



Attitude of librarians towards preservation and conservation of information resources in Rivers State University Libraries

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Abstract

This study investigates the attitude of librarians towards preservation and conservation of information resources in Rivers State university libraries. Three objectives were formulated to guide the study. The study adopted a descriptive research survey design. The population of the study was 22 librarians in Rivers State university libraries. Census sampling technique was adopted to select the entire population. Questionnaire was used for data collection. The data was analysed using frequency counts and simple percentage. The results revealed that university libraries in Rivers State predominantly use traditional preservation methods like cleaning, climate control, and repair, while slowly integrating digital techniques such as digitization and database use. Advanced digital tools like cloud storage and blockchain are rarely adopted. Librarians generally hold a positive attitude towards preservation, recognizing it as a professional responsibility and showing willingness to engage in further training. Most actively practice preservation methods, though some remain neutral or less engaged, and a few hesitate to advocate strongly for funding. The challenges identified are technological obsolescence and inadequate infrastructure, with financial constraints, lack of skilled personnel, awareness and environmental factors, institutional policy, operational and resource issues. The study recommended that University libraries should integrate advanced digital preservation methods such as cloud storage and digitization systems alongside traditional practices to ensure a more comprehensive and sustainable preservation strategy.

Keywords: *Librarians, preservation, information resources, Rivers State libraries.*

Introduction

In the technology era, the concepts of preservation has evolved significantly, reflecting advancements in digital technology and changes in how information is created, stored, and accessed. Preservation increasingly intertwined with digital innovations in 21st century libraries. Preservation involves maintaining both physical and digital formats, focusing on data integrity,



format migration, and backup strategies. The preventive techniques are employed to prevent damage before it occurs, such as using protective enclosures, controlling environmental factors, and reducing physical stress on materials. The physical deterioration of information resources, especially of paper-based materials has been attributed to factors such as: level of usage, inherent chemical instability, external environmental factors, human agents, chemical agents, biological agents; natural agents (Cirone et al., 2023). Alternatively, conservation emphasizes physical care of already damaged items and preventive measures for further deterioration, while integrating modern technologies for monitoring and documenting conditions. The combined approach reflects a commitment to ensuring long-term access and usability of library and archival materials in a rapidly evolving technological landscape. Bassey (2015) averred that libraries provide information resources of various kinds to users. These information resources come in two forms: book and non-book materials. There is need to preserve and conserve these information resources for the present and future generations of users.

In the present-day technology era, librarians face a dynamic landscape in the field of preservation and conservation of library resources. As the digital age transforms the ways in which information is created, stored, and accessed, librarians are tasked with adjusting their preservation strategies to embrace both traditional physical resources and evolving digital formats. This dual focus reflects a broader recognition of the enduring value of physical collections, alongside the growing significance of digital assets. According to Obaseki and Carter (2021), there are no many sites in third-world nations where one may receive official, specialized training in the preservation of EIRs (Electronic Information Resources). They emphasized that the absence of technical know-how is a significant problem in many African nations.

Librarians' attitudes towards preservation and conservation in this technological context are shaped by several factors as stated above. In other words, they must navigate the complexities of maintaining the integrity and accessibility of physical materials while simultaneously addressing the challenges posed by digital obsolescence, cyber-security threats, and the rapid pace of technological change. The integration of digital tools and techniques into preservation efforts represents both an opportunity and a challenge, as librarians work to harmonize these with



established conservation practices, they therefore need training and retraining to be able to embrace the 21st century technology in preservation and conservation.

This evolving environment demands that librarians embrace a holistic approach to preservation, by balancing traditional methods with innovative digital strategies. Their attitudes are characterized by a commitment to continuous learning, interdisciplinary collaboration, and the development of comprehensive policies that address both physical and digital preservation needs. In understanding these attitudes is crucial for assessing how librarians are meeting the demands of the modern era and ensuring the long-term sustainability of library resources.

The attitudes of some librarians towards preservation and conservation of library resources in the technology era can vary widely based on their experiences, institutional priorities, and personal beliefs. However, many librarians recognize the continuing importance of preserving physical materials while also valuing the advancements in digital preservation. They often see both forms of preservation as complementary rather than mutually exclusive. Librarians are generally expected to show a good understanding of best practices in both physical conservation and digital preservation, though the level of expertise can vary. There is a growing awareness of digital preservation techniques, librarians need additional training to feel more confident in the digital preservation techniques. Therefore, librarians should be proactive in adapting to new technologies and incorporating digital tools into preservation strategies, such as using digital surrogates and implementing digital asset management systems. According to Kalusopa et al., (2021) for employees to stay up with technological advancements, there is a constant need to enhance their abilities through training. Librarians' attitudes towards preservation and conservation play a significant role in the successful maintenance of information resources.

