

Implementation of Village Management Policy based on Digital Transformation Tamansari Village, Licin Sub-District, Banyuwangi Regency, East Java

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Abstract

Digital transformation in villages is becoming an important item on the national policy agenda, driven by efforts to improve public services and empower the rural economy. The purpose of this study is to evaluate the implementation of digital-based village management policies in Tamansari Village, Banyuwangi, highlighting the processes, economic impacts, and governance challenges. This qualitative research method uses in-depth interviews, observation, and document studies of village officials, MSME actors, and BUMDes managers, with source and method triangulation. The results of digitalization implementation strengthen administrative services, expand MSME marketing, and increase transparency in village governance. However, limitations in human resources and digital infrastructure are major constraints. Furthermore, the implication is that optimizing digital training and improving infrastructure become priorities for strengthening the sustainability of digital villages in Indonesia.

Keywords: Government, Village, Digital, Transformation

INTRODUCTION

The development of the digital world in Indonesia is growing rapidly in line with advances in information system technology worldwide. This rapid technological change is accompanied by increasing public awareness and knowledge of digital technologies, affecting not only urban communities but also rural populations. In the digital era, governments are therefore compelled to continuously improve public services through the development of digitalized, information system-based services. Such improvements are necessary at all levels of government, from the national level to village

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administrations, and are expected to contribute to better governance, particularly in rural areas.

Digital transformation in rural governance supports the realization of good governance and represents a strategic step forward for national development, especially at the village level. Becoming a digital nation—where citizens, governments, and businesses interact within a digital society that generates benefits for all stakeholders—requires learning from digital transformation experiments conducted in urban contexts (Ćukušić, 2021). Previous research indicates that Industry 4.0 has emerged as a dominant theme in digital transformation studies within business and management, closely linked to dynamic capabilities, business model innovation, and value creation (Putri et al., 2022). This underscores the need for both governments and communities to be adequately prepared, particularly in terms of resources and supporting infrastructure, to navigate the challenges of the Industry 4.0 era.

Digital transformation also reshapes community behavior and organizational practices. It can be understood as the integration of digital technologies into all organizational aspects and operations, leading to fundamental changes in infrastructure, workflows, and value creation for users (Maiye, 2010). In Indonesia, one tangible manifestation of digital transformation is the development of digital and smart tourist villages through cooperation between the government and private actors, particularly PT Telkom Indonesia, which began around 2019. Given the inseparable relationship between the digital world and internet access, expanding connectivity in rural areas is essential to enabling communities to engage with digital transformation processes.

The digital village program represents one strategic response to the challenges of the Society 5.0 era by utilizing internet-based media to empower communities and disseminate public service information that is easily accessible to citizens (Grimshaw, 2017). Prior studies on digital village transformation have examined co-production models within Smart Village Nusantara initiatives, using Pangandaran and Kemuning villages as pilot projects. These studies highlight sustainability challenges following the withdrawal of professional actors, such as telecommunications companies, and emphasize the need for stronger local capacity to achieve advanced stages of digital transformation and tangible impacts on village development (Susanti et al., 2023).

In this context, Tamansari Village in Banyuwangi Regency, East Java, provides an important case study of digital transformation policy implementation. Known as one of Indonesia's early adopters of the Smart Village or Smart Kampung concept since 2016, Tamansari Village has become a reference point for other villages and cities seeking to develop digital governance. The village has implemented digital village programs as part of government policy, grounded in Law Number 6 of 2014 concerning Villages.

According to Article 78 of the Village Law, village development aims to improve community welfare and quality of life, alleviate poverty, meet basic needs, develop infrastructure and local economic potential, and sustainably utilize natural and environmental resources. Village development encompasses planning, implementation, and supervision stages and prioritizes togetherness, kinship, and mutual cooperation to promote peace and social justice. The Smart Village program operationalizes these objectives through six key pillars: smart people, smart mobility, smart economy, smart government, smart living, and smart environment, positioning digital villages as a foundation for Indonesia's future development (Damarjati, 2021).

