FROM ORAL MANUSCRIPTS TO DIGITAL REPOSITORIES: REVITALIZING LOCAL KNOWLEDGE THROUGH DIGITAL ARCHIVING IN LIBRARIES

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Abstract

Oral traditions and local knowledge in Indonesia are facing the threat of extinction due to the rapid pace of modernization and a lack of structured documentation. Libraries, as knowledge management institutions, play a key role in safeguarding this intangible cultural heritage by transforming oral texts into easily accessible digital formats. This study aims to analyze the process and impact of digital archiving in libraries as a strategy to revitalize local knowledge and document heritage languages of local minorities. Using a literature review method, this study examines the workflow of converting oral knowledge through audio visual recording and structured metadata organization into open-access digital repositories. The findings indicate that digital archiving not only prevents the permanent loss of local wisdom and minority languages but also democratizes access to previously isolated knowledge. By transforming traditional library practices into dynamic cultural preservation centers, this study underscores the vital position of libraries in supporting the decolonization of knowledge and cultural sustainability in the digital age.

Keywords: *Digital Archiving, Local content, Cultural preservation, Repository*

INTRODUCTION

Oral traditions and local wisdom constitute the primary foundation of cultural identity and historical documentation in Nusantara society. Knowledge transmitted intergenerationally through oral expressions such as folklore, incantations, performing arts, and customary laws embodies rich philosophical, ecological, and linguistic values. However, in an era of rapid globalization and digital transformation, the existence of these oral traditions is highly vulnerable to erosion (Smith, 2020).

Many local and minority languages in Indonesia are experiencing a decline in active speakers, thereby threatening the continuity of the indigenous knowledge bound within them. Without systematic documentation efforts, this intangible cultural heritage risks permanent loss. Libraries, as memory institutions and learning resource centers, bear a moral and academic responsibility to transform in response to these challenges. The preservation of library collections is no longer limited to physical books or printed manuscripts; it must expand into the realm of intangible cultural heritage preservation. The conversion from oral manuscripts to digital repositories serves as a crucial strategy to safeguard local wisdom. Through audio-visual documentation, digital text transmission, and structured metadata organization, libraries are capable of re-mediating isolated knowledge into open-access digital assets accessible to a global audience.

Previous studies on cultural preservation in libraries have generally focused on the digitization of ancient physical manuscripts or the maintenance of paper documents (Rahman et al., 2022; Widodo, 2021). However, research comprehensively addressing the integration of oral tradition archiving (oral history/tradition) with library digital repository schemes in the context of local language revitalization and knowledge decolonization remains limited. Most oral manuscript storage systems remain fragmented and unstandardized within academic library repositories.

Therefore, this study aims to examine the workflow and impact of digital archiving in revitalizing local knowledge and documenting oral traditions in libraries. It seeks to explore how libraries act as active cultural preservation hubs in transforming isolated oral knowledge into inclusive digital repositories. This study is expected to provide theoretical and practical contributions to the field of library and information science in supporting cultural sustainability and linguistic documentation in the digital age.

LITERATURE REVIEW

Digital technology presents both challenges and opportunities for the preservation of increasingly endangered oral traditions (Smith, 2020). Based on the frameworks of Digital Preservation and Collective Memory, preservation is not limited to archiving physical documents but also involves maintaining local languages and cultural values. This study emphasizes that libraries should not be viewed merely as passive storage facilities, but rather as active agents that transform oral traditions into part of the digital world.

Theoretically, the transformation of oral traditions into digital formats can be explained through the Theory of Remediation proposed by Bolter and Grusin (1999). This theory argues that new media continually recreate or adapt the forms of older media without eliminating their original essence. In this context, libraries do not merely record folklore in its raw form, but also reshape this knowledge into digital audiovisual media with timestamps and structured transcriptions. This process is supported by the Open Archival Information System (OAIS) Reference Model (Lavoie, 2014), which provides a technical foundation for how oral cultural data are collected (*ingest*), continuously managed through metadata preservation, and presented to the public through open-access digital repositories.

Furthermore, the preservation of intangible cultural heritage and local languages is grounded in Collective Memory Theory (Halbwachs, 1992). Cultural memory requires a social framework to prevent it from deteriorating over time. As the number of languages and

their speakers declines, oral traditions become increasingly threatened. Digital library repositories therefore function as modern memory institutions that document collective memories so that they can be transmitted across generations.

