

Cultural Heritage Protection in the Digital Era from Indonesian Legal Perspective: Strategies for Preservation and Responsible Access

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Abstract: Digital technology continues to advance rapidly, and without appropriate preservation efforts, cultural heritage may be at risk of being forgotten or deteriorated in the digital era. In the absence of adequate protection strategies, cultural heritage faces potential exploitation through unethical use or misuse for commercial purposes. Ensuring equitable and inclusive access to cultural heritage via digital platforms is essential to support education, research, and broader cultural appreciation. This study seeks to understand recent developments in cultural heritage preservation within the context of digitalization and to evaluate the effectiveness of protection strategies implemented in legal practice at both national and international levels. Thus, this research aims to contribute to a richer understanding of the challenges and opportunities for preserving cultural heritage in the digital age, particularly through a legal lens. Employing a literature study with a normative legal approach, the research identifies effective legal frameworks for protecting cultural heritage, enabling in-depth analysis of existing frameworks, and provides insights into potential improvements needed to strengthen cultural heritage protection through legal means.

Keywords: Cultural Heritage; Cultural Protection; Cultural Digitalization; Legal Protection; Information Technology Law.

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Introduction

The advancement of digital technology has significantly impacted various fields, including cultural heritage preservation. The digitalization process offers opportunities to document, preserve, and provide broad access to invaluable cultural heritage, both tangible and intangible. Digitalization enables people to access cultural artifacts and traditions from around the world online, facilitating research and education, and supporting cultural promotion. However, digitalization also presents new challenges, particularly regarding intellectual property rights protection and data security.

In the context of digital cultural heritage protection, technologies such as augmented reality (AR) and web technologies are utilized to enhance user experiences and enrich interactions with cultural artifacts. These technologies not only assist in preservation but also allow for more dynamic visualization and reinterpretation of cultural objects. According to Z. Zhao (2017), the use of AR in preserving intangible cultural heritage enables a more immersive and educational experience, boosting cultural appreciation among younger generations.

However, integrating digital technology in cultural preservation raises concerns regarding copyright and moral rights. Increased digitalization can facilitate the reproduction and distribution of cultural content without proper authorization, potentially leading to unauthorized commercial exploitation and misuse. Strict regulations are therefore needed to ensure that digital content is protected and used in ways that respect the rights of the original creators and related cultural communities.

Such regulations are essential not only to protect cultural works but also to prevent the distortion and manipulation of digital content, which could damage cultural integrity. As discussed by Fresa (2014), creating a digital roadmap for cultural heritage preservation requires a holistic approach involving various stakeholders, including governments, cultural institutions, and communities. This is crucial for developing comprehensive and responsive policies to technological changes.

Overall, preserving cultural heritage in the digital era requires a robust and adaptive legal framework to ensure that digitalization is conducted responsibly. This includes strong legal protection for intellectual property rights, oversight of digital content distribution,

and effective enforcement against violations. Therefore, cultural preservation efforts involve not only advanced technology but also prudent policies and collaboration among stakeholders to keep cultural heritage alive and relevant for the future (Y. Zhao, 2022).

The development of cultural heritage preservation in the digital era presents complex challenges, particularly from a legal perspective. These challenges include copyright protection, regulation of commercial use, and risks of unethical cultural exploitation. Effective legal strategies are essential to protect digital cultural heritage, both in Indonesia and internationally. This requires implementing a clear legal framework to ensure ownership rights and accessibility. Additionally, it is important to establish policies that enable fair and responsible access to cultural heritage through digital platforms, supporting broad educational, research, and cultural appreciation goals.

How can effective legal strategies be applied to address these challenges and ensure fair and responsible access to cultural heritage? This study will explore “Cultural Heritage Protection in the Digital Era from a Legal Perspective: Strategies for Preservation and Responsible Access.”

