

Digitization of Javanese Manuscripts in the Pustakatama Project: Legal and Technical Analysis and Its Implications for Public Access

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ABSTRACT

Keywords:

Digitization,
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The Pustakatama Project is a cultural digitization initiative that aims to preserve and expand access to Javanese language and script texts through collaboration with local institutions and the Wikimedia ecosystem. This study analyzes the strategies, implementation processes, and community involvement in the Pustakatama Project, particularly in digitizing cultural heritage manuscripts and their integration into Wikimedia Commons and Wikisource in the Javanese language. The research employs a qualitative case study method using document analysis techniques, participatory observation during the Wiyata Pustaka Workshop, and internal documentation as primary sources. The results show that the project successfully digitized 206 manuscripts and books over 20 days, through collaboration with cultural libraries, namely the Artati Library of Sanata Dharma University and the Cultural Preservation Center of Region X. All of this material was not only successfully digitized but also made openly accessible through the Wikimedia platform, thereby enriching the digital repository with local knowledge that was previously underrepresented. Community involvement, particularly local volunteers, played a crucial role in the uploading and editing processes on Wikimedia Commons and Wikisource. The novelty of this project lies in integrating grassroots digitization, public domain awareness, and community-based open knowledge production through open platforms. Pustakatama is expected to serve as a replicable prototype for regions with limited resources in the participatory preservation of local literature.

INTRODUCTION

The preservation of cultural heritage through digitizing traditional manuscripts is currently gaining attention in the context of public accessibility to historical, literary, and local scientific materials (Lesmana & Sulandjari, 2013; Hendrawati, 2019). However, the digitization of regional language manuscripts in Indonesia, particularly Javanese manuscripts, remains relatively rare, despite the high cultural value of such manuscripts (Almis & Wijayanti, 2023). Meanwhile, implementing traditional digitization also faces technical challenges, legal uncertainties regarding copyright, and varying levels of public digital literacy (Kusumaningtyas & Nurazizah, 2022; Kurniawan, 2018).

Various international studies highlight the role of digital preservation standards, such as the Open Archival Information System (OAIS), in ensuring the authenticity and sustainability of digital archives. Meanwhile, research focusing on conserving traditional manuscripts, such as the *Legok Kolot* manuscript in Indramayu, reveals the technical procedures and protection requirements during scanning (Widiyanarti et al., 2021). From a legal perspective, research on digital copyright infringement in Indonesia highlights the urgency of more explicit and transparent licensing regulations (Makmur, Abdurahman, Zulaikha, & Samsudin, 2024).

In recent years, open knowledge movements such as Wikimedia have opened up new opportunities to document, preserve, and disseminate these manuscripts collaboratively through the participation of local volunteers. One initiative that seeks to fill the gap in the digitization of traditional manuscripts is the *Pustakatama* Project, a project to digitize

manuscripts and books written in the Javanese language and script. This project utilizes the Wikimedia platform—specifically Wikimedia Commons and Wikisource in Javanese—as a medium for collaborative preservation (Wikimedia Foundation, 2025). Several studies have discussed cultural digitization and the use of Wikimedia in various community projects (Hendrawati, 2019; Rizkyantha et al., 2025), but the legal and technical aspects of the digitization process of traditional manuscripts, particularly those related to public access, have not been discussed in depth in academic literature. Almis and Wijayanti (2023) note that Javanese-language and Javanese-script digital manuscripts and books available across various online sources often lack open licenses, and their numbers remain limited. Meanwhile, Khoerunnisa et al. (2023) add that many physical collections stored in libraries or privately owned have not yet been digitized, thus unable to be fully utilized within the open knowledge ecosystem.

In addition to the limited quantity and variety of content, there are still few volunteers with the necessary skills to scan and manage traditional manuscripts (Ilhami et al., 2024). Therefore, strategic measures are needed to increase participation and reduce the digitization gap in the future. One approach that can be taken is to refer to and utilize the legal framework supporting the preservation of manuscripts and books in Indonesia, such as Law No. 43 of 2007 on Libraries.

