Digital Preservation in Digital Libraries: A Systematic Literature Review

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ABSTRACT

This systematic literature review aims to explore digital preservation efforts in digital libraries. As the digital landscape evolves, digital libraries must adopt strategies to keep in line with new technologies and practices. Digital preservation has emerged as a crucial component of the library setting and a key tenet in guaranteeing the preservation of information sources. A total of 50 articles were selected out of 681 articles from Emerald Insight, Scopus, Web of Science, and Science Direct using predefined inclusion and exclusion criteria followed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement. The findings revealed that out of 50 articles, a total of 54% indicate collaboration and knowledge sharing as key benefits for effectiveness and sustainability, 38% mentioned legal considerations focusing on compliance and access, 57% revealed the best practice is collaboration, investing in technology and regularly monitoring and evaluation, and 44% revealed challenges and limitations while improving the resources accessibility and enhancing the implementation of digital preservation such as lack of skilled staff, limited funding, inadequate policies, insufficient research, unclear strategies and privacy concerns. This study highlights the need for a combined effort involving technology, policies, and partnerships to overcome these obstacles and ensure digital content remains available for future generations. It offers practical insights for libraries and researchers aiming to improve digital preservation in a fast-changing world.

Keywords: Digital Preservation, Digital Libraries, Systematic Review, Challenges, Best Practices

INTRODUCTION

Digital preservation is defined as digitalization employing computers, electronic devices, smartphones, digital cameras, recorders, and digital displays to preserve rare, fragile items and object [50]. Digital libraries are collections of documents that are made available online in electronic format, and preservation methods are used to bring those outdated materials into digital format [24]. Digital preservation is commonly aimed for long-term preservation, maintenance, and accessibility of digital content, using one or more digital preservation techniques.

As the digital landscape evolves, digital libraries must adopt strategies to keep in line with new technologies and practices. This digital landscape is clouded with ambiguity and complexity when it comes to a few types of preservation access [43]. Technological affordances have made information access a lot easier and faster [5]. Addressing other institutions and entities regarding digital preservation could form strategies and approaches to improve access and preserve and promote scholarly engagement with historical records and materials.

Due to the increased information services, it offers the user, digitization in libraries has become a technological need that libraries must implement. Consequently, someone else can receive the relevant information and services without the bother of moving or waiting [12]. To be in line with the speed, accuracy, and availability of library resources and services, digital preservation technology has been crucial to the updating process.

Digitization is a fundamental process that protects information sources against deterioration or loss over extended periods [13].

According to Reference [37], digital preservation is one of the crucial concerns in the digital age, where knowledge and information are abundant. The world is going through a unique new revolution called the information revolution, which has drastically altered the way of events, corporate operations, information handling techniques, and information sources, especially the preservation of digital information sources. As a result, digital preservation has emerged as a crucial component of the library setting and a key tenet in guaranteeing the preservation of information sources in all their formats. Ensuring cultural and intellectual legacy is maintained while making it accessible over time is the main goal of digital preservation [26].

Digital preservation in libraries faces numerous challenges, including capturing user context, ensuring long-term accessibility, and addressing legal and ethical considerations. Research in digital preservation remains limited, with theoretical, methodological, and technological challenges needing attention to ensure the sustainability and authenticity of digital materials [46]. Digital preservation research must address issues of capturing, storing, and utilizing user and context information, like challenges faced by the digital library community [16]. Overcoming these challenges requires interdisciplinary collaboration and the development of the best practices to ensure long-term viability and accessibility.

To accomplish the goal, the subsequent four research questions were defined:

RQ1. What are the main strategies for legal and copyright compliance in preservation practices in digital libraries?

RQ2. What standards and best practices are most implemented in digital preservation for digital libraries?

RQ3. What are the benefits of collaboration and knowledge sharing in enhancing the effectiveness and sustainability of digital preservation in digital libraries?

RQ4. What are the challenges and limitations of digital preservation in digital libraries?

METHODOLOGY

This section presents the systematic literature review process used for this investigation. The procedure, which outlines certain measures to be taken throughout the review process, has been utilized to guarantee the uniformity of the literature review [40]. By following predetermined procedures, other researchers conducting the same literature study will be able to replicate the findings.

