Digital Financial Literacy for MSMEs: The Role of QRIS, GoPay, and BukuKas in Tonja Village

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Abstract. *In the contemporary digital era, the utilization of technology, particularly digital financial applications, has become imperative for Usaha Mikro, Kecil, dan Menengah (MSMES) to enhance efficiency and transparency in business financial management. Nevertheless, a considerable impediment persists in the form of inadequate digital financial literacy, a predicament that is particularly pronounced in rural regions such as Tonja Village. This community service activity aims to enhance the understanding and proficiency of MSMES actors in utilizing digital financial applications through an educational approach leveraging social media. The method employed involves the creation and dissemination of visually appealing and informative educational posters via the Instagram platform, ensuring easy access for MSMES players at any time. This strategy was selected to reach a broader audience and align with the information consumption patterns of the contemporary digital society. The evaluation of this initiative revealed a substantial enhancement in the comprehension and enthusiasm of MSMES participants concerning the utilization of digital financial applications for the management of business finances. It is anticipated that this initiative will lead to a lasting enhancement in digital financial literacy, empowering MSMES players in Tonja Village to manage their finances with greater organization, efficiency, and accountability, thereby fostering their business growth.*

Katakunci: *Penyuluhan, MSMES, Keuangan Digital, Media Sosial, Desa Tonja.*

Abstrak. Dalam era digital saat ini, pemanfaatan teknologi, khususnya aplikasi keuangan digital, menjadi kebutuhan mendesak bagi pelaku Usaha Mikro, Kecil, dan Menengah (MSMES) guna meningkatkan efisiensi dan transparansi dalam pengelolaan keuangan usaha. Namun, rendahnya literasi keuangan digital masih menjadi kendala yang signifikan, terutama di wilayah pedesaan seperti Desa Tonja. Kegiatan pengabdian kepada masyarakat ini difokuskan pada peningkatan pemahaman dan keterampilan pelaku MSMES dalam menggunakan aplikasi keuangan digital melalui pendekatan edukatif berbasis media sosial. Metode yang digunakan berupa penyusunan dan penyebaran poster edukatif yang dirancang secara visual menarik dan informatif, kemudian disosialisasikan melalui platform Instagram agar mudah diakses kapan pun oleh para pelaku MSMES. Strategi ini dipilih untuk menjangkau khalayak secara lebih luas serta menyesuaikan dengan pola konsumsi informasi masyarakat saat ini yang cenderung digital. Hasil kegiatan menunjukkan adanya peningkatan signifikan dalam tingkat pemahaman serta minat para pelaku MSMES terhadap penggunaan aplikasi keuangan digital sebagai alat bantu pengelolaan keuangan usaha mereka. Melalui kegiatan ini, diharapkan terjadi peningkatan literasi keuangan digital yang berkelanjutan, sehingga pelaku MSMES di Desa Tonja mampu mengelola keuangan secara lebih tertib, efisien, dan akuntabel dalam mendukung kemajuan usaha mereka.

1 Introduction

Contains The rapid development of digital technology, especially in the financial sector, has triggered transformative shifts in various aspects of human life, including in the realm of microeconomics such as Micro, Small, and Medium Enterprises (MSMEs) (Mahyarni & Okfalisa, 2024). According to data from the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia will reach 215.6 million in 2023, with the majority accessing the internet through mobile devices (APJII, 2023). At the same time, the proliferation of digital wallet applications such as GoPay, OVO, and Dana has facilitated fast, safe, and efficient cashless transactions (Purwanto et al., 2024).

However, the data is not completely proportional to the conditions in Tonja Village. Although internet access is available, the results of field observations show that the majority of local MSME actors have not utilized digital financial applications optimally. The main obstacle lies not in the availability of technology, but in the low level of digital literacy and financial literacy, lack of confidence in the security of digital transactions, and lack of technical assistance. This phenomenon shows that the existence of digital infrastructure alone does not automatically drive the adoption of technology at the grassroots level (Dana et al., 2021).

Digital transformation, in this context, can be defined as the process of a comprehensive change in business mindsets, behaviors, and operational systems using digital technology to increase efficiency, productivity, and competitiveness (Martínez-Peláez et al., 2023a). However, this transformation will not be realized without adequate digital financial literacy (Koskelainen et al., n.d.). Digital financial literacy refers to the ability of individuals to understand, manage, and utilize technology-based financial services effectively, safely, and sustainably (Menberu, 2024). Without adequate understanding, MSME actors tend to stagnate, maintain conventional methods, and lose opportunities to access the wider market or optimize their financial management (Surya et al., 2022).