Unlike previous studies that focused on the failures of several village governments in managing digital villages—failures that ultimately led to the discontinuation of government smart village programs—this research highlights the progress achieved in tourism management within Tamansari Village. Tamansari Village has successfully developed a participatory governance model through the utilization of Village-Owned Enterprises (BUMDes) as the driving force behind digital transformation in public services, village tourism, and micro, small, and medium enterprises (MSMEs). By leveraging village digitalization and optimally managing its human and natural resource potential, the development of the village website plays a crucial role in sustaining promotion and visibility (Febriani & Setyawati, 2025).

The concept of a digital village emphasizes connectivity through internet infrastructure as a means to enhance productivity and accelerate public service delivery (Juliantoro, 2022). Digital transformation itself encompasses several interconnected dimensions, including the alignment of digital technologies, organizational change, enabling activities, and the creation and capture of new value and opportunities (Jeansson, 2019). In this context, digital knowledge and skills have become essential to

support increasingly disruptive business models and processes, requiring critical thinking aligned with economic objectives. Improved digital literacy enables access to information, identification of market opportunities, and the adoption of digital technologies, which ultimately strengthens the competitiveness of micro and small enterprises in a sustainable manner (Firmansyah et al., 2022).

The study of digital village transformation policies is therefore essential, as it contributes to evaluating the development and benefits of digital villages, particularly in the promotion of village tourism and MSMEs through digital transformation and marketing. These efforts are often supported directly by village governments through BUMDes that utilize internet technologies. Digital strategies play a vital role in building communication networks with consumers by introducing products and services, serving as a key intersection between the Industrial Revolution 4.0 and Society 5.0 (Wijoyo, 2020).

Despite growing interest in digital village initiatives, there remains a lack of clarity regarding their conceptual construction, theoretical frameworks, and developmental trajectories. Consequently, further research is needed to understand how villages can transform into digital villages while achieving sustainable development (Zhao et al., 2022). Moreover, the smart city literature has paid limited attention to rural contexts and the potential of villages in developing smart and sustainable solutions. This gap is reflected in the lack of systematic research on the role of digital services in sustainable rural development (Fennell, 2018).

In response to these gaps, this study emphasizes the importance of examining the digital services implemented in Tamansari Village to better understand the impacts of digital transformation on village governance, particularly in relation to MSME development and management through digital media. Digital transformation represents a fundamental shift in how organizations operate, organize, and interact with stakeholders through digital technologies, undertaken to achieve strategic objectives and improve performance (Anderson et al., as cited in Erwin et al., 2023).

Tamansari Village presents a unique case, having sustained its status as a smart village for several years while also functioning as a tourist village that actively utilizes digital platforms for promotion. Although many digital village initiatives have failed to implement policies effectively, Tamansari Village has successfully maintained its digital

transformation efforts and received multiple regional and national awards. This success underscores the need for effective strategies to support digital transformation as a means to accelerate organizational development, improve efficiency, and achieve sustainability goals (Fabac, 2022).

Finally, previous studies have not sufficiently explored the governance models required to sustain digital village management over time. Through the case of Tamansari Village in Licin District, Banyuwangi Regency, this research seeks to generate data and insights into how digital village governance can be maintained and strengthened. These findings are expected to inform the development of other digital villages, particularly those that have struggled or failed to meet expectations, by identifying governance strategies that support sustainability, public service improvement, and the development of community-based economic activities through MSMEs and village-owned enterprises.

RESEARCH METHOD

This study employs a qualitative research methodology. Sugiyono (2019) states that qualitative research is a philosophy-based research method used to conduct research in natural object conditions. Qualitative research relies on a holistic natural background and positions humans as data collection tools inductively, where the researcher functions as the key instrument in sampling data sources purposively, using triangulation data collection techniques, and inductive/qualitative data analysis. To obtain data sources using informants or subjects to understand information about the research subject (Bungin, 2007). Qualitative research is research that uses a natural setting, with the aim of interpreting the phenomena that occur and is conducted by involving various existing methods (Denzin, N. K., Lincoln, 2018).