Literature Review

Previous Research

These are some research explores the role of mixed reality and 3D modeling in cultural heritage preservation, considering both ethical and legal aspects involved:

1. Application of New Technologies in the Promotion and Preservation of Cultural Heritage: This article discusses the use of new technologies such as digital documentation, 3D scanning, virtual reality, and augmented reality for cultural heritage preservation. It also reviews the legal aspects of applying these technologies (Deretić & Kukolj, 2023).
2. Digital Heritage: This book examines the protection and conservation of cultural heritage using digital technologies like virtual reality, holographic projection, and augmented reality. It also addresses legal documentation and universal legal protection for digital heritage (Wang et al., 2020).
3. Mixed Reality and 3D Modelling Role in Cultural Heritage Preservation as a Pathway to Sustainable Heritage and Management (Dimara et al., 2024): These articles provide insights into how digital technologies, including augmented reality, can be used to preserve cultural heritage and emphasize the importance of considering legal aspects in the process.

Culture Heritage

Cultural heritage refers to the cultural assets and values passed down from generation to generation, reflecting a community's identity, history, and traditions. Cultural heritage can be **“tangible”**, including physical assets such as historic buildings, monuments, artworks, archaeological sites, and other items of cultural, historical, or artistic significance. Additionally, there is **“intangible cultural heritage”**, encompassing oral traditions, languages, rituals, music, dance, social practices, traditional knowledge, and skills that lack a physical form but are essential to the identity and continuity of a culture. The preservation of both tangible and intangible cultural heritage aims to protect and

maintain these assets so they are not lost or extinct, ensuring that the values and knowledge they embody continue to be appreciated and understood by future generations.

Intellectual Property Rights Protection

Copyright, patents, and other forms of intellectual property rights protect creative and innovative works. In the context of digitalization and the use of AR for cultural heritage preservation, this theory is relevant as it involves legal aspects in protecting digitalized outputs from unauthorized use and commercial exploitation. This includes safeguarding the digital reproduction of cultural artifacts and content produced for educational or commercial purposes.

Technology as a Cultural Bridge

Technology can serve as a medium that connects and promotes culture. In the context of cultural heritage digitalization, technologies like augmented reality, 3D scanning, and virtual reality not only aid in physical preservation but also enable broader and more interactive access to cultural heritage. This allows cultural values to be preserved and introduced to a wider audience, crossing geographical and generational boundaries.

Methods

This research employ a literature study method with a normative legal approach. A literature study focusing on protecting cultural heritage through a normative legal approach is essential for identifying a legal framework that can effectively ensure cultural heritage preservation. Research conducted with a normative juridical method and a descriptive-analytical specification enables an in-depth analysis of existing legal frameworks. By adopting a normative legal approach in the literature study, this research provides a comprehensive understanding of the current legal framework, identifies potential areas for improvement, and outlines concrete steps to strengthen cultural heritage protection through legal means (Fiantika, 2022; Irianto, 2017).

Result and Discussion

The preservation of cultural heritage in the digital era faces significant legal challenges, including copyright protection and intellectual property rights for digitalized outputs. In the article **“The Preservation of Cultural Heritage: Challenges and Opportunities in the Digital Age,”** AS Khan explores how digitalization expands access to cultural heritage but also heightens the risk of misuse and exploitation. For instance, poorly protected digital works can be easily copied and distributed without authorization, threatening the rights of original owners and the cultural integrity of the material (Asif Saeed Khan, 2023).

Additionally, M. Dulong de Rosnay and F. Musiani in their article **“The Preservation of Digital Heritage: Epistemological and Legal Reflections,”** highlight both technical and legal challenges in preserving digital heritage. They observe that while technology offers new ways to store and disseminate culture, global copyright policies remain ambiguous and inconsistent, raising issues around cross-border legal protection and establishing international standards for digital cultural heritage protection (Dulong de Rosnay & Musiani, 2012).

However, opportunities also emerge from technological advances. For example, UNESCO has undertaken efforts to address these challenges by developing standard-setting

instruments for digital cultural heritage preservation. In *‘‘UNESCO and the Challenge of Preserving Digital Cultural Heritage,’’* S. von Schorlemer discusses UNESCO’s work to ensure sustainable and ethical access to digital heritage while encouraging the establishment of a strong legal framework to protect digital works from misuse. This suggests that despite the substantial challenges, there are also opportunities to strengthen cultural heritage preservation through improved policy and regulation development (von Schorlemer, 2020).

