Economic Empowerment of MSMEs Through QRIS Payment Digitalization in Bontomanai Urban Village, Bontomarannu District, Gowa Regency

Hamsiah Djafar, Sri Indra Wibowo, Muh. Didi Al Qadri, Muh. Rafli Rizkiawan Arsyam, Ahmad Zulbijadain, Rahma Aulia, Amaliyah Rezki, St. Fadhila Djangi, Putri, Nurul Fitrah, Hilyatul Auliah Wahid, Nur Ikama, Nurazizan Dirham, Nurul Alfiana

Universitas Islam Negeri Alauddin Makassar, Indonesia
*Corresponding Author: didialqadri25@gmail.com

ARTICLE INFO

Article History:

Received : 14 Oktober 2026
Revised : 20 Oktober 2026
Accepted : 21 Oktober 2026

Keywords:

Digital Payment Adoption,
Digital Literacy,
Financial Inclusion,
MSMEs,
QRIS,

ABSTRACT

Bontomanai Village, Bontomarannu Sub-district, Gowa Regency, is an area with fairly active community economic activity, marked by the presence of many Micro, Small, and Medium Enterprises (MSMEs) engaged in culinary, daily necessities, and home-based businesses. However, most transactions are still conducted in cash due to business owners' limited understanding of the standardized quick-response code-based digital payment system. This condition results in poorly organized financial records and risks reducing business competitiveness amid the shifting public preference toward cashless transactions. This community service activity aimed to improve MSME owners' understanding of the digital payment system and assist them in adopting it as a practical and efficient cashless payment alternative. The method used was direct, door-to-door mentoring carried out through four stages: needs observation and identification, program planning, socialization and registration implementation, and impact evaluation, conducted over one week involving 30 MSME actors. The results showed that four MSMEs were successfully assisted in obtaining new digital payment codes, bringing the total to fourteen MSMEs with access to digital payment, evidenced by successful first transactions and positive testimonials from business owners regarding easier financial record-keeping and expanded customer reach. The activity concludes that direct, personalized mentoring effectively encourages the adoption of digital payment technology, although its success continues to depend on strengthening digital literacy and business owners' trust on an ongoing basis.

1. Introduction

Bontomanai Village in the Bontomarannu District of the Gowa Regency has a thriving economy. The presence of numerous micro, small and medium enterprises (MSMEs) performing a variety of functions including sales of food, daily needs, and other home-based businesses is proof of this. However, despite the fact that many of the MSMEs are utilizing cash transactions, digital payment technology has not been fully utilized.

Based upon observations and interviews made by the 79th cohort of the Community Service Program (KKN) of UIN Alauddin Makassar in particular the cohort assigned to Post 3 in Bontomanai during the first days of their placement in Bontomanai, it was determined that the majority of owners of Micro Small Medium Enterprises (MSMEs) in Bontomanai Village do not currently use or understand digital payments such as Quick Response Code Indonesian Standard (QRIS). Thus, there appears to be a very low rate of adoption of digital payment technologies by business owners. It has been shown in previous studies that there are several variables that contribute to the degree of QRIS adoption by MSMEs, such as: digital literacy, socio-economic status, and accessibility to information and technology (Pangestika et al., 2025). However, there are also many advantages associated with the utilization of QRIS, including: simplifying transaction processes; facilitating accurate recording of business finances; and increasing access to digital financial services (Mahyuni & Setiawan, 2021).

Problems experienced by MSMEs (micro, small, and medium enterprises) in using cash-based payment methods show that relying solely on cash-based payments continues to be one of the major barriers to MSME development. When MSME owners rely on only cash transactions, they usually do not keep accurate financial records. Also, MSME owners may lose customers who would rather pay through other than cash means, like digital wallets or mobile banking. There are several reasons why MSMEs do not switch from using cash-based payment systems to digital payment systems including MSME owners' unfamiliarity with digital technologies; inadequate information dissemination about QRIS (Quick Response Code Indonesian Standard); and MSME owners' belief that QRIS registration and usage processes are complicated.

