



Enhancing the Capacity of Village-Owned Enterprises (BUMDesa) and DAPM Across Ngawi Regency in Responding to the Advancements of the Digitalization Era

Istiana Wijayanti Mala^{1*}

¹ Soerjo University, Indonesia

email: istianawijyantimala@gmail.com

Article Info :

Received:
27-04-2025
Revised:
06-05-2025
Accepted:
11-05-2026

Abstract

This study examines the implementation of a participatory educational program designed to strengthen the digital capacity of Village Owned Enterprises and the Community Empowerment Trust Fund across Ngawi Regency in responding to the advancement of the digitalization era. The program employed an empirical approach involving thirty eight participants consisting of BUMDesa managers, DAPM administrators, and village officials responsible for rural economic governance. The activities were conducted through interconnected stages comprising socialization, training, mentoring, and evaluation focusing on digital literacy, digital financial administration, and digital marketing adaptation. Empirical findings revealed significant improvement in participants' conceptual understanding, practical competencies, and adaptive perspectives toward technology based governance. Participants demonstrated stronger capabilities in utilizing digital administrative systems, preparing digital financial records, and developing promotional strategies through social media and marketplace platforms. The participatory learning approach also strengthened collaborative interaction, institutional networking, and organizational responsiveness toward governance innovation. The study concludes that sustainable digital transformation in rural economic institutions requires the integration of technical competence, participatory empowerment, collaborative governance, and continuous institutional adaptation to strengthen accountability, competitiveness, and long term rural economic resilience.

Keywords : *Digital Governance, BUMDesa Empowerment, Rural Digitalization, Participatory Learning, Sustainable Governance.*



©2022 Authors.. This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.
(<https://creativecommons.org/licenses/by-nc/4.0/>)

INTRODUCTION

The acceleration of digital transformation has fundamentally reshaped the architecture of economic governance across both urban and rural regions, positioning digital capacity as a decisive determinant of institutional competitiveness, organizational adaptability, and socioeconomic resilience in the contemporary era. Within the context of rural development, the expansion of digital ecosystems has increasingly encouraged local institutions to move beyond conventional administrative practices toward integrated systems based on information technology, data management, and digital communication. Village Owned Enterprises and community based financial institutions have consequently emerged as strategic actors in sustaining local economic productivity while simultaneously functioning as instruments of participatory development and social empowerment. Recent studies emphasize that the transition toward digitally oriented village governance is no longer limited to technological modernization alone, but also reflects broader transformations in rural power relations, institutional autonomy, and governance innovation within decentralized administrative systems (Sukarno, 2024). Parallel discussions concerning the implementation of smart village frameworks further indicate that the sustainability of rural economic development increasingly depends on the ability of village institutions to integrate digital infrastructure, technological literacy, and community participation into local governance systems capable of strengthening inclusive economic growth (Yunus et al., 2025). These developments illustrate that digitalization has become an inseparable component of rural transformation agendas at both national and global levels.

Existing literature concerning the development of Village Owned Enterprises demonstrates that BUMDesa plays a substantial role in strengthening local economic structures, expanding employment opportunities, and increasing the productive utilization of village resources through community based

entrepreneurship initiatives. Wahyuningtyas (2021) conceptualizes BUMDesa as a strategic instrument of village empowerment capable of bridging local economic potential with broader regional development agendas, particularly through collaborative management models rooted in community participation. More recent scholarship extends this perspective by arguing that the effectiveness of BUMDesa increasingly depends on institutional adaptability, managerial professionalism, and the integration of sustainable development principles into organizational practices. Nugraheni et al. (2025) reveal that the achievement of Sustainable Development Goals through BUMDesa requires multidimensional strategies involving governance reform, financial accountability, and technological integration, indicating that economic sustainability cannot be separated from institutional modernization. Similarly, Pawitan et al. (2025) demonstrate that strengthening BUMDesa contributes not only to economic growth but also to broader processes of rural social transformation through participatory empowerment and collaborative development mechanisms. Despite these advances, previous studies largely converge on the conclusion that institutional effectiveness in rural enterprises is closely associated with the quality of managerial capacity and the ability to respond adaptively to changing technological and economic environments.

