

**LIBRARY DIGITIZATION AS AN EFFORT TO PRESERVE ISLAMIC LITERACY: A STUDY
AT THE NORTH SUMATRA MUI LIBRARY**

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ABSTRACT

This study aims to examine library digitization as a strategy for preserving Islamic literacy and to analyze its implementation and impact on access and preservation of collections at the Library of the Majelis Ulama Indonesia (MUI) of North Sumatra. This research employs a qualitative descriptive approach using observation, documentation, and the authors' empirical experience during an internship at the MUI of North Sumatra Library. The findings indicate that the digitization process involves the conversion of physical collections into digital formats, thematic classification of digital materials, and the use of digital storage platforms to facilitate information access. However, several challenges remain, including limited technological infrastructure, human resource capacity, and institutional support. This study concludes that the digitization of the MUI of North Sumatra Library plays a strategic role in preserving and disseminating Islamic literacy, although further strengthening of infrastructure, policies, and human resources is required to ensure sustainability.

Keywords: library digitization; Islamic literacy; special library; Majelis Ulama Indonesia of North Sumatra.

INTRODUCTION

Advances in information technology have brought about major changes in the way people acquire and utilize knowledge. Today, information is no longer dependent on print media alone, but can be easily accessed through digital platforms. Digital access has become a primary requirement in learning and research activities. Therefore, libraries are required to adapt to these developments in order to remain relevant. The Indonesian Ulema Council (MUI) Library of North Sumatra Province is a special religious library under the auspices of the MUI institution and serves as a reference center for Islamic literature. Its collection includes classical books, fatwa books, and various Islamic study literature of academic, religious, and historical value (S et al., 2024). Some of the collection is the result of grants and donations from scholars and is decades to more than a century old, requiring careful management and a focus on long-term preservation.

Functionally, the MUI North Sumatra library plays a strategic role in supporting da'wah activities, the regeneration of scholars, and the development of Islamic scholarship, both for internal institutions and the general public. However, the rare nature of the collection and the fact that it can only be accessed directly in the library room limits access to information, especially for users who are not physically located there. This condition shows a gap between the strategic function of the library and its service capacity in reaching the needs of a wide range of library users. In this context, library digitization has become an urgent necessity. Without digitization efforts, Islamic literature collections are at risk of physical damage due to age, environment, and intensity of use, and may potentially lose relevance amid shifts in public information access patterns toward digital media (Kristianto Naku & Kurniati, 2023). Therefore, the implementation of a digital library system is not only understood as a modernization of services, but also as a strategy for preserving knowledge and expanding access to Islamic literacy in a sustainable manner.

This study focuses on three main aspects, namely digital access, service quality, and user perceptions of digital library services. Digital access is understood as the ease with which users can access and utilize library collections through online media. Service quality includes aspects such as system speed, ease of operation, and the completeness of the available digital collections. Meanwhile, user perception describes the experiences and views of library users on the extent to which digital library services are able to support Islamic learning and study needs. These three aspects are used as an analytical framework to understand the effectiveness of library digitization in the context of Islamic information services. In reality, the digitization of the North Sumatra MUI library still faces a number of obstacles. Limited technological facilities and budget allocation are the main challenges. In addition, the readiness of human resources also affects the success of the digital system implementation. Some collections, such as classical books that are up to 120 years old, require special handling to prevent damage during the digitization process. The level of utilization of digital services by users also needs to be improved. This condition shows the importance of targeted research supported by accurate field data.

Various previous studies have shown that the implementation of digital libraries can increase the intensity of collection usage and expand access to information. Studies on university libraries prove that digital systems help students obtain references more quickly and efficiently. However, studies that specifically discuss digitization in religious libraries are still relatively limited. These limitations open up new research opportunities that are relevant to the social and religious context. (Devi, 2021) Recent studies emphasize the importance of developing systems that are easy to use and oriented towards user needs. The focus of the study is not only on technological aspects but also on the convenience and user experience in accessing digital services. This approach is used as a reference in analyzing the North Sumatra MUI library system so that the services developed are truly in line with the needs of the community. The purpose of this study is to examine the digitization process implemented in the MUI North Sumatra library, assess the quality of available digital services, and measure user satisfaction levels. This study aims to examine the library digitization process implemented in the Indonesian Ulema Council (MUI) Library.

