

Enhancing Access to Local Collections through Digitisation in Selected University Libraries in South-West Nigeria

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ABSTRACT

This study examined the digitisation of local collections in selected university libraries in South-West Nigeria. The study covered six universities comprising federal and private institutions across Ogun, Oyo and Osun States, Nigeria. A descriptive survey research design was adopted for the study. Data were collected through a structured questionnaire administered electronically using Google Forms to library personnel in the selected universities. A total of 126 valid responses were received and analysed using descriptive statistics such as frequency counts, percentages, mean and standard deviation with the aid of SPSS. The findings revealed a high level of digitisation across the selected university libraries, with respondents demonstrating positive perceptions and attitudes towards digitisation initiatives. The most digitised local collections identified were journal articles, theses and dissertations, project reports and conference papers. The study further showed that digitisation improves retrieval speed, enhances resilience to disasters, strengthens information security and promotes cooperation and information exchange among libraries. Despite these benefits, major challenges affecting digitisation efforts included high cost of digitisation equipment, poor internet connectivity, inadequate funding and technical infrastructure limitations. To address these challenges, the libraries adopted strategies such as staff training and career development, adoption of new technologies, user participation and awareness creation through media platforms. The study concludes that effective digitisation of local collections requires adequate technological infrastructure, skilled personnel, institutional support and sustainable funding. It therefore recommends increased funding, improved technical facilities, regular staff training and stronger inter-library collaboration to enhance digitisation initiatives in university libraries in Nigeria.

Key words: Digitisation, Digital preservation, Local collection, University libraries, South-West, Nigeria

INTRODUCTION

The digitisation of information resources has become a major transformation in the operations of libraries across the globe. In libraries, digitisation refers to the process of converting physical or analogue materials, such as books, manuscripts, photographs and other local collections, into digital formats that can be stored, accessed and preserved electronically (Ifijeh & Yusuf, 2020). Similarly, according to Adetoro and Okike (2022) library digitisation involves the systematic transformation of print and analogue collections into digital formats using technology, in order to enhance easier access, prolonged preservation and better resource sharing across a wide range of users. More recently, Olajide and Adesina (2023) described library resource digitisation as the process of producing digital versions of traditional library materials to facilitate access, ensure preservation and integrate library services into the digital knowledge economy. This digitisation process generally enables libraries to broaden their information resources beyond their physical spaces, providing users with better access to information regardless of their location. Additionally, it helps protect fragile or rare materials, particularly those with historical and cultural significance, from deterioration and loss over time.

Local collections, which often comprise of indigenous knowledge, historical documents, cultural artifacts and community archives, are of great importance for academic and research purposes. According to Nwalo (2021), local collections refer to resources that capture the historical, cultural, social and intellectual essence of a particular community or region. The author noted that these collections often include indigenous knowledge, unpublished manuscripts, rare books, archival records and other culturally significant materials that are carefully preserved by libraries and similar institutions. Mutula (2022) described local collections as special materials kept by libraries that represent the cultural identity, historical growth and intellectual contributions of a specific geographic community or institution.

Local collections could also refer to the intellectual outputs of individuals and institutions within a specific geographical location. These intellectual outputs could include scholarly works such as journals, textbooks, conference proceedings, dissertations, theses, technical reports, creative works, and other publications produced by scholars, researchers and academics residing or affiliated with the locality. Local collections have enduring value and deserve to be preserved. Anyaoku, Echedom and Baro (2021) highlighted that preserving local collections is essential, not only for scholarly research, but also for preserving cultural heritage and propmoting a sense of identity. In many countries, local collections form the backbone of special library holdings, which helps to distinguish individual institutions and contribute significantly to the enrichment of global cultural heritage.

Globally, libraries are adopting digitalisation as a key strategy to protect their collections and expand access to information. Leading institutions such as the British Library, the Library of Congress, and the National Library of Australia have launched major digitisation projects, successfully making thousands of rare and valuable materials accessible online (Mills, 2021). Similarly, in Nigeria, academic and research libraries are actively pursuing digitalisation. Notable examples of progress include the Kenneth Dike Library at the University of Ibadan, which is digitising rare books, theses and special collections (Adeleke & Abdullahi, 2021). Ahmadu Bello University Library in Zaria, according to Dawha and Afolabi (2020), is also digitising theses, dissertations and rare documents to improve resource sharing through its institutional repository. Likewise, Covenant University's Centre for Learning Resources digitise student projects and institutional documents (Oluwaseun & Oyewole, 2021). The University of Nigeria, Nsukka, is focusing on digitising indigenous knowledge and historical archives (Ezeani & Ezema, 2020). Additionally, the National Library of Nigeria has started modernising and digitising government publications and historical resources to help preserve the country's intellectual heritage (National Library of Nigeria, 2021).

