



Justifying the Role of Digital Economy Education in Enhancing the Performance of BUMDES and KUD

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ABSTRACT

Digital transformation has significantly influenced economic activities, including the operations of community-based enterprises such as Village-Owned Enterprises (BUMDES) and Village Unit Cooperatives (KUD). However, many of these institutions still face challenges related to limited digital literacy, technology utilization, and modern business management practices. This community service program aimed to strengthen the capacity of BUMDES and KUD managers through digital economy education to enhance business performance and sustainability. The activity employed a participatory training approach involving lectures, discussions, and practical explanations regarding digital marketing, financial management, and digital business strategies. The program was conducted at the Institut Bisnis dan Teknologi Pelita Indonesia, Pekanbaru, with participants consisting of managers and representatives of BUMDES and KUD. The results show that the activity successfully increased participants' understanding of digital business concepts, including the use of social media marketing, e-commerce platforms, and digital financial management tools. Participants also gained insights into business performance evaluation, such as return on investment (ROI) and break-even point analysis. Despite several challenges related to technological infrastructure and digital literacy, the program demonstrated that digital economy education can significantly improve managerial capacity and encourage the adoption of digital tools in local business operations. Therefore, strengthening digital literacy through community service initiatives is essential to support the competitiveness and sustainability of BUMDES and KUD in the digital era.

Keywords: Digital Economy Education; BUMDES; KUD; Digital Business Development; Community Empowerment; Rural Economic Development

Fields: Digital Economy; Entrepreneurship and Small Business Development; Community Development; Rural Economic Development; Digital Business and Innovation

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INTRODUCTION

Digital transformation has significantly reshaped economic activities across various sectors, including small and community-based enterprises. In rural areas, Village-Owned Enterprises (BUMDES) and Village Unit Cooperatives (KUD) play a strategic role in stimulating local economic growth, creating employment opportunities, and improving community welfare (Renaldo, Hafni, et al., 2022). However, many of these institutions still face challenges related to limited access to digital knowledge, technology utilization, and modern business strategies (Yusrizal et al., 2021). The lack of digital economy literacy often hinders their ability to expand market reach, optimize business operations, and compete in an increasingly digital marketplace (Renaldo, Suyono,

et al., 2023). Therefore, strengthening digital economy education becomes an essential step in improving the performance and sustainability of BUMDES and KUD (Renaldo, Suharti, et al., 2022).

Digital economy education provides knowledge related to online marketing, digital financial management, e-commerce utilization, and technology-based business strategies (Putra et al., 2024). Through structured training and community service programs, managers of BUMDES and KUD can gain practical insights into how digital tools can be integrated into their business activities (Suhardjo et al., 2023). The adoption of digital platforms not only allows these enterprises to reach wider markets but also improves operational efficiency and decision-making processes (Renaldo et al., 2021). Furthermore, digital literacy enables entrepreneurs to better understand customer behavior, manage financial resources, and implement effective marketing strategies (Sevendy et al., 2023).

This community service initiative aims to justify the role of digital economy education in enhancing the performance of BUMDES and KUD by providing knowledge sharing, discussion sessions, and practical guidance related to digital business development (Suyono et al., 2023). By equipping local entrepreneurs with digital competencies, this program is expected to strengthen their ability to adapt to technological changes, improve business competitiveness, and support sustainable local economic development (Renaldo, Suhardjo, et al., 2023). Ultimately, empowering BUMDES and KUD through digital economy education can contribute to building a more inclusive and resilient rural economy.

LITERATURE REVIEW

The concept of the digital economy has become increasingly important in shaping modern business activities and economic development (Susanti et al., 2024). The digital economy refers to economic activities that rely on digital technologies, internet-based platforms, and information systems to create value, improve efficiency, and expand market access. According to recent studies, digital transformation enables businesses to reach broader markets, enhance operational efficiency, and develop innovative products and services. For small and community-based enterprises such as Village-Owned Enterprises (BUMDES) and Village Unit Cooperatives (KUD), the digital economy offers significant opportunities to improve competitiveness and sustainability, particularly in rural economic development.