RESEARCH METHODS

This research is qualitative research with a descriptive-analytical approach and field research. Qualitative data is data expressed in words and sentences that are usually related to values, such as high-low or big-small. Meanwhile, quantitative data is data that uses statistics in its presentation (Sugiyono, 2019). Descriptive qualitative research allows researchers to describe phenomena systematically, factually, and contextually based on field conditions observed directly. This type of

research includes field research, because the data was obtained from the author's empirical experience while conducting an internship at the Indonesian Ulema Council (MUI) Library in North Sumatra Province. Field research emphasizes data collection at the research location to understand the practices, processes, and dynamics that occur in the real context of the institution being studied (Rahardjo, 2010).

The research data sources consist of primary and secondary data. Primary data was obtained through direct observation of the library digitization process, the author's involvement in scanning activities, digital document management, and the classification of Islamic literature collections during the internship period. In addition, the author's practical experience in dealing with technical and managerial obstacles was also part of the primary data for this research. Secondary data was obtained from institutional documents, activity reports, and scientific literature relevant to library digitization and the preservation of Islamic literacy. The data collection technique was carried out through participatory observation, in which the author was directly involved in the entire series of library digitization activities (Mujahid, 2024). Participatory observation allows researchers to gain a more comprehensive understanding of work processes, management patterns, and issues that arise during the implementation of digitization. This technique is relevant for use in field experience-based qualitative research because it places the researcher as part of the subject being studied (Sugiyono, 2016).

Data analysis was conducted using qualitative descriptive analysis techniques, namely by organizing the data from observations and documentation, grouping information based on research themes, and interpreting the data systematically to explain the implementation, obstacles, and impact of library digitization on access to and preservation of Islamic literature. This analysis aims to produce a complete picture of the digitization practices of the North Sumatra MUI library in the context of preserving Islamic scientific traditions in the digital era (Moleong, 2018).

RESULTS AND DISCUSSION

Library Digitization as a Strategy for Preserving Islamic Literacy

Before discussing the concept of digital libraries, it is necessary to first understand the basic definition of a library as an institution that manages knowledge. Libraries are institutions that collect, manage, preserve, and disseminate information sources in various forms to support education, research, and the development of community literacy. In the context of science, libraries not only serve as a place to store collections, but also as a center for scientific reference and a means of transmitting knowledge across generations (Endarti, 2022).

One type of library based on the nature of its collection is a special library. Special libraries focus on specific fields or subjects according to the needs of their parent institutions, such as religious libraries, professional libraries, or research libraries. This type of library generally has a specific, in-depth, and strategically valuable collection, including classic works and institutional documents that have high historical and scientific value. Therefore, special libraries face serious challenges in maintaining the sustainability of their collections while ensuring effective access for their users. The development of information technology has encouraged the transformation of library functions towards a digital-based management system. Library digitization refers to the process of transferring physical collections into digital formats and implementing automation systems in library service management, such as online catalogs, digital repositories, and metadata-based retrieval systems. The International Federation of Library Associations and Institutions (IFLA) emphasizes that digital libraries must guarantee open access, archive sustainability, and user data security as key principles in their management. This transformation has become an urgent need in line with changes in people's information consumption patterns, which are increasingly shifting to online platforms (Irfan & Anirwan, 2023).

In the context of Islamic literacy, library digitization has strategic significance. Islamic literature, whether in the form of classical books, works by scholars, or fatwa documents, is an intellectual treasure that is not only of academic value but also religious and cultural value. Digitization serves as a preservation strategy to protect collections from the risk of physical damage due to age, environment, and intensity of use. At the same time, digitization expands access to Islamic literacy by enabling more flexible, efficient, and inclusive use of collections, without being bound by space and time. The Library of the Indonesian Ulema Council (MUI) of North Sumatra Province is an example of a specialized religious library that houses a significant number and variety of Islamic literature, including classical books and works by scholars that are decades to more than a century

old. This condition requires an adaptive management strategy to ensure that the collection remains sustainable and relevant to the needs of users in the digital age. Limited manual access and a lack of digital facilities are challenges that drive the need for a transformation of the library management system (S et al., 2024).