These initiatives have been driven by advancements in technology, increasing user demand for remote access, as well as the urgent need to preserve delicate materials. Additionally, international collaborations like the UNESCO Memory of the World Programme emphasised the significance of digitising local and historical collections to avoid their permanent loss from disasters, deterioration or conflict (UNESCO, 2022). However, despite these positive trends globally and locally, the digitisation of local collections faces significant challenges, especially in developing countries like Nigeria. Issues such as inadequate funding, poor technological infrastructure, lack of skilled personnel and limited institutional support often hinder successful implementation of digitisation projects (Okike & Adetoro, 2022). Recognising these challenges is vital, especially within the Nigerian context, where university libraries are working to integrate their traditional service roles with emerging digital responsibilities. Thus, this study seeks to examine the digitisation efforts of university libraries in South-West, Nigeria.

Statement of the problem

The digitalisation of library resources has become a crucial aspect of modern information management, particularly in university libraries where access to knowledge and preservation of intellectual heritage are top priorities. While many libraries around the world have made significant progress in digitising their collections, including rare and local materials, the situation in many developing countries, including Nigeria, remains challenging. Local collections, which include indigenous knowledge, historical documents, cultural records and community archives, are especially vulnerable to physical deterioration, damage or total loss if not properly preserved and made digitally accessible.

In Nigeria, although several university libraries have initiated digitisation projects, the level of implementation and effectiveness varies considerably across institutions. Challenges such as inadequate funding, poor technological infrastructure, irregular power supply, insufficient technical expertise, copyright concerns and lack of comprehensive digitisation policies continue to hinder successful digitisation efforts. While some libraries such as Kenneth Dike Library in the University of Ibadan, Covenant University library, among others, have begun digitisation projects; there is still a lack of comprehensive understanding of the actual progress made, the challenges being faced, as well as the effectiveness of strategies used. It against this backdrop that this study examines the digitisation of local collections in selected university libraries in South-West Nigeria.

Research question

The following research questions are answered in the study:

1. What is the current status of digitisation efforts in the selected university libraries in South-West, Nigeria?
2. What are the perceptions and attitudes of library staff towards digitisation initiatives in the selected university libraries in South-West, Nigeria?
3. What is the level of digitisation of local collections in the selected university libraries in South-West, Nigeria?
4. What is the impact of digitisation of local collections in the selected university libraries in South-West, Nigeria?
5. What are the challenges faced during the process of digitising local collections by the selected university libraries in South-West, Nigeria?
6. What are the strategies for overcoming challenges and improving digitisation efforts in the selected university libraries in South-West, Nigeria?

LITERATURE REVIEW

Digitisation of local collections in university libraries

The digitisation of local collections in university libraries has become an important method for preserving cultural heritage, increasing access to indigenous knowledge and enhancing scholarly communication. These local collections, which include rare books, manuscripts, theses, historical documents and community archives, are being digitised to remove physical barriers to access and to integrate these resources into global knowledge networks. Empirical research shows that the digitisation of local collections is uneven across regions, especially between developed and developing countries. For example, Ifijeh and Yusuf (2020) reported that academic libraries in developed countries such as the United States, Canada and the UK have digitised around 70–80% of their special collections. In contrast, institutions in Sub-Saharan Africa have digitised only about 15–20% of their collections, mainly because of limited funding and inadequate technical expertise.

In India, Tangi and Sharma (2018) found that only 30% of the academic libraries surveyed had active digitisation programmes, most of which were carried out as isolated projects rather than as part of a sustained approach. Similar patterns were observed by Abubakar and Adebayo (2021) in Nigerian university libraries, where digitisation efforts are irregular and often depend on donor support or grant funding. Makori and Njiraine (2016) demonstrated that the digitisation of local collections in Kenyan universities resulted in a 42% increase in citations of archival documents in postgraduate research, which emphasise the academic benefits of making rare and locally significant resources digitally available.

