Availabe online at Website:
http://journal.uinjkt.ac.id/index.php/jko
**Jurnal Kommunity Online, Volume 7, No 1, 2026, 19-35**

# ADAPTATION OF DIGITAL PAYMENT TECHNOLOGY: THE USE OF QRIS IN THE SOCIAL TRANSFORMATION OF KAYUTANGAN VILLAGE MALANG

**Musfiah Saidah[1*], Shafira Zahra Ramadhani[1], Lulu Ulrojabiah[2]**
[1] UIN Syarif Hidayatullah Jakarta, Indonesia
[2] Universitas Indonesia, Jakarta, Indonesia
E-mail: musfiah.saidah@uinjkt.ac.id

**Submit :** 2 April 2026, **Revisi :** 3 Mei 2026**, Approve :** 4 Mei 2026

***Abstract***

*In the digital era, the use of technology greatly influences human life systems, including patterns of social interaction and community empowerment. It encourages the formation of agents of socialchange who utilize digital technology ethically and strategically to empower communities. Technology is a key element in today's digital ecosystem, significantly impacting social transformation. Within this framework, digital transformation in the village tourism sector is crucial for supporting local economic sustainability. However, the technology adoption process is not always linear and orderly among business actors. This study examines the perceptions, motivations, obstacles, and strategies developed by actors in their daily lives when managing a culture-based tourism village. The aim is to understand the community's personal experiences in adopting technology to promote, develop, and conduct QRIS-based digital payments in Kayu Tangan Heritage Village, Malang City. This study uses a qualitative phenomenological approach to understand lived experiences and their meanings. It involved four informants two traders, one gatekeeper resident, and one expert. Data were collected through in-depth interviews and analyzed using thematic analysis, including coding and identifying key patterns. This study is unique in offering a micro-level perspective on how local communities adapt to technological change, contributing to global insights on grassroots digital transformation. The results indicate that the technology adaptation process is gradual and uneven among actors. Acceptance of QRIS is influenced by several factors, such as initial understanding of the technology through socialization, the role of local actors, perceptions of its benefits, and experience in conducting transactions. This study concludes that technology adaptation in heritage villages is not simply a technical issue, but a social process influenced by relationships, experiences, and how actors interpret the technology. These findings underscore the importance of a participatory and contextual approach in driving inclusive digital transformation in culture-based tourism areas.*

***Keywords****: adoption, technology, digital, payment.*

**How to cite** : Saidah, M., Ramadhani, S., Ulrojabiah, L. 2026. Adaptation of Digital Payment Technology: The Use of Qris in The Social Transformation of Kayutangan Village Malang. *Jurnal Kommunity Online*, 7(1), 2026, 19-35, doi:10.15408/jko.v7i1.50582

## INTRODUCTION

The development of digital technology has brought significant changes in various sectors of life, including the management of heritage-based tourist villages. In the digital era, the use of technology greatly influences human life systems, including patterns of social

Copyright © *2026,* Jurnal Kommunity Online, 7 (1) 2026
© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

interaction and community empowerment. Consequently, the management of cultural tourism that relies on conventional approaches such as word-of-mouth promotion and seasonal visits has become less effective in reaching tourists who increasingly depend on digital information, encouraging the emergence of agents of social change who utilize digital technology ethically and strategically to empower communities

In today's digital era, tourists have access to information through websites and social media platforms. Travel planning has become more autonomous, allowing travelers to tailor experiences to their personal preferences (Afnarius, 2024). Technology also enables price comparisons, traveler reviews, and personalized recommendations, transforming the way people plan their trips. Therefore, the use of technology is no longer merely a complement but has become a primary requirement for enhancing the competitiveness of tourist destinations in the digital age.

Digital technology has the potential to be a strategic instrument in transforming the management of heritage tourism villages through the use of social media, websites, and storytelling-based digital content (Kasemsarn, 2025). Digital storytelling enables the delivery of cultural and historical narratives in a more contextual and engaging manner for tourists. Through technology, tourism villages can expand their promotional reach, improve service quality, and strengthen interactions between managers and tourists. However, the process of technology acceptance and utilization at the village level is not always instantaneous; instead, it involves stages of adaptation influenced by the social, cultural, and economic conditions of the local community (Shin, 2021).

Kayu Tangan Heritage Village is a historical and culturally diverse tourist area with significant potential for developing local wisdom-based tourism. Its unique architecture, colonial heritage, and the community's creative economic activities are key attractions. In recent years, the Kayu Tangan Heritage Village management has begun adopting various forms of technology, such as social media for promotion, digital payment systems, and the use of online information platforms to support tourism activities.