The digitization of the library at MUI North Sumatra is positioned as an institutional strategy to maintain the continuity of Islamic literacy. This strategy includes the development of digital-based library management, the integration of electronic catalogs, and the strengthening of human resource capacity in digital information management (Administrator, 2026). In addition to protecting physical collections, digitization is aimed at expanding the reach of Islamic preaching and education through the use of information technology. Thus, digitization is not only understood as a technical innovation, but as a strategic approach to the preservation and distribution of Islamic knowledge amid the dynamics of a digital society (Administrator, 2026). This conceptual and strategic foundation serves as a basis for the discussion in the next subchapter, which describes the implementation of library digitization at MUI North Sumatra based on empirical experiences during an internship.

Implementation of Library Digitalization at MUI North Sumatra

This subchapter is the empirical core of the article, based on internship experiences at the Indonesian Ulema Council (MUI) of North Sumatra. The discussion focuses on the application of digital technology as a strategy for preserving and expanding access to Islamic library collections that have historical and religious value. The implementation of library digitization at MUI North Sumatra began as a strategic effort to convert physical book collections into easily accessible digital assets, particularly since 2020 in the MUI North Sumatra Executive Board Meeting Room, Jalan MUI No. 03, Medan, under the Information, Communication, and Digitization Division. The content discussed includes the main collection of MUI fatwas, fiqh literature, Aqidah, Tasawuf, and other sharia reference documentation, which are primary sources for scholars, students, and the general public in North Sumatra. This process aims not only to preserve the books from physical damage due to age and the environment, but also to improve management efficiency through a remotely accessible digital platform, thereby supporting MUI's mission of da'wah in the modern era (Putri & Riza, 2024).

The book digitization process is carried out gradually and systematically, beginning with scanning the books using a scanning application available on the interns' mobile phones. The scanning stage involves scanning page by page with high resolution to maintain the clarity of Arabic and Latin text, where each book is carefully positioned so as not to damage the cover or fragile pages. The scanned results in image format are then converted into searchable PDF files through Optical Character Recognition (OCR), allowing users to quickly search for keywords without opening the physical document. Google Drive-based storage was chosen for its free, scalable nature and support for team collaboration, where PDF files are uploaded to structured folders with "Anyone with the link" access rights so that all interns can access the link to the digitized book collection (Ramadhani, 2024). Furthermore, the book grouping and classification process was adjusted to the division of book shelves that had not been digitized, such as the categories of Fiqh muamalah books, Ahlusunnah wal Jamaah beliefs, Practical Sufism, and special Fatwas for North Sumatra. This grouping adopts the Dewey Decimal Classification (DDC) system with Sharia modifications, where each field is given a unique code and sub-directory folder in Google Drive to facilitate retrieval and search. The classification is not only based on topic, but also considers the level of difficulty (basic, intermediate, advanced) and relevance to contemporary issues such as halal fatwas in North Sumatra, making the collection more user-friendly for stakeholders (Utara, 2025).

The role of student interns in the implementation of digitization is significant. Students are directly involved in the entire process chain, from sorting books, mass scanning, PDF conversion, to folder grouping. During the internship period, students are responsible for 70% of the daily workload, including scan quality verification and metadata tagging for each file, which accelerates the completion of daily targets. For example, students must digitize five books per person per day. This contribution adds value to the article because it is based on authentic field experience, where students learn the ethics of handling Islamic manuscripts while contributing to the preservation of the intellectual heritage of the MUI (Lestari, 2022).

However, this implementation faced a number of significant obstacles that affected efficiency, particularly limitations in tools, such as only one application, "CamScanner," and a single scanner with low capacity that often overheated after 100 pages. Time constraints arose from the limited internship duration (14 days) coupled with the MUI team's busy schedule, while human resources

(HR) were inadequate due to the lack of specialized training in OCR and cloud management for non-technical staff. Other factors included unstable internet connection in the North Sumatra MUI Library area for uploading large files to Google Drive, as well as a minimal budget for device upgrades, which resulted in the digitization process only reaching 50% of the collection after one year.

