et al. 2023). To resolve these barriers, there is a need to work with the university administration to seek their support and source for funding from external sources (Peter, 2023). By tackling these obstacles, the library can improve its capacity to adopt and maintain modern preservation techniques, ensuring the long-term preservation and accessibility of its collections (Ute et al. 2023). This aligns with the global need for libraries to respond to the preservation of information aggressively.

Discussion

The study examined the preservation and security of information resources in the digital age at the Federal University Otuoke Library, Bayelsa State, Nigeria. The findings from research question one accordingly showed that the modern preservation method currently being used is the library website, which is making ongoing efforts to establish an institutional repository. This is in line with the current development of digital technology that enables libraries to use online sources and repositories for storing the diverse knowledge base (Mubofu et al. 2022; Olutokun 2008). This also reveals their drive to preserve collections for future generations through appropriate infrastructure

and the necessary skills. This approach ensures that library users from all walks of life can access diverse information resources by visiting the physical library or through their Internet-enabled smart devices. This agrees or is consistent with the DIT, which can state what preservation methods are adapted within the library system. To this end, the study found that the modern preservation method currently used is the library website, with ongoing efforts to establish an institutional repository for preserving its intellectual resources. This finding agrees with Olatokun's (2008) finding that some libraries use and adopt certain digital preservation approaches.

Nevertheless, the study research question two found that finance constraints and lack of administrative backing were the two major obstacles facing the adoption of modern preservative techniques. This reveals numerous challenges across emerging countries such as South Africa, Pakistan, and Nigeria (Masenya and Ngulube 2019; Ahmad et al. 2023; Ifijeh 2014). Improving financial status and obtaining institutional backing are critical prerequisites for adequate investment into modern digital libraries. It becomes apparent that with inadequate funding and support, the library's actions to incorporate contemporary preservation techniques like the emerging institutional repository are inhibited to the maximum extent possible, consequently inhibiting its chances of addressing preservation and accessibility issues through effective means. This study pinpoints the barriers to the diffusion of innovative practices, too. However, the results of this study also align with the theory by identifying the major challenges, such as financial constraints and poor support, which point out that these factors commonly hinder the diffusion of innovative practices. This result conforms with that of Ahamad et al. (2013), who also found one of the significant hurdles in adopting modern library preservation techniques.

Based on the findings, the researchers recommended that the library create a strategic advocacy plan that clearly emphasises the value of long-term digital preservations or an institutional repository. They discussed working with the university administration to seek their support and source for funding from external sources. According to the Rogers DIT, support from the leadership is a vital factor for the effective adoption of technology within the system (Rogers 1962). Moreover, working with organisations that are experienced in digital preservation practices would ease off the financial constraints and, hence, lead to the successful implementation of both the repository and other modern preservation practices.

The article addressed the idea of preservation and its vital role in ensuring sustained availability and accessibility of information resources from time to time. It highlighted that university libraries must adopt modern preservation methods to preserve their collection efficiently. The authors stressed that using these methods would provide advantages such as resource availability, usefulness, and durability. Likewise, the paper acknowledged that although developed countries have accepted modern preservation methods, most of the university libraries in Nigeria still use the old systems to destroy their collections. It highlighted the need to support Nigerian university libraries by

adopting modern preservation techniques to protect the country's academic and cultural heritage.

Interestingly, the researchers also observed that most studies focused on traditional preservation methods and the challenges libraries face without detailed information about current preservation trends and practices. Consequently, there was a need to address the gap; hence, this research work explores modern methods of preservation at the Federal University Otuoke Library. Lastly, the paper addresses the critical roles of modern preservation strategies in university libraries and presents the study report at the Federal University Library Otuoke. It identified certain issues related to implementing the latest preservation strategies, and at the same time, it put forward solutions to enhance the procedures. The report adds quality to the discussions within university libraries on good preservation practices and highlights the importance of keeping academic resources for the benefit of current and upcoming generations.

Conclusion and Recommendations

The assessment of modern preservation practices at the Federal University Otuoke Library, Bayelsa State, Nigeria, highlights the significance of adopting modern preservation methods to protect the durability and accessibility of valued information resources. The results pointed out that the modern preservation method used is a library website, which is complemented by efforts to establish an institutional repository to preserve the library information sources. This is in line with the global trends in digital preservation (Mubofu et al. 2022; Olatokun 2008) and proves the library's commitment to accessibility and long-term preservation of its resources. Thus, this administrative tactic demonstrates the library's adaptability to the newest technology and its inclusive role in catering to the diverse community. While the result of the study is recognised as vital for developing these modern preservation technologies, it demonstrates the need to resolve the frustrations witnessed in their application. Financial constraints and poor administrative support are the prominent barriers now faced, and they also reflect the underlying problems of developing countries (Masenya and Ngulube 2019; Ahmad et al. 2023; Ifijeh 2014). The failure to secure the approval of management for the repository highlights the need for adequate funding and overall support from the institution to adopt modern preservation practices effectively.