The transformation of heritage-based tourism villages into structured and sustainable destinations is not unique to Indonesia but reflects a broader global trend. Similar models can be found in destinations such as Gion District in Japan, Bukchon Hanok Village in South Korea, and Hoi An Ancient Town in Vietnam, where local culture is preserved while being managed as part of a broader tourism ecosystem. These destinations demonstrate how heritage areas can be organized to enhance visitor experiences and sustain local economies through structured management and community involvement. However, unlike these relatively well-established


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

and systematically managed heritage sites, the development process in Kayutangan Heritage Village in Indonesia reflects a more gradual, uneven, and socially embedded pattern.

This difference highlights an important gap in the application of Innovation Diffusion Theory, which often assumes a linear and rational process of change. In the context of developing countries, transformation is shaped not only by functional considerations but also by social relations, trust, local knowledge, and everyday experiences. Therefore, this study contributes to the global discourse by offering a micro-level perspective on how grassroots communities navigate change within culturally rooted environments, providing a more contextual and nuanced understanding of innovation diffusion in heritage tourism settings.

The development of digital technology in the tourism sector is driving the adoption of innovations that change the way tourist destinations are managed and enjoyed by tourists. Rachmadi (2020) explains that the use of technology in tourism activities occurs through several stages, from planning, utilizing digital devices during the trip, to sharing travel experiences on social media after the visit.

This pattern emphasizes that technology not only serves as a promotional tool but also shapes the overall tourist experience. Furthermore, digital transformation in tourism has transformed the destination ecosystem, including products, services, and how tourists interact with the destination (Khoir, 2023). This development requires destination managers, including culture-based tourism villages, to innovate to remain relevant and competitive amidst increasingly digital changes in tourist behavior (Sabil, 2022).

Based on previous research, Ferdian & Munawaroh (2025) explains that digital technology plays an important role, especially *social media* as the main tool for promoting tourism, as well as websites that facilitate and expand access to information. In this context, a *smart tourism approach* is an appropriate strategy for strengthening a destination's tourism identity, particularly through digital marketing (Hanum, 2020). Advances in information technology that emerged alongside the Industrial Revolution 4.0 era have had a significant impact on various aspects of life, including the promotion of the tourism sector (Staankov, 2020).

Today's tourism industry is increasingly utilizing creative technologies to expand markets and increase knowledge about tourist attractions. Therefore, these innovations are expected to increase village visibility, expand visitor reach, and stimulate local economic growth. However, implementing technology in Kayu Tangan Heritage Village is not without challenges. Differences in community digital literacy levels, limited infrastructure, and resistance to change are factors that influence the speed and success of technology adoption.


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Amidst the rapid development of digital technology, balanced attitudes and behaviors, coupled with insight and knowledge in its use, are needed, namely digital literacy. Digital literacy is not only related to the ability to use technological devices, but also the ability to understand information, assess the credibility of content, and make wise decisions in the digital space (Pradana, 2018). According to Paul Gilster (Sasmito, 2021), digital literacy is the ability of individuals and communities to access, understand, and critically utilize digital technology through computers.

Without adequate digital literacy, technology utilization has the potential to be shallow and unsustainable. Digital literacy is a crucial prerequisite for facing technological transformations that are increasingly integrated into society's social, economic, and cultural life. If this is not balanced with digital literacy skills, the *post-truth phenomenon,* a condition where is the trust to information more based on emotional impulses rather than rational considerations or verification of facts.

In this case, village communities have an important role to play in being responsible in using the media, especially in terms of their ability to evaluate various circulating information. in digital space. Because digital literacy determines the extent to which technology can provide real benefits and not create new inequalities or dependencies.

This statement is supported by previous research by Lubis and Junaidi (2016), which explained that the internet skills and knowledge of MSMEs in Jambi City vary widely. Some of them do not adopt technology due to a lack of understanding of its benefits. Furthermore, digital technology utilization among MSMEs remains relatively low (Sasmito, 2021).

The Kayutangan village community in Malang City experienced a similar situation. Some business owners and residents still rely on conventional methods for tourism management and services. This situation demonstrates that the process of adapting to technology is not only related to technical aspects, but also involves the mindset, habits, and social structure of the village community. Digital technology cannot be understood as a purely technical solution, as its effectiveness is largely determined by the process of social adoption and integration into local practices (Hjalager, 2010).

In this context, the theory of innovation diffusion serves as a relevant framework for understanding how technology is introduced, disseminated, and adopted by the Kayu Tangan Heritage Village community. Innovation diffusion explains that technology adoption proceeds through several stages, from knowledge, persuasion, decision, implementation, and confirmation. This process is also influenced by the roles of key actors, such as village


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

administrators, local government, creative communities, and community leaders who serve as agents of change.