The role of libraries is analyzed through the framework of Decolonizing Methodologies and Indigenous Knowledge Systems. Conventional library classification systems often marginalize local knowledge by positioning it as a secondary anthropological artifact A decolonizing approach encourages libraries to grant epistemological sovereignty to communities that own the traditions through Prior Informed Consent ethics (WIPO, 2017) and community co-curation participation (Kurniyawan & Rahmi, 2021).

RESEARCH METHODS

This study uses a qualitative approach with a literature review method to examine the preservation of oral traditions, digital archiving, and the evolving role of libraries in preserving local knowledge. A literature review is used to identify, evaluate, and synthesize relevant studies in order to provide a comprehensive understanding of a research topic.

The data used in this study consist of secondary data obtained through searches of academic journals, scholarly books, and relevant official documents. The literature search was conducted using keywords related to *digital preservation*, *oral traditions*, *digital archiving*, *minority languages*, *local knowledge*, and *library role*. The selected literature was evaluated based on its relevance to the research focus and the credibility of the sources. A systematic literature review approach enables researchers to develop search strategies, identify relevant literature, and synthesize findings from previous studies (Snyder, 2019).

The collected data were then analyzed qualitatively using thematic analysis. Thematic analysis is used to identify and develop patterns or themes emerging from the research data. In this study, the data were organized into several main themes: the digital archiving workflow, revitalization of local knowledge and preservation of minority languages, repositioning libraries as cultural preservation centers, and implications and policies for cultural sustainability. The *reflexive thematic analysis* approach can be used to systematically organize and interpret thematic patterns in qualitative research (Byrne, 2022).

RESULTS AND DISCUSSION

A. Digital Archiving Workflow for Oral Traditions

Oral traditions such as folklore, incantations, customary laws, and community knowledge are important parts of intangible cultural heritage that need to be preserved (UNESCO, 2003). One way to prevent these traditions from disappearing is through well-planned digital archiving. In general, the process includes recording and documentation, metadata processing, and storage in a digital repository (Lavoie, 2014).

The first stage involves audio-visual recording conducted directly in the field with native speakers or tradition bearers as the main sources (Moss & Mazikana, 1986; Oral History Association, 2019). Audio recordings can use high quality formats such as WAV, while video is used to capture voices, facial expressions, body movements, speech patterns, and the atmosphere in which the tradition takes place (Bradley & Puri, 2016). The documentation process must also follow ethical principles through informed consent so that speakers and communities have the right to determine how the documented materials will be used and published (Yow, 2005).

After the data have been collected, audio recordings, videos, and transcriptions need to be accompanied by metadata so that the information can be easily found and understood. Metadata may include the title, recording date, language or dialect, informant identity, cultural context, meaning of the story, and customary copyright rules (Dublin Core Metadata Initiative, n.d.; WIPO, 2017). Standards such as Dublin Core and the Oral History Metadata Synchronizer (OHMS) can be used to connect transcriptions with recordings through timestamps, allowing users to locate specific sections of a recording more easily (Boyd et al., 2015).

The final stage is storing the documentation in a secure digital repository that supports long-term preservation. Ideally, there should be a master file for preservation purposes and an access copy that can be used by communities, students, and researchers through the internet (Lavoie, 2014). However, not all collections should be openly accessible because some traditions may be sacred or restricted to particular groups; therefore, access policies should follow community agreements and cultural values (Boyd, 2013; WIPO, 2017).

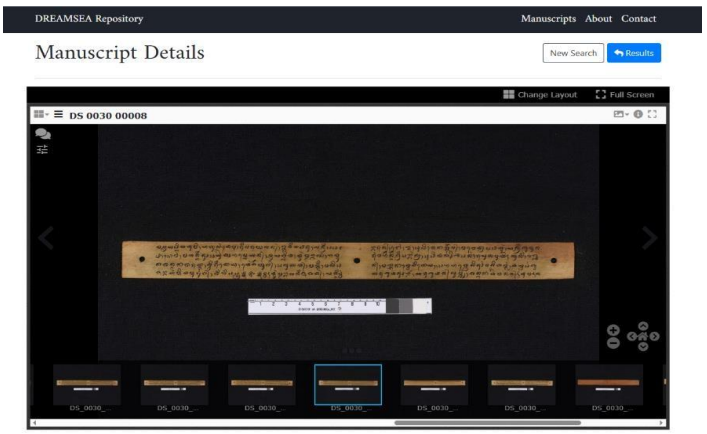
B. Revitalizing Local Knowledge and Preserving Minority Languages