Based on the findings, the researchers recommended that the library develop a strategic plan of advocacy that drives home the importance of the long-term nature of digital preservation by targeting management in the university to attract external funding sources. Support from university management plays an important role, as is confirmed in the theory of Rogers' Diffusion of Innovations (Rogers 1962). As a supplement to that, building connections with digital preservation-focused institutes and companies will remove the financial burden and smooth out the implementation of the institutional repository in addition to other modern preservation practices. Moreover, bridging the existing chasm between traditional and modern preservation practices as applied to university libraries in Nigeria is key to the sustainability of our heritage. The study

emphasises the resolve to align university libraries with global best practices to safeguard Nigeria's cultural and academic heritage.

The uniqueness of this survey is in its examination of the specific context of the Federal University of Otuoke Library, which complements the global discussion of the effective preservation strategies in the university libraries. The past research has highlighted the barriers faced by Nigerian university libraries, but the present study provides insight into the current preservation methods being employed. It highlights the fact that the preservation of Nigeria's national academic and cultural heritage vividly depends on the harmony between the country's present-day library and contemporary preservation methods.

Therefore, this research has established a core measure of contemporary preservation methods' importance and indicated the need for most Nigerian universities to adopt modern preservation practices. Through this, they can be certain of the availability, sustainability, and quality of their information resources for the benefit of current and future generations. This study aims to spur additional research and is required to implement the process of outlining practical measures that will improve the present levels of preservation among Nigerian academic institutions.

References

- Ahmad, R., R. Muhammad, and M. Arif. 2023. "Barriers to Preservation for Digital Information Resources in University Libraries of Pakistan." *International Journal for the Preservation of Library and Archival Material* 44 (3): 221–243. <https://doi.org/10.1515/res-2023-0005>
- Akanwa, P. C., and O. N. Okorie, C. I. Nwogu. 2023. "Information Resources Security and Preservation in University Libraries in Imo State." *International Journal of Applied Technologies in Library and Information Management* 9 (2): 43–53.
- Akintonde, A. A., and O. A. Awujoola. 2022. "Information and Communication Technology Skills and Digital Preservation Practices by Library Personnel in Some Selected University Libraries in South-West, Nigeria." *Library Philosophy and Practice*, 7358. <https://digitalcommons.unl.edu/libphilprac/7358>
- Anyagwu, U. 2014. "Imperative for Storage and Preservation of Legal Information Resources in a Digital Era." *Information and Knowledge Management* 4 (5). <http://unllib.edu/LPP/>
- Asogwa, B. 2011. "Digitization of Archival Collections in Africa for Scholarly Communication: Issues, Strategies, and Challenges." *Library Philosophy and Practice (e-journal)* 76 (3). 651. <https://digitalcommons.unl.edu/libphilprac/651>
- Auduly, Å., E. O. C. Hall, Å. Kneck, T. Westergren, L. Fegran, M. K. Pedersen, H. Aagaard, K. L. Dam, and M. S. Ludvigsen. 2022. "Qualitative Longitudinal Research in Health Research: A Method Study". *BMC Medical Research Methodology* 22 (1): 255. <https://doi.org/10.1186/s12874-022-01732-4>