Qualitative data collection techniques involve observation, interviews, content analysis, and other methods that are more open to interpretation. The research was conducted at the Tamansari Village office, Licin District, Banyuwangi Regency, East Java. Meanwhile, the data collection instrument used was an interview guide with a number of pre-prepared questions. Meanwhile, the interview informants were the Head of Tamansari Village, BUMDes administrators, and village digital operators and managers. The information was obtained directly from the primary source, Tamansari village

government. Thus, the authenticity of the data can be accounted for because it is obtained from its source. Next, the interview results were analyzed to extract the most important points, draw conclusions based on the analysis of those questions, and then provide practical recommendations based on those conclusions. Data collection and usage are conducted responsibly and with respect for individual rights and privacy.

RESULT AND DISCUSSION

The Role of Digitalization in Improving Public Service Efficiency and Empowering the Rural Economy.

Nowadays, the development of digitalization is permeating various fields, not only the world of government offices but also the world of trade, tourism, and even education. The importance of digital transformation in government will make it easier for both the public and government bureaucracy to serve the community, as digital services will save time and costs, especially for the public. The development of the digital world has reached an extraordinary level, as we can see that almost every community in Indonesia has been able to understand the use of digital applications on smartphones on their own, without needing much instruction. Therefore, the development of the digital world in Indonesia has a significant impact on the progress and advancement of society. "An evolutionary process that leverages digital capabilities and technologies to enable business models, operational processes, and customer experiences to create value" (Morakanyane et al., 2017). Furthermore, digital transformation is the use of technology aimed at radically improving company performance and reach, changing customer relationships, internal processes, and value propositions (Westerman, 2011). It's time for government services to transition from manual/traditional systems to digitalization because it will have a positive impact on both central and local governments. The government's efforts in implementing the 4.0 era must involve various stakeholders, who must be involved because this cannot be carried out by one party alone. For example, the government must collaborate with industry and economic associations, technology providers, and other necessary elements within the system. The government's role as a policymaker in facing the era of digitalization is expected to quickly prepare and regulate

the regulations that will serve as the legal framework for addressing, implementing, and navigating this era (Trisantosa, 2022). The digitalization of public services is seen as capable of increasing the efficiency of public service delivery and making public services more accessible to the community (Yulanda & Fachri Adnan, 2023). Digital transformation is seen as both an opportunity and a challenge for the government in providing services by utilizing information technology. In research written by (Wiranti & Frinaldi, 2023). Digital transformation is the process of using technology to create new things and transform business processes, culture, and customer service to respond to changes in business models and customer needs. Therefore, government initiatives, the need for digital transformation, and the use of technology to create efficient and transparent public services are important, as is the importance of technological readiness and digital transformation in the context of public administration (Irfan, 2023). The progress of a country is determined by how its government manages the nation, so the success of a country will greatly depend on how the government manages and governs it. According to the village head, the Smart Village of Tamansari is strongly supported and influenced by the local government of Banyuwangi itself, and always encourages the village government's steps in innovating digital village creativity so that digital governance in Tamansari village can continue to function to this day, while many other villages have discontinued this program. Furthermore, the village head also explained that in addition to the support of the local government, there was also the active participation of residents in marketing village MSME products. Therefore, the village government must be faithful in serving the community thru various services by utilizing digital media.

Here are the criteria that must be met for digital village management, including: Having a strong internet network and Wi-Fi, having a digital record-keeping system (financial, visitors), and being integrated with online travel agents or e-commerce. Additionally, creativity is needed from the village for it to continue developing, such as: Having website and social media management, having accurate and high-quality information about the tourist village, and having creative and engaging content with local wisdom value.