Technological infrastructure is very important to determining how advanced a country's digitisation efforts are. According to a UNESCO report (2019), cloud-based storage systems and open-source tools like DSpace and Greenstone assist institutions in overcoming obstacles to digitising their collections. However, many institutions

still face challenges such as limited internet bandwidth and a shortage of IT staff, making it difficult to properly maintain and operate these digital platforms. Moreover, Kalusopa and Zulu (2009) pointed out that the absence of robust metadata standards and digital preservation policies poses a significant challenge to the long-term sustainability of digitised collections. Interestingly, the COVID-19 pandemic accelerated digitisation efforts. Olapade and Adebayo (2022) observed a 50% increase in digitisation efforts after 2020, as academic libraries shifted their focus toward providing remote access. However, the progress in digitising local materials has not kept pace with the general expansion of electronic resources, largely due to concerns regarding intellectual property and the absence of clear digitisation policy frameworks.

Attitudes and perceptions of library personnel towards digitisation

While technological advancements offer opportunities for improved access and preservation of library information resources, the success of digitisation initiatives often depends heavily on the attitudes and perceptions of library personnel. Many studies show that staff generally support digitisation, especially when they believe it makes their work more efficient and helps users access information easily. For example, a study by Pratiwi (2024) found that librarians in Samarinda, Indonesia, largely supported the integration of digital systems into archiving processes. The librarians recognised the value of digitisation for improving access to information, although some showed hesitation due to limited technological training and experience. Similarly, Blair (2025) explored the historical and modern perspectives on library digitisation, revealing that while digitisation offers immense archival value, personnel often express concerns about workload increases and the potential loss of traditional librarianship roles.

Libraries that involve staff in planning and offer continuous training tend to see more enthusiasm for digital tools. Smith and Mulindwa (2022) explained that when digitisation is seen as a team effort rather than a top-down decision, staff are more motivated. Resistance often comes from fears of job loss, data security concerns, and unreliable technology. Lack of clear policies and insufficient infrastructure can further reinforce negative perceptions. As pointed out by Odili and Ugwuanyi (2021), librarians in Nigerian university libraries voiced concerns about poor digital infrastructure and unreliable internet access, which significantly affected their perceptions of digitisation benefits. User behaviour also plays a role.

Library personnel tend to view digitisation more favorably when they witness increased patron satisfaction and usage. A study by Ahmed and Osei (2023) found that library staff in Ghana became more optimistic about digitisation once they saw improvements in user engagement and information retrieval. Additionally, professional identity and job satisfaction are also linked to attitude towards digitisation initiatives among library personnel. Personnel who view digitisation as a skill-enhancing opportunity rather than a threat to their traditional role are more likely to embrace digital change. For instance, an empirical study in South African libraries revealed that younger staff with IT competencies exhibited more positive perceptions compared to older staff who felt alienated by rapid digital changes (Nkondo et al., 2020).

Impact of digitisation of local collections

Digitisation has significantly improved the accessibility of library materials by enabling users to retrieve information remotely and quickly. Onwueme et al. (2024) explained that digital technologies are changing libraries in Nigeria from traditional repositories into modern information hubs, removing the space and time limits that once restricted access to essential academic and research resources. A major benefit of digitisation is the expanded access to library resources. By converting physical materials into digital forms, libraries remove geographic and time related barriers, so users can access information at any time. Tripathi, Bhushan and Upreti (2025) noted that digital libraries empower researchers and learners by making large collections of knowledge available online, which is especially useful in areas with limited physical infrastructure. Digitisation also helps preserve fragile or old documents by reducing physical handling, which can cause damage. Jumamuratova (2025) noted that digital storage, organised metadata and backup strategies improve long-term preservation. An example is the San Diego Natural History Museum, where digitisation and careful handling extended the life of marine specimen collections, as described by Horsley et al. (2024).

Digitisation promotes inclusive access to knowledge for underserved and marginalised populations. Iijima et al. (2025) emphasised that digitised health and library services allow older adults and people in remote areas to remain informed and engaged. This broader access supports educational equality and contributes to a more informed society. However, digitisation also presents challenges, such as digital preservation and sustainability issues. Digital files can be corrupted, outdated, or poorly managed. Chernenko (2025) pointed out that maintaining digital materials requires continuous investment in infrastructure and staff training. Additionally, libraries must follow copyright rules, manage digital rights and ensure cybersecurity to provide ethical and secure access. This is in line with the submission of Pandey and Kumar (2020) who highlighted that although digitisation can effectively support preservation efforts, but inadequate infrastructure combined with the absence of clear national policies poses a significant risk, potentially causing digital surrogates to fall short of delivering the robust, long-term protection for which they were designed.