Although the literature has produced important insights regarding rural economic empowerment and digital governance, significant conceptual and empirical limitations remain visible, particularly concerning the practical integration of digital transformation into the daily governance systems of BUMDesa and Community Empowerment Trust Funds. Much of the existing scholarship tends to emphasize macro policy narratives, normative governance frameworks, or generalized discussions on rural development, while insufficient attention has been devoted to the operational challenges faced by local managers in adopting digital administrative, financial, and marketing systems. Research discussing digital transformation in rural institutions frequently assumes that technological access automatically translates into institutional readiness, despite evidence showing that disparities in digital literacy, managerial competence, and organizational culture continue to obstruct effective implementation. Triono et al. (2025) underline that efforts to establish transparent and accountable governance through information technology often encounter structural obstacles related to human resource limitations and weak institutional adaptation mechanisms. Similar concerns emerge in studies on smart village implementation, where digitalization initiatives frequently remain concentrated at the policy discourse level without adequate exploration of grassroots managerial capacities and participatory learning processes required for sustainable transformation (Yunus et al., 2025). This gap indicates that the dominant discourse surrounding rural digitalization still lacks sufficiently grounded empirical analysis concerning how local actors negotiate technological change within the practical realities of village economic management.

The unresolved limitations identified in previous studies generate substantial scientific and practical urgency, particularly because the inability of rural institutions to adapt to digital transformation risks deepening economic inequality between technologically integrated regions and villages that remain dependent on conventional systems. In the context of increasingly competitive digital economies, limited technological competence among BUMDesa and DAPM managers may reduce organizational efficiency, weaken financial accountability, constrain market expansion, and ultimately diminish public trust in village economic institutions. The urgency of this issue extends beyond managerial performance because the sustainability of rural economic resilience is directly connected to the capacity of local institutions to utilize technology for transparent governance and productive economic engagement. Sukarno (2024) argues that the contemporary digital era requires villages to redefine governance practices through innovative institutional arrangements capable of balancing autonomy with adaptive modernization. Simultaneously, Nugraheni et al. (2025) emphasize that sustainable rural development cannot be achieved without institutional transformation capable of integrating economic, social, and technological dimensions into coherent governance strategies. These arguments suggest that strengthening digital literacy and managerial competence within BUMDesa and DAPM constitutes not merely a technical intervention but a strategic necessity for ensuring the long term viability of village based economic systems in rapidly changing socioeconomic environments.

Positioned within this evolving scholarly landscape, the present study addresses an important gap by examining digital capacity strengthening for BUMDesa and DAPM through a participatory community service framework grounded in empowerment based learning and practical institutional adaptation. Unlike previous studies that predominantly focus on macro governance discourse or

descriptive analyses of village economic institutions, this study emphasizes the operational dimension of digital transformation by directly engaging managers of BUMDesa and DAPM in processes of digital literacy enhancement, administrative modernization, financial management training, and digital marketing practice. The study situates digitalization not solely as a technological intervention but as a transformative process involving shifts in managerial cognition, institutional culture, and participatory governance practices. The integration of participatory educational methods with hands on digital training represents an important analytical contribution because it allows the examination of how local actors internalize technological knowledge and translate it into practical organizational change. In this regard, the study contributes to expanding contemporary discussions concerning rural digital governance by connecting theoretical debates on institutional modernization with empirical realities emerging from community based capacity building initiatives in village economic institutions.

This study aims to analyze the implementation of a community service program designed to strengthen the digital capacity of BUMDesa and DAPM managers across Ngawi Regency in responding to the challenges of the digitalization era through participatory and empowerment based approaches. The study specifically seeks to evaluate the extent to which digital literacy training, digital based financial administration practices, and digital marketing assistance contribute to improving managerial competence, institutional adaptability, and organizational awareness regarding technology driven governance. Theoretically, this study contributes to the development of rural governance and community empowerment literature by demonstrating that digital transformation within village economic institutions must be understood as a multidimensional process involving technological, cognitive, and institutional change simultaneously. Methodologically, the study offers an applied community service model that integrates participatory learning, practical mentoring, and contextual problem solving as an adaptive framework for strengthening the sustainability and competitiveness of village based economic institutions in the digital era.

METHODS

This community service program employed an empirical participatory educational design aimed at strengthening the digital capacity of managers of Village Owned Enterprises and the Community Empowerment Trust Fund across Ngawi Regency in responding to the advancement of the digitalization era. The activity was conducted on April 25 until April 26, 2026 at Hotel Sarangan, Magetan Regency, East Java Province, involving thirty eight participants consisting of BUMDesa managers, DAPM administrators, and village officials responsible for rural economic governance. The implementation of the program was structured through several interconnected stages comprising preparation, socialization, training, mentoring, and evaluation. During the preparation stage, the team conducted problem identification and needs assessment through observation and direct communication with participants to map limitations in digital literacy, financial administration, and digital marketing practices. The socialization stage introduced participants to the objectives of the program, the urgency of digital transformation, and the strategic role of technology in strengthening village economic institutions. The training stage focused on enhancing participants' competencies in digital literacy, digital based administrative and financial management, and the utilization of social media and marketplaces for product marketing through interactive lectures, group discussions, hands on practice, and contextual case studies. The mentoring stage was designed to ensure the practical implementation of the training materials through technical guidance, consultations, and monitoring of digital application practices in institutional management.