This law emphasizes the importance of preserving library collections as part of efforts to protect the nation's cultural heritage. The law also stipulates that libraries must preserve library materials, both in physical and digital form (Legal Documentation and Information Network, 2025). According to Kusumaningtiyas and Nurazizah (2022), legal provisions and policies regarding library preservation open opportunities for collaboration between relevant institutions and open digitization projects such as Wikimedia while providing legal legitimacy for community-led literature preservation initiatives. Furthermore, Purnomo and Pratiwi (2023) state that community involvement in digitizing traditional manuscripts is relevant from an educational perspective and aligns with the state's mandate to preserve Indonesia's intellectual and cultural heritage. Based on this review, there are significant gaps, namely technical approaches that are often not accompanied by detailed license analysis and present legal risks for digital content; legal/licensing aspects that have not been analyzed in the practical context of digitizing traditional manuscripts, even though they have been discussed in the context of general copyright; and a lack of integrative studies that look at the relationship between technical formats and public access simultaneously.

In general, this study aims to analyze the legal and licensing aspects used in the digitization of Javanese manuscripts by the *Pustakatama* Project; describe the technical approaches applied, particularly in the context of integration into the Wikimedia platform; and evaluate the implications for public access of the digitization practices carried out. The results are expected to serve as a reference for similar institutions in developing community-based manuscript digitization prototypes that consider legal and technical aspects in a balanced manner, as well as bridging the gap between cultural manuscript digitization practices and the legal certainty of their licenses.

RESEARCH METHOD

This study uses a qualitative approach with a case study method to examine in depth the legal, technical, and public access implications of the digitization of Javanese manuscripts through the *Pustakatama* Project. This approach was chosen to understand the context,

practices, and challenges implementers and stakeholders face in the project (Baxter & Jack, 2016). Ellinger and McWhorter (2016) add that this approach effectively traces the meanings constructed in the actual environment by stakeholders in the field.

Meanwhile, the techniques used in data collection are:

Document Analysis

This technique was used to examine various documents related to literature preservation policies in Indonesia, copyright provisions, and open licenses, as well as internal guidelines from the Wikimedia Foundation regarding uploading and managing content on Wikimedia Commons and Wikisource. In addition, laws and academic publications supporting the context of this research were also analyzed.

Participatory Observation

Observations were conducted directly and participatively in the *Wiyata Pustaka* Workshop, which was part of implementing the *Pustakatama* Project. Researchers in this activity were actively involved in the workshop process, discussions, and editing practices on the Wikimedia Commons and Wikisource platforms. Observations included technical barriers, the dynamics of volunteer participation during the digitization process, interactions between participants, and workshop methods.

Internal Documentation

Additional data sources were obtained from the project organizers' internal documentation, including video recordings, visual documentation of activities that recorded the digitization and workshop processes, and activity reports. This documentation provides a detailed overview of the workflow, technical decisions, and legal considerations during the implementation of the digitization project.

RESULTS AND DISCUSSION



Figure 1. *Sanata Dharma Library.*



Figure 2. *Dalem Jayapuran Library.*

The *Pustakatama* Project, which ran from July 1, 2025, to August 3, 2025, was an effort to integrate the digitization of traditional manuscripts with a community-based participatory approach. The project involves four main volunteers: Erlyndita Setyawardani as project manager, Dandung Adityo Argo Prasetyo as project assistant, Fandy Aprianto Rohman, responsible for administration and license document research, and Sahmu Hidayat, handling documentation and visual design. Meanwhile, the activities focused on two main partners, the Artati Library of *Sanata Dharma* University and *Dalem Jayadipuran* (Regional Cultural Preservation Center X). The selection of these two partners was based on the historical and scientific value of their collections and their commitment to the preservation and open access of traditional manuscripts (Wikimedia Foundation, 2025).