Challenges in digitising local collections

Despite offering significant advantages, the digitisation of local library collections presents numerous challenges. Pandey (2014) identified financial limitations as a primary obstacle for academic libraries, noting that many institutions lack sufficient funding for essential equipment such as high-resolution scanners, digital storage systems and conversion software. Mohammed (2016) further observed that continuous operational expenses, including maintenance, software updates and infrastructure improvements, create sustainability issues within restricted budget environments. Technical challenges also significantly impact digitisation efforts. Otubelu and Ume (2015) explained that transforming analogue materials into functional digital formats requires advanced hardware and reliable software capable of ensuring long-term preservation. They highlighted how establishing consistent digitisation protocols and managing format compatibility issues often delay progress, which often require libraries to continually invest in both technology and personnel training to remain current.

Legal and metadata considerations add further complexity to digitisation efforts. According to Mohammed (2016), local collections frequently contain sensitive or copyrighted materials which necessitate thorough legal review to prevent intellectual property conflicts. Also, Otubelu and Ume (2015) contended that without implementing standardised metadata frameworks early in the process, even well-executed digitisation projects may produce disorganised collections that impede user access. These related challenges explain the importance of university libraries establishing comprehensive policies and procedures from the beginning of digitisation initiatives.

Patra and Sahoo (2022), in their comprehensive review of 56 research papers published between 2010 and 2019 revealed multiple significant obstacles in library digitisation initiatives. Their analysis identified key challenges including substantial financial investments required for technology and personnel, difficulties in processing varied document types and formats, the time-consuming and labor-intensive nature of digitisation work, concerns regarding digital asset security, problems maintaining consistent quality standards, complexities in developing effective search and retrieval mechanisms, as well as complications in metadata creation and management. The researchers noted that these challenges were consistently reported across international contexts. Overall, these challenges require comprehensive solutions encompassing careful financial management, technological advancement, clear legal frameworks and continuous staff development.

Strategies for enhancing digitisation efforts

Studies have explored effective strategies for digitisation, highlighting challenges and solutions that institutions can adopt. For example, Chatterjee and Dey (2023) found that a well-structured infrastructure is fundamental for successful digitisation effort. Their study on Presidency University, Kolkata, India, reveals that digitisation efforts require high-speed scanners, digital storage media and robust network bandwidth to ensure seamless access to digitised materials. They further argued that integrating digitisation into institutional policies enhances sustainability and effectiveness. Otubelu and Ume (2015) identified several significant barriers to digitisation efforts in academic libraries, including financial constraints, insufficient technical knowledge among staff and technical challenges in converting traditional materials to digital formats. They recommend that libraries develop comprehensive staff training programmes and explore external funding opportunities to overcome these

obstacles. Furthermore, they advocate for the implementation of institutional repositories as a means to ensure both long-term preservation and improved accessibility of digitised materials.

In examining Nigerian university libraries, Obiozor-Ekeze (2021) highlighted policy development as a critical element in digitisation initiatives. The study suggested that successful digitisation depends on adequate funding allocation, appropriate infrastructure investment and the integration of digitisation skills into library science education. The author asserted that developing standardised policies aligned with international best practices is essential for creating sustainable digitisation initiatives over time. These studies collectively emphasised that successful digitisation efforts in university libraries requires thoughtful planning across multiple areas such as technological infrastructure, staff development, funding strategies and comprehensive policy frameworks.

METHODOLOGY

This study employed a descriptive survey research design to examine the digitisation of local collections in selected university libraries in South-West Nigeria. The study covered six universities comprising federal and private institutions across three states in the South-West geopolitical zone of Nigeria. The selected universities were Federal University of Agriculture, Abeokuta, Covenant University, University of Ibadan, Lead City University, Obafemi Awolowo University and Oduduwa University. The target participants for the study comprised professional and para-professional library personnel working in the selected university libraries. Data were collected using a structured questionnaire created through Google Forms to facilitate wider coverage and ease of participation across the institutions. The questionnaire link was distributed electronically through official and professional communication channels accessible to library personnel in the selected universities. A total of 126 valid responses were received and used for the analysis. The instrument was designed to obtain information on digitisation practices, level of digitisation of local collections, perceptions of library personnel, challenges affecting digitisation initiatives and strategies adopted for improving digitisation efforts. The questionnaire consisted mainly of close-ended items structured on Likert-type scales. The instrument was validated by experts in Library and Information Science as well as specialists in measurement and evaluation to ensure clarity, relevance and content validity of the items. Respondents were assured of confidentiality, anonymity and voluntary participation throughout the study. Data collected were analysed using descriptive statistics such as frequency counts, percentages, mean and standard deviation with the aid of Statistical Package for Social Sciences (SPSS). The findings were presented using tables for clarity and ease of interpretation. Ethical considerations were duly observed throughout the study, and all information obtained from respondents was used strictly for academic purposes.