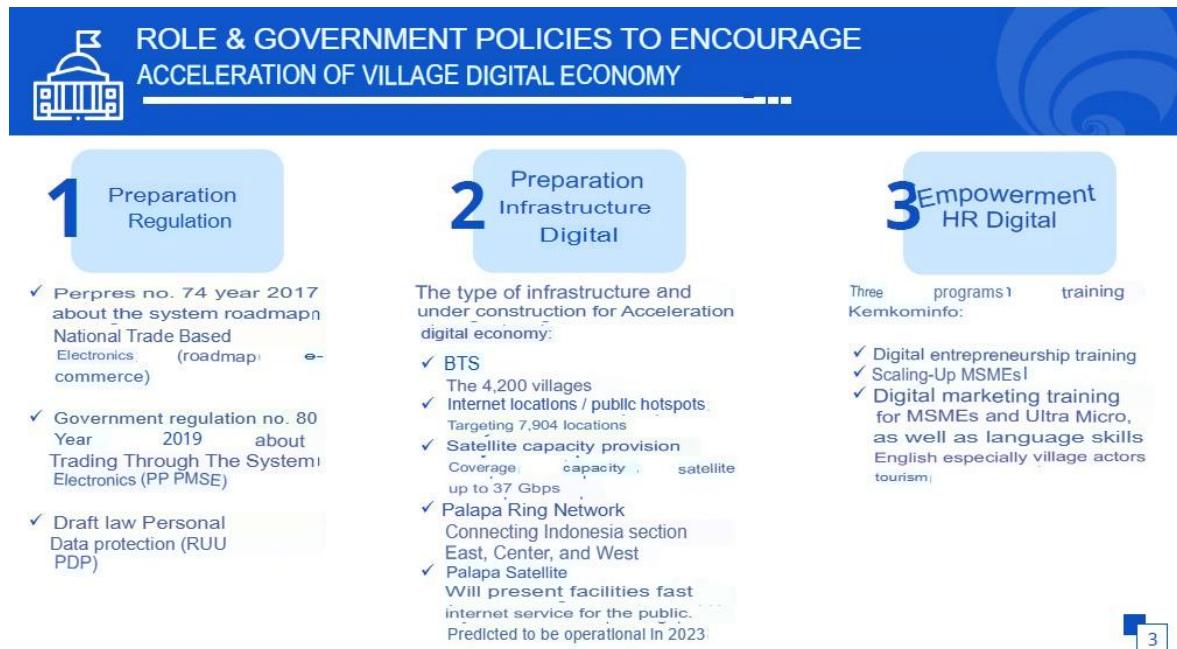


Figure 1. Flow The role of the government to encourage the acceleration of the village digital economy in Indonesia

Source: Kominfo (2020)

Figure 1 shows a government program designed to encourage and provide policies for village governments to develop digital villages. One of the goals is to develop the community economy and level the playing field through digital media, managed in a structured and programmed manner by the government. The community's dependence on digital media continues to increase, creating significant economic opportunities for the community, including through Micro, Small, and Medium Enterprises (MSMEs).

Digitalization Strategy for Tamansari Village in Developing Technology-Based MSMEs and Tourism

The development of digital village transformation is a breakthrough in progress for improving public services at the village government level, and one of these is in Tamansari village (a tourist village) which has transformed into digital village management in recent years. The implementation of the digital village has been running since around 2016. Digital transformation can not only change the form of administrative services at the government level but can also transform the natural resources of villages and other village potentials that have been said to be largely unknown to the public.