Figure 3. Main Volunteers *Pustakatama*

This project's core activity is digitizing Javanese-language manuscripts and books, which are then uploaded to Wikimedia Commons, accompanied by license checks to ensure that each work is in the public domain. Public domain licensing is the legal status of a work no longer protected by copyright, either because the copyright has expired or has been explicitly released by the copyright holder, allowing it to be used freely by anyone without legal restrictions (Creative Commons, 2020). Sorting materials based on license status is an important first step in ensuring compliance with Wikimedia platform policies and the spirit of open knowledge (Almis & Wijayanti, 2023).

In Indonesian law, the concept of public domain is regulated in Law Number 28 of 2014 concerning Copyright. In general, the public domain is the legal status when a creation no longer has copyright protection and can be used freely by anyone. Article 58 of the Copyright Law explains that works whose copyright protection period has expired automatically enter the public domain. This means that once the protection period ends, the economic rights to the work no longer apply, and the work can be utilized by the public without needing permission (Budhirianto, 2016).



Figure 4. Public domain template of the Government of the Republic of Indonesia on Wikimedia Commons.

In addition, Article 59 of the same law states that the state holds copyright over traditional cultural expressions and cultural heritage works whose creators are unknown. Thus, such works are functionally in the public domain, but are still protected by the state to avoid irresponsible commercialization. This indicates that the public domain in the Indonesian context has moral and cultural protection dimensions, in addition to aspects of freedom of access (Djaja, 2016).

Over 20 working days, the digitization process was carried out intensively with a daily target of eight files per day. The initial target of 160 files was exceeded, with 206 files totaling 179 books, 12 clippings, and 15 magazines/manuscripts (Wikimedia Commons, 2025). The digitization results were uploaded to Wikimedia Commons and indexed on Wikisource (Wikisource, 2025).

The digitization covers various manuscripts and books with historical, cultural, and linguistic value. The curation process is carried out by considering bibliographic aspects, the physical condition of the documents, and public domain license status. Some of the files that have been digitized in the *Pustakatama* project include *Bauwarna Wajang*, *Djangka Ranggawarsitan*, *J.B.M. Vianney Rama Pastur ing Ars*, *Kitab Bubuka Agami Islam Jilid 1*, *Kitab Ringkesan Babadipun Kangjeng Nabi Mukhammad s.a.w. Sakhabat Sayidina Abu Bakar sarta Sayidina Umar r.a.*, *Pandhawa Gubah*, *Serat Djiwandono*, *Seri Kitab Primbon Adammakna*, *Nyai Ageng Serang*, and *Tekad Wadja* (Wikimedia Commons, 2025). Additionally, all visual documentation of the activities recording the digitalization process is uploaded to the *Meta Pustakatama* page as part of the project's open reporting and accountability (Wikimedia Foundation, 2025).



Figure 4. Several files resulting from the digitization of the *Pustakatama* project.

One of the technical obstacles encountered during the digitization process is the varying physical condition of the documents, especially those that are fragile or have deteriorated. Another challenge arises in post-digitization, such as adjusting metadata and processing files to comply with Wikimedia Commons upload standards. This underscores the importance of technical readiness and understanding digital interoperability standards in cultural preservation projects (Makmur, Abdurahman, Zulaikha, & Samsudin, 2024).

Digital interoperability standards refer to technical guidelines that enable consistent data exchange across platforms and information systems. In the context of cultural preservation, applying these standards ensures sustainable access, metadata readability, and compatibility with global digital repositories. Applying interoperability principles can also increase the visibility and utilization of digital collections, as Rizkyantha et al. (2025) discussed in a study on integrating cultural collections in an open digital ecosystem.

Volunteer participation in *Pustakatama*, on the other hand, fluctuates and is influenced by free time, technical capacity, and understanding of open licenses. Volunteer involvement increases in structured activities, such as digitization processes and workshops. However, it tends to decline during independent work phases, such as uploading files to Wikimedia Commons. These findings are consistent with studies showing that support among volunteers and clear activity structures are important factors in maintaining participation in volunteer-based digital projects (Liew, 2015).