The implementation of a program by students in the 79th batch of the Community Service Program (KKN) at UIN Alauddin Makassar more specifically, the students participating in Post 3 was designed to help address these issues by assisting micro, small, and medium-sized businesses (MSMEs) located in the Bontomanai subdistrict in digitizing their payment methods using QRIS. This initiative was accomplished through multiple phases; it began with raising awareness about the advantages associated with using QRIS, then providing support during the registration phase, and lastly printing and delivering QRIS codes to business owners who decided to implement QRIS. The purpose of this program is to increase MSME operator knowledge about digital payment systems and provide them with assistance to utilize QRIS as a more efficient, practical and cashless alternative to traditional payment methods.

The value of this program is that it uses a direct, door-to-door approach to help MSMEs (Micro, Small, And Medium Enterprises). This approach allows students to be more involved with the business owners, so that they can provide the education and assistance that are needed by every individual MSME. Previous studies and programs which were mainly concerned with studying perceptions or QRIS adoption levels among MSMEs (Andriani et al.,

2024; Sudiatmika & Martini, 2022) did not emphasize on achieving concrete results; such as the acquisition and installation of QRIS, which is then ready to be used in day-to-day business activities. Therefore, the results achieved through the community service (KKN) will last much longer than the KKN itself, contributing to the development of local businesses in Bontomanai Village.

2. Method

Community Service Program (KKN) activities conducted by students of the 79th cohort of KKN at UIN Alauddin Makassar (Post 3) were implemented in Bontomanai Village, Bontomarannu District, Gowa Regency. Activities were conducted in the third week of the KKN period—one week after the work program seminar—from September 1st, 2026 to September 7th, 2026. The stages of activity included field observation for two days (September 1-2, 2026), socialization, registration assistance and printing and distribution of QRIS codes. The final stage was follow-up observation and evaluation of the impacts of activities on September 7th, 2026.

The main focus of this mentorship project is to train 30 MSMEs in Bontomanai Village. Most of the trainees in this mentorship project will be micro-scale businesses with a moderate or low daily revenue; such as home-based businesses, convenience store owners who sell products used every day, and food and beverage vendors. When we started our community service project, most of the trainees in this mentorship project were not very knowledgeable about using cashless payment methods for their business. Instead, they used cash as a form of payment for their daily business activities. We chose the direct door-to-door mentoring approach because we wanted to provide personalized attention and instruction based upon what each individual trainee needed. This approach allowed us to reach out to each business owner and teach them how to use digital payments in their business. This community service project was divided into four major stages, which were:

1) Preparation Stage and Needs Identification through Field Survey and Initial Interview: To identify the needs of MSMEs in Bontomanai Village, students have conducted a field survey and direct interviews with the owners of MSMEs to determine the current condition of their business transaction, the knowledge that they possess about digital payment technology and the obstacles that they experience when using cashless payment methods. Program Coordination and Planning: Students develop educational material, prepare administrative document and registration requirement for QRIS and plan the route to visit each MSME as targeted.
2) Pre-Implementation Phase and Preparation of Instruments: Develop a practical guide for QRIS registration covering requirements such as an ID card, bank account or digital wallet, and business details to ensure a fast and efficient registration process. Prepare observation sheets and data recording formats for MSME partners.
3) The Implementation and Direct (Door-to-Door) Support Stage is an Education/Socialization phase regarding the Advantages of using QRIS - Students physically visit their Partner MSME's and educate them on the advantages of Cashless Transactions; on the convenience of QRIS; on the Security of Transactions made with QRIS; and on how simple it is to keep track of Finances using QRIS. Assistance with

Registration - Students help MSME Owner's complete the Online QRIS Merchant Registration Process Step-by-Step until the registration is processed successfully by the Payment Service Provider (PSP). Printing & Delivery of QRIS - Students obtain, print, and provide the physical QRIS Code (In the form of a Banner/Standee) and then assist the MSME Owner in placing the QRIS Code at their Store or Business Location so that it can be used.

4) Evaluation Phase and Sustainability Policy – Monitoring Usage: To conduct subsequent evaluations to determine if the QRIS code performs as intended during both simulation testing and when used by customers. Impact Evaluation: To assess the effectiveness of the program using the total number of MSMEs that received, installed, and were capable of using QRIS in their day-to-day business activities.