Objectives of the study.

The objectives of the study are to:

1. determine the method of preservation of information resources in River State university libraries



2. examine the attitude of librarians towards preservation and conservation techniques of library resources.
3. Identify the challenges of librarians towards preservation and conservation techniques of library resource.

Literature Review

Librarians down the ages have been charged with the responsibility of managing information resources and the library users. One of the management practices in the library is preservation and conservation of library resources which is aimed at ensuring the longevity of the library resources. This is a critical concern at this period of dwindling budgetary allocation to public universities where subtle fund is release to the library for the purchase of resources and therefore little or no chance should be given to deterioration. On this premise, Matlala et al., (2022) observed that the knowledge level shown by librarians towards the preservation and conservation of information materials was relatively high and the level of training for staff and funding of conservation and preservation practices in the selected university libraries has improved greatly when compared with previous studies of conservation and preservation. The study recommends that the library management should maintain and improve on the pace of funding and training of staff on preservation and conservation practices in public university in Nigeria.

Oyighan et al., (2024) noted that institutional libraries need to adopt the digital method of preservation to enable library materials stay a longer time in meeting information needs of the users. Digitization has been widely sorted as one solution to the problem of information preservation in libraries and archives. Nevertheless, lack of fund makes it almost impossible to adopt digital preservation techniques in most Nigerian libraries and strategies should be approached with caution. For all practical purposes, digitization is costly to implement. The costs are in the form of hardware and software, user training requirements, manpower to sustain the system, converting archival materials to machine-readable form and maintenance. Most times, huge digital files can be expensive to store and difficult to transfer. Many digital technology enthusiasts often ignore these cost implications (Olatokun, 2008). Therefore, for the university libraries in this study the cost implications of adopting digital preservation and conservation techniques may be possible in the very near future.



The preservation and conservation of information resources remain pivotal in ensuring the longevity and accessibility of knowledge within libraries. Librarians, as custodians of these resources, play a crucial role in implementing effective preservation strategies (Opara et al., 2023). Their attitudes towards these practices significantly influence the success of preservation efforts. Recent studies have highlighted a generally positive attitude among librarians towards preservation and conservation. For instance, a study conducted in university libraries across Delta and Edo States in Nigeria revealed a high level of engagement in preservation activities, correlating strongly with librarians' proficiency in Information and Communication Technology (ICT) skills (Ogbomo & Ogbe, 2023). This suggests that librarians who are adept in ICT are more likely to adopt and implement effective preservation methods, particularly in the digital realm.

In the context of digital preservation, librarians in institutions have demonstrated a strong commitment to maintaining digital resources (AbdulRahman, & Mohezar). Their positive attitudes are reflected in the provision of regular access to digitally preserved materials for students and the adequate availability of necessary equipment. This proactive approach underscores the importance of librarian engagement in the successful preservation of digital content. However, challenges persist that can hinder preservation efforts. identified issues such as the absence of formal preservation policies and insufficient funding for preservation equipment (Yusuf, 2024). These challenges highlight the need for institutional support and the development of comprehensive preservation frameworks to guide librarians in their conservation endeavors. Furthermore, research indicates that the lack of preservation and conservation policies, inadequate training, and insufficient equipment are significant obstacles faced by librarians (Mabawonku et al., 2023). Addressing these issues requires a concerted effort to provide librarians with the necessary resources and training to enhance their preservation capabilities. Librarians have been actively involved in various preservation activities, including digitization, environmental control, and user education.

The integration of emerging technologies, such as artificial intelligence (AI), presents new opportunities for enhancing preservation practices (Jain et al., 2025). AI can assist in automating digitization processes, monitoring environmental conditions, and managing metadata, thereby augmenting the efficiency of preservation efforts (Oyighan et al., 2024). Librarians' openness to



adopting such technologies is crucial for the evolution of preservation strategies in the digital age. Librarians' attitudes towards preservation and conservation are generally positive and play a significant role in the successful maintenance of information resources. However, to fully realize effective preservation practices, there is a need for institutional support in the form of policies, funding, training, and the adoption of advanced technologies. By addressing these areas, libraries can ensure the longevity and accessibility of their collections for future generations

Methodology

The study adopted a descriptive research survey design. The population of the study was 22 librarians in Rivers state university libraries which are Dame Patience Goodluck Jonathan Automated Library, Ignatius Ajuru University of Education, Port Harcourt (11) and Rivers State University Library (11) Census sampling technique was adopted to select the entire population. Questionnaire was used for data collection. The data was analysed using frequency count and simple percentage.

