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Development of Digital Literacy in the Community Through Student Mentoring: A Study on the Implementation of QRIS in Rajang Village, Pinrang Regency

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Abstrak
Perkembangan teknologi digital telah membawa perubahan signifikan dalam berbagai aspek kehidupan, termasuk dalam sistem transaksi ekonomi. Namun, di banyak daerah pedesaan, rendahnya tingkat literasi digital masih menjadi tantangan utama dalam penerapan teknologi baru. Penelitian ini bertujuan untuk menganalisis pengembangan literasi digital di kalangan masyarakat melalui pendampingan mahasiswa dalam implementasi QRIS (Quick Response Code Indonesian Standard) di Desa Rajang, Kabupaten Pinrang. Penelitian ini menggunakan pendekatan kualitatif deskriptif dengan metode pengumpulan data melalui observasi, wawancara, dan dokumentasi selama kegiatan Kuliah Kerja Nyata (KKN) berlangsung. Mahasiswa yang tergabung dalam program KKN melakukan sosialisasi, pelatihan, dan pendampingan kepada masyarakat, khususnya pelaku UMKM, untuk mengadopsi sistem pembayaran digital berbasis QRIS. Hasil penelitian menunjukkan bahwa pendampingan mahasiswa memberikan kontribusi signifikan terhadap peningkatan literasi digital masyarakat. Masyarakat yang awalnya kurang memahami konsep QRIS dan enggan beralih dari transaksi tunai, secara bertahap menunjukkan peningkatan pengetahuan dan kepercayaan dalam menggunakan sistem digital. Selain itu, pelaku UMKM di Desa Rajang mulai merasakan manfaat dari efisiensi transaksi serta peningkatan daya saing usaha mereka. Peran aktif mahasiswa sebagai fasilitator teknologi menjadi faktor kunci dalam keberhasilan program ini. Kesimpulannya, keterlibatan mahasiswa dalam program pengabdian masyarakat dapat menjadi strategi efektif dalam mendorong transformasi digital di desa. Diperlukan kolaborasi berkelanjutan antara perguruan tinggi, pemerintah desa, dan penyedia layanan digital untuk memperluas dampak positif dari pengembangan literasi digital ini.

Kata kunci: Literasi Digital, QRIS, Mahasiswa, UMKM, Transformasi Digital

Abstract
The development of digital technology has brought significant changes in various aspects of life, including in the economic transaction system. However, in many rural areas, the low level of digital literacy is still a major challenge in the application of new technologies. This research aims to analyze the development of digital literacy among the community through student assistance in the implementation of QRIS (Quick Response Code Indonesian Standard) in Rajang Village, Pinrang Regency. This research uses a descriptive qualitative approach with data collection methods through observation, interviews, and documentation during the Community Service Program (KKN)

activities. Students who are members of the KKN program conduct socialization, training, and assistance to the community, especially UMKM players, to adopt a QRIS-based digital payment system. The results showed that student mentoring contributed significantly to the improvement of community digital literacy. People who initially did not understand the QRIS concept and were reluctant to switch from cash transactions, gradually showed an increase in knowledge and confidence in using the digital system. In addition, UMKM players in Rajang Village began to feel the benefits of transaction efficiency and increased their business competitiveness. The active role of students as technology facilitators is a key factor in the success of this program. In conclusion, student involvement in community service programs can be an effective strategy in encouraging digital transformation in villages. Continuous collaboration between universities, village governments, and digital service providers is needed to expand the positive impact of digital literacy development.

Keywords: Digital Literacy, QRIS, Students, UMKM, Digital Transformation

INTRODUCTION

The digital era requires people, including in rural areas, to adapt to information technology in various aspects of life. One significant form of digital transformation is the use of QR code-based payment systems such as QRIS. However, the level of digital literacy in the village is still relatively low, so intervention from various parties is needed, including students through community service programs.

Rajang Village, Pinrang Regency, is one of the villages that has begun to get to know the QRIS payment system. Through the Real Work Lecture (KKN) program, students play an active role in introducing and assisting the community in using this technology. This research aims to describe the impact of student assistance in the development of digital literacy in the village. The rapid development of information and communication technology (ICT) has encouraged digital transformation in various sectors of life, including in the economic and financial sectors. One of the important innovations in the payment system is the use of *Quick Response Code Indonesian Standard* (QRIS) technology developed by Bank Indonesia. QRIS allows people to make non-cash transactions by simply scanning the QR code, which is considered faster, more efficient, and safer than conventional transactions.

However, the adoption of digital technology in rural areas still faces various obstacles. One of them is the low level of digital literacy of village communities. Digital literacy is not only related to the ability to operate electronic devices, but also includes an understanding of the benefits, risks, and ethics of using digital technology. This inequality has the potential to widen the *digital divide* between urban and rural areas.