Now, thru information technology, hidden village potentials can be highlighted thru village information on digital media, making them globally accessible to the public. According to information from the village head, Tamansari Village, a smart village, was launched in 2016. Several village potentials were highlighted, such as Micro, Small, and Medium Enterprises, natural and cultural tourism, or community traditions. Thru digitalization and internet connectivity, the tourism potential of Tamansari Village continues to be promoted to the public, resulting in a significant number of foreign tourists visiting, especially since Banyuwangi Regency is directly across from Bali Island, which we know is a favorite island for foreign tourists. This allows them to visit the natural attractions in Tamansari Village, Banyuwangi Regency, one of which is Ijen Crater, a favorite tourist spot. Next, from an educational potential perspective, by leveraging the potential of the village's micro, small, and medium enterprises (MSMEs) such as dairy farming, coffee plantations, honeybee farming, homemade souvenirs from the women of Tamansari Village, Osing stalls, and homestays managed by Bumdes. (Hai, 2021), which researched the challenges faced by Micro, Small, and Medium Enterprises in Vietnam, found that three main resources (IT, human resources, and business strategy) have a positive impact on the digital transformation of Micro, Small, and Medium Enterprises in Vietnam. Digital transformation has a positive impact on the results of Micro, Small, and Medium Enterprises. Rural communities can offer Micro, Small, and Medium Enterprise products online thru digital strategies, thus increasing the visibility of the products offered and sold to the wider public. According to the BUMDes manager, there are currently 60 Micro, Small, and Medium Enterprises, 50 homestays, dozens of tour guide services, tourist vehicles, and several other small and medium-sized businesses in Tamansari village, and all types of village businesses involve its residents. Regarding this, according to the BUMDesa Management, in terms of the village economy, government policies will greatly influence the advancement of the village's economy itself. This is because the policies and leadership skills will impact tangible results that can be felt by both the village government and the community.

Its marketing is assisted by the Village Government and Village-Owned Enterprises, utilizing digital technology managed by the Tamansari village government. In addition, the general public can also purchase unique souvenirs produced by the residents of

Tamansari village online. There are 5 things related to digital transformation, including people, processes, strategy, technology, and integration. (Rafiah et al., 2022) "The economic strategy is a people's digital economy that prioritizes the micro scale or Micro, Small, and Medium Enterprises, because Micro, Small, and Medium Enterprises are the dominant sector in Indonesia's business structure, accounting for 98.8 percent in 2019, and from the total workforce, 96.99% are employed in the Micro, Small, and Medium Enterprises sector"(Mandira, 2022). Information technology has great potential to change the face of villages, improve the quality of life for communities, and drive sustainable economic growth (Apriyansyah et al., 2018). A Village Information System (SID) is a system that utilizes information technology to collect, manage, and disseminate information related to village services and management (Santoso et al., 2020). Thru the Village Management Information System, village governments can develop village information data digitally. The Village Information System (SID) is a platform that uses information and communication technology to collect, manage, and disseminate information related to public services in the village (Yoraeni et al., 2022). SID allows villages to integrating village administrative data and processes into a single centralized system, making it easier to access and process information (Astuti, 2018). The Village Information System will be very helpful in managing the village's potential, from natural resources, human resources, geography, and other village potentials. The Village Information System (SID) is an information system that develops data and information management in villages (EY Anggraeni, 2017). With the existence of a village information system, it will be very fast and easy to make any decisions. The development of a village information system certainly transforms into village digitalization, so all forms of public services are carried out digitally, the most important thing being an internet connection. A case study is Tamansari Village, located in Banyuwangi Regency. It is a tourist village that has already implemented digitalization (Smart Village). A digital village is an endogenous rural development process, accompanied by the application of networks,

informatization, and digitalization in rural areas, as well as the improvement of modern information skills for the community (Zhao et al., 2022). The following figure 2.