Data collection

The systematic review rules outlined by Hemingway and Brereton (2009) were adopted for the literature review [25]. As mentioned, the review focused on identifying digital preservation in digital libraries settings. Consequently, restrictions were imposed on specific types of libraries, such as those in higher institutions during the literature search.

Selection of article databases

The selection of articles for this paper is retrieved from Perpustakaan Tun Abdul Razak (PTAR) My Knowledge Management portal in the Library and Information Science category from a set of article databases which are Scopus Elsevier, Web of Science, Emerald Insights, and Science Direct. The considerations for selection are subject coverage, accessibility, full-text availability, and search features.

Search terms

Searching articles are conducted by application of information retrieval techniques which are Boolean Operators: Direct quotes, AND, OR to narrow the relationships between keywords in a search and construct

more targeted results which:

1. Digital preservation AND;
2. Digital libraries AND;
3. Challenges OR Legal consideration OR Best practice OR Standards OR Collaboration

Selection of article databases

An inclusion and exclusion criteria were constructed to ensure the article database retrieved met the pre-set criteria. The search was operated in advanced search for a date range between 2017 to 2024 in journal article content type.

Table 1 Inclusion Criteria

Inclusion criteria	Motivation
Date range publication year: 2019-2024	Publication dates range from 2019 and forward
Focused on digital preservation	Concentrating research on digital preservation is a prerequisite
Research on practices in digital libraries	Concentrating research on practices in digital libraries is a prerequisite
Language: English	Articles must be in the English language
Content type: Journal articles	Articles must be peer-reviewed

Data screening: The screening with inclusion and exclusion process is defined in the PRISMA flow chart as illustrated in Figure 1.0. Records screened in total of 681 articles with initial review of titles and abstracts which resulted in the removal of 52 articles duplicates in the databases, Next, studies on other than digital preservation in digital libraries were excluded (n=240). This exclusion process screened 389 studies with articles excluded for full text not accessible (n=120), language (n=9) and articles not focused on the subject areas of information science (n=210) that were retrieved for inclusion in the study.

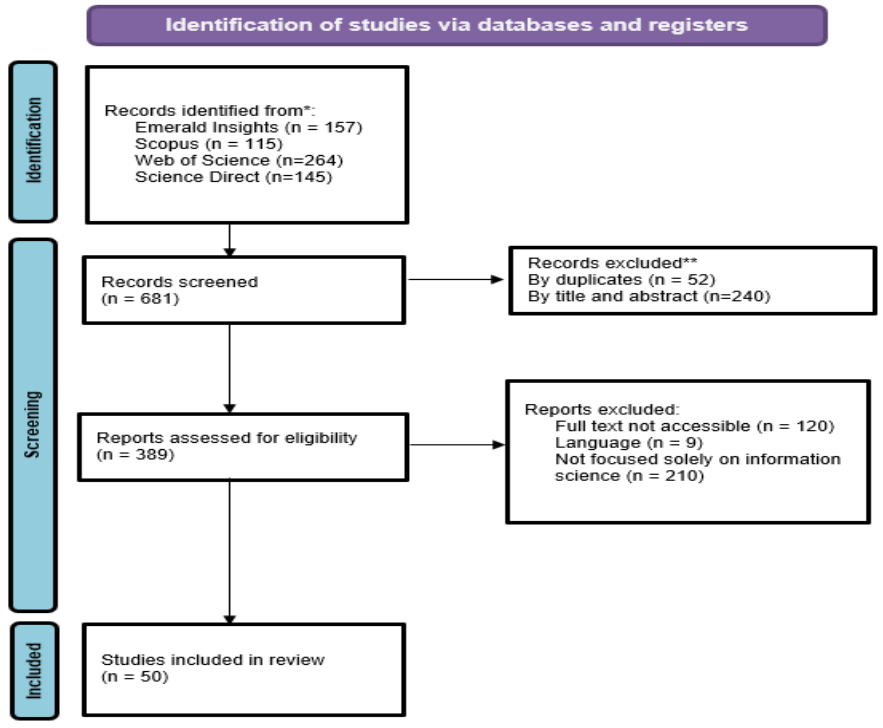

Fig. 1 PRISMA flow diagram

Data analysis

The papers were classified and analyzed in three categories:

1. Theoretical or conceptual framework
2. Empirical works
3. Theoretical and Empirical works

Content analysis was selected as the analysis method for this study. The study aims to identify themes by examining the existing research on digital preservation in digital libraries. Additionally, it is anticipated that most of the articles will avoid dealing with statistical data that is easily comparable. Articles selected through the selection process were decoded and categorized into the following categories: legal considerations, standards and best practices, collaboration and knowledge sharing, and challenges and limitations.