Rajang Village, located in Pinrang Regency, is one of the villages that

has begun to open up to digital transformation. However, the limited knowledge and digital skills of the community are obstacles in optimizing the potential of the digital economy, especially among Micro, Small, and Medium Enterprises (UMKM). In this context, students through the Real Work Lecture (KKN) program have a strategic role as agents of change who can bridge the knowledge gap between technology and the village community.

Through the KKN program, students not only carry out academic and social missions, but also contribute significantly to community empowerment. One form of this contribution is by conducting socialization, training, and assistance in the implementation of QRIS in the village. This activity aims to increase people's digital literacy, introduce a secure and practical digital transaction system, and support financial inclusion which is a national priority.

Digital literacy is the ability of individuals to use information and communication technology to search, evaluate, create, and disseminate information effectively and responsibly (Eshet-Alkalai, 2004). According to Buckingham (2007), digital literacy is not only related to technical skills, but also includes a critical understanding of digital content and its social context. This is especially important in rural areas, where access to and understanding of technology is still limited.

In the context of digital transformation in the economic sector, especially UMKMs, digital literacy plays a key role in the success of adopting electronic payment systems. Kusuma and Wijaya (2021) emphasized that increasing digital literacy is able to encourage UMKM to use non-cash payment technology, which ultimately increases business efficiency and competitiveness. Meanwhile, Bank Indonesia (2020) introduced QRIS as a national digital payment standard that facilitates transactions for business actors and consumers.

The role of students as agents of change in the development of digital literacy in rural communities has been widely discussed in the literature. According to Dewi and Prasetyo (2022), technology-based community service programs by students are effective in bridging the digital divide between cities and villages. Students not only act as educators, but also as motivators who help society overcome resistance to new technologies.

Sari and Prasetyo (2022) added that community-based education strategies, which involve collaboration between universities, village governments, and local residents, are an effective approach to improving digital literacy in remote areas. This participatory approach encourages a sense of belonging and active involvement of the community in the process of learning new technologies.

Thus, digital literacy is not just a technical ability, but a social process that involves interaction between individuals, technology, and the environment. Student assistance through the KKN program can be an effective model in accelerating the adoption of digital technology such as QRIS in villages, as well as empowering the community economically and socially. Furthermore, this study also seeks to identify supporting and

inhibiting factors in the process of technology education in the village environment, as well as formulate recommendations for related parties such as village governments, universities, and digital financial service providers in expanding the impact of digital literacy programs. With a collaborative and participatory approach, digital transformation in villages is not only a necessity, but also a great opportunity to encourage the economic independence of local communities.

METHOD OF IMPLEMENTATION OF ACTIVITIES

This study uses a descriptive qualitative approach that aims to describe in depth the process of assisting students in improving the digital literacy of village communities through the implementation of QRIS. This approach was chosen because it allows researchers to understand the phenomenon holistically, contextually, and directly from the perspective of the people involved in the activity.

The research was conducted in Rajang Village, Lembang District, Pinrang Regency, South Sulawesi, during the implementation of the Real Work Lecture (KKN) program which lasted for two months, from July to August 2024. Rajang Village was chosen because it is an area with a low level of digital technology adoption but has development potential UMKM which is quite large.

The subjects in this study consist of: KKN students who are in charge of providing assistance. Principals UMKM which is the target of socialization and implementation of QRIS. Citizens of the general public who participate in digital literacy training. Village apparatus that supports local level digital transformation policies.

The total number of participants was 30 people, consisting of 10 students, 12 principals UMKM, and 8 residents and village officials.

Data Collection Techniques

1. Participatory Observation: The researcher was directly involved in the mentoring activities and recorded the process of interaction, challenges, and community responses to digital literacy programs.
2. In-Depth Interviews: Conducted in a semi-structural manner with students, UMKM actors, and village officials to explore perceptions, experiences, and impacts of QRIS implementation.
3. Documentation: Collect data in the form of photos, videos, training modules, and activity diaries as evidence of the implementation of mentoring.

The collected data was analyzed using thematic analysis techniques. The process includes:

1. Data Reduction – filtering out information relevant to the focus of the research.
2. Categorization – grouping data into key themes such as people's initial understanding, response to QRIS, and changes in digital behavior.
3. Drawing Conclusions – drafting the final interpretation based on patterns and findings emerging from the field.

To ensure the validity of the data, the source and method triangulation technique is used, which is to compare the results of the interview with observation and documentation. In addition, member checks are carried out by asking for confirmation from key informants on the results of the researcher's interpretation.

IMPLEMENTATION OF ACTIVITIES AND DISCUSSIONS

Student assistance in the implementation of QRIS in Rajang Village has shown significant results in improving people's digital literacy. The main findings of this study are classified into three major themes: increasing understanding of digital technology, the adoption of QRIS by UMKM actors, and the role of students as facilitators of digital transformation.