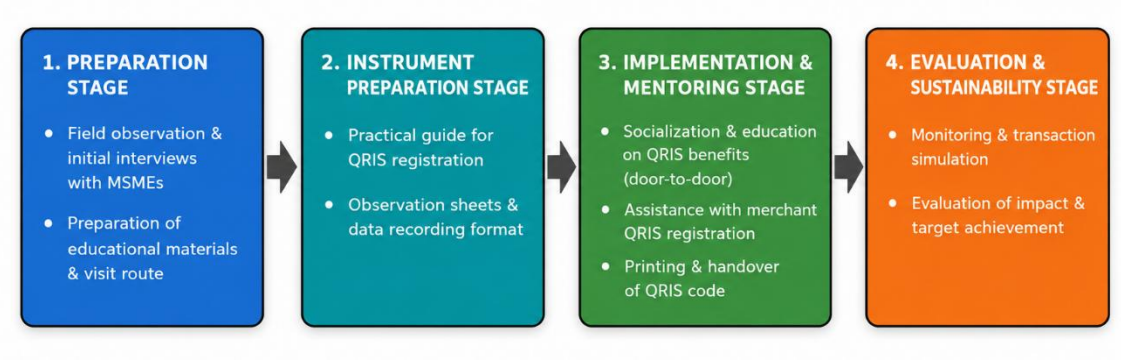


Figure 1. The Community Service Program Flow Diagram

The collection of information regarding the activities of MSMEs was carried out through the use of different methods: (1) field observation forms for recording the baseline and development of the MSMEs participating in the project; (2) structured interviews with owners of MSMEs at two different times during the phase of identifying needs and evaluating results and (3) photographic records of the activities developed throughout the implementation process, as supporting evidence. There were no standardized questionnaires used in this initiative nor were there any evaluations of pre-test and post-test because the focus of the program was to provide technical support and direct experience, instead of evaluating the change of attitude or knowledge through standardized means. Therefore, the evaluation of the effectiveness of the program will be based upon observations made during field visits and description of the data obtained from them.

The analysis method applied in this study was a mixed methods design to examine the implementation process of the QRIS program; identify challenges encountered in the field; determine enabling factors for the successful implementation of the program; assess the impact of the program; and obtain feedback from MSME participants via interview or testimonial. Qualitative analysis was conducted to provide an account of how the program was implemented, the difficulties experienced by MSME participants, what enabled MSME participants to overcome these difficulties, and the overall effect of the program. Simple quantitative analysis was used to measure the percentage of success target met in terms of the number of MSMEs that successfully installed, operated independently and used QRIS out of the total number of MSMEs planned to participate. By using a mixed methods approach, it is possible for the reader to have a general idea about the whole process as well as a more objective assessment of the accomplishments of the program.

3. Results and Discussion

Initial observations carried out by students of the 79th cohort of the UIN Alauddin Makassar Community Service Program (KKN) who were stationed in Post 3 in Bontomanai Village revealed that 30 MSME (micro, small, and medium enterprise) operators would be the primary target of their activity. Additionally, the initial observations also allowed for mapping the condition of QRIS use by MSME operators before they received assistance. During the early observation, it was found that most MSME operators continued to use cash payments and had limited knowledge regarding QRIS functions and the advantages of using QRIS.

The activities that were undertaken during this study were completed in a methodical manner. As shown in Figure 2, there were seven steps involved in the completion of these activities. The first step was to observe the current state of MSMEs. This was followed by creating awareness among business owners of the advantages of using QRIS for recording and facilitating business transactions. Next, assistance was provided to each business owner on a door-to-door basis. The QRIS registration process was then completed by the business owners through the BukuPay application. After the registration process was completed, QRIS codes were printed and distributed. In addition to printing and distributing the QRIS codes, non-cash transactions were tested with the business owners. Finally, a second observation was conducted after a period of time to determine if the use of QRIS had an effect on the business operations.