RESULTS

The results from searching for a literature review resulted in 681 research papers. Research publications were located using pre-specified search terms. With inclusion and exclusion criteria applied, 50 significant articles were selected for the systematic review of digital humanities practices in academic libraries. The results were carefully reviewed to ensure that the data analysis was relevant, reliable, and consistent with the research objectives of this paper.

Table 2 Search Result from Different Databases

Database	Search string	No. of research paper
Elsevier Scopus	digital AND preservation AND digital AND libraries AND challenges OR legal AND considerations AND best AND practices OR standards OR collaborations AND ((LIMIT-TO (SUBJAREA, "SOCI")) AND (LIMIT-TO) (DOCTYPE, "ar")) AND (LIMIT-TO) (LANGUAGE, "English"))	115
Web of Science	(((((ALL= (digital preservation)) AND ALL= (digital libraries)) OR TS=(challenges)) AND TS=(collaborations)) AND TS=(standards)) AND TS=(best practices)	264
Emerald Insights	(content-type: article) AND (digital preservation AND (digital libraries) AND (legal considerations) AND (collaboration) AND (challenges) AND (standards) AND (knowledge sharing))	157
ScienceDirect	(digital preservation AND digital libraries) OR (challenges AND best practices AND collaborations AND standards AND legal considerations)	145

Research designs

The designs of the research papers were analyzed to ensure the validity and reliability of the systematic reviews of digital preservation in digital libraries. 50 research papers were selected and analyzed. Three categories were identified to discover research strategies which are theoretical or conceptual framework (qualitative), empirical works (quantitative), and theoretical and empirical works (mixed methods).

As shown in Figure 2.0, out of 50 articles retrieved, a total of 26 articles 52% were identified as empirical works, 14 articles 28% were identified as theoretical works, and 10 articles 20% were identified as theoretical and empirical works. The qualitative methods used in studies on digital preservation include literature reviews, theoretical analyses, and talks to investigate theories, models, and conceptual frameworks. While quantitative

methodology employs quantitative methods, such as experiments, surveys, or statistical analyses, to investigate aspects of digital preservation mixed methods employ integrated theoretical models and actual data, offering a holistic viewpoint through integrating qualitative and quantitative methodologies. The research designs for 50 selected articles on digital preservation in digital libraries exhibit a balanced, diverse methodological landscape, with empirical studies being the most prevalent, emphasizing theoretical and practical perspectives.

