

DIGITAL TRANSFORMATION AND SUSTAINABILITY OF CULTURAL COMMUNITIES

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ABSTRACT

This article examines the role of digital technology in the preservation of cultural heritage, focusing on community development and the preservation of traditional Javanese arts. Based on the literature review and field observations, this article discusses a paradigm shift in cultural preservation and promotion through digital technology, especially in the context of traditional Javanese music. Previous studies have shown that the internet and digitalization play an essential role in promoting and sustaining cultural wealth. This article explores how digital technologies facilitate traditional music's recording, archiving, and distribution, thereby expanding access for modern society and the global community. Platforms like Google Arts & Culture strategically introduce cultural heritage by providing open access to art and cultural collections from different countries, making traditional culture more accessible and appreciated by the wider community. The discussion also highlighted the role of online cultural communities as the main driver in preserving and promoting culture in the digital era. Technology expands access to and distribution of cultural information and encourages collaboration, innovation, and connectivity between individuals and communities. This article is part of the author's efforts to assist *the community development process* in the cultural community in Klaten, emphasizing the importance of digital technology as a strategic tool in community development and cultural preservation. This technology is expected to be adopted by individuals, organizations, and governments to maintain and develop cultural heritage to remain relevant.

Keywords: cultural preservation, traditional arts, digital technology, cultural heritage

INTRODUCTION

As a foothold of Javanese cultural heritage, Javanese music has a role that is not limited to mere entertainment. This musical tradition is essential in maintaining the Javanese people's cultural identity and spiritual essence. However, with the rapid advancement of technology that has changed the pattern of access and dissemination of information, the Javanese music scene faces new challenges in its efforts to maintain and spread cultural heritage. Previous research emphasizes that the presence and integration of new media technologies (Dovbysh & Lehtisaari, 2020; Mihelj et al., 2019), especially the internet, and digitalization, have a significant impact on encouraging the promotion and preservation of cultural wealth.

The influence of technology on the preservation of cultural arts is very significant. On the one hand, technology allows the preservation of cultural arts through digital media to store and disseminate information related to cultural arts. This opens up the opportunity to introduce cultural arts to a broader audience (Bautista, 2013). However, technology has also changed how people perceive and access cultural arts. For example, technology can shift traditional art forms into more modern and digital ones (Özdemir, 2022). Technology can also affect how people learn and understand cultural arts, potentially changing how cultural heritage is passed down from one generation to the next. Therefore, the role of technology in the preservation of cultural arts is a complex phenomenon that requires careful understanding and handling to maintain a balance between the preservation of cultural traditions and technological developments.

The intersection between media technology and cultural arts has sparked an exciting discourse across various disciplines (Apostolidou et al., 2020). One of the discussions explored how artistic engagement with digital technologies facilitates cultural experimentation, grassroots political advocacy, and public participation in maintaining cultural continuity. Integrating artistic expression with digital technology facilitates cultural experimentation and supports grassroots political involvement and public participation in maintaining cultural sustainability.

In preserving Javanese music, digital technology can help maintain the sustainability and continuity of Javanese karawitan in modern society. By utilizing digital technology, traditional Javanese karawitan music can be preserved and shared with a broader audience (Fitriana & Putra, 2022; Yuliati et al., 2023). Using digital technology to preserve music, such as karawitan, can ensure its continuity and sustainability in modern society (Wikandini et al., 2022). By embracing digital technology, the preservation and dissemination of Javanese music face new challenges. However,

using technology also offers new opportunities to preserve and promote traditional Javanese music. By utilizing digital technology, traditional Javanese karawitan music can be preserved and shared with a broader audience.

METHOD

This study adopts an *ethnography action research approach*, with the author actively assisting cultural communities in Klaten. This method allows for a deep understanding of the cultural context through direct participation in community activities and identifying challenges and opportunities during the process of arts and cultural preservation (Reason & Bradbury, 2001). By accompanying the community, the author can map the changes that occur and encourage positive transformation through local needs-based interventions.

This study is not only observational but also participatory in its implementation. The author is an active facilitator, collaborating with the community to utilize digital media and develop cultural preservation strategies. Direct observation is carried out through communication with community members and observation of online activities on platforms such as Galuh Prambanan TV (Jati, 2022). This platform is a promotional medium and a space for discussion and collaboration in maintaining cultural sustainability in the digital era.

This study uses the *ethnography action research* method because of its adaptive and participatory nature, allowing researchers to work directly with the community and respond to emerging needs (Tacchi et al., 2003). With this active involvement, this study documents cultural preservation practices and provides strategic input for community development. The results of this study contribute to developing relevant and beneficial solutions for the cultural community in Klaten that is facing the challenges of the digital era.