RESULTS OF ANALYSIS

Answers to the research questions were provided in this section

Research question one: What is the current status of digitisation efforts in the selected university libraries in South-West, Nigeria?

Table 1: Current status of digitisation efforts

Status	Frequency	Percentage (%)
None	3	2.4
Low	8	6.3
Moderate	29	23.0
High	86	68.3
Total	126	100.0

The data presented in Table 1 illustrates the perceived status of digitisation efforts across selected university libraries in South-West Nigeria, as reported by library personnel. Among the 126 respondents, majority (68.3%) perceived their libraries to have achieved a high level of digitisation, while 23.0% indicated moderate progress. However, only a few respondents reported low (6.3%) or no digitisation efforts (2.4%) in their libraries. The finding suggests that digitisation initiatives are considerably established across the selected university libraries in South-West Nigeria.

Research question two: What are the perceptions and attitudes of library staff towards digitisation initiatives in the selected university libraries in South-West, Nigeria?

Table 2: Perceptions and attitudes of library staff towards digitisation initiatives

S/N	ITEMS	SA%	A%	N%	D%	SD%	\bar{x}	Std. Dev.
1	I believe digitisation initiatives have enhanced my library's operations and service delivery.	82 (65.1%)	39 (31.0%)	3 (2.4%)	1 (0.8%)	1 (0.8%)	4.59	.684
2	I feel digitisation initiatives help my library meet the evolving needs of students and faculty effectively.	78 (61.9%)	43 (34.1%)	3 (2.4%)	1 (0.8%)	1 (0.8%)	4.55	.701
3	I believe digitisation initiatives have positively influenced the reputation of my library.	75 (59.5%)	45 (35.7%)	4 (3.2%)	1 (0.8%)	1 (0.8%)	4.51	.726
4	I feel digitisation initiatives have reshaped my library's role within the academic community.	63 (50.0%)	44 (34.9%)	7 (5.6%)	6 (4.8%)	6 (4.8%)	4.21	1.083
5	I am satisfied with the institutional support and resources provided for digitisation in my library.	71 (56.3%)	42 (33.3%)	7 (5.6%)	3 (2.4%)	3 (2.4%)	4.39	.912
6	I believe digitisation initiatives have increased my library's public visibility and outreach.	84 (66.7%)	38 (30.2%)	2 (1.6%)	1 (0.8%)	1 (0.8%)	4.61	.664
7	I believe digitisation initiatives increase the risk of making many librarians' roles redundant.	48 (38.1%)	34 (27.0%)	12 (9.5%)	11 (8.7%)	21 (16.7%)	3.61	1.431
8	I feel digitisation initiatives boost user engagement with my library's resources.	81 (64.3%)	41 (32.5%)	2 (1.6%)	1 (0.8%)	1 (0.8%)	4.59	.671
9	I believe digitisation initiatives have improved librarians' attitudes and openness toward adopting new technologies.	80 (63.5%)	40 (31.7%)	4 (3.2%)	1 (0.8%)	1 (0.8%)	4.56	.715

10	I believe digitisation initiatives are reshaping the future landscape of information delivery in my library.	79 (62.7%)	42 (33.3%)	3 (2.4%)	1 (0.8%)	1 (0.8%)	4.56	.690
Weighted mean = 4.42 Criterion mean = 3.00								

Key: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SD)

Table 2 illustrates the perceptions and attitudes of library staff towards digitisation initiatives in selected university libraries in South-West Nigeria. The result revealed a weighted mean score of 4.42, which is higher than the criterion mean score of 3.00, indicating a highly positive perception and attitude of library personnel towards digitisation initiatives. Specifically, the result showed that respondents strongly agreed that digitisation initiatives have increased their library’s public visibility and outreach ($\bar{x} = 4.61$), enhanced library operations and service delivery ($\bar{x} = 4.59$), as well as boosted user engagement with library resources ($\bar{x} = 4.59$). However, respondents expressed relatively mixed opinions regarding the possibility of digitisation making some librarians’ roles redundant ($\bar{x} = 3.61$).