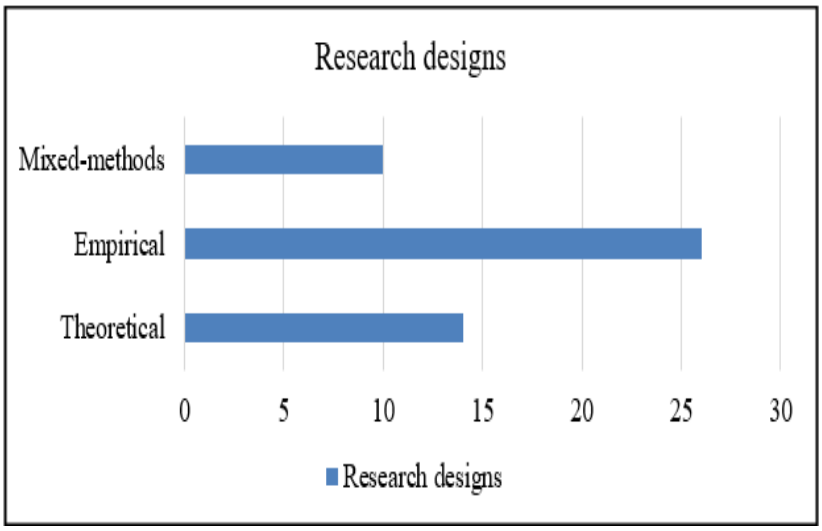

Fig. 2 Research designs

The studies comprising (n = 26) empirical studies primarily utilized case studies, surveys, and interviews to explore the digital preservation activities in digital libraries. For example, case studies of the Digital Preservation Working Group (DPWG) identified a common need to develop digital preservation workflows to share knowledge and coordinate digital preservation activities [31]. Qualitative data collected through interviews with respondents from Ghanaian academic libraries discover available standards and practices that seem inadequate for long-term preservation in the institutional repositories [2]. A survey of research methods revealed institutional repositories help spread academic research, increase readership, improve access to local content, minimize damage, preserve library space, and help Nigerian research discoveries become more widely known [39].

Theoretical studies (n = 14) highlighted frameworks that offer insights into the accessibility and sustainability of digital library systems and archival systems, focusing on the long-term effectiveness of digital information and information systems. For example, DeLone and McLean's Information System Success Model (1992) provides a comprehensive framework for evaluating the effectiveness of information systems. The Open Archival Information System (OAIS), archiving system conceptual framework seeks to protect and sustain digital information's long-term accessibility. Mixed-methods studies (n = 10) integrated real-world applications with theoretical understanding. For example, visual models showing the research process by Morse (1991), Creswell et al. (2003), and Creswell (2005). To achieve triangulation, the study combined a quantitative questionnaire with one-on-one qualitative in-depth interviews. This involved document reading, observation, and questionnaire preparation. Best practices were combined with theoretical insights, a study by Dressler V. (2017), an analysis of digital preservation policy at ARL institutions assessing the benefits and drawbacks of the policies at ARL member institutions [18].

The following sub-sections provide a discussion of the SLR research topics addressing the proposed study's RQs.

Legal and copyright Considerations/Access and Legal Compliance (RQ1): The first research question discussed is What are the main strategies to ensure legal and copyright compliance in preservation practices in digital libraries? 38% of the papers have revealed the key legal and copyright considerations for digital preservation in digital libraries, focusing on compliance and access. Directives support digital libraries' adaptation to technological advancements and navigate copyright complexities, enabling broader digital access and preservation. 20% of theoretical works revealed copyright and legal issues are key factors affecting digital

preservation sustainability. 15% of empirical research found the key factors include effective tools, reliable repositories, skilled staff, institutional support, and effective management.

Source:

Author	Title	Significant findings
(Rodgers , 2018)	Buy, Borrow, or Steal? Film Access for Film Studies Students	Students are increasingly resorting to digital piracy to access the required films, surpassing the use of the library's Reserve Desk. This trend highlights the significant challenges faculty and librarians face in providing effective and legal access to films for coursework. Moreover, students express a clear preference for online streaming platforms, emphasizing the demand for more convenient and accessible options to meet their academic needs.
(Masenya & Ngulube, 2019)	Digital preservation practices in academic libraries in South Africa in the wake of the digital revolution	Copyright issues involve obtaining permission to use protected content and ensuring intellectual property rights for long-term preservation. Directives support digital libraries' adaptation to technological advancements and navigate copyright complexities.
(Masenya & Ngulube, 2020)	Factors that influence digital preservation sustainability in academic libraries in South Africa	This paper revealed that the major factors influencing the digital preservation sustainability of academic libraries in South Africa are copyright and legal issues. Key factors for sustainable digital preservation include copyright management, reliable repositories, skilled staff, institutional support, and effective tools. The study suggests a preservation model that groups these factors into management, resources, and technology. The study proposes a conceptual model for the preservation of digital resources in academic libraries, mapped with the Open Archival Information System (OAIS) reference model.
(Ryan et al., 2022)	Managing and accessing web archives: Irish practitioners' perspectives	The paper explores how the NLI has built its selective web archive over the past decade to address the absence of large-scale web archiving solutions. It highlights Ireland's unique legal challenges that limit large-scale archiving of the Irish web, the NLI's efforts to overcome these barriers, and the serious implications of current laws for data loss and long-term access to Ireland's digital heritage.
(Akinola et al., 2024)	Preservation of theses and dissertations in the era of digitization: a case study of selected universities in Oyo state, Nigeria	The key challenges encountered in the digital preservation of theses and dissertations include the lack of a clear policy, inadequate funding, insufficient staff training, poor internet connectivity, and copyright issues.