Table 1: Method of preservation of information resources adopted in River State university libraries

Method of Preservation	Yes (Freq)	Yes (%)	No (Freq)	No (%)
Air conditioning and humidity control	17	89.5%	2	10.5%
Digitization of materials	15	78.9%	4	21.1%
Regular cleaning and dusting	18	94.7%	1	5.3%
Insecticides/fumigation	14	73.7%	5	26.3%
Binding/repair of damaged materials	16	84.2%	3	15.8%
Photocopying/scanning of fragile materials	13	68.4%	6	31.6%
Fire safety measures	17	89.5%	2	10.5%
Staff training on preservation	12	63.2%	7	36.8%
Cloud storage	10	52.6%	9	47.4%
Use of databases	16	84.2%	3	15.8%
Use of blockchain for preservation	1	5.3%	18	94.7%



The analysis of preservation methods adopted by university libraries in Rivers State reveals a strong preference for traditional and infrastructural strategies. The most commonly used methods include regular cleaning and dusting of materials (94.7%), the use of air conditioning and humidity control (89.5%), and fire safety measures such as fire extinguishers (89.5%). These figures indicate a high level of awareness regarding the importance of maintaining physical conditions to protect information resources. Additionally, conventional approaches such as binding and repair of damaged materials (84.2%) and the use of databases (84.2%) are also widely practiced, showing a balanced application of physical and digital preservation tools. Digitization of materials is used by 78.9% of the libraries, suggesting a growing shift toward digital preservation, though this has not yet replaced traditional methods. The use of insecticides or fumigation (73.7%) and photocopying or scanning of fragile items (68.4%) further confirms the libraries' continued reliance on physical preservation techniques. However, some gaps remain in the adoption of more advanced digital preservation technologies. While databases are commonly used, only 52.6% of the respondents indicated the use of cloud storage, showing that more than half of the libraries may lack access to or trust in cloud-based solutions for preserving digital content. Even more striking is the extremely low adoption of blockchain technology, with only 5.3% of libraries employing it for preservation purposes. This suggests that blockchain remains largely unexplored or misunderstood within the library context in the region. Furthermore, only 63.2% of respondents reported regular staff training on preservation methods, highlighting a need for increased investment in human capacity building. Overall, the findings suggest that while university libraries in Rivers State are actively engaged in preserving their resources, there is still significant room for advancement, especially in the areas of digital preservation and staff development.

Table 2: The attitude of librarians towards preservation of information resources

Item	SA (%)	A (%)	D (%)	SD (%)
I consider preservation as a core professional responsibility	52.6%	36.8%	10.5%	0.0%
Follows preservation practices in daily work	47.4%	31.6%	15.8%	5.3%
Believes digital preservation is essential	57.9%	26.3%	10.5%	5.3%



Willing to undergo preservation training	68.4%	21.1%	10.5%	0.0%
Prioritizes preservation even with limited resources	42.1%	36.8%	15.8%	5.3%
Advocates for funding/resources for preservation	36.8%	31.6%	21.1%	10.5%
Supports integrating traditional and digital methods	63.2%	26.3%	10.5%	0.0%
Views preservation as a collective duty among staff	52.6%	31.6%	10.5%	5.3%

The attitude of librarians towards preservation and conservation techniques of library resources in Rivers State appears to be generally positive and proactive. A majority of the respondents (89.4%) agree or strongly agree that preservation is a core professional responsibility, with only a small fraction disagreeing. This suggests a strong foundational mindset in favor of preserving resources. Similarly, a high percentage of librarians (73.7%) actively follow preservation practices in their daily work, although some (21.1%) still show either a neutral or negative stance, indicating room for improved engagement. Librarians also express a progressive attitude toward digital preservation, with 84.2% agreeing that it is essential for sustainability. Notably, 89.5% are willing to undergo further training in preservation techniques, which highlights a clear openness to professional development in this area. When it comes to prioritizing conservation in resource-constrained situations, 78.9% of librarians still show commitment, though slightly fewer respondents (73.7%) advocate for funding or resource allocation—suggesting some hesitance or possibly institutional limitations. An overwhelming majority (89.5%) believe that both traditional and digital preservation methods should be integrated, underscoring a balanced and inclusive outlook on conservation practices. Finally, over 84% of librarians view preservation as a collective responsibility, suggesting strong teamwork ethics in managing preservation activities. Overall, the data reflects a professional community that recognizes the value of preservation and is largely willing to support and improve existing practices. However, some gaps remain in proactive advocacy for resources and full implementation of best practices across all institutions.