According to Arfandi (2016), volunteerism in the Indonesian context—digitization of manuscripts and preservation of local literature—is often influenced by religious values, such as the theology of philanthropy promoted by *Muhammadiyah*. *Muhammadiyah*'s philanthropy is oriented toward material giving and active involvement in social development, education, and culture through community work (Makhrus & Saepudin, 2023). This theology encourages active participation in the liberation of access to knowledge as a form of social worship and the implementation of the values of *amar ma'ruf nahi munkar* in the cultural sphere.

This spirit is embodied in *Pustakatama* through collective work and support among the four main volunteers, where each member plays a strategic role in technical, administrative, and educational processes. This collaboration adopts a flexible role-based approach that enables work efficiency while providing space for initiative for each member. Arfandi (2016) emphasizes that *Muhammadiyah* philanthropy is not solely oriented toward material assistance but includes intellectual and cultural contributions, including disseminating knowledge through digital media as part of community development toward progress.



Figure 5. *Wiyata Pustaka* Workshop at Universitas Negeri Semarang.

As part of its public engagement strategy, the project held a workshop titled “*Wiyata Pustaka*” on July 12, 2025, at Building B8, Faculty of Language and Arts, Semarang State University. The workshop involved 34 new contributors to edit Wikisource (Wikimedia Foundation, 2025). Participatory observation indicated that direct collaboration with prospective contributors through workshops can improve digital skills and awareness of the importance of preserving local literature. This aligns with the findings of Dewantara and Widhyharto (2015), who stated that young people in digital communities tend to respond to social issues through collaborative approaches in both online and offline spaces.

Based on the results of the field study, interactions between participants in the workshop were dynamic and collaborative. The participants came from diverse backgrounds and shared their knowledge and skills in editing Wikisource. Meanwhile, the facilitators encouraged open dialogue among participants to create an equal discussion space (Dewantara & Widhyharto, 2015).



Figure 6. Discussion at the *Wiyata Pustaka* Workshop.

The methods used in the workshop combined hands-on approaches with reflective discussions. Each participant was provided with technical material on digitization and editing Wikisource and was encouraged to understand the value behind preserving local literature as part of a living cultural heritage. This approach aligns with the principle of lifelong learning in Ignatian pedagogy, which emphasizes that the learning process does

not stop at acquiring skills but continues through personal and social transformation (Witono & Maridjo, 2021).

The value of “finding God in all things,” which is at the core of Ignatian spirituality, is also embodied in the appreciation of the noble value of local manuscripts as expressions of past wisdom. Through reflection and group discussions, workshop participants were invited to see that digitization and editing are not merely technical activities, but also acts of caring for the collective memory of universal human values. This strengthened the participants' awareness that involvement in cultural preservation is a form of spirituality and social responsibility (Ibrahim, 2017).

This awareness aligns with strengthening the Reflective Pedagogical Paradigm (RPP) that facilitators acquired during their studies. In line with the humanistic principles developed within the Jesuit tradition, this paradigm promotes a knowledge-building process that begins with context, followed by experience, reflection, action, and evaluation (Witono & Maridjo, 2021). These values form the framework for designing workshops, which are results-oriented and focus on shaping participants as individuals “for and with others” (Pranyoto, 2014).

In general, Pustakatama, in the context of a digital social movement based on literacy, is part of a collective process of expanding access to open knowledge. This approach aligns with the idea that community involvement in digital initiatives can strengthen the democratization of knowledge and foster cultural awareness through direct participation (Nugroho & Syarif, 2022). As Lay (2015) also noted, community involvement in culturally-based intellectual work is a cultural political strategy that enables the substantive expansion of knowledge democracy. The project produces digital documents and fosters networks among volunteers and partners involved in preserving regional literature. Such collaboration plays a role in building a sustainable support system for community-based cultural preservation in the digital age (Makmur, Abdurahman, Zulaikha, & Samsudin, 2024).