To provide effective and preventative legal protection against unauthorized exploitation or misuse of cultural heritage, a comprehensive and integrated legal framework is required. First, regulations must clearly protect intellectual property rights, including copyrights and moral rights over digitalized cultural heritage. This includes recognizing the rights of original creators and cultural owners, as well as preventing unauthorized reproduction or distribution. Such protection is crucial to ensure that digital representations of cultural artifacts are not misused or altered without permission (Srinivas et al., 2018).

Second, effective oversight and law enforcement mechanisms are essential. This involves developing registration and licensing systems for digitalized cultural heritage, alongside strict sanctions for legal violations. Regulations should encompass aspects such as usage monitoring, regular audits, and transparency obligations for parties managing or using digital representations. A robust legal framework should also provide mechanisms to resolve disputes related to ownership and use of digitalized works (Browne & Raff, 2022).

Third, public education and increased awareness among stakeholders about the importance of cultural heritage preservation in digital form are necessary. This can be achieved through educational programs, training, and public awareness campaigns. By raising awareness about cultural values and the laws that protect them, the public can play an active role in safeguarding cultural heritage integrity. Additionally, the legal framework needs to maintain flexibility to adapt to technological advancements and shifts in cultural heritage management practices (Jagielska-Burduk, Pszczyński, & Stec, 2021).

In Indonesia, legal provisions related to cultural heritage protection are governed by several regulations, aimed at preserving and protecting both tangible and intangible cultural assets. The primary legal basis is Law No. 11 of 2010 on Cultural Heritage, which addresses preservation, management, and protection of cultural heritage against misuse and damage. A key element of this law is the zoning system for cultural heritage sites, which designates protected areas and provides guidelines for their management and conservation (Asri, 2018).

Additionally, cultural heritage protection is supported by international agreements adopted by Indonesia, such as the UNESCO Convention on the Protection of Intangible Cultural Heritage and the UN Convention on the Protection of Underwater Cultural Heritage. These agreements emphasize the importance of safeguarding cultural heritage from unauthorized commercial exploitation and outline measures to ensure sustainable preservation and access. Through these conventions, Indonesia commits to protecting cultural heritage and ensuring that conservation practices adhere to international standards (Permanasari, 2023).

At the local level, regulation and enforcement of cultural heritage protection often require collaboration between central and local governments. This includes developing local policies aligned with national frameworks, as well as implementing cultural preservation programs. These policies also involve educating the public and stakeholders to raise awareness of cultural heritage importance. Furthermore, efforts are made to integrate cultural protection into development policies, ensuring that cultural preservation becomes an integral part of planning and development across various sectors (Fitri, Yahaya, & Ratna, 2017).

In addition to Law No. 11 of 2010 on Cultural Heritage, other Indonesian laws support cultural heritage protection, particularly in the context of digitalization and responsible access:

1. Law No. 28 of 2014 on Copyright

The Copyright Law provides legal protection for works related to cultural heritage, including those that have been digitalized. In the context of cultural heritage digitalization, copyright law protects digital works such as 3D scans, digital photography, and audiovisual recordings representing cultural objects. This law grants exclusive rights to creators or copyright holders to control the use, distribution, and reproduction of their works. This is essential to prevent unauthorized commercial exploitation and ensure that digitalized products are used in ways that respect the rights of the original owners.

2. Law No. 1 of 2024 on Information and Electronic Transactions (ITE Law)

The ITE Law plays an essential role in protecting digital information, including data and content related to cultural heritage. The law regulates electronic information dissemination and online transactions, including the protection of personal and sensitive data. In the context of cultural heritage preservation, the ITE Law can be applied to regulate the dissemination of digital cultural heritage content, ensuring that information published through digital platforms does not violate privacy rights or defame cultural owners. This law also sets penalties for unauthorized information dissemination or fraud related to electronic transactions.