Challenges in Preservation of Information Resources

Item	1 (SD)	2 (D)	3 (A)	4 (SA)
Lack of funding is a major challenge in preserving information resources.	0 (0%)	2 (11%)	9 (47%)	8 (42%)
Technological obsolescence poses a risk to long-term preservation.	0 (0%)	1 (5%)	6 (32%)	12 (63%)
There is inadequate skilled personnel for preservation tasks.	0 (0%)	3 (16%)	8 (42%)	8 (42%)
Environmental conditions affect preservation.	1 (5%)	3 (16%)	10 (53%)	5 (26%)
Institutional policies are not supportive of preservation efforts.	2 (11%)	4 (21%)	8 (42%)	5 (26%)
There is a lack of awareness about the importance of preservation.	1 (5%)	2 (11%)	9 (47%)	7 (37%)
Digital resources are more challenging to preserve than print materials.	1 (5%)	3 (16%)	9 (47%)	6 (32%)
Inadequate infrastructure hinders effective preservation.	0 (0%)	1 (5%)	7 (37%)	11 (58%)

Based on the analysis technological obsolescence emerged as the most significant challenge, with 95% of respondents either agreeing or strongly agreeing that it poses a threat to long-term preservation. This is closely followed by inadequate infrastructure where 95% also agreed or strongly agreed, indicating widespread concern about insufficient facilities or technological support. Lack of funding was another major issue, with 89% agreement, showing that financial limitations are broadly seen as a constraint on preservation efforts. Additionally, inadequate skilled personnel was supported by 84% of respondents, highlighting a critical need for more trained staff in preservation roles. Other moderately acknowledged issues include lack of awareness at 84% and difficulty preserving digital resources at 79%, which reflect growing challenges in understanding and managing digital formats. Environmental conditions received 79% agreement,



suggesting a notable but slightly lower level of concern compared to technical or human resource issues. Lastly, institutional policy limitations were the least agreed upon, with 68% of participants recognizing them as a challenge. While not insignificant, this suggests that operational and infrastructure-related issues are seen as more urgent than policy-level shortcomings

Conclusion

University libraries in Rivers State reveals a predominant reliance on traditional and infrastructural strategies. High percentages of libraries engage in regular cleaning, dusting, climate control, and fire safety measures, reflecting a strong awareness of the importance of maintaining optimal physical conditions for information resources. Conventional methods such as binding, repair, and use of databases remain widely practiced, while digitization is gaining traction, indicating a gradual but steady shift toward digital preservation. However, advanced digital technologies like cloud storage and blockchain are underutilized, suggesting that many libraries have yet to fully embrace or access cutting-edge digital solutions. Librarians in Rivers State demonstrate a generally positive and proactive attitude toward preservation and conservation. Most consider preservation a core professional responsibility and actively apply preservation practices in their daily work. There is also a strong openness toward further training and professional development, especially in digital preservation, underscoring the workforce's readiness to enhance their skills. Regarding challenges, technological obsolescence and inadequate infrastructure emerge as the most critical threats to effective preservation. Financial constraints and lack of skilled personnel also pose significant hurdles, highlighting the need for increased investment in both resources and human capital. Other challenges include lack of awareness, difficulty in preserving digital resources, and environmental factors.

Recommendation

1. University libraries should integrate advanced digital preservation methods such as cloud storage and digitization systems alongside traditional practices to ensure a more comprehensive and sustainable preservation strategy.
2. Librarians should be continuously engaged in professional development programs to strengthen their already positive attitudes toward preservation and to bridge the gap in digital competencies among staff.



3. University libraries should prioritize investment in infrastructure and modern technologies to mitigate the critical challenges of technological obsolescence and inadequate facilities that hinder effective preservation.