In the context of Kayutangan Heritage Village, Malang City, the community's social system is characterized by strong social capital, reflected in the solidarity (shared trust) and coordination of social networks within the village community. The norm of mutual cooperation, systematized in community activities, such as in tourism awareness groups (Pokdarwis), forms social capital that plays a strategic role in the adoption of technology and creative economic innovation (Yerik, 2025).

A social system is understood as a collection of individuals, groups, and institutions interconnected through norms, values, and specific patterns of social interaction (Ayuna, 2023). This social system plays a crucial role in determining how innovations are accepted and implemented by society.

From a social capital theory perspective, social networks supported by trust and collective norms function as an uncertainty reduction mechanism for innovation (Rogers, 2003), thereby increasing public acceptance of the use and adoption of technology in tourism management. These characteristics of social capital influence how society views innovation, particularly technology-based innovations and the creative economy introduced for tourism development. Previous researchers have extensively examined this issue (Wafa, 2024), explaining that social capital can be a crucial driver of sustainable tourism innovation.

Therefore, it is important to examine how technology adaptation occurs in Kayu Tangan Heritage Village from the perspective of innovation diffusion. This study not only provides an overview of technology acceptance patterns among the community but also reveals the factors that drive and hinder the adoption process. The study's findings are expected to provide evaluation material and strategic recommendations for village managers and policymakers in designing digitalization programs for tourism villages that are more inclusive, sustainable, and aligned with the characteristics of the local community.

## METHODS

This study uses a qualitative phenomenological approach to understand the lived experiences and meanings constructed by social actors related to the process of technology adaptation in the context of Kayu Tangan Heritage Village. The qualitative approach was chosen because it enables researchers to understand complex social phenomena in their natural settings and to interpret meanings from participants' perspectives (Creswell, 2018). This design is particularly suitable for examining the intersection between technological adaptation and


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

cultural communication, as it allows an in-depth exploration of values, beliefs, and community interactions that quantitative approaches might overlook (Denzin, 2018). The phenomenological approach was chosen because the research objective was to explore the essence of individual subjective experiences, including perceptions, motivations, obstacles, and strategies when they interact with technological innovation in the daily practices of village heritage and tourism management.

The research sample was selected purposively with informant criteria relevant to the phenomenon. The number of informants in this study was limited to four informants; two traders, one gate keeper, and one expert. The informants represent key actors who experience and interpret the phenomenon from different functional positions, allowing for a focused yet in-depth exploration of technology adoption within the local context.

Data collection was conducted through two main techniques: direct participant observation in the field and semi-structured in-depth interviews. Observations were conducted at key locations within the heritage village, including the tourist information center, MSME outlets, tour guide points, and promotional activities or local events, with the aim of recording actual technology usage practices. Observations were conducted in several sessions throughout the village's operational day, capturing interactions between stakeholders and critical moments in tourism services.

## RESULTS AND DISCUSSION

The research results show that the adoption of QRIS-based digital payment technology in the Kayu Tangan Heritage Village area is gradual and uneven among business owners. Adoption of this technology is influenced by initial introduction, the role of driving forces, perceived benefits, and the merchants' direct experience in daily transactions.

These findings reflect a contextual pattern of technology adoption that differs from linear and formalized models. The role of local actors as informal change agents highlights the importance of social trust and proximity in shaping adoption decisions. This suggests that technology diffusion in grassroots communities is embedded in everyday social interactions rather than structured dissemination processes.

Furthermore, differences in user perception particularly between older tourists and younger visitors such as students can be understood through varying levels of familiarity and digital literacy. Younger users tend to perceive QRIS as practical and efficient due to their prior exposure to digital ecosystems, while older users may associate it with complexity and risk, influenced by limited experience and lower trust in digital transactions.


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

This indicates that adoption is not solely determined by functional benefits but also by generational experiences, technological confidence, and social context. Therefore, the findings emphasize the need to understand technology adoption as a socially constructed process shaped by interaction, experience, and meaning-making at the local level. Based on an interview with Ms. Asdifa, a trader in the Kayu Tangan area, it was discovered that the QRIS introduction process took place informally through local social networks. She stated that the initial use of QR.

*"It just happened suddenly, I found out from Pokdarwis,"*

This demonstrates that the role of change agents in this context doesn't always come from formal institutions, but also from trusted local actors. Despite the initial introduction being simple, Ms. Asdifa admitted to understanding how to use QRIS and being able to operate it independently. This demonstrates that the knowledge and implementation stages in the innovation adoption process have been crossed.

At this stage, adaptation shows that users do not just stop at the process of getting to know and trying the innovation but begin to integrate it into their daily practices independently according to the needs they face. Mrs. Asdifa's ability to operate QRIS without assistance indicates that the innovation has undergone a process of *reinvention,* namely adapting the way the technology is used to local capacities and routines. This condition allows the process of technology adaptation at the village community level to run more effectively when it involves local actors who have social legitimacy and closeness to the community and is supported by the role of formal institutions in providing frameworks, regulations, and access to the adopted technology.