Meanwhile, the application of practice-based methods and reflective discussions in workshops aligns with the mandate of Law No. 43 of 2007 on Libraries, which emphasizes the importance of community literacy culture. This approach enables participants to discuss the cultural significance behind each traditional manuscript. Active interaction in the form of volunteer-participant exchanges regarding digitization techniques also supports the development of participants' critical literacy competencies. Critical literacy in community-based activities is expected to enhance social and cultural participatory awareness (Hendriani, 2018).

Critical literacy also serves as a strategic foundation for building national intelligence, as illustrated in the policy of the Governor of West Sulawesi, which requires high school and vocational school students to read at least 20 books as a graduation requirement (Himawan & Ihsanuddin, 2025). This policy recognizes that literacy strengthens critical thinking, social empathy, and cultural awareness—key elements in manuscript preservation and digital education. Through workshops, participants are encouraged to sharpen their ability to understand historical contexts and support the role of libraries as tools for intellectual and character development. Previous research confirms that a structured reading culture is strongly correlated with forming reflective thinking and developing a literate society (Sukmawati, Ni'ma, & Marsanti, 2023).

Further research can be directed toward exploring the effectiveness of artificial intelligence in automating the transcription of manuscripts written in local scripts, which

remains a technical challenge in digitization projects. Additionally, comparative studies between digital preservation projects in various regions of Indonesia are important to identify patterns of community participation and institutional policies that support such initiatives. The findings from *Pustakatama*, which demonstrate the success of community-based relational participation, can serve as a benchmark against previous studies that emphasized institutional approaches, thereby opening new avenues for analysis in the management of open knowledge.

CONCLUSION

The digitization of Javanese-language manuscripts and books through the *Pustakatama* Project demonstrates that the preservation of local literature can be achieved through technical means and a collaborative, community-based approach. This study underscores the importance of legal and technical aspects in ensuring public access to knowledge sources while highlighting the relevance of volunteer involvement in building an inclusive digital literacy ecosystem. The project's results illustrate that the synergy between cultural values, legal policies, and the spirit of volunteerism can serve as a strong foundation for the future preservation of local manuscripts in Indonesia, despite the limited number of freely licensed online collections and challenges in community participation. This research is expected to encourage more similar initiatives that focus on the quantity of digitization and strengthen the educational, reflective, and transformative values of open cultural literacy.

Future manuscript digitization projects must integrate more with education policies, information technology, and sustainable civil society engagement. Collaboration between government institutions, educational institutions, and digital communities can strengthen infrastructure, interoperability standards, and human resource capacity to preserve local literature. With clear regulatory support and inclusive participation models, manuscript digitization is a means of documentation and a strategic medium for building cultural identity awareness and critical literacy among the Indonesian people.

REFERENCES

- Almis, V. M., & Wijayanti, L. (2023). Digitalisasi Naskah Kuno Sebagai Upaya Pelestarian Informasi: *Systematic Literature Review*. *Jurnal Ilmu Perpustakaan*, 5(2), 296–310. <https://journal.ummat.ac.id/index.php/JIPER/article/view/15224>.
- Arfandi, H. (2016). Motif dan Strategi Gerakan Filantropi Muhammadiyah. *Jurnal Muhammadiyah Studies*, 1(1), 127–155. <https://doi.org/10.22219/jms.v1i1.11413>.
- Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544–559. <https://doi.org/10.46743/2160-3715/2008.1573>.
- Budhirianto, S. (2016). Model Pemberdayaan Relawan TIK dalam Meningkatkan E-Literasi Masyarakat di Kota Sukabumi. *Jurnal Penelitian Pos dan Informatika*, 5(2), 71–82. <https://jppi.komdigi.go.id/index.php/jppi/article/view/59>.
- Creative Commons. (2020). *About the Public Domain*. <https://creativecommons.org/publicdomain>. Diakses pada 23 Juli 2025.
- Dewantara, R. W., & Widhyharto, D. S. (2015). Aktivisme dan Kesukarelawanan dalam Media Sosial Komunitas Kaum Muda Yogyakarta. *Jurnal Ilmu Sosial dan Ilmu Politik*, 19(1), 40–52. <https://doi.org/10.22146/jsp.10855>.