RESULTS AND DISCUSSION

In the context of Javanese music, integrating technology can revolutionize how this traditional art form is preserved and appreciated in modern society. By combining traditional performance techniques with digital tools, Javanese musicians can reach a wider audience and ensure the longevity of their cultural heritage. This intersection between technology and Javanese music opens new possibilities for preserving and promoting the art form. Technology plays a crucial role in preserving cultural heritage and ensuring its continuity (I Gede Iwan Sudipa et al., 2022). It helps bridge the gap between preserving traditional Javanese music and embracing the advancement of the digital age. By utilizing digital technology, traditional Javanese music can be recorded, archived, and shared online, allowing it to reach a global audience. This digital preservation not only ensures the accessibility and visibility of Javanese music but also facilitates research, education, and collaboration among musicians and scholars.

Digital technology provides a platform for the preservation, distribution, and promotion of traditional Javanese music, karawitan. This makes it possible to record, archive, and disseminate performances, compositions, and knowledge related to Javanese music. With the help of digital technology, traditional Javanese music can be documented, transcribed, and preserved in digital format. This digital preservation allowed for the global spread of Javanese music and further exploration and study of its intricate melodies, rhythms, and traditions. Integrating digital technology to preserve Javanese music ensures its continuity and sustainability in modern society. Through digital technology, traditional Javanese music known as karawitan can be preserved and shared with a broader audience (Syarif et al., 2020). By utilizing digital technology, traditional Javanese karawitan music can be preserved and shared with a broader audience. In addition, digital technology allows for innovative approaches to composition and performance in preserving Javanese music. Incorporating digital technology to preserve traditional Javanese music ensures its survival and paves the way for innovation and creativity in the form of art. The preservation of Javanese music is essential to maintain the region's cultural heritage.

The Impact of Online Cultural Communities

The impact of online cultural communities on preserving and promoting cultural heritage must be considered. These online communities provide a platform for individuals to connect and engage with others who share a common interest in preserving and promoting cultural heritage. Through these communities, individuals can share knowledge, resources, and experiences, creating collaborative spaces for preserving and promoting cultural heritage. In addition, these online communities allow for easy dissemination and access to cultural heritage information, reaching a global audience.



Figure 1. Screenshot of Galuh Prambanan TV YouTube Link

Several previous studies have shown that online cultural communities have influenced and supported the use of media technology in cultural arts (Burgess & Green, 2018; Goodrich & De Mooij, 2014; Jati, 2022; Lievrouw, 2023). The author observed a Javanese cultural community in Klaten that developed an internet-based community media platform called Galuh Prambanan TV. The community faces challenges in digital art communication, including audience development, the quality of digitally displayed artworks, economic and cultural values, and the evolution of digital art forms. This highlights the need for an effective online communication strategy to promote a vibrant and diverse cultural community in the digital age. One of the key findings of this study is the significant impact of online cultural communities on the preservation and promotion of cultural heritage. In the author's observation, the community uses means of communication such as the WhatsApp platform and the chat feature on the YouTube platform.

Using communication tools such as WhatsApp and chat features on YouTube is an integral part of an effective online media strategy in developing cultural communities. WhatsApp allows community members to connect directly, discuss, and share information instantly in small groups. This facilitates a more profound exchange of ideas and builds closer relationships among members. On the other hand, the chat feature on YouTube offers a more open platform, allowing for more comprehensive discussions and interaction with a larger audience. This means of communication allows for a two-way dialogue between content creators and viewers, enriching the experience with direct exchange in disseminating information, ideas, and viewpoints related to the cultural activities being promoted. These two tools provide flexibility in message delivery, build strong communication networks, and facilitate intense collaboration between community members, all of which are at the core of the strategic use of online media for the growth and maintenance of cultural communities.

By fostering relationships between individuals and providing a platform for sharing resources, online cultural communities play an essential role in preserving and promoting cultural heritage in the digital age and beyond. Digital technology's importance in preserving and promoting cultural heritage must be addressed (Tseng et al., 2013). This allows for broader access to cultural heritage, facilitates innovative approaches to preservation and promotion, encourages collaboration between individuals, and improves communication strategies in the digital age.

By harnessing the power of digital technology, traditional cultural practices, and art forms can be shared with a broader audience, ensuring their survival and relevance in an ever-changing world. In conclusion, using digital technology to preserve and promote cultural heritage is very important. This allows for broader access and dissemination of cultural heritage information and encourages collaboration, innovation, and connection among individuals and communities. Overall, digital technologies have revolutionized the preservation and promotion of cultural heritage by providing opportunities for broader access, collaboration, and innovative approaches (Tait et al., 2016). Digital technologies have revolutionized the preservation and promotion of cultural heritage by providing opportunities for broader access, collaboration, and innovative approaches (Ningrayati Amali et al., 2022). Digital technology's use in preserving and promoting cultural heritage has revolutionized this field. Technology has opened new possibilities for broader access, collaboration, and innovative approaches to preserving and promoting cultural heritage. In addition, technology has also made it possible to preserve and disseminate traditional cultural practices and art forms and ensured the survival of cultural preservation.