One empirical study focusing on digital village development shows that when communication strategies and technology adoption are systematically managed by village governments or other formal institutions, implementation progress will increase significantly, especially when this is combined with training and mentoring methods that emphasize local participation.

In the case study, farmer groups, local organizations, or social dynamics determined how technological information and knowledge spread, and the extent to which communities felt confident in adopting it. When local stakeholders take on the role of change agents, they can strengthen perceptions of benefits associated with technology adoption and reduce resistance to transformation, thus facilitating more inclusive and sustainable technological development within the village (Ninsima, 2025).


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Furthermore, the existing body of literature on technology adoption in rural communities confirms the crucial role of social legitimacy, developed through social networks, in facilitating the spread of innovation. When the Kayu Tangan village community perceives support and recommendations from local leaders or respected social groups, the likelihood of technology adoption can increase significantly, as social norms and pressure play a significant role in reinforcing adoption decisions.

On the other hand, the framework for technology adoption in rural settings is often inseparable from the support of formal institutions such as government policies, digital village communication strategies, and e-government initiatives. These formal institutions' responsibilities include establishing regulations, providing access to information, facilitating training, and allocating technical resources, all of which have the structural legitimacy to enhance technology implementation in rural settings (Hapsari, 2024).

The success of technological innovation in Kayu Tangan Village certainly requires adaptation that can be continued using an approach, namely a multi-stakeholder collaboration approach or *Penta-Helix.* This collaboration certainly involves several parties, such as the government, academics, business actors, communities, and the media, which are key to the success of this QRIS innovation. In this case, Pokdarwis also plays a crucial role in presenting the *community element* that functions as a social bridge for the local community and an accelerator. The involvement of the Financial Services Authority (OJK) and service-providing banks reflects the existence of *government* and *business elements* that function as regulators and infrastructure providers (*enablers)*. The successful use of QRIS in the future depends heavily on the strong integration of these five elements that will create *a smart economy* in creating an independent society (Yulianti, et al., 2025).

However, in practical transactions, QRIS has not completely replaced cash payment methods. Ms. Asdifa assessed that the use of QRIS and cash, although QR is considered easier for refunds, is still a factor. She also revealed that the majority of tourists still prefer cash over digital payments, while QRIS users are predominantly students. This finding suggests that the innovation's compatibility with tourist habits is still relatively low, impacting the rate of technology adoption at the merchant level.

In addition to the benefits, merchants' experiences also demonstrate the challenges and risks inherent in QRIS use. This demonstrates that while QRIS facilitates technical convenience for the public, its adaptation and use must be balanced with digital financial literacy to prevent a digital divide in rural communities and the risk of crime and losses for MSMEs. Data from the Financial Services Authority (OJK) shows that the level of financial literacy among


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Indonesians in 2019 only reached 38.03%, despite an increase compared to 2016. This situation indicates a gap between the acceleration of digital financial service innovation and the public's ability to understand the mechanisms, risks, and implications of its use. Ms. Asdifa revealed that there had been a discrepancy between the number of reported transactions and the balance received, which was only discovered during the deposit process.

> *"It's the same. Using QR codes makes it easier to get change. But not everyone uses QR codes. Tourists rarely use QR codes, often using cash. Schoolchildren are the ones who often use QR codes.* "

This situation prompted him to conduct stricter transaction audits. These findings indicate that while innovation offers convenience, trust and system transparency remain crucial issues in the confirmation process of innovation adoption.

In the technology adoption phase, social capital plays a crucial reciprocal role in influencing the speed of adoption. Social capital not only acts as an initial support factor but also has a reciprocal relationship with the technology itself. Social capital encompasses three main components: social networks, norms, and trust. These components form a social environment that allows information about new technologies to spread more quickly and reliably. Conversely, as technology begins to be widely adopted and used, it strengthens social capital by increasing the intensity of communication, collaboration, and interaction between individuals within existing social networks.

Among the components of social capital, trust *plays* a crucial role in supporting the adoption of new technologies. Trust serves as a social mechanism that reduces perceptions of risk and uncertainty, especially when individuals are confronted with technologies that are not yet fully understood or tested.

Empirical research shows that social networks serve as a major channel for innovation diffusion, as individuals tend to adopt new technologies after seeing or hearing about the experiences of others within their social circles. In this context, social capital not only accelerates the adoption process but also reduces the uncertainty inherent in new technologies. A study by Liu et al. (2024) asserted that social *trust* has a significant influence on technology adoption decisions, particularly through its role in strengthening communication effectiveness and social legitimacy of new technologies.