The evaluation process employed empirical data collection through pretests, posttests, direct observation, participant participation analysis, and brief interviews conducted during and after the implementation of the program. The pretest and posttest instruments were utilized to measure changes in participants' understanding of digital literacy concepts, digital financial administration, and digital marketing strategies, while observations and interviews were conducted to assess behavioral changes, practical skills, and participants' responsiveness toward the digital transformation process. The indicators of program success included the improvement of participants' conceptual understanding regarding BUMDesa digitalization, the enhancement of practical abilities in operating simple digital applications for financial administration, the ability to create and utilize social media accounts for marketing village products, and the emergence of more adaptive perspectives toward technology based governance. The evaluation results demonstrated that participants experienced significant

improvements in both cognitive and practical dimensions, particularly in understanding the importance of transparency, accountability, and efficiency through digital systems. The participatory implementation model also strengthened collaborative learning processes among participants, allowing the activity to function not only as a knowledge transfer mechanism but also as a sustainable empowerment strategy oriented toward strengthening modern, transparent, and competitive village economic governance.

RESULTS AND DISCUSSION

Digital Literacy Transformation and Cognitive Adaptation in BUMDesa Governance

The implementation of the community service program revealed that the initial condition of BUMDesa and DAPM managers in Ngawi Regency was characterized by limited digital literacy and low familiarity with technology based governance systems. Most participants still relied on manual administrative practices and conventional communication patterns in managing institutional activities. This condition reflects the broader challenge of rural digital transformation identified by digital governance scholars, where technological adaptation in rural institutions remains uneven because of structural and educational disparities (Sari & Diana, 2024). The empirical findings indicate that participants initially perceived digitalization as an external administrative demand rather than as a strategic instrument for institutional development.

The socialization and introductory sessions demonstrated that participants possessed fragmented knowledge regarding the concept of digital transformation in village enterprises. Several participants associated digitalization only with the use of social media platforms, without understanding its implications for financial accountability, institutional transparency, and organizational efficiency. This finding aligns with the argument proposed by Sukarno (2024), which emphasizes that governance innovation in rural institutions requires not only technological access but also conceptual transformation among institutional actors. The educational intervention therefore functioned as an important mechanism for reconstructing participants' understanding regarding the strategic role of digital systems in strengthening rural economic resilience.

The participatory educational approach applied during the training sessions encouraged the emergence of interactive learning dynamics among participants. Group discussions and contextual case analyses enabled participants to critically reflect on their institutional limitations and compare their experiences with other BUMDesa managers from different villages. Such collaborative interaction strengthened the collective learning process and stimulated the exchange of practical solutions related to digital adaptation. This participatory pattern corresponds with the empowerment framework proposed by Hadiyanti et al. (2024), which highlights that community empowerment becomes more effective when learning processes are dialogical and experience based.



Figure 1. Opening Session and Introduction

The opening and introduction session presented in Figure 1 illustrates the participatory atmosphere developed during the early stage of the activity. Participants actively engaged in introductory discussions concerning digital governance challenges experienced in their respective institutions. The interactive communication pattern observed during this session indicates that the

socialization stage successfully created initial awareness regarding the urgency of technological adaptation in village enterprise management. Wahyuningtyas (2021) explained that institutional awareness constitutes a foundational element in strengthening the strategic role of BUMDesa within village economic empowerment processes.

The pretest results demonstrated that most participants had low to moderate levels of understanding regarding digital literacy concepts and digital governance mechanisms. Participants generally experienced difficulties in explaining the functions of digital platforms for administration, marketing, and financial recording. Observational findings further indicated that participants lacked confidence in operating digital applications independently during the early sessions of the program. Similar conditions were identified by Anthony and Rosmayati (2026), who explained that limited digital competence remains one of the major inhibiting factors in the operational transformation of BUMDesa institutions.

Table 1. Changes in Participants' Digital Literacy Understanding Before and After Training

Assessment Indicator	Pre Training Condition	Post Training Condition	Interpretation
Understanding of digital governance concepts	Low	Moderate to High	Increased conceptual awareness
Ability to identify digital applications	Limited	Improved	Greater technological familiarity
Understanding of digital marketing	Basic	Functional	Expanded practical comprehension
Awareness of digital transparency	Minimal	Significant	Increased governance orientation
Confidence in technology utilization	Low	Moderate	Improved adaptive behavior

Source: Empirical Evaluation Results of Community Service Program, 2026.