Figure 2. The Community Service Program Timeline and Stages

Table 1. MSMEs QRIS Usage Condition on 30 Target MSMEs

Classification	MSMEs
Have Used QRIS Beforehand	10
Registered New QRIS Successfully	4
Rejected – Lack of Smartphone	3
Rejected – Low Competitive Power	6
Rejected – Repeated Failed Transaction	1
Rejected – Beware of Scams	3
Rejected – Beware of Additional Fee	3
Total	**30 MSMEs**

Sources: Prepared By The Authors

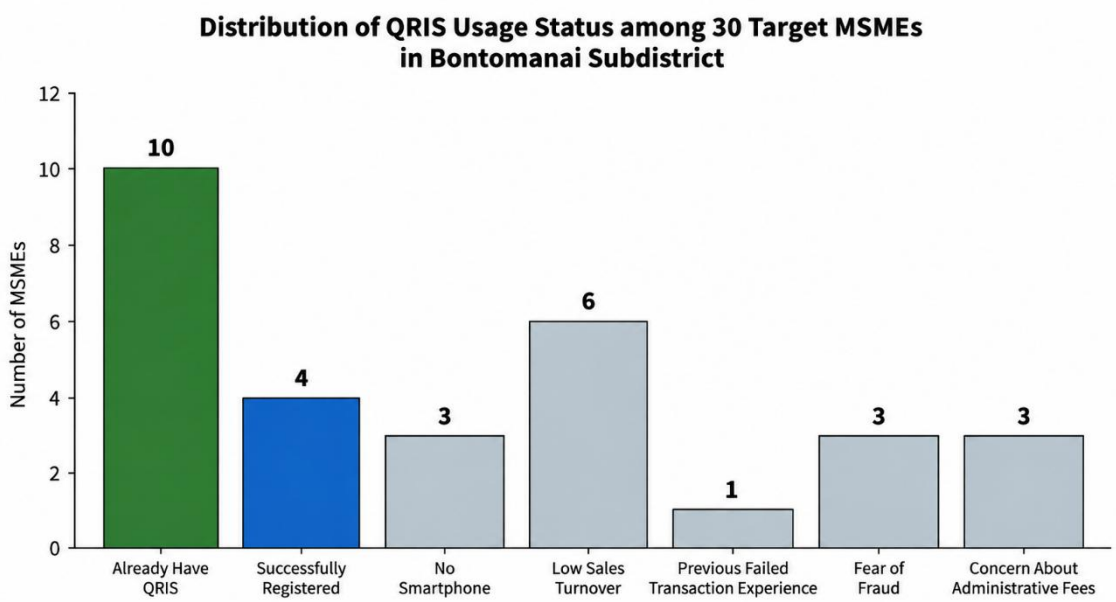


Figure 3. Distribution of QRIS Usage Status Among MSMEs in Bontomanai Sub-District

There are 30 MSMEs being approached; however, 10 MSMEs have been using QRIS prior to being contacted. Four MSMEs have been assisted by BukuPay to register for QRIS. On the other hand, 16 MSMEs have refused to accept QRIS for different reasons. Six MSMEs refuse to use QRIS because they do not feel that their business turnover justifies the use of a digital payment method. Three MSMEs refuse to use QRIS because they fear fraud. Three MSMEs refuse to use QRIS because they fear administrative costs. Three MSMEs refuse to use QRIS because they do not own smartphones. Finally, one MSME refuses to use QRIS because they have had a bad experience with a digital payment transaction in the past.



Figure 4. Community Service Program Documentation

The program evaluation was performed through a qualitative observational method; there were no standard measurement tools used. The evaluation examined the MSME owners' post-outreach knowledge regarding the use of QRIS and the assistance they had received in order to implement QRIS. Overall, the MSME owners that received assistance displayed an increase in their knowledge of QRIS functions - including but not limited to, presenting the QR code to their customers, reviewing incoming transaction records, and identifying the advantages of QRIS as a tool for tracking transactions. An increase in knowledge was demonstrated by the MSME owners' willingness and capability to perform independent trial transactions during the last portion of the assistance process.

Two simple indicators that the program was successful are: (1) the QRIS conversion ratio, the percentage of MSMEs that were activated with QRIS versus the number of MSMEs targeted for activation (4 of 30, or 13.3%), plus the percentage of MSMEs who were already equipped with QRIS, which gives a total QRIS penetration of 46.7%. (2) the transaction trial success rate, all (4 of 4) MSMEs that were successfully activated with QRIS were able to successfully complete a non-cash transaction trial.