- Awamleh, M. A., and F. Hamad. 2022. "Digital Preservation of Information Sources at Academic Libraries in Jordan: An Employee's Perspective." *Library Management* 43 (1/2): 172–191. <https://doi.org/10.1108/LM-10-2021-0088>
- Bashorun, M. T., E. K. Idogun-Omogbai, and J. O. Muhammad. 2021. "A Survey of Preservation and Conservation of Information Resources in Private University Libraries, South-West, Nigeria." *Record and Library Journal* 7 (2): 307–319. <https://doi.org/10.20473/rj.v7i2.137>
- Daniele, O. S. A., R. R. M. J. Francisco, M. R. S. Tatiana, and B. C. N. João. 2022. "The Characteristics of Qualitative Research: A Study with Theses from a Postgraduate Program in Education." *Educação em Revista* 38: e26895. <https://doi.org/10.1590/0102-469826895t>
- Echem, M. E., and E. Okwu. 2023. "Library Security and Sustainable Service Delivery in Donald Ekong Library, University of Port Harcourt, Rivers State, Nigeria." *Communicate: Journal of Library and Information Science* 25 (1): 89–101. <https://www.cjolis.org/index.php/cjolis/article/view/26>
- Ejiroghene, R. E. 2024. "Prospects of Digitalization Practices in Academic Libraries in Delta State, Nigeria." *IntechOpen*. <https://doi.org/10.5772/intechopen.1003195>
- Etim, F. E. 2022. "The University Library." Federal University of Otuoke. Accessed 4 February 2024. <https://fuotuokey.edu.ng/the-university-library/>.
- Garba, S. M., A. A. Mohammed, and M. S. Imam, M. S. 2019. "Preservation and Conservation of University Library Digital Information Resources in Federal University of Technology Minna and Ibrahim Badamasi Babangida University Lapai Nigeria." *Library and Information Management Forum* 12 (1 and 2): 68–79.
- Goswami, M. 2018. "Effects of Environmental Factors on Preservation of Library Documents." *International Journal of Library and Information Studies* 8 (2): 42–47.
- Hamidreza, S., K. Marcin, B. Elango, and K. Hamid. 2023. "Redesigning Library Websites Using the MDA Framework." *Library Hi Tech News*. <https://doi.org/10.1108/lhtn-05-2023-0085>
- Ifijeh, G. 2014. "Adoption of Digital Preservation Methods for Theses in Nigerian Academic Libraries: Applications and Implications." *The Journal of Academic Librarianship* 40: 399–404. <https://doi.org/10.1515/pdct-2022-0024>
- Jan, M. 2023. "Global Trends in Digital Preservation: Outsourcing Versus In-House Practices." *Journal of Librarianship and Information Science* 4–12: 12–23. <https://doi.org/10.1177/09610006231173461>
- Jimada, A., and B. S. Aduku. 2015. "Challenges of Digital Preservation in Federal University Libraries in North Western States of Nigeria." *The Information Manager* 15 (1 and 2): 17–21.

- Joseph, J., and S. Sangchul. 2009. "Robust Tools and Services for Long-Term Preservation of Digital Information." *Library Trends* 57 (3). <https://doi.org/10.1353/lib.0.0053>
- Kumar, S. 2023. "The Importance of Library Websites in Accessing Electronic Resources." *Library Progress (International)* 43 (1): 24–27. <https://doi.org/10.48165/bpas.2023.43.1.3>
- Masenya, T. M., and P. Ngulube. 2019. "Digital Preservation Practices in Academic Libraries in South Africa in the Wake of the Digital Revolution." *South African Journal of Information Management* 21 (1): a1011. <https://doi.org/10.4102/sajim.v21i1.1011>.
- Michelle, P. 2023. "Integrating Preservation into Librarian Workflows." *Insights: The UKSG Journal* 36 (5): 1–9. <https://doi.org/10.1629/uksg.614>
- Mubofu, C., H. Mambo, and A. Samzugui. 2022. "Preservation Practices for Information Resources in Public University Libraries in Tanzania." *International Journal for the Preservation of Library and Archival Material* 43 (3): 199–218. <https://doi.org/10.1515/res-2022-0014>
- Mukherjee, P., and G. Das. 2023. "Preservation and Conservation of Library Materials as Reflected Through Library and Information Science Abstract (1971–2009): A Review Work." *International Journal for Multidisciplinary Research* 1 (2, 1–14). <https://doi.org/10.36948/ijfmr.2023.v05i02.2594>
- Njeze, M. 2012. "Preservation and Conservation Issues in Selected Private Universities in South-West Nigeria." *Library Philosophy and Practice*, 761. <https://digitalcommons.unl.edu/libphilprac/761>
- Normamatova, K. S. H. 2023. "Digital Preservation in Libraries: Preparing for a Sustainable Future." By Jeremy Mynetti and Jessalyn Zoom. (Review). Archival issues. <https://doi.org/10.31274/archivalissues.16301>
- Ogunbodede, K. F. and E. Okwu. 2023. "Challenges of Marketing Information Resources and Services in University Libraries in Bayelsa State Nigeria." *Indonesian Journal of Librarianship* 4 (1): 1–12. <https://doi.org/10.33701/ijolib.v4i1.3332>
- Ogunbodede, K. F., and B. Cocodia. 2023. "Promoting the Use of Open Educational Resources by Librarians in University Libraries in Nigeria." *International Information & Library Review*. <https://doi.org/10.1080/10572317.2023.2183556>
- Olatokun, W. M. 2008. "A Survey of Preservation and Conservation Practices and Techniques in Nigerian University Libraries." *Library and Information Science Research Electronic Journal* 18 (2). <https://doi.org/10.32655/LIBRES.2008.2.3>
- Oluranti, F. E, A. R. Olorunleke, and A. Abiodun. 2023. "Digital Preservation Skills of Electronic Information Resources' Management among Library Personnel in Selected Universities in Nigeria." *European Journal of Computer Science and Information Technology* 11 (3): 75–87. <https://doi.org/10.37745/ejcsit.2013/vol11n37585>