The data presented in Table 1 indicate a measurable improvement in participants' conceptual understanding after the implementation of the training program. The increase was particularly visible in participants' awareness regarding the relationship between digitalization and institutional transparency. Participants also demonstrated improved confidence in identifying and utilizing simple digital tools relevant to rural business governance. This transformation supports the findings of Raheni and Iskandar (2025), who argued that rural digitalization programs contribute significantly to institutional adaptability when accompanied by participatory educational mechanisms.

The training sessions further revealed that the process of cognitive adaptation among participants occurred gradually through repetitive interaction with practical examples and simulation activities. Participants became increasingly capable of connecting theoretical concepts with the operational realities faced by BUMDesa institutions in their respective villages. Several participants explicitly stated during group discussions that digitalization had previously been perceived as complicated and inaccessible. After the practical sessions, participants began to view technology as a manageable and beneficial instrument for institutional improvement, consistent with the observations reported by Yunus et al. (2025).

The emergence of adaptive perspectives among participants indicates that digital literacy development is closely associated with behavioral transformation and organizational culture. Participants who initially demonstrated resistance toward technological adoption gradually exhibited more open attitudes during the mentoring sessions. This change reflects the theoretical assumption that organizational innovation is strongly influenced by psychological readiness and institutional learning capacity (Muhith & Widiyarta, 2025). The empirical findings therefore suggest that digital transformation in rural institutions requires simultaneous intervention in both technical competencies and managerial mindsets.

The discussion sessions also highlighted the importance of contextual learning models in strengthening participants' engagement during the program. Participants responded more positively to

examples directly related to village business management than to abstract explanations regarding technology. This condition indicates that rural empowerment programs become more effective when educational materials are adjusted to the socio economic realities of the target communities. Pawitan et al. (2025) similarly emphasized that strengthening BUMDesa institutions requires contextual empowerment strategies that integrate local experiences into the learning process.

The collaborative atmosphere developed during the program contributed to the formation of peer support mechanisms among participants from different villages. Several participants initiated informal exchanges regarding digital application practices and institutional governance challenges outside the formal training sessions. This interaction demonstrates that participatory educational activities can stimulate the emergence of sustainable learning networks among rural economic actors. Such findings support the perspective of Abdurachman et al. (2021), who identified entrepreneurial interaction and collaborative learning as important foundations for strengthening institutional self development.

The findings from this stage indicate that digital literacy transformation within BUMDesa governance cannot be interpreted solely as a process of technological introduction. The empirical evidence demonstrates that digital adaptation also involves the reconstruction of institutional perspectives regarding efficiency, accountability, and competitiveness in rural economic management. Participants increasingly recognized that technological utilization constitutes an integral component of modern governance practices rather than an additional administrative burden. This orientation is relevant to the broader discourse on rural economic transformation proposed by Sanjaya et al. (2026), which positions strategic management and digital adaptation as central elements in strengthening the sustainability of village enterprises.

Administrative and Financial Digital Capacity Strengthening

The implementation of the administrative and financial management training revealed that most participants previously relied on manual recording systems with limited documentation structures. Financial transactions were commonly recorded using handwritten notes without standardized reporting mechanisms, creating difficulties in monitoring institutional cash flow and accountability processes. Several participants also demonstrated inconsistent archiving practices that potentially weakened institutional transparency and administrative continuity. Similar administrative limitations in rural economic institutions were identified by Fitriasuri and Sari (2025), who emphasized that ineffective financial governance frequently constrains the organizational performance of village enterprises.

The technical training sessions focused on strengthening participants' practical competencies in operating simple digital applications for financial administration. Participants were introduced to spreadsheet based recording systems, transaction categorization techniques, and basic digital documentation procedures relevant to BUMDesa operational activities. Observational findings indicated that participants gradually became more familiar with the logic of digital recording after repeated simulation exercises and guided practice sessions. This practical learning orientation corresponds with the findings of Silalahi et al. (2025), which explain that repetitive application based exercises significantly improve participants' operational confidence in digital financial management.

The mentoring activities demonstrated that participants experienced varying levels of adaptation during the transition from manual to digital administration. Some participants quickly understood the operational structure of spreadsheet formulas and digital report organization, while others required intensive guidance during transaction input simulations. The differences in adaptation speed were strongly influenced by prior exposure to technology and the frequency of digital device usage in daily institutional activities. Triono et al. (2025) similarly observed that the effectiveness of digital governance programs is closely associated with participants' initial technological familiarity and institutional learning environments.

Participants also demonstrated increasing awareness regarding the relationship between digital administration and institutional accountability. Several managers acknowledged that manual recording systems often complicated financial verification and delayed reporting processes to village stakeholders. The introduction of digital administrative structures enabled participants to understand how transparent reporting mechanisms could strengthen public trust toward BUMDesa governance. This finding aligns with Safitri et al. (2025), who argued that transparent financial management constitutes a fundamental element in strengthening accountability within community based institutions.