Based on follow-up observations conducted a few days after the QRIS codes were handed over, it was noted that all four MSMEswhich had been provided with the facilitysuccessfully processed their first QRIS transactions, with a number of customers beginning to switch to using QRIS for payments. One of the MSME owners shared the following testimonial:

" QRIS na ngaiki na sare kabajikang punna a balanjaki ri gaddea. punna ri cini keuangan ta, lebih mudah juga inne, tenaja na ni rekeng doetta ta se're-se're, qris juga inne na mudahkan tongki sebagai pembeli , apalagi tena ni erang doe tunai "

The following statements illustrate that the positive effect of the program on business owners goes far beyond the administration (or having) of a QRIS code. Specifically, the business owner experienced two main benefits from the QRIS program: reduced complexity regarding accounting records and expanded market opportunities for non-cash carrying consumers. This result is consistent with the initial goal of the program to encourage MSMEs to adopt QRIS as an easy and effective alternative for non-cash payment methods.

The program has faced many obstacles in the implementation phase of the field. Many of these obstacles include: - Some MSME owners do not own smartphones; therefore, they cannot register for QRIS. - Many MSME owners believe that their business turnover is too small to use digital payment systems. Concerns about the possibility of fraud and administrative fees associated with digital payment systems. Apprehension based on a past negative experience with a failed digital transaction by a business owner. Most of the obstacles encountered by the program relate to digital literacy and trust, rather than to technical problems with the registration process itself.

There were several reasons why this was able to be implemented successfully: The ease of registration through the BukuPay application, as it does not require a large amount of documentation; the effective teamwork among KKN (Community Service Program) team members when assigning geographical areas and providing mentorship; and most importantly, the enthusiasm of the local population, as a number of micro, small and medium enterprise (MSME) owners took the time to hear about the program, although some ultimately did not register.

The low success rate in attracting new MSMEs to register their QRIS in this activity only 4 of 30 MSMEs participated and successfully registered supports the statement made by Pangestika et al. (2025) regarding the influence of digital literacy, socio-economic factors, and availability of information and technology on QRIS adoption among MSMEs. All three factors were present in this activity as evidenced by the participants' explanations for why they did not want to participate, they didn't have smartphones, or they thought their businesses weren't making enough money yet.

The reasons given for rejection, namely concerns about fraudulent activities and the cost associated with administering such systems suggest that although some socialization may have been successful at lowering the psychological or trust barrier to using digital payment systems, it was insufficient to entirely remove it. As such, this supports the conclusion of Mahyuni & Setiawan, (2021) that the advantages of QRIS transaction convenience, financial record keeping, and expanded access to digital financial services will only be available to businesses who have already gone through the first step toward acceptance of QRIS, rather than simply having received information about it. In addition, testimonials provided by MSME actors within the Impact of Activities section illustrate that once the first step toward accepting QRIS has been completed, the benefits outlined above are experienced in reality; specifically, in terms of providing an easier way to keep track of revenue and expanding the base of customers who are willing to pay using non-cash methods.

The issue of "rejection" based on historical failure in previous transactions shows how one bad experience for a single business owner can result in a reluctance to adopt new digital payment technology for years. This is consistent with what is known about technology adoption theories; i.e., system failures during the first time you use something decrease your confidence in the reliability of the system as a whole. While both Andriani et al. (2024) and Sudiatmika & Martini (2022) were studying how people perceived or generally accepted QRIS, this project resulted in concrete results - the acquisition and activation of QRIS for four additional MSMEs beyond the ten who were already using it. Therefore, 14 of 30 MSMEs (46.7%) in Bontomanai sub-district are now able to accept QRIS digital payments, and those four businesses have demonstrated its usefulness through real-world transactions with their customers.

The majority of MSMEs (53.3%) are still using cash-based payment methods. The results show that single-event, door-to-door intervention efforts have been ineffective in overcoming structural barriers, lack of appropriate hardware and psychological barriers of the business owner. Therefore, the results indicate that success in digitizing MSME payments requires more than just access to technology; it requires ongoing, intensive support and the development of long-term trust.