Modernization and globalization have contributed to the decline in the use of some local languages and traditions, particularly as younger generations increasingly use more widely spoken languages. This condition may cause local knowledge and oral traditions to be transmitted less frequently from one generation to another (UNESCO, 2003). In such circumstances, digital archiving can serve as a strategy for preserving local knowledge so that it remains available and can be learned by future generations (Smith, 2020).

Digital archiving can help protect intangible cultural heritage that has traditionally been preserved only through the memories of community elders or cultural figures. Digital technology allows stories, languages, traditional medical knowledge, speech intonation, expressions, and social contexts to be recorded more comprehensively, reducing dependence on human memory alone (Nathan & Fang, 2014). The collected data can also be systematically organized in databases or repositories, making it easier to find, reuse, and transmit to younger generations (Harrison, 2010).

Digital documentation can serve as an intergenerational bridge because it can be developed into local-language applications, online repositories, educational videos, and other interactive learning materials. Several practices in Indonesia demonstrate that digitalization can be applied to oral traditions, Kaganga-script manuscripts in Lampung, and Balinese lontar manuscripts through various cultural documentation projects (Manuaba & Wijaya, 2021; Lauder & Lauder, 2021). Thus, digital technology functions not only as a storage medium but also as a means of reintroducing local culture to younger generations (Badan Pengembangan dan Pembinaan Bahasa, 2021).

Digitalization is also important for preserving ancient manuscripts that contain community knowledge about health, rituals, the environment, and social life. One example is the collection of Balinese lontar manuscripts such as Usada and Tutur Roga Sanghara Bhumi, which can be accessed through DREAMSEA, a collaboration between PPIM UIN Jakarta and CSMC Hamburg (DREAMSEA, n.d.). Digitalization allows these manuscripts to be studied through high-resolution images and connected with oral reading traditions such as mabasan or mewirama (Bhandesa, 2022).



Source: *Digital Repository of Endangered Manuscripts in Southeast Asia (DREAMSEA), Manuscript ID 1731* (Suweca, 1910/DREAMSEA, MSID 1731).

In addition to preserving local knowledge, digital archives can provide broader access to information for students, researchers, and the general public. Information that previously required people to visit a particular region can be made available through digital repositories, making it easier to study and explore (Lavoie, 2014). Such accessibility can also strengthen recognition of and pride in local languages, traditions, and cultural identities (Lafamane, 2020; Badan Pengembangan dan Pembinaan Bahasa, 2021).

C. Repositioning Libraries as Cultural Preservation Centers

Technological developments have expanded the role of libraries beyond simply storing and providing books. As memory institutions, libraries can actively collect, document, manage, and preserve various forms of cultural heritage, including folklore, oral traditions, local languages, and community knowledge (Hughes, 2004). This role allows libraries to become cultural preservation centers that connect information from the past with the needs of present and future generations.

Libraries can conduct field documentation in collaboration with native speakers, community leaders, and tradition bearers. Folklore, traditional songs, incantations, and cultural rituals can be recorded in audio and video formats, accompanied by metadata, and stored in digital repositories (Hughes, 2004; Oral History Association, 2019). In this way, libraries do not only preserve books and written documents but also safeguard the collective

memory and cultural knowledge of communities.

This role is also related to efforts toward the decolonization of knowledge. Library classification and knowledge management systems such as the Dewey Decimal Classification and the Library of Congress have been criticized for reflecting predominantly Western perspectives, which may result in local knowledge being treated as supplementary or merely as a cultural object (Olson, 2001). Through the development of local collections, more contextual metadata, and community-based digital archives, libraries can provide greater space for local languages, local histories, Indigenous knowledge, and environmental knowledge as valuable sources of knowledge.

D. Implications and Policies for Cultural Sustainability

Digital archiving is not merely concerned with storing files but also requires policies that ensure long-term access, protection of community rights, technological infrastructure, funding, and community participation (Lavoie, 2014). Digital repositories can help ensure that local languages, folklore, and traditional knowledge remain available even when the number of speakers or knowledge holders continues to decline. Internet-based access also allows younger generations to use these archives as learning resources, research materials, and sources for creative content (Badan Pengembangan dan Pembinaan Bahasa, 2021).