Table 2. Participants' Practical Competencies in Digital Financial Administration

Assessment Indicator	Before Training	After Training	Interpretation
Transaction recording accuracy	Low	Moderate to High	Improved recording consistency
Digital report organization	Limited	Improved	Better administrative structure
Spreadsheet application operation	Minimal	Functional	Increased technical capability
Understanding of financial transparency	Basic	Significant	Stronger accountability orientation
Consistency of digital administration	Low	Moderate	Improved operational discipline

Source: Empirical Evaluation Results of Community Service Program, 2026.

The data presented in Table 2 indicate that the training activities contributed to measurable improvements in participants' practical administrative competencies. The most visible increase appeared in participants' ability to organize financial reports systematically through simple digital applications. Participants also demonstrated improved understanding regarding the importance of transaction categorization and documentation consistency in supporting institutional governance. Rinayuhani and Wachidah (2025) emphasized that digital administrative systems strengthen governance quality because they encourage more structured, traceable, and transparent management processes.

Following the technical simulations, participants became increasingly capable of independently preparing basic financial reports relevant to BUMDesa operational activities. Several participants successfully practiced transaction recapitulation, expenditure classification, and digital archiving using spreadsheet based systems during mentoring sessions. Practical observations further indicated that participants began to recognize the efficiency advantages generated through digital recording mechanisms compared with conventional manual administration. Maryuni et al. (2024) similarly explained that digital service transformation improves organizational effectiveness through faster information processing and more organized administrative coordination.

The training process also revealed several technical obstacles encountered during the implementation stage. Some participants experienced difficulties in understanding spreadsheet formulas, while others demonstrated limited typing speed and inconsistent familiarity with digital interfaces. Internet connectivity constraints and differences in participants' device specifications additionally influenced the smoothness of practical exercises during the sessions. Anthony and Rosmayati (2026) identified similar structural limitations as recurring barriers affecting the operational digitalization of village economic institutions in rural regions.

Despite these challenges, the participatory mentoring approach created supportive learning interactions that facilitated gradual improvement among participants. Participants who adapted more quickly frequently assisted other participants during practical simulations, creating collaborative problem solving dynamics within the training environment. This peer learning mechanism strengthened collective engagement and reduced participants' anxiety toward the use of digital administrative applications. Hadiyanti et al. (2024) argued that collaborative empowerment models contribute significantly to strengthening rural institutional adaptability because learning occurs through shared practical experiences rather than one directional instruction alone.



Figure 2. Training Process

The training process documented in Figure 2 illustrates the practical orientation of the capacity building activities implemented during the program. Participants were actively involved in direct simulations of digital financial recording, administrative organization, and application operation under guided supervision from facilitators. The interactive technical environment encouraged participants to connect administrative concepts with real operational conditions encountered in BUMDesa management practices. Maq et al. (2024) explained that practical mentoring activities contribute more effectively to strengthening institutional competence because participants directly experience the operational relevance of technological applications.

The findings from this stage indicate that strengthening digital administrative and financial capacity requires continuous integration between technical training, mentoring assistance, and organizational adaptation processes. The improvement achieved by participants was not limited to operational application skills but also extended toward stronger awareness regarding accountability and governance discipline in village economic institutions. Participants increasingly recognized that digital administration functions as an instrument for improving institutional efficiency, reporting accuracy, and managerial transparency within BUMDesa governance structures. Muhith and Widiyarta (2025) emphasized that sustainable rural governance development depends substantially on the institutional ability to integrate transparent administrative systems with adaptive managerial practices.

Marketing Adaptation and Sustainable Governance

The mentoring and evaluation stages demonstrated that participants increasingly recognized the strategic importance of digital marketing in strengthening the competitiveness of BUMDesa and DAPM institutions. Participants began to understand that marketplace platforms and social media were not merely communication instruments but also mechanisms for expanding market access and strengthening institutional visibility. Several participants reported that their institutions previously relied exclusively on conventional promotion through local community networks with limited market reach. This condition reflects the broader challenge identified by Maharani et al. (2022), who emphasized that rural enterprises frequently experience difficulties in adapting marketing strategies to the dynamics of the digital economy.

The training sessions on digital promotion focused on practical exercises involving content creation, product visualization, marketplace introduction, and communication strategies for online consumers. Participants were encouraged to develop promotional narratives based on the unique characteristics of village products and local economic potential. Observational findings indicated that participants demonstrated increasing enthusiasm when practical marketing simulations were directly connected to products originating from their respective villages. Pawitan et al. (2025) explained that contextual empowerment models contribute significantly to strengthening local entrepreneurial engagement within village economic institutions.