Standard and Best Practices (RQ2*):* The second research question is What standards and best practices are most implemented in digital preservation for digital libraries? Standards refer to established rules, guidelines, or specifications to ensure consistency, compatibility, and quality in digital library systems and operations. Best Practices, however, are widely accepted approaches, methods, or procedures that have proven effective through experience. They are recommendations rather than formal requirements and are often used to complement standards to enhance digital library workflows. Based on 50 articles, 57% have mentioned that collaboration is one of the best practices in Digital Preservation in Digital Libraries. There are 31% of the articles attached to the importance of technology investment as a standard for digital preservation while there

are 12% mentioned monitoring and evaluation as standard and best practices in implemented digital preservation.

Sources:

Author	Title	Significant findings
(Mannheimer & Cote, 2017)	Cultivate, assess, advocate, implement, and sustain: A five-point plan for successful digital preservation collaborations	In this article, there are five practices highlighted. The practices are, to cultivate a foundation of knowledge and identify a shared vision, Assess the current digital preservation landscape at each institution, Advocate for the value of digital preservation activities, implement shared digital preservation services and Sustain group activities, and establish structures for ongoing support.
(Dressler, 2017)	The state of affairs with digital preservation at ARL member libraries	The University Libraries adhere to the following principles, manage digital content with understanding, create digital content with supporting metadata, commit to life cycle management of digital content, and define, plan, and implement digital preservation activities that make the best use
(Rafiq & Muhammad, 2024)	Preserving cultural heritage: digital preservation in small community libraries	The selection of sustainable file formats that ensure long-term access and compatibility can play a key role in digital preservation. Likewise, compliance with standards and best practices can also play a key successful role.
(Carroll & Mallon, 2021)	Using digital environments to design inclusive and sustainable communities of practice in academic libraries	Communities of practice, which offer a flexible, collaborative professional development environment open to senior and junior staff, offer a potential means of capturing the benefits of traditional and peer mentoring models. Originally defined by Lave and Wenger, communities of practice are groups formed by practitioners who meet regularly to explore a specific topic, refine a skill, or share expertise to improve their professional practice
(Sherriff, Benson & Atwood, 2019)	Practices, Policies, and Problems in the Management of Learning Data: A Survey of Libraries' Use of Digital Learning Objects and the Data They Create	The author identified a library-level policy specific to learning data and it is this set of responses that indicated the highest level of adherence to best practices regarding student learning data. Twenty-five percent of responses (potentially overlapping with the 13%) identified a library-level policy with general applicability to user data, though it was unclear how adequately these policies were addressing learning data issues. These statistics align with Perry et al.'s finding that a minority (25%) of ARL respondents reported having library staff documents or guidelines that informed any participation in library analytics initiatives.

Collaboration and Knowledge Sharing (RQ3): Related to the research questions What are the benefits of collaboration and knowledge sharing in enhancing the effectiveness and sustainability of digital preservation in digital libraries? 54% of the papers have identified collaboration and knowledge sharing as key benefits for improving the effectiveness and sustainability of digital preservation efforts by combining knowledge, encouraging creativity, offering assistance and mutual support, cost reduction, efficient problem-solving, and

long-term program development. 16% of empirical works have also discovered that institutional repositories of digital libraries can gain from collaborating with professionals to ensure ethical, legal, and secure handling of research data, benefiting both the research community and the research community. 24% out of 50 papers discovered that open data thrives and advantages community involvement and trust, essential for sustainability and growth.