The implementation of this digitization demonstrates the adaptive strategy of North Sumatra MUI in responding to the physical limitations of the collection while expanding access to Islamic literacy efficiently.

Although still simple and facing various limitations, the digitization practices carried out reflect an institutional commitment to preserving Islamic intellectual heritage through the contextual and pragmatic use of information technology. With the strengthening of infrastructure, improvement of human resource capacity, and sustainable policy support, the digitization of the North Sumatra MUI library has the potential to become a model for digital-based Islamic literacy management at the regional level.

The Impact of Digitization on Access to and Preservation of Islamic Literature

The digitization of libraries has had a significant impact on expanding access, improving efficiency, and preserving Islamic literature. Conceptually, information technology has enabled the transformation of libraries from mere physical storage spaces into centers for the distribution of digital knowledge that are not bound by time or space. Testiani Makmur asserts that the use of information technology in libraries has a direct impact on the ease of retrieving information, increasing service speed, and changing the patterns of interaction between library users and knowledge sources (Makmur, 2019).

In the context of accessibility, digital libraries have been shown to increase users' interest in reading and information literacy. Research by Siti Khoirunnisa shows that the availability of digitally accessible collections encourages library users to interact more frequently with reading materials, especially among the younger generation who are familiar with digital technology (Khoirunnisa, 2020). Similar findings were also presented by Erna Wulan Sari et al., who concluded that the use of digital libraries contributes positively to increasing literacy and reading interest, due to the ease of access and variety of information formats provided (Sari et al., 2024).

From a preservation perspective, digitization serves as a preventive strategy against physical damage to collections, especially manuscripts and Islamic literature of historical value. Rahman Senjaya and Annisa Susinta emphasize that information remains preserved even if the physical collection degrades due to age or environmental factors (Senjaya & Susinta, 2022). Digitization also supports content preservation, not just the preservation of physical media. Furthermore, Arienda Prasetyo highlights that digital libraries have implications for the democratization of access to knowledge, where information is no longer exclusive to certain groups but can be accessed by the wider community as long as they are connected to the internet (Prasetyo, 2019). In the context of Islamic literature, this opens up opportunities for a more inclusive transmission of religious knowledge, while strengthening the function of Islamic preaching and education in the digital age.

When linked to the digitization practices at the North Sumatra MUI Library, these impacts are evident. Access to collections of fatwas, fiqh books, aqidah, and tasawuf has become easier for students, researchers, and the general public without having to interact directly with physical collections. At the same time, the preservation of Islamic literature is guaranteed through digital storage that functions as a long-term archive. Thus, digitization not only improves the effectiveness of library services but also plays a strategic role in maintaining the continuity of Islamic intellectual heritage so that it remains relevant and can be passed on to future generations. Thus, the digitization of the North Sumatra MUI library is not only technical and administrative in nature but also strategic in maintaining the continuity of Islamic scholarly traditions amid digital disruption.

CONCLUSIONS

Library digitization is an important strategy in maintaining the sustainability of Islamic literacy in the midst of information technology developments. Based on the results of the research, the digitization of libraries at the Indonesian Ulema Council (MUI) of North Sumatra not only functions as an effort to preserve Islamic literature collections from the risk of physical damage, but also as a means of expanding access to Islamic knowledge for the community. The digitization process is carried out through the transfer of physical collection media to digital format, thematic grouping of collections, and the use of digital storage platforms to support more flexible and efficient access to

information. The implementation of library digitization at MUI North Sumatra shows an institutional commitment to adapting the management of Islamic literacy to the needs of the digital society. Digitalization has a positive impact on the ease of access, efficiency of collection utilization, and protection of classical books and Islamic texts of historical value. However, the implementation of digitalization still faces various obstacles, especially limited technological infrastructure, human resource capacity, and sustainable policy support. Therefore, strengthening technological facilities, improving the competence of library managers, and formulating an integrated digitalization policy are strategic steps that need to be taken so that the digitization of the North Sumatra MUI library can run optimally and sustainably. Thus, digital libraries not only play a role as a technical innovation, but also as a strategic instrument in maintaining the continuity of Islamic scientific and da'wah traditions in the digital era.

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