Participants also demonstrated improved understanding regarding the relationship between digital promotion and institutional sustainability. Discussions during the mentoring sessions revealed that participants increasingly associated marketing visibility with opportunities for long term business development and community economic resilience. Several BUMDesa managers identified the potential

for collaborative product promotion between villages after participating in the training activities. Nugraheni et al. (2025) argued that collaborative adaptation strategies represent an important component in strengthening the sustainability orientation of village owned enterprises within the framework of rural development.

The practical evaluation process further revealed that participants experienced gradual improvement in organizing promotional content through social media platforms. Participants who initially lacked confidence in creating online promotional materials became more capable of preparing simple visual content and institutional information for digital publication. The mentoring sessions also encouraged participants to explore communication patterns that were more responsive to consumer interaction in digital environments. Raheni and Iskandar (2025) identified that adaptive communication strategies constitute an important factor in strengthening the effectiveness of rural digitalization programs.

The empirical findings presented in Table 3 indicate that the program contributed not only to marketing adaptation but also to the emergence of more collaborative governance orientations among participants. The evaluation results demonstrate that institutional actors increasingly recognized the importance of integrating digital communication into organizational management strategies. Participants also showed improved consistency in utilizing digital platforms to support institutional promotion and networking activities. Sanjaya et al. (2026) emphasized that strategic governance adaptation is essential for maintaining the competitiveness of village enterprises in the contemporary digital environment.

Table 3. Institutional Adaptation and Digital Marketing Outcomes

Indicator	Initial Condition	Post Program Condition	Analytical Interpretation
Marketplace utilization	Minimal	Moderate to active	Expanded digital market access
Social media engagement	Passive	Interactive	Improved communication responsiveness
Promotional content creation	Limited	Functional	Increased institutional visibility
Collaborative governance orientation	Fragmented	Strengthened	Improved inter institutional networking
Adaptive institutional mindset	Conventional	Progressive	Stronger sustainability orientation

Source: Empirical Evaluation Results of Community Service Program, 2026.

The improvement in participants' marketing adaptation was also reflected in the emergence of informal collaborative initiatives during the evaluation sessions. Several participants exchanged institutional social media accounts and discussed opportunities for joint promotional activities involving village products from different areas in Ngawi Regency. This interaction indicated that the program stimulated not only individual institutional adaptation but also broader networking processes among rural economic actors. Satoto et al. (2024) highlighted that collaborative revitalization strategies contribute substantially to strengthening rural economic resilience and institutional prosperity.



Figure 3. Question and Answer Session and Evaluation

The evaluation discussions further revealed that participants increasingly viewed digital governance as a continuous institutional process requiring sustained organizational commitment. Participants acknowledged that technological adaptation could not rely exclusively on short term training activities without consistent follow up mentoring and institutional support. Several participants expressed the need for advanced technical guidance related to content management, online communication strategies, and digital business networking. Yunus et al. (2025) explained that sustainable digital transformation in rural governance requires continuous institutional learning and adaptive organizational culture.

The participatory reflection sessions also demonstrated the emergence of stronger awareness regarding accountability and transparency in digital communication practices. Participants recognized that digital visibility increases public scrutiny toward institutional performance and governance quality. This condition encouraged participants to become more attentive in presenting institutional information and promotional materials through online platforms. Rinayuhani and Wachidah (2025) argued that governance transparency becomes increasingly important within digitally connected rural administrative systems.

Several participants additionally emphasized that digital marketing adaptation created new opportunities for strengthening community participation in village economic development initiatives. Online promotion activities enabled local communities to become more familiar with village products and institutional programs managed by BUMDesa and DAPM organizations. Participants also identified the possibility of involving younger community members in managing digital communication and promotional activities because of their stronger familiarity with technological platforms. Marzuki and Karim (2026) observed that village enterprises possess strategic potential in supporting broader social and developmental objectives through adaptive governance mechanisms.

The findings from this stage indicate that sustainable governance transformation within BUMDesa and DAPM institutions is closely associated with the ability to integrate marketing adaptation, collaborative networking, and participatory institutional management. The empirical evidence demonstrates that digital transformation contributes not only to operational modernization but also to the strengthening of institutional competitiveness and long term governance resilience. Participants increasingly perceived digital platforms as strategic instruments for expanding economic opportunities and strengthening institutional legitimacy within rural communities. Wahyuningtyas (2021) emphasized that the strategic role of BUMDesa in rural empowerment becomes more effective when supported by adaptive governance systems and sustainable innovation capacity.