Sources:

Author	Title	Significant Findings
(Mannheimer & Cote, 2017)	Cultivate, assess, advocate, implement, and sustain: A five-point plan for successful digital preservation collaborations	Beyond the cost savings gained by sharing a digital preservation service, the members of DPWG benefitted from shared knowledge and expertise gained during the partnership. The group also functioned as a sounding board as each institution built its digital preservation program, and it became a system of support when challenges arose.
(Masenya & Ngulube, 2020)	Factors that influence digital preservation sustainability in academic libraries in South Africa	This paper revealed effective collaboration with other institutions is one of the factors influencing digital preservation sustainability in academic libraries which aligns with the key factors that contribute to the success of memory institutions in the digital age.
(Adu, 2018)	A multi-methods study exploring the Role of stakeholders in the digital preservation environment: The case of Ghana	The study underscored the adoption of collaborative and participatory opportunities in the digital preservation environment and reinforced the concept of Open Data, which thrives on citizen's trust, participation, and collaboration.
(Joo et al., 2019)	Investigation of challenges in academic institutional repositories: A survey of academic librarians	For user education, libraries can closely collaborate with the university's Institutional Review Board to make guidelines for ethical research data management and curation in institutional repositories, particularly compliance with the Health Insurance Portability and Accountability Act and the Family Educational Rights and Privacy Act.
(Ahmad & Rafiq, 2023)	The Digital Preservation 101 guide for small libraries	The alternative options can include collaboration and partnership with other organizations. It can help them share the infrastructure, resources, and expertise. A suitable option can also be engaging with larger institutions, consortia, or nearby preservation networks. This will assist small libraries primarily in overcoming technological, financial, expertise, and policy constraints.

Challenges and Limitations (RQ4): As mentioned above, the research questions What are the challenges and limitations of digital preservation in digital libraries? 44% of the empirical papers have identified that digital

preservation and digital libraries pose challenges and limitations while improving the resources accessibility and enhancing the implementation of digital preservation by highlighting lack of skilled staff, lack of technology infrastructure and facilities, lack of IT knowledge, poor funding and policy implementation and inadequate research and development activities. 34% have discovered that digital preservation of digital libraries is faced by policymakers, with privacy and security issues that hinder the institution from fully utilizing it. 22% out of the selected 50 papers were a combination of empirical and theoretical discoveries that lack clarity, do not follow the common standard of documentation, and do not understand the user culture as the challenges and limitations of the digital preservation of digital libraries.

Sources:

Author	Title	Significant Findings
(Wittenberg et al., 2018)	Challenges and opportunities in evolving digital preservation landscape: reflections from Portico	It underlines that digital works of art are prone to obsolescence without effective preservation measures, needing powerful third-party services like Portico, which has extended beyond maintaining e-journals to encompass e-books and digitized collections. The study highlights important issues including the financial limitations that libraries, particularly smaller ones, confront and the necessity of inter-organizational cooperation to improve preservation initiatives. Furthermore, it highlights how open-access publication affects preservation procedures and stresses how crucial it is to preserve access to a variety of content kinds, including locally produced resources, to guarantee long-term availability for upcoming studies.
(Masenya & Ngulube, 2019)	Digital preservation practices in academic libraries in South Africa in the wake of the digital revolution	This paper reveals that South African academic libraries face significant challenges in digital preservation due to insufficient standards, funding, and trained staff, which jeopardizes long-term access to digital resources. It emphasizes the need for improved practices and collaboration to effectively manage and sustain these resources in the face of rapid technological changes.
(Okuonghae & Achugbue, 2022)	Digital librarianship practice and open access technology use for sustainable development in Nigeria	The study identifies several barriers to sustainable development in education, including inadequate funding, poor educational infrastructure, and mismanagement of resources. Furthermore, it emphasizes the need for training librarians to effectively leverage open-access technologies to enhance library services and promote sustainable educational practices. The study calls for enhanced training for librarians to utilize open-access technologies effectively, thereby improving library services and contributing to the educational sector's sustainability.
(Akinola et al., 2024)	Preservation of theses and dissertations in the era of digitization: a case study of selected universities in Oyo state, Nigeria	It indicates that digital preservation efforts are still in the developmental phase, with many librarians acknowledging that enhancing web rankings is a primary motivation for these initiatives. The research highlights that web archiving is the predominant method employed for digital preservation, yet it identifies substantial challenges such as inadequate information and communication technology infrastructure, lack of formal policies, and insufficient funding. These barriers hinder effective digitization processes.

(Emezie et al., 2024)	Determination of library staff skills to enhance the visibility of intellectual output in Nigerian universities	Library staff possess high skills in basic computer operations, their competencies in digital conversion, preservation, and storage are moderate, and they exhibit low skills in metadata creation. This skill gap poses challenges for effectively managing institutional repositories (IRs) and maximizing the visibility of university research outputs. It emphasizes the need for university management to prioritize training for library staff in these critical areas to improve resource accessibility and enhance university web rankings, thereby fostering a more robust scholarly communication environment.