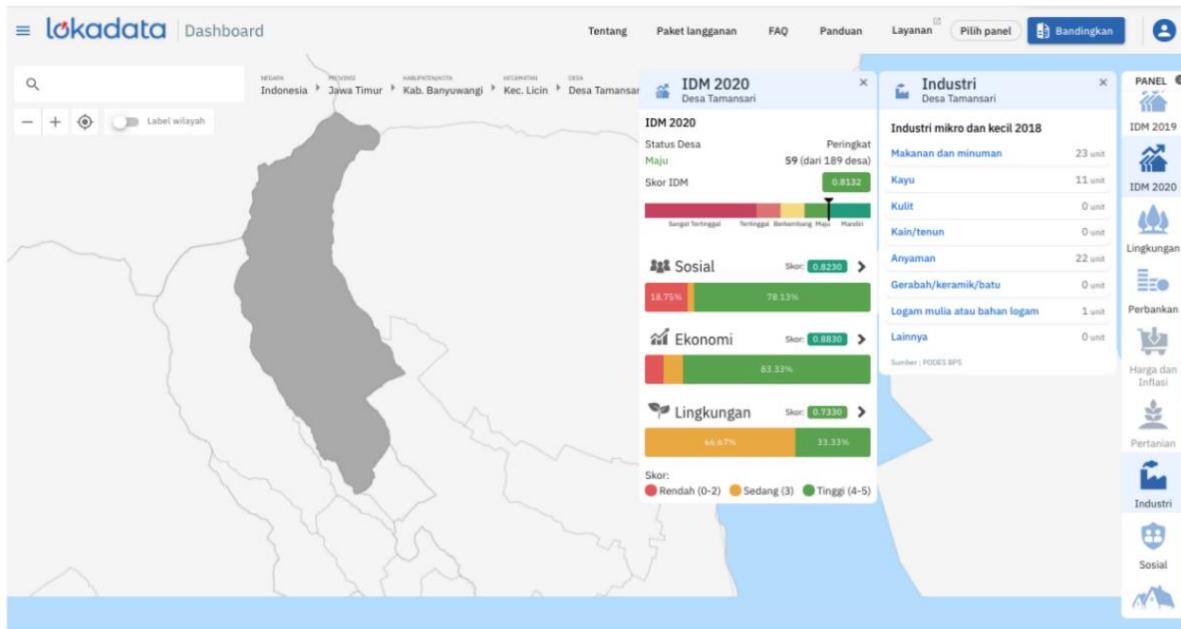


Figure 2. Village Development Index (IDM) of Tamansari Village, Banyuwangi Regency, 2020

Source: Muhammad Ulil Albab (2020)

Data from the 2020 Village Development Index (IDM) data and small micro industries in Tamansari Village, Licin District, Banyuwangi Regency. Lokadata/Lokadata Dashboard in the picture that the Village Building Index, Tamansari Village in 2020 is fairly advanced, where the Social economy, the local community is quite high, the Social index with a score of 0.8230 or around 78.13% (high criteria), Economy with Index Score 0.8833 or around 83.33% (high). This proves that the Tamansari Village government is able to develop the village quite well, one of which is through the strategy of utilizing digital transformation in developing local natural resources, in order to improve the socio-economy of the community. In addition, Tamansari Village, Licin District, was included in the top 50 of the 2021 Indonesian Tourism Village Award (ADWI) held by the Ministry of Tourism and Creative Economy (Kemenparekraf) with advanced criteria. The Village Development Index is a composite of social, economic, and ecological resilience. The following table 1.

Table 1. Criteria for Village Development Index (IDM) in Indonesia

No	Village status	Limit value
1	Far behind	$\leq 0,491$
2	Left behind	$> 0,491$ dan $\leq 0,599$
3	Developing	$> 0,599$ dan $\leq 0,707$
4	Forward	$> 0,707$ dan $\leq 0,815$
5	Independent	$> 0,815$

Sumber: Hanibal Hamidi (2015)

According to the Head of Tamansari Village, during an interview, "we have been using the Village Information System for several years, where public services can now be accessed digitally by the community, so residents don't need to come to the village government office but can do it at their respective locations or villages." This is a very good advancement in efforts to improve public services at the village government level. The website-based village information system in Tamansari village is very helpful for the community in various administrative service needs, such as business permits, population certificates, application letters, and referral letters (KK/KTP). In addition, information on the village's natural resources (village tourist spots), and even the vision and mission, as well as financial reports, can be transparently accessed by the village community thru the website and by the wider public. Furthermore, according to the village head, Tamansari is becoming a tourism village by optimizing its potential and various business networks, with the Village-Owned Enterprise (BUMDes) as its leading sector. In this village, there are over 300 residents involved in the village tourism business network. Tamansari Village also optimizes digitalization in building and expanding the reach of the village tourism market so that it can be known by people outside the village, thereby increasing visits to the village tourism in Tamansari. Meanwhile, socialization regarding the use of digital administration in Tamansari village is carried out thru forums organized by village officials, both in the hamlets and at the village level. The digital transformation of Tamansari village is going well because the village government always coordinates with the district government if there are any issues with the village office information system. Tamansari Village, as one of the best digital villages, assists the community in developing Micro, Small, and Medium Enterprises (MSMEs) in the village. One way is by providing information about the village's MSME products thru the village website and social media, allowing people outside the village to obtain information thru these channels. Some of