Furthermore, the role of digital financial literacy becomes increasingly crucial as it directly affects how MSMEs engage with financial services in the digital era (Vijayakumar & Chandrasekar, 2024). Adequate literacy allows entrepreneurs to navigate various digital financial products, such as mobile banking, digital wallets, and fintech applications, while minimizing risks related to fraud, misuse, or financial mismanagement(Hasan, 2024). In this context, digital financial literacy not only enhances business resilience but also empowers MSME actors to make more informed decisions, strengthen financial inclusion, and support long-term business sustainability (Amelia Setyawati et al., 2023).

At the same time, governments, financial institutions, and educational stakeholders play a strategic role in ensuring that MSME actors are not left behind in the wave of digitalization (M. et al., 2024). Programs focusing on digital skills training, financial education, and infrastructure support are essential in bridging the digital divide and ensuring equitable participation in the digital economy (Bansal & Choudhary, 2024). Strengthening collaboration between these actors will accelerate the transformation process, enabling MSMEs to maximize the potential of digital technologies in driving innovation, improving financial management, and contributing to national economic growth (Martínez-Peláez et al., 2023b).

Therefore, this community service initiative is designed to provide education and counseling to MSME actors in Tonja Village regarding the use of digital financial applications, especially e-wallets such as GoPay, QRIS, and the BukuKas financial recording application. This program aims to increase the knowledge, skills, and confidence of MSME actors in managing finances digitally. Thus, it is hoped that it will create a sustainable digital transformation of MSMEs, strengthen the competitiveness of local businesses, and encourage community economic independence through increasing digital literacy.

2 Method

This method of implementing community service uses a community-based approach that emphasizes the active involvement of Micro, Small, and Medium Enterprises (MSMEs) as the main subject of activities. The activity is in Tonja Village, North Denpasar District, Denpasar City, Bali Province, with the target of MSME actors selected based on the results of initial observations related to the low use of digital financial applications in business activities. The implementation stage begins with observation and identification of needs through field visits and informal interviews with MSME actors to find out the level of understanding, skills, and obstacles faced in the use of digital financial applications.

The results of observations show that most MSME actors do not understand the benefits and procedures for using applications such as GoPay, OVO, and Dana, both for transactions and business financial records. Based on these findings, the service team collaborated with the Tonja Village apparatus in compiling educational materials that were relevant, easily accessible, and according to the needs of the target. The educational materials are packaged in the form of digital posters that contain explanations of the benefits, practical guides, and safety tips for using digital financial applications. The poster is designed with attractive visuals and simple language to make it easy to understand. The implementation was carried out through the publication of posters on the official Instagram account of Tonja Village and the account of the thematic service team on Sunday, February 2, 2025, with the support of village officials to expand the reach of information. The success of the activity was measured qualitatively through changes in the attitudes and perceptions of MSME actors towards the use of digital financial applications, and quantitatively through the number of MSME actors who started downloading or using the application after the activity. This apprcapacity andted to increase digital financial literacy, strengthen business capacity, and encourage sustainable digital transformation of MSMEs in Tonja Village.

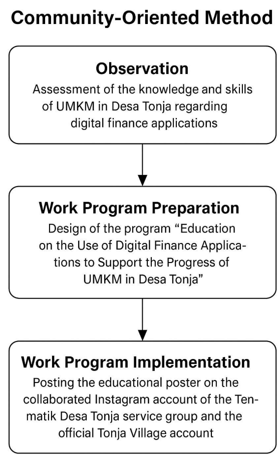

Figure 1. Community Service Activity Flowchart

The flowchart above illustrates the systematic sequence of activities carried out in the community service program to ensure the achievement of its objectives. The process begins with the observation and problem identification stage, which involves collecting preliminary data through field visits and informal interviews with MSME actors in Tonja Village to assess their level of understanding, identify challenges, and determine specific needs regarding the use of digital financial applications. The next stage is planning and developing educational materials, where the community service team collaborates with the village administration to design relevant, concise, and easy-to-understand content tailored to the local community's conditions and digital literacy capabilities.