> *"There's also a downside to it not being entered, they say it's entered. That's why it's being checked; it happens often. Later, when the payment is made, the amount doesn't match. 5,000 for a thousand people, it's 5 million. Oh, it's entered into QRIS. But it doesn't match. That's why I'm checking now."*


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Similar findings were corroborated by Trader 1's statement that the payment system he uses is dual-channel, accepting both cash and QRIS payments. He explained that his QRIS system is configured with an audible notification to indicate a successful transaction.

> *"Cash is possible, QR is possible. It's set to sound like that. I also received training from the Financial Services Authority (OJK), and they use seminars to teach literacy. The sound is used to alert people who are entering, but there's an additional fee."*

However, these features come with additional costs, which indirectly impacts the economic considerations for merchants optimizing technology use. This merchant also revealed that he had participated in financial literacy training organized by the Financial Services Authority (OJK) through a seminar. These findings demonstrate that formal institutions play a role as agents of change in improving merchants' literacy and readiness for digital financial technology.

Meanwhile, an interview with Trader 2 (Ms. Nia) revealed that QRIS usage in the Kayu Tangan area has been around for quite some time and is relatively accepted as part of daily economic activity. She stated that the use of QR codes had long been offered by banks to her parents. However, she emphasized that in practice, there is no significant difference between cash transactions and QRIS, as long as traders remain diligent in managing their income. This statement confirms that the perception of the relative superiority of innovation remains pragmatic, with technology being accepted as long as it provides convenience without incurring significant additional risks.

> *Hand-held wood has been around for a long time. It can use QR codes. There used to be banks that offered QR codes, and my father used to offer them at this bank. There are always similar ones. It's actually the same, just be careful.*

Several empirical studies support the notion that small businesses tend to adopt digital technology not because the innovation is sophisticated, but because it doesn't disrupt existing work activities. Furthermore, a 2022 Bank Indonesia report on QRIS implementation in the MSME sector noted that most merchants use QRIS as a complement to cash transactions, not as a primary replacement. This pattern is also evident in Kayutangan Village, where the innovation is accepted only functionally without impacting the local economic structure.

According to Purwadi, researcher from National research and Innovation Agency There needs to be a middle ground with hybrid adaptation.

> *"The digital divide will always exist, especially when faced with a society that is not yet digitally literate. Hybrid adaptation can be a solution if full QRIS is not possible."*

Overall, the findings indicate that traders in Kayu Tangan Heritage Village fall within the early majority to late majority categories Diffusion of Innovations framework. These


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

groups typically adopt innovations after their benefits have been socially validated and perceived risks have diminished, unlike innovators and early adopters who are more open to experimentation.

In terms of communication channels, the innovation diffusion process is carried out through training activities provided to business actors and the local community. This training serves as the primary medium for transferring knowledge and skills related to technology use, so that the community not only learns about the innovation but is also able to implement it directly.

Furthermore, in terms of time, the adoption of innovation occurs gradually until it eventually becomes a habit. This is influenced by ongoing conditioning and socialization processes. Thus, the community does not experience instant change but rather goes through a gradual adaptation process until the innovation is internalized in daily activities.

Meanwhile, in terms of social systems, the success of innovation diffusion is inseparable from the strong cooperation and understanding among residents in the Kayutangan area. The community demonstrates a commitment to adapting to current developments, particularly in adopting digital payment systems, while maintaining cash payment options as a form of inclusivity. In this context, the existence of Pokdarwis (*Tourism Awareness Groups*), as local non-governmental organizations, plays a crucial role. Pokdarwis acts as a driving force, coordinating community participation and encouraging collective and sustainable management of tourism potential.

This analysis reinforces that innovation adoption is not uniform but varies across social groups depending on how the innovation is perceived and experienced. It highlights that diffusion in this context is a socially constructed process, where generational differences, communication patterns, and lived experiences shape the speed and depth of adoption.In this case, they were not the main pioneers in QRIS adoption, but began using it after encouragement from local actors, banks, and formal institutions. The adoption process was also not entirely driven by internal needs, but rather a response to changes in the payment system in the surrounding environment. The majority group tends to wait for social legitimacy, evidence of success, and normative pressure before adopting an innovation. This is reflected in the tendency of new traders to adopt technology after seeing its use become common practice in tourism activities, being recommended by banks, and being facilitated by government policies and programs.

Furthermore, the characteristics *of the early majority* and *late majority* are also characterized by a relatively low level of risk tolerance and reliance on social learning


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

processes. In this context, innovation adoption in the Kayutangan village community occurs through observation and imitation mechanisms, as explained in the diffusion model, which emphasizes the role of social influence over independent adoption incentives (Bass, 1969). Traders tend to wait for confirmation from collective experience, both from fellow traders and from formal actors, before deciding to integrate innovations into their business practices.