Technology-Based Media for Cultural Preservation

Technology-based media is becoming increasingly crucial in facing the challenges of cultural preservation in the ever-changing digital era. It provides a platform to respond to the need to capture, store, and disseminate information about cultural heritage in an accessible and sustainable manner. Digital technology enables the preservation, distribution, and promotion of information related to cultural heritage in a highly innovative way. One prime example is Google Arts & Culture. This platform facilitates the digitization and virtual reconstruction of archaeological sites and monuments and presents immersive experiences for individuals to engage directly with cultural heritage.

Through its projects, Google Arts & Culture allows users worldwide to explore art and cultural heritage collections from different corners of the planet (Cowin, 2020; Verde & Valero, 2021). The platform is a digital archive and an open window that offers users broad access to appreciate and learn about cultural heritage from a broader and deeper perspective. With Google Arts & Culture, users can explore virtual exhibitions, explore art collections, learn about history, and engage directly with cultural heritage from wherever they are. This makes digital technologies, such as the Google Arts & Culture platform, essential in preserving and promoting cultural heritage in the ever-evolving digital age.

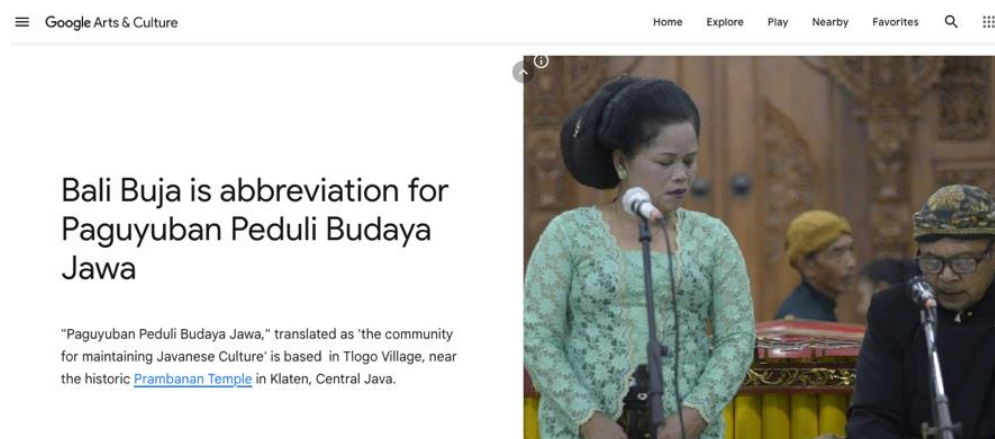


Figure 2. Google Arts & Culture Screenshot

Digital technology is changing the paradigm of cultural heritage preservation and promotion by providing broader access opportunities, collaboration, and innovative approaches. Integrating digital technology with cultural heritage has brought a paradigm shift in preserving and promoting cultural heritage. This has enabled the digitization, preservation, and virtual reconstruction of artefacts and cultural sites, making them accessible to a broader audience. In addition, digital technology has facilitated collaboration between cultural heritage organizations, researchers, and communities. Overall, digital technologies have become essential in preserving and promoting cultural heritage, enabling digitization, dissemination, and virtual reconstruction of artefacts and sites, fostering more comprehensive access and engagement with cultural heritage.

Conventional mass media, such as radio and television, must adapt to internet-based technology to improve services to cultural communities. This adaptation process involves the integration of digital platforms and online streaming services, which expands access to cultural content and reaches a broader audience. The use of digital technology in the context of preserving and promoting cultural heritage is not only focused on digitizing artefacts and websites but also includes the integration of digital platforms and online streaming services in the realm of conventional mass media.

Overall, integrating digital technologies in preserving and promoting cultural heritage has revolutionized the sector by providing broader access opportunities, collaboration, innovative approaches, and integrating digital platforms into traditional mass media structures. Adopting integrated digital platforms and online streaming services provides a more extensive space for access to cultural content, allowing for more global outreach. This adaptation effort signifies a blend of traditional and digital media to ensure that cultural and artistic heritage is accessible to a global audience. Thus, the impact of media-based technology on cultural preservation is not limited to the digitization of artefacts and sites but has fundamentally changed the way cultural heritage is preserved, disseminated, and experienced, marking the significant influence of technology on the future of cultural arts and heritage.

CONCLUSION

The development of mass media through internet technology plays a significant role in disseminating culture and information related to cultural heritage. The impact of digital technology on the preservation and promotion of cultural heritage has great importance. This technology facilitates the process of digitization and accessibility to cultural resources, expands community reach, increases interaction with collections, and increases the efficiency of conservation efforts. In addition, digital technology is also creating innovative methods to engage with cultural heritage.

Digital technology makes it possible to overcome several challenges and limitations that often arise in efforts to preserve and promote cultural heritage using conventional methods. The transformation resulting from digital technology has revolutionized the process of preserving and promoting cultural heritage. It provides opportunities to digitize resources, maintain access to collections, improve the efficiency of conservation efforts, and create innovative approaches to engagement with cultural heritage. By effectively utilizing digital technology, cultural heritage can be preserved for future generations and remain accessible and relevant to diverse global audiences. Therefore, individuals, organizations, and governments need to adopt digital technology to preserve and promote cultural heritage.

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