the MSME products from Tamansari Village include food, beverages, and natural tourist destinations, all featuring MSME products. Thus, the pattern of relations between rural communities and village governments has a mutually beneficial productivity for both parties. The impact on village governments can help improve good governance, while village governments help increase the economic productivity of the village. "According to the village head," with the digitalization of the village, services to the community are improving. Public services are becoming faster, and residents no longer need to always come to the village office if they need services; they can simply use the digital or online services provided by the village government. In addition, it helps provide information about micro, small, and medium-sized enterprise products from the village community digitally, both thru social media and the village website. This allows their products to sell well to both direct visitors and online purchases, thus continuously improving the economy of the Tamansari village community.

Furthermore, according to the BUMDes management, some evidence of MSMEs that are still well-managed by the community includes several well-developed micro, small, and medium enterprise product units in Tamansari Village, such as dairy farming, coffee plantations, honeybee farming, home-based souvenirs, osing stalls, and the management of inns and homestays by the Village-Owned Enterprise. Tamansari Village has a Village-Owned Enterprise, which is able to increase per capita income above average and contribute to the village's original income. In addition, the Village-Owned Enterprise is able to absorb local community labor, reducing unemployment in the village. Therefore, MSMEs are an important part of the village government in reducing unemployment and boosting the community's economy.

The village government's ability to seize economic opportunities for the progress of the village and its people is not wasted. They are developing village tourism thru digital village transformation. The village government is making good use of the village's geographical location, which is close to the island of Bali, which is visited by many foreign tourists. They are managing village tourism thru digital information, resulting in a significant number of foreign tourists visiting the natural attractions of Tamansari village. These tourism potentials include natural tourism, local cultural tourism, the Seruni Spring, and micro, small, and medium enterprises tourism. In this way, the village government is

also encouraging micro, small, and medium enterprise actors to continue producing and selling their products at the village tourism site. Additionally, according to the head of Tamansari village, the success of Tamansari village in managing a smart village/digital village is partly due to the support from the Banyuwangi Regency Government. This has made it easier for us to build a village tourism ecosystem. Various digitalization programs implemented by the Banyuwangi Regency Government, such as Smart Kampung, have also encouraged us to become accustomed to developing digitalization in our village, and the appreciation from the community itself, because the village government recognizes the importance of the community for the progress of the village.

Next, according to the village head, efforts to increase the potential of the village community are often carried out by the Tamansari village government thru socialization, training, and knowledge sharing to provide a framework for the community's potential, utilizing the natural resources and potential of the village, with good cooperation between the community and the Tamansari village government. Based on the criteria above, as a digital and creative village, Tamansari village has remained a digital/smart village until 2024 and has become a model village, visited by many from other villages and outside the region, earning the title of one of the Advanced Villages. The impact of digital transformation implemented by the Taman Sari village government has a positive effect on the community and the village government itself. In this case, the Tamansari village government successfully managed its administration by utilizing the existing resources in the village and implementing digital governance of the village information system. Since the implementation of the digital information system, Tamansari village management systems have become faster and more transparent. Furthermore, the impact on MSMEs and Village-Owned Enterprises (BUMDes) has increased by up to 30%, especially during the Covid pandemic. In addition, digitalization can strengthen tourism promotion and visitation networks, thereby increasing the income of BUMDes. However, behind that, there are still some obstacles to the development of digitalization, namely the limited availability of digitally literate human resources, unstable networks in some hamlets, and limited training due to a fairly limited budget. This study is expected to expand understanding of digital village governance models at the local level, assess policy effectiveness, and identify best practices and challenges faced in the context of

digital-based tourism villages. Digital transformation in village governance is a direct implication of decentralization policies and bureaucratic reform, which emphasize the principles of effectiveness, efficiency, and inclusivity in public services, (Febriani & Setyawati, 2025).