3. Law No. 5 of 2017 on Cultural Advancement

The Cultural Advancement Law provides a broader legal framework covering various aspects of cultural protection, preservation, development, and utilization. This law recognizes the importance of cultural preservation, both tangible and intangible, to strengthen national identity and promote cultural diversity. The law also supports digitalization efforts as a means of preserving and promoting culture. Under this law, the government is obligated to support cultural preservation initiatives, including using digital technology to ensure broad and responsible access to cultural heritage.

Together with the Cultural Heritage Law, these three laws form a comprehensive legal framework in Indonesia to protect and preserve cultural heritage and to ensure that digitalization and access are conducted responsibly and in accordance with applicable laws.

Technically, when an entity intends to digitize cultural heritage, it must follow certain legal procedures and requirements stipulated

by relevant laws. Below are the technical steps and possible legal consequences if there is a violation:

Table 1: Legal Framework for Digital Cultural Heritage Preservation in Indonesia

Procedures and Technical Requirements for Cultural Heritage Digitalization	
Licensing and Permits	Parties intending to digitize cultural heritage must obtain permission from the relevant authorities, such as the Ministry of Education and Culture or local government agencies responsible for cultural preservation. This includes obtaining access permits for protected cultural sites or objects. This procedure is regulated under the Cultural Heritage Law and its implementing regulations, such as Government Regulations and Regional Regulations.
Compliance with Copyright and Intellectual Property Rights	When digitizing cultural objects, particularly those with copyright elements, the parties involved must ensure they have the rights to reproduce, distribute, or display the work. This includes respecting any moral and economic rights held by the creator or original owner of the work. The Copyright Law regulates how these rights must be respected, including the process for obtaining usage permissions.
Management and Distribution of Digital Content	Once digitalization is complete, the management of digital content must adhere to information security and data protection standards as regulated under the ITE Law. This includes ensuring that digital data is not altered or misused and that digital content distribution respects copyright and privacy rights. Digital platforms used to distribute content should have clear policies regarding content usage and implement mechanisms to prevent unauthorized content distribution.
Legal Implications of Violations	
Administrative and Criminal Sanctions	If violations of licensing or copyright provisions occur, the offending party may face administrative or criminal sanctions. For example, copyright infringement may lead to fines or imprisonment under the Copyright Law. Meanwhile, violations related to the distribution of digital content may incur penalties under the ITE Law, including significant fines and/or imprisonment.
Obligation to Pay Damages	In addition to criminal sanctions, offenders may also be required to pay compensation to the rights holder or affected parties. This includes financial compensation for losses incurred due to unauthorized content use or damage to reputation.
Revocation of Licenses and Activity Bans	Authorities may revoke previously granted licenses if digitalization is found to have been conducted without meeting legal requirements or if digital content is used unlawfully. License revocation may be accompanied by a ban on conducting similar activities in the future.

By following these procedures and adhering to the legal framework, entities can contribute to the responsible digitalization of cultural heritage, ensuring that cultural assets are preserved, respected, and accessible to future generations in a legally compliant manner.

Conclusion

In the context of cultural heritage preservation in the digital era, Indonesia has a comprehensive legal framework encompassing various aspects of protection, from the Cultural Heritage Law and Copyright Law to the Information and Electronic Transactions (ITE) Law. The process of digitalizing cultural heritage is strictly regulated, including obtaining permits, complying with intellectual property rights, and managing digital content. This legal protection aims to prevent unauthorized misuse and exploitation and to ensure that access to digital cultural heritage is conducted responsibly, respecting the rights of original owners. Violations of these provisions may result in administrative and criminal sanctions, as well as liability for damages, demonstrating the Indonesian government's strong commitment to protecting cultural heritage.