However, digitalization also presents several challenges, particularly regarding ethics and the intellectual property rights of Indigenous and local communities. Not all forms of knowledge can be freely published because some information may be confidential, sacred, or intended only for particular groups. Therefore, Prior Informed Consent and appropriate access controls are essential to prevent the misuse or commercialization of community knowledge without permission (WIPO, 2017).

Other challenges include technological infrastructure gaps, digital obsolescence, and limited funding. Not all regions have adequate internet connectivity, storage equipment, skilled personnel, or facilities to implement sustainable digital archiving (Perpustakaan Nasional Republik Indonesia, 2020). To maintain archives over the long term, libraries need to conduct regular backups, use open file formats, migrate files when necessary, and obtain sustainable financial support from governments, universities, and relevant institutions (Lavoie, 2014).

The sustainability of digital archiving also requires communities to participate as community co-curators. Communities should not merely serve as sources of information but should also participate in determining which information can be published, providing cultural context, contributing to metadata development, and reviewing whether the documentation accurately represents their traditions (Kurniyawan & Rahmi, 2021). In addition, digital archives can be integrated into educational curricula through collaboration among libraries, schools, cultural institutions, and education authorities, allowing local languages, folklore, and cultural knowledge to be used in local-content education and Project-Based Learning (Prasetyo & Wibowo, 2022; Kemendikbudristek RI, 2022).

Ultimately, digital archiving of oral traditions and local knowledge is not simply about storing files on computers or in repositories. It is a strategy for ensuring that languages, traditions, knowledge, and community memories remain available and can be passed on to future generations (Lavoie, 2014). With appropriate technology, policies, long-term preservation strategies, and active community participation, libraries can develop into cultural preservation centers that not only store information but also contribute to the sustainability of local cultures in a changing world.

CONCLUSIONS

This study shows that digital archiving of oral traditions and local knowledge can serve as an important strategy for preserving intangible cultural heritage, minority languages, and community knowledge. This process can be carried out through audio-visual recording, metadata management, digital repository storage, and providing access while still considering ethical principles and community rights. However, digital archiving is not only about technology. It also requires community involvement, sustainable preservation, protection of cultural knowledge, and efforts to address technological infrastructure gaps.

This article emphasizes that libraries can develop beyond their traditional role as places for storing books and become cultural preservation centers. In this role, libraries can actively document, manage, and provide access to oral traditions and local knowledge. An important contribution of this study is the integration of digital archiving principles, cultural documentation, and the role of libraries in supporting the revitalization of local knowledge.

However, this study is conceptual in nature and does not include direct field data from librarians or communities that own the traditions. Therefore, future research is recommended to investigate digital archiving practices directly in libraries and cultural institutions, including community involvement, metadata implementation, access policies, and the sustainability of digital preservation.

REFERENCES

Boyd, D. A. (2013). Search, discover, and protect: Digital oral history and the challenge of accessibility. *The Oral History Review*, 40(1), 75–83. https://doi.org/10.1093/ohr/oht038

Boyd, D. A., Fernheimer, J. W., & Dixon, E. (2015). Indexing as engagement: Using OHMS to enhance user experience and access. *The Oral History Review*, 42(2), 312–331. https://doi.org/10.1093/ohr/ohv014

Bradley, K., & Puri, A. (2016). *Guidelines for the production and preservation of digital audio objects* (IASA-TC 04). International Association of Sound and Audiovisual Archives.

Moss, W. W., & Mazikana, P. C. (1986). *Archives, oral history and oral tradition: A RAMP study*. UNESCO.

Smith, R. (2020). Erosion of oral traditions in the digital age: Global perspectives and local impacts. *International Journal of Cultural Heritage*, 12(3), 115–129.

Halbwachs, M. (1992). *On collective memory*. University of Chicago Press.

Bolter, J. D., & Grusin, R. (1999). *Remediation: Understanding new media*. MIT Press.

Yow, V. R. (2005). *Recording oral history: A guide for the humanities and social sciences* (2nd ed.). Altamira Press.