- Oluwole, E., A. Rasaki, A. Egbedokun, and A. Adedayo. 2023. "Preservation of Audio-Visual Collections at Albert Ilembade Library, Federal University of Technology Akure, Ondo State, Nigeria." *Collections: A Journal for Museum and Archives Professionals* 19 (1): 20–32. <https://doi.org/10.1177/155019062311590>
- Oni, O., L. Abu, and I. A. Ekeniyer. 2018. "Prospects and Challenges of Digitization of Academic Libraries Resources for Effective Services Delivery in Universities in Edo State." *International Research: Journal of Library & Information Science* 8 (2).
- Osunride A. A., and B. O. G. Adetunla. 2017. "Preservation and Conservation of Library Materials in University Libraries in South-West, Nigeria." *International Journal of Library and Information Science Studies* 3 (3): 8–19.
- Oyeniya, A. S. 2015. "Preservation and Conservation of Information Resources." A paper presented at National Workshop on the Management and Protection of University Records, Ibadan, Nigeria, July 19–23.
- Peter, O. O. 2023. "Information Resources Preservation in Academic Libraries: Challenges and Strategies." *International Journal of Library and Information Science Studies* 391: 15–28. <https://doi.org/10.37745/ijliss.15/vol9n32434>
- Peter, O. O. 2023. "Strategies for Preservation of Electronic Information Resources in Academic Libraries in Nigeria." *International Journal of Library and Information Science Studies* 5 (2): 1–10. <https://doi.org/10.37745/ijliss.15/vol9n35062>
- Pratama, B. A., and E. N. Rukmana. 2023. "Kegiatan Preservasi Bahan Pustaka Di Diperpuska Ciamis. Informatio." *Informatio: Journal of Library and Information Science* 3 (2): 125–138. <https://doi.org/10.24198/inf.v3i2.46642>
- Putri, S. A., N. D. Agustini, U. L. S. Khadijah, S. Rodiah, C. M. S. Samson, E. N. Rukmana, and L. Khoerunnisa. 2023. "Kegiatan Preservasi Bahan Pustaka di Perpustakaan IKOPIN University." *LibTech: Library and Information Science Journal* 4 (1): 1–14. <https://doi.org/10.18860/libtech.v4i1.19624>
- Rogers, E. M. 1962. "Diffusion of innovation theory." New York: Free Press. Accessed 4 February [https://sphweb.bumc.bu.edu/otlt/mphmodules/sb/behavioralchange/theories/behavioralchange/theories4.html#:~:text=Diffusion%20of%20Innovation%20\(DOI\)%20Theory,the%20oldest%20social%20science%20theories.](https://sphweb.bumc.bu.edu/otlt/mphmodules/sb/behavioralchange/theories/behavioralchange/theories4.html#:~:text=Diffusion%20of%20Innovation%20(DOI)%20Theory,the%20oldest%20social%20science%20theories.)
- Saka, K. A., G. A. Babalola, A. O. Ahmed, and A. A. Mohammed. 2020. "Influence of Preservation Techniques and Access to Digital Resources on Research Outputs of Academic Staff in Federal University Libraries in Northern Nigeria." *Library Philosophy and Practice*, 4141. <https://digitalcommons.unl.edu/libphilprac/4141>
- Saleem, D. 2022. "PhD Research in Humanities & Social Sciences: Methods & Approaches." *Patan Pragya* 10 (1): 179–187. <https://doi.org/10.3126/pragya.v10i01.50755>

- Suada, A. D., and V. Bajrami. 2023. "Qualitative Research Methods in Science and Higher Education." *Human Research in Rehabilitation* 13 (1): 156–166. <https://doi.org/10.21554/hrr.042318>
- Ute, L., K. Siti, W. Yunus, and K. Rully. 2023. "Preservation of the Ancient Manuscripts of the Book 'Waruga Jagat' and the Book 'Babad Sumedang' at the Sumedang Pangeran Foundation Library." *Socio Politica* 12 (2): 53–60. <https://doi.org/10.15575/socio-politica.v12i2.21400>
- Yeni, B., W. Rachman, and R. Diah. 2022. "Academic Libraries' Sustainable Preservation and Conservation Practices." *Preservation, Digital Technology & Culture* 51 (3): 121–129. <https://doi.org/10.1515/pdte-2022-0024>
- Zintah, A. T., Y. D. Tabawa, and O. O. Oyinloye. 2017. "Preservation and Conservation of Library Resources in Bingham University Library, Karu, Nasarawa State, Nigeria." *International Journal of Applied Technologies in Library and Information Management* 3 (1): 92–101.
- Zulu, S. F. C. 2008. "Intellectual Property Rights in the Digital Age." In Aina, L.O., et al. (Eds.) *Knowledge and Information Management in the Digital Age: Concepts, Technologies and African Perspectives*. Ibadan: Third World Information Service.