Subsequently, the educational materials are implemented through digital poster publication, disseminated online via the official Instagram account of Tonja Village and the community service team's social media account. This strategy was chosen to maximize outreach, given the high usage of social media among the community, allowing the materials to be accessed anytime and anywhere. The final stage is program evaluation, conducted by comparing the conditions before and after the counseling session, focusing on improvements in understanding as well as behavioral changes in MSME actors regarding the adoption of digital financial applications. Through this workflow, each stage reinforces the others, creating a targeted, measurable, and impactful educational process that contributes to enhancing the community's digital financial literacy.

3 Results

The Community Service Program on the Use of Digital Financial Applications to Support the Progress of MSMEs in Tonja Village was successfully implemented with the full support of the Tonja Village Government, the local MSME community, and the active participation of the wider Tonja Village residents. This program was designed in direct response to the challenges faced by MSME actors in managing their finances digitally, especially in utilizing applications that can improve the effectiveness and efficiency of their business operations.

The series of activities began with the observation and problem identification stage. Field findings revealed that most MSME actors in Tonja Village still had limited understanding and skills in using digital financial applications. Many continued to rely on manual record-keeping, prioritized cash transactions, and lacked awareness of digital security practices during online financial activities. These limitations were observed across MSMEs with diverse educational backgrounds, ranging from elementary to tertiary levels, and varied business experiences. Lower levels of formal education and limited prior exposure to technology were found to correlate with lower digital literacy, making the adoption of financial applications more challenging.

This phenomenon served as the foundation for work program design in the form of a digital education campaign through Instagram. The campaign materials were developed into visually appealing and easy-to-understand digital posters, featuring:

a. Explanations of the benefits of digital financial applications in business.

b. Step-by-step guides on how to use them.

c. Recommendations for popular, user-friendly applications such as BukuKas, Daily Financial Notes, and other digital cashier platforms.

These applications were selected based on criteria of ease of use, compatibility with mobile devices, and suitability for the social background of local MSMEs, where many had limited prior training in finance or technology.

The implementation phase took place on Sunday, February 2, 2025, using Instagram social media as the main dissemination channel. Posters were uploaded to the Instagram account of the Tonja Village service group and shared through the official Instagram account of Tonja Village. This partnership ensured a broader audience reach and demonstrated effective synergy between program implementers and local government in supporting the village's digital transformation efforts.

During the campaign, the mentoring process proved to be two-way and interactive, rather than purely one-directional. After the poster uploads, numerous MSME actors actively engaged through comments and direct messages, asking questions about the recommended applications and sharing their own experiences in testing them. Their responses indicated that applications focused on transaction recording and basic financial tracking were the easiest to adopt, particularly for MSMEs with limited educational backgrounds and minimal prior exposure to financial technology.

Furthermore, early indications of behavioral change were observed. Several MSMEs began experimenting with digital applications to record their income and expenses more systematically. Others introduced cashless payment options such as QRIS and e-wallets (GoPay, OVO, DANA) into their transactions, recognizing their potential to reach a broader customer base. The demand for similar educational content increased, and interactions on social media continued beyond the program date, suggesting growing community openness toward digital-based learning and sustained interest in advancing digital financial literacy.

To illustrate the changes that occurred, Table 1 is presented below, which compares the conditions before and after the implementation of the extension program:

Table 1. Before and After Implementing Community Service Programs

No.	Before the counseling activity on the use of digital financial applications	After the counseling activity on the use of financial applications digital
1.	Most MSMES actors in Tonja Village have limited knowledge about digital financial applications and their benefits.	MSMES actors' knowledge of digital financial applications and the benefits of using them is starting to show an increase.
2.	Many MSMES actors are not used to using technology and find digital financial applications difficult to use, so they are reluctant to switch to digital financial applications.	MSMES actors are starting to be more open in using digital financial application technology and adapting to digital developments, so that they can encourage innovation and support their business progress.
3.	The lack of public understanding, especially MSMES actors, about the security of digital financial applications, such as the fear of online fraud or personal data leaks.	After the counseling, MSMES actors' understanding of the security of digital financial applications began to increase and they became more aware of how to secure data in conducting transactions digital.
4.	Many transactions are still carried out in cash, thus limiting the opportunity for MSMESs in Tonja Village to expand the market through digital payment methods.	Most MSMES in Tonja Village have begun to switch to non-cash transactions by accepting digital payments through QRIS and e-wallets, such as using the Go-Pay application.
5.	MSMES actors often experience errors in their financial records, making it difficult for MSMES actors to evaluate the profits and losses of their businesses.	MSMES actors can more easily record their finances, such as recording their income, expenses, and profits and losses.