These findings also align with empirical analyses showing that the characteristics of early adopters are not universal and are highly dependent on the social context and type of innovation. Early adoption is more often influenced by access to resources, social networks, and institutional support. Thus, the relative delay in innovation adoption by traders in Kayu Tangan Heritage Village cannot be understood as resistance to change, but rather as a form of social rationality in responding to newly legitimized innovations.

From a social system perspective, the decision to adopt QRIS is heavily influenced by local social networks, trust in the technology introducer, and ingrained transaction habits. The low adoption rate of QRIS among adult tourists demonstrates that technology adoption depends not only on merchant readiness but also on consumer readiness as part of the broader social system.

This occurs because consumers are a crucial factor in influencing the adoption of QRIS, as digital payment technology is not simply a transaction tool but also a part of the changing social structure of people's behavior. Consumer readiness to accept technology encompasses several factors, such as knowledge, perceived ease of use, trust, and attitudes toward the new technological innovation itself.

First, consumers' initial intentions and decisions influence their readiness to accept technology. Consumers who are prepared in terms of technological understanding and belief in its benefits (*perceiving ease of use and perceived usefulness*) demonstrate a higher level of acceptance of QRIS for everyday transactions. The *Technology Acceptance Model (TAM)* explains that without this readiness, technology adoption will face significant obstacles, even with adequate infrastructure (Saputra, 2024).

Second, consumer readiness plays a role in the formation of social norms and collective behavior. When the majority of consumers feel comfortable and trust the digital payment system, QRIS is no longer seen merely as a technical innovation but as a new social norm that is widely accepted in social and economic interactions. A case study by Pratiwi et al. (2025) showed that ease of use and the influence of social circles are important determinants of the intention of certain generations to use QRIS, especially among digital natives.


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Third, consumer readiness is closely related to their trust in the security of technological innovation. Without understanding the risks and benefits of its use, trust in the system can be low, ultimately hindering the adoption of digital payment technology (QRIS) (Sendjaja, 2025). This factor then directly impacts consumer behavior when deciding whether or not to adopt QRIS.

Fourth, from a social systems perspective, technology adoption is not solely determined by providers or government regulations. It also depends on the community as end users and part of a dynamic social system. Mature consumer readiness reflects the community's ability to actively participate in the digitalization of social change, while a lack of consumer understanding and readiness to adapt to technology will actually create adoption disparities between age groups, geographic locations, or digital literacy levels.

Thus, the results of this study demonstrate that the adoption of digital payment technology in Kayu Tangan Heritage Village is gradual, contextual, and filled with negotiations between practical benefits, technical risks, and social customs. These findings confirm the relevance of the diffusion of innovation theory in explaining that technology adoption is not merely a technical issue but also a social process influenced by communication, trust, experience, and the relationship structures of the local community (Sulek, 2010).

## CONCLUSION

This study concludes that the adoption of QRIS-based digital payment technology in the Kayu Tangan Heritage Village area is gradual and uneven among merchants. Technology adoption does not occur instantly, but unfolds as a social process shaped by the roles of local actors, formal institutions, and merchants' direct experiences in everyday transactions. From the perspective of Innovation Diffusion Theory, most merchants can be categorized within the early majority to late majority groups, as they tend to adopt innovations after observing tangible benefits while still requiring assurance regarding security and ease of use.

Theoretically, these findings extend Innovation Diffusion Theory by demonstrating that adoption in grassroots contexts is not purely driven by rational evaluation of innovation attributes, but is deeply embedded in social relations, trust networks, and localized experiences. This suggests that the diffusion process in developing contexts is more relational and iterative than linear, highlighting the importance of informal change agents alongside formal structures. In addition, the findings resonate with the Technology Acceptance Model by showing that perceived usefulness and perceived ease of use are mediated by social influence and experiential learning, rather than functioning as purely individual cognitive assessments.In


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

terms of challenges, the study found issues of trust and accuracy in QRIS use, particularly related to potential discrepancies between transaction amounts and incoming balances. This experience prompted merchants to implement stricter transaction monitoring. These findings emphasize that the confirmation stage in the innovation adoption process is crucial for determining the sustainability of technology use.

Overall, technology adoption in Kayu Tangan Heritage Village is determined not only by technical aspects, but also by communication factors, social trust, digital literacy, and the community's economic habits. Therefore, the successful digitalization of heritage-based tourism villages requires a sustainable support strategy, not only in the form of technology provision but also in strengthening literacy, user education, and developing a digital ecosystem that aligns with the socio-cultural characteristics of the local community.