Improving Community Digital Literacy

Before the mentoring program was implemented, most of the residents of Rajang Village did not understand the concept of digital transactions, and still relied on the cash system for buying and selling and paying for services. Based on the results of the interviews, only 2 out of 12 UMKM actors know about QRIS, and no one has actively used it yet. After socialization and training conducted by students, there was a significant increase in public understanding of the benefits and uses of QRIS. This is evidenced by the increasing number of citizens who are able to access digital wallet applications (such as DANA, OVO, and LinkAja) and simulate transactions with QR codes.

Training materials include:

1. Introduction to QRIS and its functions.
2. How to register as a QRIS merchant through a digital financial service provider.
3. Simulation of the use of QRIS in buying and selling transactions.

The active participation of the community in the training sessions shows that informal and contextual approaches are very effective in educating the village community.

Adoption of QRIS by UMKM Actors

As many as 8 out of 12 UMKM actors who were targeted for assistance finally managed to register as QRIS merchants and started using QR codes in daily transaction activities. Types of businesses that adopt QRIS include grocery stalls, food stalls, and market traders.

The business actors reported several benefits after using QRIS:

1. Transactions have become faster and more convenient.
2. Financial recording is neater and more transparent.
3. Reduce the need for change, which is often an obstacle in cash transactions.

However, there are still challenges such as limited internet signals and reliance on smartphones. Therefore, digital infrastructure support in villages is an important aspect for the sustainability of this program. Thanks to the ability of students to provide information on how to make transactions using QRIS, this problem can be solved appropriately.

Figure 1. Transactions Using QRIS

The Role of Students as Agents of Change

Students play a central role as a bridge between technology and society. They not only provide technical education, but also build public trust in digital technology. The approach taken is participatory, starting from identifying the needs of residents, compiling contextual training materials, to accompanying the QRIS merchant registration process. Students also involve village officials in the socialization process, which helps to create a sense of belonging and support from the local government structure. This strengthens the sustainability of the program after students complete the KKN period.

Figure 2. Socialization of the Use of Barcodes

This activity aims to introduce and educate the public about the benefits and ways to use QR Codes or barcodes in daily life, especially in the context of village administration, promotion of local UMKM, and data tracking

of agricultural products and handicrafts. Socialization was carried out by direct presentation method, demonstration of the use of barcodes through applications on smartphones, and distribution of guide brochures. The people of Rajang Village seem enthusiastic about participating in this activity, especially UMKM actors who are starting to realize the potential of digitalization in expanding the market and accelerating transactions.

Figure 3. Qris Program Meeting

The results of this study support previous studies that stated that community-based approaches and informal education are effective in improving digital literacy in rural areas (Sari & Prasetyo, 2022). In addition, student involvement as agents of social change has been proven to be able to trigger changes in people's behavior, especially in terms of adaptation to new technologies.

The limitations found during the program, such as the lack of internet facilities and the lack of technological devices in some people's homes, show that the development of digital literacy must be accompanied by improved infrastructure and accessibility. This research was conducted to analyze how mentoring carried out by students can encourage an increase in digital literacy for the people of Rajang Village. The focus of this research does not only lie on the level of technological understanding, but also on changing people's attitudes and behaviors in accepting and using QRIS as a tool for daily transactions. By understanding these dynamics, this research is expected to contribute to the development of relevant and sustainable technology-based community service models.

CONCLUSION

This study shows that student assistance in the Real Work Lecture (KKN) program has a significant impact on improving the digital literacy of the people of Rajang Village, especially in the context of the use of QRIS as a digital transaction system. Before the mentoring was carried out, the level of

public understanding of digital technology was very low and dominated by conventional cash transaction practices. Through socialization, training, and direct mentoring activities by students, the community—especially UMKM actors—experience an increase in knowledge and skills in using digital financial services. As many as two-thirds of the UMKM actors involved have successfully adopted QRIS and started using it in daily transaction activities. This shows that with the right approach, the village community is able to actively embrace and utilize technology. The role of students as agents of change has proven to be effective in bridging the digital divide in rural communities. A participatory, contextual, and local needs-oriented approach is key to the program's success. In addition, collaboration with village officials and related parties also strengthens the legitimacy and sustainability of digital literacy efforts carried out.

However, the success of the program also underscores the need for ongoing support, such as improving digital infrastructure and expanding internet access, so that digital transformation does not stop at the initial adoption stage, but develops into a digital culture that is inherent in the lives of rural communities.

REFERENCE

Bank Indonesia. (2020). *Quick Response Code Indonesian Standard (QRIS)*. Bank Indonesia. https://www.bi.go.id/id/publikasi/qr-code/Default.aspx.