Several additional actions are necessary to maximize the impact of the program beyond the duration of the KKN. One such action would include turning over the information collected on the 30 MSMEs and their status with regard to implementing QRIS to the Bontomanai Village government so it may be used as a database for future MSME digitalization programs. Another step would involve using the four MSMEs who were able to implement QRIS as "cadres" or examples to convince those MSMEs that have been hesitant about QRIS to adopt the technology. This strategy may prove more effective than the outreach efforts made by outside

organizations because fellow entrepreneurs can be more persuasive. A third action would be to explore additional collaborations with the bank offering the "BukuPay" service or other local banks, to create periodic follow-up outreach sessions. These sessions would specifically address the 16 MSMEs that refused to participate initially. Each of these MSMEs would receive individualized attention addressing the specific reason(s) they did not participate initially. Finally, the village government, along with local community leaders, should serve as facilitators for continued support. This will help ensure that digital payment literacy in Bontomanai Village continues to grow after the KKN program concludes.

4. Conclusion

The assistance program for the digitalization of QRIS payments for MSMEs in Bontomanai Village, Bontomarannu District, Gowa Regency, has successfully improved understanding and encouraged the adoption of cashless payments among the target participants. Out of 30 targeted MSMEs, 4 were successfully assisted in obtaining a new QRIS, bringing the total to 14 MSMEs (46.7%) that now have access to digital payments a fact evidenced by successful initial QRIS transactions and positive testimonials from the business owners. A door-to-door approach proved effective in reaching business owners on a personal level; however, structural and psychological barriers such as limited access to devices and concerns regarding transaction risks continue to constrain the overall conversion rate. These findings underscore that the successful digitalization of MSME payments depends not only on the availability of technology but also on the intensity of ongoing support and the continuous strengthening of trust among business owners.

To sustain and build upon the benefits already achieved, it is recommended that follow-up programs include periodic monitoring, the engagement of successful MSMEs as role models, and the establishment of partnerships with local sub-district (Kelurahan) authorities and digital payment service providers. Future research should expand the scope of QRIS awareness covering not only MSME owners but also consumers and employ quantitative or mixed-method approaches to more precisely measure the impact of QRIS adoption on MSME revenue. This should also include further investigation into trust-related barriers faced by MSMEs that have yet to transition to digital payment systems.

Acknowledgement

The author expresses gratitude to the Institute for Research and Community Service (LP2M) of UIN Alauddin Makassar for their support in organizing the 79th cohort of the Community Service Program (KKN). Thanks are also extended to the Bontomanai Village Government, Bontomarannu District, Gowa Regency, for their permission and support throughout the implementation of the program, as well as to all the MSME (micro, small, and medium enterprise) owners in Bontomanai Village who participated and collaborated during the process of implementing QRIS digital payment systems.

References

Andriani, J., Wahyuningsih, A., & Indani, F. T. (2024). Bagaimana QRIS Menarik Minat UMKM? Keputusan Menggunakan QRIS Sebagai Teknologi Pembayaran Studi Kasus: UMKM Di Yogyakarta. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi*, *3*(1), 109-122.

Mahyuni, L. P., & Setiawan, I. W. A. (2021, October). Bagaimana QRIS Menarik Minat UMKM? Sebuah Model Untuk Memahani Intensi UMKM Menggunakan QRIS. *Forum Ekonomi*, *23*(4), 735-747.

Pangestika, Z. N., Putri, D. K., Angelica, S. F., Nuryana, I., & Nihayah, D. M. (2025). Systematic Literature Review: Persepsi Penggunaan QRIS Sebagai Peningkatan Efektivitas Alat Pembayaran Dan Sistem Keuangan Digital. *Jurnal Pendidikan Ekonomi (JUPE)*, *13*(2), 103-115.

Sudiatmika, N. B. P., & Martini, I. A. O. (2022). Faktor-Faktor Mempengaruhi Niat Pelaku UMKM Kota Denpasar Menggunakan QRIS. *JMM UNRAM-Master of Management Journal*, *11*(3), 239-254.