- Djaja, H. (2016). Perlindungan Hukum terhadap Ekspresi Budaya Tradisional dalam Perspektif Undang-Undang Hak Cipta. *Jurnal Cakrawala Hukum*, 7(1), 18–29. <https://doi.org/10.26905/idjch.v7i1.1790>.
- Ellinger, A. D., & McWhorter, R. (2016). Qualitative Case Study Research as Empirical Inquiry. *International Journal of Adult, Vocational and Technology Education*, 7(3), 1–13. <https://doi.org/10.4018/IJAVET.2016070101>.
- Hendrawati, T. (2019). Digitalisasi Manuskrip Nusantara Sebagai Pelestari Intelektual Leluhur Bangsa. *Media Pustakawan*, 25(4), 21–29. <https://ejournal.perpusnas.go.id/mp/article/view/196>.
- Hendriani, A. (2018). Pedagogik Literasi Kritis: Sejarah, Filsafat, dan Perkembangannya di Dunia Pendidikan. *Pedagogia*, 16(1), 44–59. <https://doi.org/10.17509/pdgia.v16i1.10811>.
- Himawan & Ihsanuddin. (2025). Syarat Lulus SMA Wajib Baca 20 Buku, Disdik Sulbar: Teknis Belum Dibahas. *Kompas.com*. <https://regional.kompas.com/read/2025/07/22/200322278/syarat-lulus-sma-wajib-baca-20-buku-disdik-sulbar-teknis-belum-dibahas>. Diakses pada 23 Juli 2025.
- Ibrahim, T. (2017). *Dialog Landasan Pedagogik*. Bandung: Rizki Press.
- Ilhami, I., Fadil, M. S. R., Ferina, R., & Assabilla, S. A. (2024). Analisis Tantangan dan Peluang yang Dihadapi Perpustakaan di Era Digital. *Blantika: Multidisciplinary Journal*, 3(2), 211–219. <https://blantika.publikasiku.id/index.php/bl/article/view/284>.
- Jaringan Dokumentasi dan Informasi Hukum. (2025). *Undang-Undang Republik Indonesia Nomor 43 Tahun 2007 tentang Perpustakaan*. <https://peraturan.bpk.go.id/Details/39968/uu-no-43-tahun-2007>. Diakses pada 23 Juli 2025.
- Khoerunnisa, L., Johan, R. C., Ramadhan, S. Y., & Wulandari, Y. (2023). Upaya Digitalisasi Naskah Kuno di Perpustakaan Yayasan Pangeran Sumedang. *Journal of Documentation and Information Science*, 7(1), 56–68. <https://doi.org/10.33505/jodis.v7i1.222>.
- Kurniawan, A. B. (2018). Digitalisasi Sastra Jawa Semakin Mendesak. *Kompas.id*. <https://www.kompas.id/artikel/digitalisasi-sastra-jawa-semakin-mendesak>. Diakses pada 23 Juli 2025.
- Kusumaningtiyas, T., & Nurazizah. (2022). Perpustakaan Digital Budaya Indonesia: Peran Masyarakat dan Komunitas Melindungi dan Melestarikan Budaya Indonesia. *Jurnal Pustaka Budaya*, 9(1), 50–62. <https://doi.org/10.31849/pb.v9i1.9178>.
- Lay, C. (2015). *Pidato Pengukuhan Guru Besar: Negara, Kekuasaan, dan Demokrasi*. Yogyakarta: Universitas Gadjah Mada.
- Lesmana, T. & Sulandjari, K. (2013). Pemberdayaan Komunitas Lokal dalam Pelestarian Lingkungan: Tinjauan atas Proyek Kolaboratif, Keberlanjutan, dan Pengambilan Keputusan. *Jurnal Multidisiplin West Science*, 2(9), 808–818. <https://doi.org/10.58812/jmws.v2i09.668>.
- Liew, C. L. (2015). Building a Knowledge-Sharing Platform for Digital Cultural Heritage: The Role of Online Sociability Determinants. *D-Lib Magazine*, 21(11/12). <https://www.dlib.org/dlib/november15/liew/11liew.html>.