References

- Asif Saeed Khan. (2023). THE PRESERVATION OF CULTURAL HERITAGE: CHALLENGES AND OPPORTUNITIES IN THE DIGITAL AGE. *Al-Behishat Research Archive*, 1(1), 16–24.
- Asri, D. P. B. (2018). PERLINDUNGAN HUKUM TERHADAP KEBUDAYAAN MELALUI WORLD HERITAGE CENTRE UNESCO. *Jurnal Hukum Ius Quia Iustum*, 25(2).
- Browne, K., & Raff, M. (2022). The Emergence of the International Protection of Cultural Heritage. *International Law of Underwater Cultural Heritage*.
- Deretić, N., & Kukolj, S. (2023). Application of New Technologies in the Promotion and Preservation of Cultural Heritage (pp. 309–329).
- Dimara, A., Psarros, D., Vrochidis, A., Papaioannou, A., Krinidis, S., & Anagnostopoulos, C.-N. (2024). Mixed Reality and 3D Modelling Role in Cultural Heritage Preservation as a Pathway to Sustainable Heritage and Management (pp. 405–418).
- Dulong de Rosnay, M., & Musiani, F. (2012). The preservation of digital heritage: epistemological and legal reflections. *Journal for Communication Studies*, 5(2).
- Fiantika, F. R. et al. (2022). Metodologi Penelitian Kualitatif. In Metodologi Penelitian Kualitatif. Rake Sarasin. Retrieved from <https://scholar.google.com/citations?user=O-B3eJYAAAAJ&hl=en>
- Fitri, I., Yahaya, A., & Ratna, M. (2017). Cultural Heritage and Its Legal Protection in Indonesia Since the Dutch East Indies Government Period.
- Fresa, A. (2014). DIGITAL CULTURAL HERITAGE ROADMAP FOR PRESERVATION. *International Journal of Humanities and Arts Computing*, 8.

10. Irianto, S. (2017). METODE PENELITIAN KUALITATIF DALAM METODOLOGI PENELITIAN ILMU HUKUM. *Jurnal Hukum & Pembangunan*, 32(2), 155.
11. Jagielska-Burduk, A., Pszczyński, M., & Stec, P. (2021). Cultural heritage education in unesco cultural conventions. *Sustainability (Switzerland)*, 13(6).
12. Permanasari, A. (2023). Indonesia zoning system for the protection of cultural heritage: A review. *AIP Conference Proceedings (Vol. 2706)*.
13. Republic of Indonesia. (n.d.). Undang-Undang Nomor 11 Tahun 2010 tentang Cagar Budaya. Indonesia.
14. Republik Indonesia. (n.d.). Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta. Indonesia: LN.2014/No. 266, TLN No. 5599, LL SETNEG: 57 HLM. Retrieved August 4, 2024a, from <https://peraturan.bpk.go.id/Details/38690>
15. Republik Indonesia. (n.d.). Undang-undang (UU) Nomor 1 Tahun 2024 tentang Perubahan Kedua atas Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik. Retrieved August 4, 2024b, from <https://peraturan.bpk.go.id/Details/274494/uu-no-1-tahun-2024>
16. Republik Indonesia. (n.d.). Undang-Undang Nomor 5 Tahun 2017 tentang Pemajuan Kebudayaan. Indonesia. Retrieved August 4, 2024c, from <https://peraturan.bpk.go.id/Details/37642/uu-no-5-tahun-2017>
17. von Schorlemer, S. (2020). Unesco and the challenge of preserving the digital cultural heritage. *Santander Art and Culture Law Review*, 2020(2).
18. Srinivas, J., Das, A. K., Kumar, N., de Bruijn, H., Janssen, M., Leszczyna, R., Brilingaitė, A., et al. (2018). Managing Cybersecurity Risk in Government: An Implementation Model. *Computers and Security*, 8(1).
19. Wang, X., Lasaponara, R., Luo, L., Chen, F., Wan, H., Yang, R., & Zhen, J. (2020). Digital Heritage. *Manual of Digital Earth* (pp. 565–591). *Singapore: Springer Singapore*.
20. Zhao, Y. (2022). Digital Protection of Cultural Heritage Based on Web Technology. *Mathematical Problems in Engineering*, 2022.
21. Zhao, Z. (2017). Digital Protection Method of Intangible Cultural Heritage Based on Augmented Reality Technology. *Proceedings - 2017 International Conference on Robots and Intelligent System, ICRIS 2017*.