However, this study focuses primarily on merchants and one local actor, without including perspectives from tourists, policymakers, or technology providers. The findings are context-specific and not intended for broad generalization, but rather for in-depth understanding. Future research is recommended to involve a larger and more diverse group of participants, including visitors and institutional actors, to provide a more comprehensive view of technology adoption. Comparative studies across different heritage villages, both within Indonesia and internationally, would also be valuable to identify patterns and contextual differences. Additionally, future studies could integrate mixed-method approaches to examine not only lived experiences but also measurable impacts of digital adoption on economic performance and community sustainability.

## REFERENCES

Ayuna, N. E. (2023). The Role of Communication in the Acculturation Process of Local Social Systems. *Technomedia Journal (TMJ)*, 8(1), 35–51. https://doi.org/10.33050/tmj.v8i1.2015

Afnarius, et al. (2024). *Digitalization of Tourism*. Bandung: Widina Media Utama.

Dedehayir, O., Ortt, R. J., Riverola, C., & Miralles, F. (2017). Innovators and Early Adopters in the Diffusion of Innovations: A Literature Review. *International Journal of Innovation Management*, 21(8), 1–27. https://doi.org/10.1142/S1363919617400102

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches (4th ed.).* London : Sage Publications.

Denzin, N. K., & Lincoln, Y. S. (2018). *The Sage handbook of qualitative research (5th ed.).* London : Sage Publications.


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Deris, F. D., Noor, N. A. M., & Basco, A. E. (2025). Crafting Connection: Digital Storytelling in Community-based Tourism. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(2), 461–466. https://doi.org/10.47772/IJRISS.2025.9020039

Ferdian, F. & Munawarroh, M. (2025). Digital Transformation in Developing Cultural and Religious Tourism in Old Banten. *Student Research Scientific Journal*, Vol. 2 No. 1, 347-353

Hanum, F. (2020). Konsep Smart Tourism sebagai Implementasi Digitalisasi di Bidang Pariwisata. *TORNARE: Journal of Sustainable Tourism Research*, 2(2), 14–17. https://doi.org/10.24198/tornare.v2i2.25787

Hapsari, D. R., Lubis, D. P., Haryanto, T., Aulia, T., Arham, I. L., & Aditika, E. (2024). Communication Strategy in Adopting Digital E-Government Technology for Sustainable Digital Village Development. *Policy Brief Pertanian, Kelautan, dan Biosains Tropika*, 6(4), 1084–1089. https://doi.org/10.29244/agro-maritim.0604.1084-1089

Heliawati, C., & Munawaroh. (2025). The Role of Digital Technology in the Development of Cultural and Religious Tourism in Banten. *Jurnal Ilmiah Ekonomi dan Manajemen (JIEM)*, 3(2), 398–403. https://doi.org/10.61722/jiem.v3i2.3860

Hjalager, A. M. (2010). A Review of Innovation Research in Tourism. *Jurnal Tourism Management*, 31(1), 1–12. https://doi.org/10.1016/j.tourman.2009.08.012

Ichsan, NR et al. (2024). Destination Digitalization: A Strategy for Developing Tourism Promotion in Indonesia. *Edunomika: Indonesian Education Journal*, Vol. 8 No. 2, 1257-1258.

Kasemsarn, K., & Nickpour, F. (2025). *Digital Storytelling in Cultural and Heritage Tourism: A Review of Social Media Integration and Youth Engagement Frameworks*. *Jurnal Heritage*, 8(6), 261. https://doi.org/10.3390/heritage8060261

Khoir, M. H. A., & Savana, N. (2023). Implementasi Digitalisasi untuk Mendukung Pengembangan Desa Budaya sebagai Daya Tarik Wisata. *Journal of Tourism Planning and Economic Development (JOTPED)*, 1(1), 51–59. https://doi.org/10.65483/jotped.v1i1.26

Liu, B., Li, N., & Liao, C. (2024). Effects of Social Capital on the Adoption of Green Production Technologies by Rice Farmers: Moderation Effects Based on Risk Preferences. *Jurnal Sustainability*, 16(20), Article 8879. https://doi.org/10.3390/su16208879

Lubis, TA & Junaidi. (2016). Utilization of Information Technology in Micro, Small, and Medium Enterprises in Jambi City. *Journal of Regional Financing and Development Perspectives* Vol. 3, No. 3, 165-173.

Mareta, Y., & Meiryani. (2023). Determinants of Interest Using QRIS as a Payment Technology for E-Wallet by Z Generation in Indonesia. *Syntax Literate: Jurnal Ilmiah Indonesia*, 8(2), 800–807. https://doi.org/10.36418/syntax-literate.v8i2.11175

Mokoginta, EA & Sendjaja, T. (2025). Adoption of Digital Payments in the Post-Pandemic Era: Literature Review on Trends, Challenges, Policy Implications in Indonesia. *Impression: Journal of Technology and Information,* 4(5), 403-406.