Research question three: What is the level of digitisation of local collections in the selected university libraries in South-West, Nigeria?

Table 3: Level of digitisation of local collections

S/N	ITEMS	VH	H	L	VL	\bar{x}	Std. Dev.
1	Textbooks	58 (46.0%)	43 (34.1%)	8 (6.3%)	17 (13.5%)	3.13	1.021
2	Thesis and Dissertation	79 (62.7%)	31 (24.6%)	4 (3.2%)	12 (9.5%)	3.41	.912
3	Journal Articles	86 (68.3%)	32 (25.4%)	3 (2.4%)	5 (4.0%)	3.58	.731
4	Project Reports	63 (50.0%)	54 (42.9%)	3 (2.4%)	6 (4.8%)	3.38	.765
5	Inaugural Lectures	57 (45.2%)	45 (35.7%)	6 (4.8%)	18 (14.3%)	3.12	1.037
6	Public Lectures	55 (43.7%)	47 (37.3%)	7 (5.6%)	17 (13.5%)	3.11	1.024
7	Technical Reports	52 (41.3%)	43 (34.1%)	9 (7.1%)	22 (17.5%)	2.99	1.126
8	Workshop Reports	49 (38.9%)	46 (36.5%)	10 (7.9%)	21 (16.7%)	2.98	1.102
9	Working Papers	51 (40.5%)	50 (39.7%)	8 (6.3%)	17 (13.5%)	3.07	1.081
10	Conference Papers	56 (44.4%)	49 (38.9%)	5 (4.0%)	16 (12.7%)	3.15	1.048
Weighted mean = 3.19 Criterion mean = 2.50							

Key: Very High (VH), High (H), Low (L), Very Low (VL)

The level of digitisation of local collections in selected university libraries in South-West Nigeria is illustrated in Table 3. The result showed that there is a high level of digitisation of local collections in the examined institutions. This is evident in the weighted mean score of 3.19, which is higher than the criterion mean score of 2.50. The result further revealed that the most digitised collections in the libraries included journal articles ($\bar{x} = 3.58$) as well as thesis and dissertations ($\bar{x} = 3.41$). Conference papers ($\bar{x} = 3.15$) and textbooks ($\bar{x} = 3.13$) were

also relatively highly digitised across the selected institutions. However, workshop reports ($\bar{x} = 2.98$) and technical reports ($\bar{x} = 2.99$) appeared to be the least digitised collections in the libraries.

Research question four: What is the impact of digitisation of local collections in the selected university libraries in South-West, Nigeria?

Table 4: Impact of digitisation of local collections

S/N	ITEMS Digitisation of library collections facilitates:	SA	A	N	D	SD	\bar{x}	Std. Dev.
1	Increased retrieval speed	77 (61.1%)	45 (35.7%)	2 (1.6%)	1 (0.8%)	1 (0.8%)	4.54	.702
2	Enhanced resilience to disasters	82 (65.1%)	40 (31.7%)	3 (2.4%)	1 (0.8%)	0	4.61	.587
3	Improved accessibility from remote areas	61 (48.4%)	58 (46.0%)	4 (3.2%)	2 (1.6%)	1 (0.8%)	4.40	.705
4	Increased prospects for cooperation	64 (50.8%)	53 (42.1%)	6 (4.8%)	2 (1.6%)	1 (0.8%)	4.40	.744
5	Improved adherence to regulations	60 (47.6%)	59 (46.8%)	4 (3.2%)	2 (1.6%)	1 (0.8%)	4.39	.726
6	Less time spent handling unique and delicate materials	63 (50.0%)	57 (45.2%)	3 (2.4%)	2 (1.6%)	1 (0.8%)	4.42	.698
7	Better circumstances for storage	58 (46.0%)	55 (43.7%)	7 (5.6%)	4 (3.2%)	2 (1.6%)	4.28	.844
8	Improved security measures	65 (51.6%)	54 (42.9%)	4 (3.2%)	2 (1.6%)	1 (0.8%)	4.43	.720
9	Enhanced accountability and transparency	64 (50.8%)	55 (43.7%)	4 (3.2%)	2 (1.6%)	1 (0.8%)	4.42	.718
10	Improved cooperation and information exchange	62 (49.2%)	58 (46.0%)	3 (2.4%)	2 (1.6%)	1 (0.8%)	4.41	.691
Weighted mean = 4.43								
Criterion mean = 3.00								