CONCLUSION

The implementation of the participatory educational program demonstrated that strengthening the digital capacity of BUMDesa and DAPM institutions across Ngawi Regency contributed significantly to the transformation of institutional governance, operational capability, and adaptive organizational perspectives in responding to the advancement of the digitalization era. The empirical findings revealed that participants experienced progressive improvement in conceptual understanding related to digital governance, practical competence in digital administrative and financial management,

and the utilization of digital marketing strategies to expand institutional visibility and economic opportunities. The participatory learning model encouraged collaborative interaction, institutional reflection, and contextual adaptation processes that strengthened participants' responsiveness toward technology based governance practices. The mentoring and evaluation stages further indicated that sustainable digital transformation in rural economic institutions requires not only technical competence but also organizational commitment, collaborative networking, and continuous learning mechanisms. The integration of digital administration, transparency oriented governance, and adaptive marketing practices strengthened participants' awareness regarding the strategic role of technology in enhancing institutional accountability, competitiveness, and sustainability within rural development frameworks. The findings confirm that community based empowerment programs can function as effective instruments for accelerating inclusive digital transformation and reinforcing the long term resilience of village economic institutions.

REFERENCES

- Abdurachman, T., Agustinus, E., Mulyani, N., & Rahma, A. (2021). Identifikasi Karakteristik Kewirausahaan Sebagai Landasan Pengembangan Potensi Diri. *DEDIKASI PKM*, 2(3), 361-365. <http://dx.doi.org/10.32493/dedikasipkm.v2i3.10966>
- Amali, L. N., Tuloli, M. S., & Katili, M. R. (2026). Digital Transformation for Rural Empowerment: A Web-Based Application Framework to Enhance BUMDesa Performance. *Jambura Journal of Informatics*, 8(1). <https://doi.org/10.37905/jji.v8i1.37891>
- Anthony, M. B., & Rosmayati, S. (2026). Analysis of Inhibiting Factors in the Operation and Digitalization of Village-Owned Enterprises (Bumdes) After Legal Entity Legalization in Tanjung Agung Village, Bulungan Regency. *International Journal Of Science Education and Technology Management (IJSETM)*, 5(1), 63-72. <https://doi.org/10.28301/ijsetm.v5i1.61>
- Fitriasuri, F., & Sari, I. R. . (2025). Sosialisasi Serta Optimalisasi Umkm, Bumdes Dan Pengelola Dana Desa Melalui Pengelolaan Keuangan Desa Tanjung Laut. *Journal Of Human And Education (JAHE)*, 5(1), 309–318. <https://doi.org/10.31004/jh.v5i1.2203>
- Hadiyanti, P., Darmawan, D., Sasmita, K., Jafar, M. M., & Dalimunthe, H. H. B. (2024). Empowering rural entrepreneurship: Innovating through village-owned enterprises. *Journal of Nonformal Education*, 10(2), 414-424. <https://doi.org/10.15294/jone.v10i2.5998>
- Madjodjo, F., & Dahlan, F. (2020). Analisis kinerja Badan Usaha Milik Desa dalam pengelolaan anggaran untuk meningkatkan pengolahan potensi desa di Desa Akedotilou. *Indonesia Accounting Journal*, 2(2), 187. <https://doi.org/10.32400/iaj.31055>
- Maharani, I. M., Muhaimin, A. W., & Pratiwi, D. E. (2022). Strategi Sistem Pemasaran Dalam Menghadapi Society 5.0 (Studi Kasus: BUMDes Sumber SEjahtera, Desa Pujon Kidul, Kabupaten Malang). *Jurnal Ekonomi Pertanian Dan Agribisnis*, 6(4), 1655-1670. <https://doi.org/10.21776/ub.jepa.2022.006.04.37>
- Maq, M. M., Dewi, S. P., Muktar, M., Suningrat, N., & Sitopu, J. W. (2024). Pendampingan balai desa dalam mengembangkan BUMDes untuk meningkatkan perekonomian masyarakat. *Journal Of Human And Education (JAHE)*, 4(5), 185-191. <https://doi.org/10.31004/jh.v4i5.1439>
- Maryuni, S., Pardi, Darmawan, D., Apriyani, E., Rudianto, Zesa, P., & Selpiani, W. (2024). Transformasi pelayanan digital terpadu dalam penerapan sistem pemerintahan berbasis elektronik. *Jurnal Pembelajaran Pemberdayaan Masyarakat (JP2M)*, 5(4), 1011–1028. <https://doi.org/10.33474/jp2m.v5i4.22479>
- Marzuki, S. S., & Karim, S. A. H. (2026). Village Owned Enterprises as a Financial Support Mechanism for Educational Management and Village Development. *Journal of Educational Management Research*, 5(2), 1341-1351. <https://doi.org/10.61987/jemr.v5i2.1874>
- Muhith, M. R. D., & Widiyarta, A. (2025). Governance Principles Driving Sustainable Village Economic and Social Development. *Academia Open*, 10(2), 10-21070. <https://doi.org/10.21070/acopen.10.2025.11937>
- Nugraheni, T. S. R., Utami, E. R., & Utami, T. P. (2025). The portrait of challenges and strategies of village-owned enterprise in achieving SDGs: The perspective of sustainable development. *Journal of Accounting and Investment*, 26(2), 548-578. <https://doi.org/10.18196/jai.v26i2.26741>