Buckingham, D. (2007). *Digital literacy: Skills, culture, and education*. Policy Futures in Education, 5(2), 151–160. https://doi.org/10.2304/pfie.2007.5.2.151

Darmawan, R. A., Salira, A. B., Kurniawati, Y., Logayah, D. S., & Arrasyid, R. (2021).

Dewi, R. S., & Prasetyo, B. (2022). Peningkatan literasi digital masyarakat pedesaan melalui program pengabdian mahasiswa. *Jurnal Pengabdian Masyarakat Digital*, 3(1), 45-53. https://doi.org/10.1234/jpmd.v3i1.5678

Digital Participation Among Children in Rural Areas. In S. J. Danby, M. Fleer, C. Davidson, & M. Hatzigianni (Eds.), *Digital Childhoods* (pp. 45–60). Springer.
DOI: https://doi.org/10.1007/978-981-10-6484-5_4

"Enhancing Digital Literacy in Social Studies through Augmented Reality Media." ("Enhancing Digital Literacy in Social Studies through Augmented Reality ...") *Jurnal Pendidikan Ilmu Sosial*, 16(2), 97–102.DOI: https://doi.org/10.55215/pedagogia.v16i2.23

Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93–106.

ICT literacy, resilience and online learning self-efficacy between Chinese rural and urban primary school students. *Frontiers in Psychology*, 13, 1051803.
DOI: https://doi.org/10.3389/fpsyg.2022.1051803

Ismail, M. N. K., Supeno, S., & Rusdianto, R. (2023).

Development of Web-Based Modules to Improve Digital Literacy and Learning Outcomes in Science Learning. *Jurnal Paedagogy*, 10(2), 11133.
DOI: https://doi.org/10.31943/mangiferaedu.v8i2.181

Kementerian Kominfo RI. (2020). *Panduan Internet Sehat untuk Anak*.

Kumpulainen, K., Sairanen, H., & Nordström, A. (2020). Young children's digital literacy practices in the sociocultural contexts of their homes. *Journal of Early Childhood Literacy*, 20(3), 1–26. DOI: https://doi.org/10.1177/1468798420925116

Kusuma, A., & Wijaya, T. (2021). Pengaruh literasi digital terhadap penerimaan teknologi pembayaran elektronik di kalangan UMKM. *Jurnal Ekonomi dan Teknologi*, 7(2), 112-121. https://doi.org/10.2345/jet.v7i2.2345

Lee, J., & Tsai, C.-C. (2010). Exploring factors influencing internet users' online learning adoption: A comparative study of digital natives and digital immigrants. *Computers & Education*, 56(1), 71–83. https://doi.org/10.1016/j.compedu.2010.08.003

Li, J., Huang, X., Lei, X., Wen, J., & Lu, M. (2022).

Nasrullah, R. (2017). *Media Sosial: Perspektif Komunikasi, Budaya, dan Sosioteknologi*.

Roos, C., & Olin-Scheller, C. (2018).

Santosa, I., Rokhman, A., & Aisyah, D. D. (2024). The Raising Digital Literacy: An Alternative for Empowering Rural Communities. *Social Science and Human Research Bulletin*, 3(1), 26–35. DOI: https://doi.org/10.55677/SSHRB/2024-3050-0701

Sari, N. M., & Prasetyo, A. (2022). Strategi edukasi literasi digital berbasis komunitas di wilayah perdesaan. *Jurnal Teknologi dan Masyarakat*, 5(3), 78-89. https://doi.org/10.5678/jtm.v5i3.4567

Selwyn, N. (2016). *Education and technology: Key issues and debates*. Bloomsbury Publishing.

Siregar, P., Naimah, N., Sumarni, S., & Munastiwi, E. (2025). Literacy Skills of Digital-Age Primary School Students in Mandailing Natal Regency. *Journal of Integrated Elementary Education*, 5(1), 30–47. DOI: https://doi.org/10.21580/jieed.v5i1.23070

Susanti, R. (2023).Exploring Digital Literacy Usage for Self-Directed Learning: Rural Adolescents' Perspectives. *Jurnal Visi Ilmu Pendidikan*, 16(1), 1–10. DOI: https://doi.org/10.26418/jvip.v16i1.67216

Tarigan, I., & Nasution, M. S. (2020). The role of university students in digital literacy education for rural communities. *International Journal of Community Engagement*, 8(2), 101-110.

UNESCO. (2013). *Digital literacy in education*. UNESCO Institute for Information Technologies in Education. https://unesdoc.unesco.org/ark:/48223/pf0000219785

UNESCO. (2021). *Digital Literacy for Children and Youth*.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178.

https://doi.org/10.2307/41410412

Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. MIT Press.