Table 4 examines the impact of digitisation of local collections in selected university libraries in South-West Nigeria. Overall, the respondents expressed strong agreement on the positive effects of digitisation across the various areas examined, with the weighted mean score of 4.43 being substantially higher than the criterion mean score of 3.00. More specifically, the respondents affirmed that digitisation of local collections enhances resilience to disasters ($\bar{x} = 4.61$) and increases retrieval speed ($\bar{x} = 4.54$). The respondents also agreed that digitisation facilitates cooperation and information exchange ($\bar{x} = 4.41$) and improves accessibility to library resources from remote areas ($\bar{x} = 4.40$).

Research question five: What are the challenges faced during the process of digitising local collections by the selected university libraries in South-West, Nigeria?

Table 5: Challenges faced during the process of digitising local collections

S/N	ITEMS	YES	NO	\bar{x}	Std. Dev.
1	High cost of digitisation equipment	98 (77.8%)	28 (22.2%)	1.78	.418
2	Poor internet connectivity	86 (68.3%)	40 (31.7%)	1.68	.467
3	Preservation of digital resources	79 (62.7%)	47 (37.3%)	1.63	.485
4	Inadequate skilled personnel	71 (56.3%)	55 (43.7%)	1.56	.498
5	Lack of standards	69 (54.8%)	57 (45.2%)	1.55	.500
6	Inadequate funding and limited budget	83 (65.9%)	43 (34.1%)	1.66	.476
7	Technical infrastructure limitations	76 (60.3%)	50 (39.7%)	1.60	.492
8	Limited staff training and expertise	68 (54.0%)	58 (46.0%)	1.54	.500
9	User adoption and engagement	81 (64.3%)	45 (35.7%)	1.64	.481
10	Integration with existing systems	80 (63.5%)	46 (36.5%)	1.63	.483
11	Limited user awareness	72 (57.1%)	54 (42.9%)	1.57	.497
Weighted mean = 1.62					
Criterion mean = 1.50					

Table 5 highlights the key challenges encountered by selected university libraries in South-West Nigeria during the process of digitising their local collections. The results indicated that the most prominent challenges were high cost of digitisation equipment ($\bar{x} = 1.78$) and poor internet connectivity ($\bar{x} = 1.68$). However, limited staff training and expertise ($\bar{x} = 1.54$) appeared to be the least reported challenge among the respondents. Overall, the weighted mean score of 1.62 indicated that the identified challenges significantly impede the successful digitisation of local collections in the examined university libraries.

Research question six: What are the strategies implemented for overcoming challenges and improving digitisation efforts in the selected university libraries in South-West State?

Table 6: Strategies implemented for overcoming challenges and improving digitisation efforts

S/N	ITEMS	Implemented	Not Implemented	\bar{x}	Std. Dev.
1	Partnerships with additional libraries and establishments	109 (86.5%)	17 (13.5%)	1.87	.342
2	Requesting grants or support from outside sources	107 (84.9%)	19 (15.1%)	1.85	.359
3	Building internal knowledge via education and career advancement	120 (95.2%)	6 (4.8%)	1.95	.214

4	Putting new technology into practice and embracing them	121 (96.0%)	5 (4.0%)	1.96	.196
5	Encouraging participation and feedback from users	118 (93.7%)	8 (6.3%)	1.94	.243
6	Enhancing technical infrastructure	116 (92.1%)	10 (7.9%)	1.92	.271
7	Increasing user awareness via media coverage	119 (94.4%)	7 (5.6%)	1.94	.230
Weighted mean = 1.92					
Criterion mean = 1.50					

Table 6 shows the strategies implemented for overcoming challenges and improving digitisation efforts in selected university libraries in South-West Nigeria. The result revealed a high level of implementation across all the examined strategies, with the weighted mean score of 1.92 exceeding the criterion mean score of 1.50. Specifically, the result showed that the most widely implemented strategies included putting new technology into practice and embracing them ($\bar{x} = 1.96$), as well as building internal knowledge through education and career advancement ($\bar{x} = 1.95$). The finding therefore suggests that the selected university libraries are actively adopting multiple strategies to strengthen and sustain their digitisation initiatives.