BUMDES and KUD play a strategic role in strengthening local economies by supporting entrepreneurship, increasing employment opportunities, and promoting community-based economic activities (Junaedi et al., 2024). These institutions often operate in sectors such as agriculture, small-scale trade, food production, and local services. Despite their potential, many BUMDES and KUD still face challenges related to limited managerial capacity, inadequate technological infrastructure, and insufficient knowledge of digital business practices. Previous research highlights that improving managerial knowledge and digital literacy can significantly enhance the effectiveness of small enterprises in adapting to market changes and technological advancements.

Digital economy education is considered an effective strategy to improve the capability of business actors in utilizing technology for economic activities (Sudarmanto et al., 2025). Digital literacy includes understanding online marketing, e-commerce platforms, digital payment systems, and technology-based financial management. Through digital education programs, entrepreneurs can learn how to promote products through social media, manage online transactions, analyze market trends, and improve customer engagement. Several studies emphasize that digital literacy training can increase business productivity, expand customer reach, and improve financial performance among small and medium-sized enterprises.

Furthermore, community engagement and community service activities are widely recognized as effective approaches to transferring knowledge and skills to local communities. Through training, workshops, and mentoring programs, academic institutions can contribute to empowering communities and strengthening local economic structures. Community service programs that focus on digital business development have shown positive outcomes in improving entrepreneurial skills, increasing business innovation, and encouraging the adoption of digital technologies among community-based enterprises.

Based on the existing literature, it can be concluded that digital economy education plays a crucial role in enhancing the capacity and performance of BUMDES and KUD. By integrating digital knowledge with practical business strategies, community-based enterprises can improve operational efficiency, expand market opportunities, and achieve sustainable economic growth. Therefore, initiatives that promote digital literacy and technology adoption are essential for supporting the long-term development of rural economic institutions.

METHODOLOGY

This community service activity employed a participatory training and discussion approach aimed at improving participants' understanding of the digital economy and its application in business development for Village-Owned Enterprises (BUMDES) and Village Unit Cooperatives (KUD). The program was conducted through a direct face-to-face session involving lectures, interactive discussions, and practical explanations regarding digital business strategies (Renaldo et al., 2024). The activity took place at the Institut Bisnis dan Teknologi Pelita Indonesia, Pekanbaru, and involved participants consisting of managers and representatives of BUMDES and KUD.

The implementation of this community service program consisted of several stages (Arlia et al., 2025). The first stage was preparation, which included identifying the needs of participants related to digital business knowledge, preparing training materials, and coordinating with relevant stakeholders. The second stage was the implementation of the training session, where the community service team delivered materials related to the digital economy, digital marketing strategies, financial planning, and business development opportunities in the era of digitalization. The delivery of the material was conducted using presentation media such as laptops, projectors, whiteboards, and supporting teaching materials to ensure effective knowledge transfer.

During the training session, participants were encouraged to actively participate in interactive discussions and question-and-answer sessions to address challenges faced in managing their businesses (Junaedi et al., 2025). This participatory approach allowed participants to share experiences, discuss practical solutions, and gain a better understanding of how digital tools and platforms can support their business activities. The facilitators also provided examples of digital marketing practices and strategies that could be applied in BUMDES and KUD operations.

Finally, the evaluation stage was conducted to assess participants' understanding and the effectiveness of the training activities. Feedback from participants was collected through discussions and observations during the session. The evaluation results were used to identify the impact of the program in improving participants' knowledge of digital economy concepts and their ability to apply digital strategies in business development. Through this methodology, the community service activity aimed to strengthen the capacity of BUMDES and KUD in adapting to digital transformation and enhancing their business performance.

RESULTS AND DISCUSSION

The community service activity on digital economy education for BUMDES and KUD managers was successfully implemented with active participation from the participants. The program was attended by representatives of BUMDES and KUD as well as several participants interested in learning about digital business development. The training session was conducted through presentations and interactive discussions, allowing participants to gain a deeper understanding of the role of digital technology in supporting business growth. The enthusiasm of the participants was reflected in the active question-and-answer session and the discussions regarding challenges faced in managing local enterprises.