Figure 2. Poster Postings on the Instagram Social Media Account of the Tonja Village Community Service Group in Collaboration with the Official Instagram Account of Tonja Village.

The educational poster uploaded by the author through the Devotion group's official Instagram account received 14 likes and was viewed by 187 accounts. This shows a fairly good level of exposure in the community, considering that the majority of MSMES players have begun to actively use social media as part of their business promotion and communication strategies. The success of this program can also be seen from the emergence of local initiatives after the program. For example, some MSMES players formed a WhatsApp group to share information about the use of financial applications, as well as their experiences in managing financial transactions and reports. This dynamic shows that the service activities have succeeded in forming a space for dialogue and collaboration between MSMES actors, which can be an embryo for the formation of a digital-based learning community.

In addition, the Tonja Village Government also showed interest in making this activity an initial model in a broader digital-based village economic empowerment program. This strengthens the role of service activities as a trigger for more sustainable social change. The potential for local figures to emerge as facilitators of digital literacy in finance has also begun to emerge, with some individuals showing initiative to help fellow MSMES players who have difficulties in using the application.

As part of the mid-term evaluation, it is important to note that similar activities require sustainability and support from various stakeholders. Collaboration between educational institutions, village governments, and the private sector is crucial in expanding the impact of service activities. In addition, sustainability can be supported by developing digital training modules that can be used by MSMESs independently. This module can be in the form of video tutorials, e-books, or podcasts that explain various aspects of using digital financial applications in a language that is easy to understand (Aziz et al., 2025).

The enthusiasm of MSMES players for the use of financial applications also provides opportunities for further research on the effectiveness of using digital financial technology in improving micro business performance. Thus, this community service activity can be the beginning of a synergy between academic activities, field practice, and technological innovation for the economic empowerment of rural communities (Hung, 2023).

Overall, this service program has made a positive contribution to increasing the capacity of MSMES actors in adopting digital financial technology, as well as fostering collective awareness of the importance of financial recording and transaction security. The digital approach used allows for wide dissemination of information at an efficient cost and provides sustainable impact through active community participation and multi-stakeholder collaboration.

With these results, community service activities in Tonja Village can be said to have successfully achieved its main objectives, namely increasing the digital financial literacy of MSMES players, opening access to practical technology solutions, creating positive behavioral changes and new awareness in facing the challenges of the digital economy. Hopefully, this activity can be replicated in other villages by adjusting the approach according to the social and cultural context of the local community, so that digital transformation can truly become a joint movement towards sustainable economic independence.

4 Discussion

The community service program carried out in Tonja Village with the theme of Counseling on the Utilization of Digital Financial Applications to Support the Progress of MSMEs is a strategic step in answering the challenges of digital transformation, especially in the context of strengthening the capacity of MSME actors. Through a digital-based education approach, this activity makes a real contribution to building people's digital financial literacy, especially MSME actors who have tended to be marginalized from the mainstream of digitalization.

The implementation of this program utilizes social media-based counseling methods, by disseminating information through Instagram in the form of educational infographics. This strategy has proven to be efficient and effective in reaching a wide audience quickly and at a relatively low cost. The educational poster that was disseminated contained important information about the types of digital financial applications, the advantages of their use, digital security aspects, and how MSME actors can use them in their daily operations (Newsom et al., 2021).

The training activities were carried out in one intensive meeting for 4 hours, which consisted of material exposure sessions, simulations of application use, and interactive question and answer sessions. However, to ensure the sustainability of learning, participants can still access re-material through social media uploads. Based on the post-training evaluation, around 65% of participants were able to understand and practice the use of digital financial applications well, while the other 35% still needed follow-up assistance. Factors that affect this difference in understanding level include age (participants over 50 years old tend to be slower to adapt), educational background (basic education has higher difficulties), and lack of previous experience in using digital devices (Gerlich, 2025).

The results of the program showed that participants experienced an increased understanding of digital finance concepts, including the use of digital wallet applications, scanning QR codes for transactions, and the importance of recording digital finances in real-time. The responses given by MSME actors reflect their enthusiasm and need for relevant and applicable information. Thus, this activity not only succeeded in providing theoretical counseling, but also stimulated behavioral change in a more adaptive direction to technology.