DISCUSSION OF FINDINGS

The study found that majority of the library personnel perceived their libraries to have achieved a high level of digitisation. Similarly, there is an overwhelming positive perception and attitude of the library personnel towards digitisation initiatives. Specifically, the library personnel affirmed that digitisation initiatives have enhanced their library operations and service delivery, increased public visibility of their resources and helped meet evolving user needs. This finding is in tandem with the submission of Makori and Njiraine (2016), who averred that the digitisation of local collections in Kenyan universities resulted in an increase in citations of archival documents in postgraduate research, which emphasise the academic benefits of making rare and locally significant resources digitally available.

The study also found a high level of digitisation of local collections in the examined institutions, with collections such journal articles, project/thesis and dissertation, project reports and conference papers, being the most digitised. An earlier study by Ifijeh and Yusuf (2020) reported that academic libraries in developed countries such as the United States, Canada and the UK have digitised around 70–80% of their special collections. In contrast, institutions in Sub-Saharan Africa have digitised only about 15–20% of their collections, mainly because of limited funding and inadequate technical expertise. Abubakar and Adebayo (2021) observed that in Nigerian university libraries, digitisation efforts are irregular and often depend on donor support or grant funding.

On the effect of digitation on local collections, the study found that digitisation enhances resilience to disasters, speeds up retrieval process, improves resource security and facilitates cooperation and information exchange. The finding of this study is supported by Tripathi, Bhushan and Upreti (2025) who noted that digital libraries empower researchers and learners by making large collections of knowledge available online, which is especially useful in areas with limited physical infrastructure. Jumamuratova (2025) also affirmed that digital storage, organised metadata and backup strategies improve long-term preservation of resources. The notable challenges encountered during the digitisation process as revealed by the study include high cost of digitisation equipment, poor internet connectivity, issues related to user adoption and engagement, integration with existing systems, preservation of digital resources and limited staff training and expertise. This finding is in tandem with the submission of Pandey (2014), who identified financial limitations as a primary obstacle for academic libraries, noting that many institutions lack sufficient funding for essential equipment such as high-resolution scanners, digital storage systems and conversion software. Mohammed (2016) further noted that continuous operational

expenses, including maintenance, software updates and infrastructure improvements, create sustainability issues within restricted budget environments.

On the strategies implemented for overcoming challenges and improving digitisation efforts, the study found that the most widely implemented strategies include building internal knowledge through education and career advancement, adopting and utilising new technologies, encouraging user participation and feedback and increasing user awareness through media coverage. This finding is line with the view of Otubelu and Ume (2015) who recommend that libraries develop comprehensive staff training programmes and explore external funding opportunities to overcome these obstacles. Chatterjee and Dey (2023) also averred that a well-structured infrastructure is fundamental for successful digitisation effort. Their study on Presidency University, Kolkata, India, revealed that digitisation efforts require high-speed scanners, digital storage media and robust network bandwidth to ensure seamless access to digitised materials.

CONCLUSION

The digitisation of local collections in university libraries is an important step towards improving access to information, preserving cultural heritage and increasing the visibility of institutions. Besides enhancing efficiency, digitisation also encourages resilience, innovation as well as inclusivity in library services. However, libraries face challenges such as limited funding, infrastructure issues and skills shortages. Despite these challenges, their dedication to continuous development and adoption of flexible strategies help to ensure sustainable growth. Ultimately, successful digitisation depends not only on technological tools but also on creating an environment with skilled staff and supportive policies to fully realise the potentials of digital scholarship.

RECOMMENDATION

The following are recommendations based on the findings of this study:

1. To sustain and expand digitisation efforts, university libraries should seek increased institutional funding, explore external grants and establish partnerships to acquire essential equipment, software and infrastructure.
2. Regular training programmes should be organised to enhance the technical skills of library personnel. This will ensure that they are well-equipped to manage digitisation processes, maintain digital collections and adopt new technologies.
3. Efforts should be made to upgrade internet connectivity, storage systems and scanning equipment to enhance the efficiency and reliability of digitisation activities, as well as to ensure seamless access to digital resources.
4. Libraries should actively create awareness about their digital resources through outreach, workshops and online platforms. This will facilitate greater user participation and utilisation of digitised materials.

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