References

- AbdulRahman, A. R., & Mohezar, S. (2020). Ensuring continued use of a digital library: A qualitative approach. *The Electronic Library*, 38(3), 513-530.
- Abubakar, F., & Alegbeleye, G. O. (2024). Attitude of library personnel towards preservation practices in academic libraries in Niger State, Nigeria. *Journal of Library Services and Technologies*, 6(1), 26-39.
- Alegbeleye, G.O. (2008, January 24). Past imperfect, present continuous, future perfect: the challenges of preserving recorded information in Nigeria. An inaugural lecture delivered at the University of Ibadan.
- Bassey, R S. (2015). Use of library in general studies programme. In R. S. Bassey, N. B. Edem, and O. E. Ani (Eds.), *Library use and information literacy in Nigerian universities*. Calabar, Nigeria: Adonai Publishing.
- Cirone, M., Figoli, A., Galiano, F., La Russa, M. F., Macchia, A., Mancuso, R. & Ruffolo, S. A. (2023). Innovative methodologies for the conservation of cultural heritage against biodeterioration: A review. *Coatings*, 13(12), 1986.
- Ifijeh, G. (2014). Adoption of digital preservation methods for theses in Nigerian academic libraries: Applications and implications. *The Journal of Academic Librarianship*, 40(3-4), 399-404.
- Jain, V., Mohanan, P., & Naira, M. (2025). Role of artificial intelligence in management and preservation of old text through new tech. *Artificial Intelligence-Enabled Businesses: How to Develop Strategies for Innovation*, 25-38.



Kalusopa, T., Mosweu, T., & Bayane, S. (2021). Implementation of Enterprise-Wide Systems to Manage Trustworthy Digital Records in Botswana's Public Sector. *New Review of Information Networking*, 26(1–2), 50–69.

<https://doi.org/10.1080/13614576.2021.1898035>

Mabawonku, T. O., Ademilua, O. S., & Olusanya, F. O. (2023). Preservation practices in university

libraries in South-West Nigeria. *Gateway Information Journal*, 24(1 & 2), 62-76.

Masenya, T. M., & Ngulube, P. (2020). Factors That Influence Digital Preservation Sustainability in Academic Libraries in South Africa. *South African Journal of Libraries and Information Science*

Matlala, M. E., Ncube, T. R., & Parbanath, S. (2022). The state of digital records preservation in South Africa's public sector in the 21st century: a literature review. *Records Management Journal*, (ahead-of-print).

Obaseki, D., & Carter, J. E. (2021). Training specialists in developing countries: A new model. *Journal of the Pan African Thoracic Society*, 2(1), 4-5.

Ogunmodede, T. A. & Ebijuwa, A. S. (2013). Problems of conservation and preservation of library resources in African academic libraries: A review of literature. *Greener Journal of Social Sciences*, 3(1), 050-057.

Olatokun, W. M. (2008). A survey of preservation and conservation practices and techniques in Nigerian university libraries. *Library and Information Science Research E-Journal*, 18(2), 1-18. <https://dx.doi.org/10.32655/LIBRES.2008.2.3>

Opara, O., Nsirim, O., & Iroka, P. L. (2023). Technological Methods and Security of Information Resources in Dame Patience Goodluck Jonathan Automated Library, Ignatius Ajuru University of Education. *Southern African Journal of Security*, 1, 17-pages.



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- Osunrinde, A. A. & Adetunla, B.O.G. (2018). The Effect of Librarians' Knowledge and Funding of Preservation and Conservation Practices in Public University Libraries in Nigeria. *Journal of Library & Information Science*, Vol.8 No.3,
- Oyeniya, A. S. (2015). Preservation and conservation of information resources. A paper presented at National Workshop on the Management and Protection of University Records, July, 19-23, 2015, Ibadan, Nigeria
- Oyighan, D., Ukubeyinje, E. S., David-West, B. T., & Oladokun, B. D. (2024). The role of AI in transforming metadata management: Insights on challenges, opportunities, and emerging trends. *Asian Journal of Information Science and Technology*, 14(2), 20-26.
- Udo-Anyanwu, A. J. & Mezieobi, S. (2020). Preservation of information materials for effective service delivery in academic libraries in Imo State. *Journals of Applied Information Science and Technology*, 13(1), 229-23.
- Yusuf, F. L. (2024). Preservation of Local Cultural Heritage through Library Archives: Challenges and Strategies. *Lapai International Journal of Management and Social Sciences*, 16(1), 164-175.