- Pawitan, G., Lesmono, D., Aritonang, K., & Diyanah, M. C. (2025). Empowering rural communities through strengthening village-owned enterprises (BUMDes) for sustainable socioeconomic development: A case study of Mekarsari Village, Garut Regency. *Society*, 13(1), 256-274. <https://doi.org/10.33019/society.v13i1.797>
- Raheni, C., & Iskandar, R. (2025, September). Digitalization of Village-Owned Enterprises in Supporting SDGs in Rural Areas: Opportunities and Challenges in Sigi Regency. In *IECON: International Economics and Business Conference* (Vol. 3, No. 2, pp. 1924-1938). <https://doi.org/10.65246/Oxqm8t30>
- Rinayuhani, T. R. R., & Wachidah, H. N. (2025). Good Governance through Digitalization of Government in Sidomulyo Village, Bangsal District, Mojokerto Regency. *SENTRI: Jurnal Riset Ilmiah*, 4(7), 448-459. <https://doi.org/10.55681/sentri.v4i7.4329>
- Safitri, N., Alwi, M., & Albar, A. (2025). Akuntabilitas Keuangan Sekolah sebagai Upaya Transparansi Pengelolaan Dana Pendidikan di SMK Muhammadiyah Wonomulyo. *Jurnal e-bussiness Institut Teknologi dan Bisnis Muhammadiyah Polewali Mandar*, 5(1), 89-93. <https://doi.org/10.59903/ebussiness.v5i1.191>
- Sanjaya, A., Huseini, M., & Wijaya, C. (2026). The Role Of Strategic Management In Optimizing Governance And Business Development Of Village-Owned Enterprises In The Digital Era. *Journal of Studies in Academic, Humanities, Research, and Innovation*, 3(1), 306-324. <https://doi.org/10.71305/sahri.v3i1.1453>
- Sari, J. A., & Diana, B. A. (2024). Dampak Transformasi Digitalisasi terhadap Perubahan Perilaku Masyarakat Pedesaan. *Jurnal Pemerintahan Dan Politik*, 9(2), 88-96. <https://doi.org/10.36982/jpg.v9i2.3896>
- Satoto, S., Nuriyatman, E., Mushawirya, R., Mujib, M. M., & Haq, M. I. (2024). Revitalization of Village-Owned Enterprises to Strengthen the Community Economy in Indonesia: Between Policy and Prosperity. *Jambe Law Journal*, 7(2), 509-537. <https://doi.org/10.22437/home.v7i2.364>
- Silalahi, H. ., Silalahi, D., Tarigan, M. ., & Barus, . B. (2025). Pelatihan Penyusunan Laporan Keuangan Sederhana Untuk UMKM Dlam Mendukung Pengelolaan Keuangan Berbasis Digital . *Journal Of Human And Education (JAHE)*, 5(2), 588-593. <https://doi.org/10.31004/jh.v5i2.2464>
- Sukarno, S. (2024). Redefining Village Power: Asymmetric Autonomy and Governance Innovation in the Digital Age. *Pena Justisia: Media Komunikasi dan Kajian Hukum*, 23(2), 9078-9089. <https://doi.org/10.31941/pj.v23i2.6715>
- Triono, B., Ridho, I. N., nasution, robby darwis, azhar, insyira yusdiawan, & lorenza, leuryan chery. (2025). Pendampingan Pemanfaatan Teknologi Komunikasi Dan Informasi Dalam Mewujudkan Tata Kelola Yang Transparan Dan Akuntabel . *Jurnal Gembira: Pengabdian Kepada Masyarakat*, 3(06), 2636-2642. Retrieved from <https://gembirapkm.my.id/index.php/jurnal/article/view/1312>
- Wahyuningtyas, I. K. (2021). Peran Strategis Bumdes (Badan Usaha Milik Desa) Dalam Pemberdayaan Ekonomi Desa. *Jurnal Jendela Inovasi Daerah*, 4(1), 91-101. <https://doi.org/10.56354/jendelainovasi.v4i1.95>
- Yunus, A. M., Andania, A., Irmawati, I., Ismail, I., & Hamzah, F. (2025). Implementing Smart Village to Strengthen Digital Economy in Rural Bone Regency. *NeoRespublica: Jurnal Ilmu Pemerintahan*, 7(1), 23-41. <https://doi.org/10.52423/neores.v7i1.1210>