Badan Pengembangan dan Pembinaan Bahasa. (2021). *Model revitalisasi bahasa daerah dalam rangka Merdeka Belajar*. Kemendikbudristek RI.

Harrison, K. D. (2010). *The last speakers: The quest to save the world's most endangered languages*. National Geographic Books.

Hughes, L. M. (2004). *Digitizing collections: Strategic issues for the information manager*. Facet Publishing.

Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi RI. (2022). *Panduan pembelajaran dan asesmen: Kurikulum Merdeka*. Badan Standar, Kurikulum, dan Asesmen Pendidikan Kemendikbudristek RI.

Kurniyawan, E., & Rahmi, R. (2021). Partisipasi masyarakat adat dalam pengelolaan digitalisasi kebudayaan lokal. *Jurnal Ilmu Perpustakaan dan Informasi (JIPIS)*, 5(1), 25–35.

Lafamane, F. (2020). Karya sastra dan kearifan lokal dalam pelestarian bahasa daerah. *Jurnal Kebudayaan dan Bahasa*, 2(1), 15–28.

Laksmi, L., & Novita, D. (2020). Pengarsipan sejarah lisan (oral history) pada repositori digital perpustakaan perguruan tinggi di Indonesia. *Jurnal Pustakawan Indonesia*, 20(1), 15–28.

Lauder, M. R. M. T., & Lauder, A. F. (2021). Dokumentasi bahasa terancam punah di Indonesia Timur: Peran teknologi informasi dalam pelestarikan bahasa daerah. *Wacana: Jurnal Ilmu Pengetahuan Budaya*, 22(3), 510–535.

Lavoie, B. F. (2014). *The Open Archival Information System (OAIS) reference model: Introductory guide* (DPC Technology Watch Report 14-02; 2nd ed.). Digital Preservation Coalition. https://doi.org/10.7207/twr14-02

Manuaba, I. B. A. L., & Wijaya, I. G. G. P. A. (2021). Digitalisasi naskah lontar Bali melalui proyek Datu Purwa: Tantangan dan peluang preservasi budaya lokal di era digital. *Jurnal Kajian Bali (Journal of Bali Studies)*, 11(2), 312–330.

Nathan, D., & Fang, M. (2014). Digital archiving for endangered languages and cultures. Dalam P. K. Austin & J. Sallabank (Ed.), *The Routledge handbook of endangered languages* (hlm. 421–438). Routledge.

Perpustakaan Nasional Republik Indonesia. (2020). *Standar nasional perpustakaan: Preservasi bahan perpustakaan digital*. Perpusnas RI.

Prasetyo, A., & Wibowo, H. (2022). Integrasi repositori digital perpustakaan dalam pembelajaran berbasis muatan lokal. *Jurnal Kajian Informasi & Perpustakaan (JKIP)*, 10(2), 145–160.

Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples* (2nd ed.). Zed Books.

World Intellectual Property Organization. (2017). *Protecting traditional knowledge: The WIPO Intergovernmental Committee* (WIPO Background Brief No. 2). WIPO Publication.

Suweca, I Made Kajeng Waras Himawan. *Private Collection of I Made Kajeng Waras Himawan Suweca [Tutur Roga Sanghara Bhumi / Usada]*. Denpasar, Bali, 1910. Naskah Lontar. Digitalized by DREAMSEA Project No. DS 0030 00008, MSID 1731. Hill Museum & Manuscript Library (HMML) & DREAMSEA. https://hmmlcloud.org/dreamsea/detail.php?msid=1731.

Bhandesa, A. M., Wulansari, N. T., & Susanta, I. P. A. E. (2022). Kajian nilai dan konsep pengobatan tradisional pada Lontar Usada Yeh. *Jurnal Penelitian Agama Hindu, 6*(1), 13–23. https://doi.org/10.37329/jpah.v6i1.1497

Moss, W. W., & Mazikana, P. C. (1986). *Archives, oral history and oral tradition: A RAMP study*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000072038

Oral History Association. (2019). *Oral History Best Practices*. Oral History Association. https://oralhistory.org/best-practices/

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research, 104*, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity, 56*, 1391–1412. Open Access. https://doi.org/10.1007/s11135-021-01182-

UNESCO. (2023). *UNESCO Intangible Cultural Heritage: The 18th session of the Intergovernmental Committee*. UNESCO.