One of the main outcomes of this activity was the increase in participants' understanding of digital economy concepts and their practical application in business management. Many participants initially had limited knowledge about the use of digital platforms for marketing and business operations. After the training, participants demonstrated better awareness of the importance of digital marketing strategies, including the use of social media, online marketplaces, and digital promotion tools to expand market reach. This improvement in understanding indicates that digital economy education can significantly contribute to strengthening the managerial capacity of BUMDES and KUD.

In addition, the activity also helped participants understand the importance of efficient financial management and investment planning in small-scale businesses. The discussion sessions highlighted how proper financial planning, cost management, and evaluation of business performance—such as understanding return on investment (ROI) and break-even points—can help businesses maintain sustainability and profitability. Participants realized that digital tools could assist them in monitoring financial transactions, managing inventory, and analyzing business performance more effectively.

Another important finding from the activity was related to the challenges faced by BUMDES and KUD in adopting digital technology. Some participants mentioned limitations in technological infrastructure, digital literacy, and access to financial resources as major obstacles. However, the training helped them identify potential solutions, such as utilizing affordable digital platforms, collaborating with local communities, and gradually

implementing digital marketing strategies. These discussions emphasized that digital transformation does not always require large investments but can begin with simple and accessible digital tools.

Overall, the results of this community service program demonstrate that digital economy education plays an important role in enhancing the capacity and performance of BUMDES and KUD. By improving knowledge of digital business practices, marketing strategies, and financial management, participants are better prepared to adapt to the rapidly changing business environment. The integration of digital technology into local business operations is expected to improve competitiveness, increase market access, and support sustainable economic development in rural communities.

CONCLUSION

Conclusion

This community service activity demonstrates that digital economy education plays an important role in improving the knowledge and capabilities of BUMDES and KUD managers in developing their businesses in the digital era. Through training sessions, discussions, and knowledge sharing, participants gained a better understanding of digital marketing strategies, financial management, and the use of digital platforms to expand market access. The results indicate that many participants initially had limited knowledge regarding digital business practices, but the program helped increase their awareness of the importance of digital transformation for business sustainability. Overall, the activity successfully enhanced participants' capacity to utilize digital tools and strategies to improve business performance and competitiveness.

Implications

The findings of this community service activity have several practical implications. First, digital economy education can serve as an effective approach to empower community-based enterprises such as BUMDES and KUD. By strengthening digital literacy and managerial skills, these enterprises can improve operational efficiency and market reach. Second, academic institutions play a crucial role in supporting community empowerment through training, mentoring, and knowledge transfer programs. Third, the integration of digital technologies into local business activities can contribute to strengthening rural economic development and increasing the resilience of small-scale enterprises in the face of market competition.

Limitations

Despite the positive outcomes, this community service program has several limitations. The number of participants involved in the activity was relatively limited, which may affect the generalization of the results to a broader population of BUMDES and KUD managers. In addition, the activity was conducted within a short time frame, which limited the opportunity to provide more in-depth practical training or long-term mentoring. Another limitation is that the evaluation of the program mainly relied on participant discussions and observations rather than comprehensive quantitative measurements of changes in business performance.

Recommendations

Based on the results of this activity, several recommendations can be proposed. First, similar training programs should be conducted regularly to ensure continuous improvement in digital literacy and business management skills among BUMDES and KUD managers. Second, collaboration between universities, local governments, and financial institutions should be strengthened to provide broader support for digital business development. Third, training programs should incorporate more practical sessions, such as hands-on workshops on digital marketing tools, e-commerce platforms, and digital financial management systems.

Future Community Service

Future community service programs should focus on developing more comprehensive digital business assistance programs for BUMDES and KUD. This may include long-term mentoring, the development of digital marketing strategies, and the implementation of simple digital accounting systems to improve financial management. Additionally, future programs can integrate emerging technologies such as mobile-based business applications, digital payment systems, and online marketplaces to further strengthen the competitiveness of local enterprises. Expanding the scope of participants to include youth entrepreneurs and local community members may also help create a more sustainable ecosystem for digital entrepreneurship in rural areas.

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