- Makhrus, M., & Saepudin, E. (2023). Gerakan Filantropi Islam Berbasis Media Sosial dan Implikasinya terhadap Pemberdayaan Masyarakat di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 9(2), 1906–1919. <https://doi.org/10.29040/jiei.v9i2.8911>.
- Makmur, T., Abdurahman, D., Zulaikha, S. R., & Samsudin, D. (2024). Tantangan Utama Preservasi Naskah Kuno Berbasis Digitisasi. *Berkala Ilmu Perpustakaan dan Informasi*, 20(1), 193–209. <https://doi.org/10.22146/bip.v20i1.9321>.
- Pranyoto, Y. H. (2014). Paradigma Pedagogi Refleksi (PPR): Suatu Alternatif Pendekatan Pembelajaran dalam Dunia Pendidikan. *Jurnal Masalah Pastoral*, 3(1), 68–86. <https://doi.org/10.60011/jumpa.v3i1.14>.
- Purnomo, G. W., & Pratiwi, K. Y. (2023). Engaging the Digital Native Generation in Cultural Digital Preservation: Strategies and Approaches for Libraries and Librarians in the Digital Age 4.0. *Knowledge Garden: International Journal of Library Studies*, 1(1), 19–42. <https://doi.org/10.21776/ub.knowledgegarden.2023.1.1.9>.
- Rizkyantha, O., Rusmiatiningsih, Afrina, C., & Oktapia, M. (2025). Preservasi Naskah Kuno: Strategi Pelestarian Minimal untuk Mempertahankan Warisan Budaya. *Jurnal Pustaka Budaya*, 12(1), 52–60. <https://doi.org/10.31849/pb.v12i1.22944>.
- Sukmawati, A., Ni'ma, S. L., & Marsanti, A. P. N. (2023). Peranan Budaya Literasi dalam Membentuk Pendidikan Karakter Siswa. *Jurnal Basicedu*, 7(4), 2048–2057. <https://doi.org/10.31004/basicedu.v7i4.5839>.
- Widiyanarti, T., Sarwoprasodjo, S., Sihabudin, A., & Kinseng, R. A. (2021). *Intercultural Communication in Manuscript Digitization (Study in the Village of Legok Indramayu)*. *Nyimak: Journal of Communication*, 5(1), 59–78. <https://doi.org/10.31000/nyimak.v5i1.3122>.
- Wikimedia Commons. (2025). *Pustakatama Digitization*. https://commons.wikimedia.org/wiki/Category:Pustakatama_digitization. Diakses pada 23 Juli 2025.
- Wikimedia Foundation. (2025). *Pustakatama Project*. <https://meta.wikimedia.org/wiki/Pustakatama>. Diakses pada 23 Juli 2025.
- Wikisource bahasa Jawa. (2025). *Pustakatama*. <https://jv.wikisource.org/wiki/Kategori:Pustakatama>. Diakses pada 23 Juli 2025.
- Witono, O. B., & Maridjo, H. H. (2021). Karakteristik Pendidikan Jesuit dalam Pendidikan Dasar dan Menengah di Perkumpulan Strada. *Jurnal Administrasi dan Manajemen Pendidikan*, 4(4), 331–337. <https://journal2.um.ac.id/index.php/jamp/article/view/23750>.