This change reflects a social transformation characterized by a paradigm shift from conventional methods to digital methods in financial management. Previously, most MSME actors in Tonja Village still used manual methods in recording income and expenses, which often led to inaccuracies and errors in managing their business cash flow. Through this counseling, participants are encouraged to take advantage of applications that not only make financial recording easier but also increase accountability and efficiency in running a business.

Furthermore, this activity also shows the success of building synergistic cooperation between the service implementation team and the Tonja Village Government. This collaboration is reflected in the active involvement of village officials in disseminating information and supporting the sustainability of the program through the village's official social media channels. This collaborative approach emphasizes that strengthening community capacity cannot stand alone, but requires synergy between academics, the government, and society itself. Thus, the empowerment model developed in this activity can be replicated for the context of other villages that have similar characteristics (Dushkova & Ivlieva, 2024).

However, this activity also faces challenges that need to be noted, including limited training time which makes some participants need more in-depth guidance, limited digital devices among MSME actors, and initial resistance from some participants who lack confidence in using technology. In addition, the internet connection in several village areas is still unstable, thus hindering the smooth use of the application simulation. These challenges demonstrate the need to design a continuous training scheme with a phased approach, which can be integrated with hands-on mentoring.

The successful implementation of this program also opens up space for theoretical reflection on the importance of a community-based digital empowerment approach in community service activities. Information technology-based strategies, if used wisely and contextually, are able to reach and solve problems that have been difficult to solve with conventional methods. In the context of MSMEs, digital counseling has advantages because it provides high flexibility, scalability, and affordability.

The challenges in implementing digital literacy training for MSMEs, such as limited devices, unstable internet access, and participants' initial resistance, can be explained through the Technology Acceptance Model (TAM), which emphasizes that technology adoption depends on perceived usefulness and ease of use (Kalayou et al., 2020). Low confidence among participants reflects limited perceived ease of use, while the lack of awareness of digital benefits shows low perceived usefulness. At the same time, from a socio-technical systems perspective, the misalignment between technical infrastructure and social readiness constrains effective transformation (Machado Becker et al., 2025).

In addition to the short-term benefits that have been achieved, this activity is also expected to be a catalyst for the formation of a sustainable digital ecosystem in MSMEs in Tonja Village. This ecosystem involves the continuous involvement of business actors, village governments, and educational institutions in supporting the sustainable use of digital applications. Therefore, the sustainability of this program must be a major concern, by designing follow-up activities such as advanced training, application implementation assistance, and periodic evaluation of its implementation.

As a reflection, this activity shows that digital literacy in financial management is not only important to improve business efficiency and effectiveness, but also the foundation of the economic resilience of rural communities. With increased digital understanding and skills, MSME players have a greater opportunity to compete in a wider market, both locally and nationally.

Finally, it can be concluded that this community service program has succeeded in fulfilling its goal of providing understanding, improving skills, and encouraging the adoption of digital technology in MSME financial practices. This is a concrete example of how academic approaches can be practically integrated into people's lives in order to improve the quality and competitiveness of the local economy. This program is expected to be an inspirational model in the implementation of other digital-based community service in the future.

5 Conclusion

The community service program conducted in Tonja Village has made a tangible contribution to enhancing the understanding and skills of the target community, particularly in utilizing digital financial applications for MSMEs. The results indicate that participatory and educational approaches are effective in fostering awareness and motivation among the community to adopt technology as a means of improving economic capacity. Theoretically, this activity reinforces the understanding that collaboration between higher education institutions and local communities plays a vital role in accelerating the diffusion of innovation and enhancing digital literacy, in line with Everett Rogers' diffusion of innovation theory, which explains that technology adoption occurs through stages of persuasion, decision, and implementation influenced by internal factors (individual willingness and capacity) as well as external factors (support and training from the environment). Based on these findings, it is recommended to maintain continuous mentoring programs to ensure optimal use of digital applications, strengthen collaboration between village authorities and local stakeholders with higher education institutions to support program sustainability, and conduct follow-up evaluations using quantitative approaches to measure the concrete impact on improving the community's economic capacity. Thus, this activity not only contributes to community empowerment but also provides valuable insights for the development of community-based learning models that are adaptive and relevant to the challenges of the digital era.

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