DISCUSSION

This systematic literature analysis, using the most current publications, assisted in identifying an overview of relevant studies pertinent to digital preservation in digital libraries. The results indicate that the focus is on strategies for ensuring legal and copyright compliance in digital library preservation practices. Key considerations include directives, effective tools, reliable repositories, skilled staff, institutional support, and effective management. These factors contribute to broader digital access and preservation.

Digital libraries benefit from collaboration and knowledge sharing in digital preservation as an effort to combine resources, skills, and technology, which increases preservation's sustainability and efficiency. In addition to adopting the best practices, institutions can improve data security, share expenses, and guarantee the long-term availability of digital collections. It is vital to address challenges like limited technology, funding, expertise, and policy frameworks with shared digital preservation tools and infrastructure. Knowledge sharing makes it possible to implement the best practices and innovative strategies without requiring in-house specialists and to take advantage of the experience of larger institutions. The findings also demonstrate that collaboration can encourage a culture of prudent data stewardship, especially in environments with limited resources to ensure standardized practices for ethical data handling.

Furthermore, digital libraries pose many challenges and limitations to practicing digital preservation while improving the accessibility of resources and enhancing the institutional rank. Most of the findings show that lack of skilled staff, technology infrastructure and facilities, IT knowledge, poor funding and policy implementation, and inadequate research and development activities were the major issues in digital preservation ideas. Additionally, challenges and limitations hinder the feasibility of digital preservation to provide a variety of content and long-term visibility for future users. It is necessary to emphasize what needs to be prioritized and critical areas in fostering digital library activities. Having a strategic plan could emphasize the need for improved practices and collaboration to effectively manage and sustain digital preservation in the face of rapid technological changes.

Other than that, most articles highlighted the importance of metadata in implemented standards and best practices in digital preservation in digital libraries. It shows that metadata plays a critical role in standards and best practices for digital preservation within digital libraries. It serves as the backbone for ensuring that digital content remains accessible, usable, and understandable over time. Collaboration also plays a vital role in strengthening digital preservation efforts. No single institution can tackle the complexities of digital preservation alone, especially given the rapid technological advancements, diverse formats, and growing volume of digital content. Collaborative initiatives enable the sharing of resources, expertise, and infrastructure to ensure the long-term preservation and accessibility of digital collections.

The limitation of this study is cultural and institutional differences. Digital preservation practices in digital libraries can differ substantially depending on the cultural, institutional, and regional contexts in which they are implemented. This diversity arises from variations in the organizational structures, funding models, technological infrastructures, and the local laws or policies governing digital information. For instance, cultural perspectives on intellectual property, privacy, and the role of information in society can influence how

digital content is preserved and made accessible. A systematic review that focuses on one type of institution or library may not be able to fully capture these variations in practice, making it difficult to provide a comprehensive or universally applicable set of best practices for all types of digital libraries. Besides that, there is an overemphasis on specific technologies. While technology plays a central role in the preservation of digital content, an excessive focus on technologies, such as file formats, storage solutions, or software tools can narrow the scope of the review and create a skewed understanding of what constitutes "best practices" in digital preservation. This technological focus may not fully capture the broader, more nuanced factors that contribute to effective and sustainable digital preservation practices.

CONCLUSIONS

In conclusion, digital preservation plays a pivotal role in digital libraries by adopting compliance with legal and ethical standards, collaborating, and adopting best practices. Improvements can be made for sustainability, efficiency, and accessibility while addressing challenges like limited funding, technology, and skilled personnel. However, challenges like inadequate infrastructure, funding, and IT expertise require strategic planning and prioritization. Collaboration is essential for adapting to technological advancements and ensuring long-term digital content accessibility. By ensuring the durability of digital resources, preservation initiatives make information available to a wider range of users, including potential user groups in the future. To provide accessibility and inclusion for various user groups while abiding by legal, ethical, and intellectual property requirements, digital preservation is essential to preserving the relevance, dependability, and integrity of digital libraries.

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