Recommendations for strengthening operational aspects of sustainable digital transformation

Here are recommendations for strengthening operational aspects in a single integrated table, covering human resources, data governance, funding, partnerships, and evaluation, which may need to be integrated into village programs to ensure sustainable digital transformation (table 2).

Table 2 Recommendations for Strengthening the Operationalization of Digital Transformation

No	Main component	Action plan	Responsible person	Execution time	Resources	Performance Indicators
1	Human resource development	Digital literacy training & SME mentoring	Village Administration, Village-Owned Enterprises, Communication and Information Agency & Micro, Small and Medium Enterprises	Q1-Q4 2026 (every six month)	Village funds, Telkom CSR, local facilitators	80% participants who pass the competency test, active digital MSMEs
2	Data Governance	Village data SOP, backup system & SID integration	Village Administration, PMD& Communication and Information	Q2-Q4 2026	Village funds, digitization grants	SOP approved, data encrypted, SID integrated
3	Funding & Partnerships	CSR proposal, MoU with Telkom & marketplace	Village Administration, Village-Owned Enterprises	Q1-Q3 2026	Proposal team, partner network	funded proposals, 2 active partnerships
4	Evaluation & Indicators	Baseline survey, quarterly monitoring	Village Administration, Statistics/Communication and	Q1 2026-Q4 2027	Enumerator, evaluation form	Baseline reports and evaluations are available,

			Information Agency & PMD			annual targets are achieved
5	Implementation Stages	Preparation, implementation, integration, replication	Village Administration, Village-Owned Enterprises.	Q1 2026-Q4 2027	Consultative forum, village facilitators	Output of each stage: documents, training, systems, final report

Source: Research data analysis results 2024

Human Resource Strengthening: Village governments and MSME actors need to regularly attend digital literacy training and online business mentoring so they can utilize technology for public services and product marketing. *Data Governance:* Villages must have safe and integrated digital data management standards, including SOPs, backup systems, and connectivity with local government systems. *Funding and Partnerships:* Financing is provided thru village funds, CSR, and strategic partnerships with private entities such as Telkom and e-commerce platforms to support infrastructure and promotion. *Evaluation and Performance Indicators:* Initial baseline data, clear annual targets, and regular evaluations are needed to measure achievements and improve strategies. *Implementation Stages:* Starting from preparation, execution, system integration, and finally replication to other villages, with measurable outputs at each stage. Regulatory support from local and central governments is essential to ensure the sustainability of digital village initiatives. This includes policies related to data security, information system standardization, and adequate budget allocation (Yoraeni et al., 2022). The development of smart villages is based on an awareness of the energy efficiency of modern energy solutions. Knowledge and awareness are needed at all levels among the population, farmers, and entrepreneurs in rural areas, as well as among representatives of local and national governments (Budziewicz-Guźlecka & Drożdż, 2022)

CONCLUSION

Digital transformation in Tamansari Village, Banyuwangi, has had a significant positive impact on village governance, public services, and community economic empowerment. The implementation of digital village policies thru the utilization of

information technology, village information systems (SID), and the strengthening of Village-Owned Enterprises (BUMDes) has proven capable of increasing the efficiency of administrative services, expanding online marketing of MSME products, and promoting transparency and accountability in village governance. This success is supported by high community participation, local government support, and the optimization of local resources. Tamansari Village serves as an example of a digital village that has successfully maintained the sustainability of its smart village program, even amidst limitations in human resources and digital infrastructure, which remain major challenges.

Nevertheless, the sustainability of digital transformation in villages requires continuous efforts, such as strengthening human resource capacity thru digital literacy training, improving infrastructure, integrated data governance, and strategic partnerships with various parties. Policy recommendations emphasize the importance of regulation, periodic evaluation, and replicating good practices to other villages so that digital village development in Indonesia can proceed more optimally and inclusively. Overall, the experience of Tamansari Village shows that digital transformation at the village level can accelerate development, improve community welfare, and strengthen village governance toward good governance and sustainable development.

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