Ninsiima, R., Mshenga, P., Okello, D., et al. (2025). Influence of Social Norms on Blockchain Technology Adoption: A Structural Equation Modeling Approach Among Smallholder



© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Barley Farmers in Uganda. *Discover Agriculture*, 3(1), Article 89. https://doi.org/10.1007/s44279-025-00254-z

Pradana, Y. (2018). Attribution of Digital Citizenship in Digital Literacy. *Untirta Civic Education Journal*, **3**(2), 168–182. https://doi.org/10.30870/ucej.v3i2.4524

Pratiwi, Y. et al. (2025). QRIS Adoption: Analysis of Generation Z Behavior in the Digital Payment Era. *BAJ (Behavioral Accounting Journal)*, Vol.8 No.1, 66-73.

Rachmadi, MF (2020). Analysis of Digital Technology Optimization in the Industrial Revolution 4.0 Era in Developing Halal Tourism Industrial Areas to Improve the Local Economy of Gunungpati District, Semarang City. *Jurnal Dinamika*, Vol. 1 No. 1, 39–53

Raharjo, MK et al. (2023). Community Empowerment Through Digital-Based Local Economic Development in Society 5.0 Era. *Journal of Non-Formal Education*, Vol. 11 No. 1, 81-85.

Ramiyanti, S., & Arianto, B. (2023). *Digital Financial Literacy Assistance for Digital MSMEs in Tembong Village, Serang City*. *PRAXIS: Jurnal Pengabdian kepada Masyarakat*, 1(3), 158–167. https://doi.org/10.47776/praxis.v1i3.621

Rogers, E.M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

ohimah, A., & Novaria, R. (2019). Social Marketing Communication in the Diffusion Process of Innovation Revitalization of the Kampung Lawas Maspati Tourism Village Community. *Linimasa: Jurnal Ilmu Komunikasi*, 2(1), 31–45. https://doi.org/10.23969/linimasa.v2i1.1383

Sabil, JW, and Han. D.D. (2022). *Immersive Tourism State of the Art of Immersive Tourism Realities through XR Technology*. Breda: Breda University of Applied Sciences.

Sasmito, Y. W. D., & Prestianto, B. (2021). Analysis of Digital Literacy Levels and E-Commerce Implementation in Micro, Small, and Medium Enterprises in Semarang City. *Jurnal Ekonomi, Manajemen, Akuntansi dan Perpajakan (JEMAP)*, 4(1), 145–162. https://doi.org/10.24167/jemap.v4i1.3148

Stankov, U., & Gretzel, U. (2020). Tourism 4.0 Technologies and Tourist Experience: A Human-Centered Design Perspective. *Information Technology & Tourism*, 22(3), 477–488. https://doi.org/10.1007/s40558-020-00186-y

Saputra, YD. FE & Bahari, A. (2024). Analysis of Determinants and Antecedents of the Use of Quick Response Indonesian Standard (QRIS) in Digital Payments. *Management Studies and Entrepreneurship Journal*. Vol.5 No.1, 3027-3028.

Shin, S. A., Jang, J. O., Kim, J. K., & Cho, E. H. (2021). Relations Of Conspicuous Consumption Tendency, Self-Expression Satisfaction, And Sns Use Satisfaction Of Gen Z Through Sns Activities. *International Journal of Environmental Research and Public Health*, 18(22). https://doi.org/10.3390/ijerph182211979

Sulek, M. (2010). On the Modern Meaning of Philanthropy. *Nonprofit and Voluntary Sector Quarterly*, 39(2), 193–212. https://doi.org/10.1177/0899764009333052

Straub, E. T. (2009). Understanding Technology Adoption: Theory and Future Directions for Informal Learning. *Review of Educational Research*, 79(2), 625–649. https://doi.org/10.3102/0034654308325896

Singgalen, YA & Prasadja, H. (2025). *Community-Based Tourism*. Bandung: Widina Media Utama.


© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), 157–178. https://doi.org/10.2307/41410412

Yulianti, R., Andriani, M., & Yeshiana, W. (2025). Smart Village Development Model with Penta-Helix Approach to Realize Village Community Independence in the Society 5.0 Era. *Moderat: Jurnal Ilmiah Ilmu Pemerintahan*, 11(1), 132–138. https://doi.org/10.25157/moderat.v11i1.4503

Wafa, R. H. S., Prayitno, G., Wicaksono, A. D., Rahmawati, H., & Hiddlestone Mumford, J. (2024). The Relationship Between Community Social Capital and Rural Tourism Innovation in Indonesia. *Journal of Regional and Rural Studies (RRS)*, 2(2), 73–84. https://doi.org/10.21776/rrs.v2i2.57



© 2026 The Author(s). This is an open access article under CC-BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)