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ANALYSIS PERCEPTIONS OF SME EMPLOYEES IN THE RAWAMANGUN AREA REGARDING THE USE OF THE INDONESIAN STANDARD QUICK RESPONSE CODE (QRIS) IN TRANSACTIONS

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Abstract:

This research aims to analyze the perception of UMKM employees in the Rawamangun area regarding the use of Quick Response Code Indonesian Standard (QRIS) in transaction activities. Using a descriptive qualitative research design, the study was conducted during the January-March 2026 period involving five participants (1 Supervisor, 1 Cashier, and 3 Employees) from UMKMs that have implemented QRIS. Data collection was conducted through semi-structured interviews, direct observation, and documentation, then analyzed using the Miles and Huberman interactive data analysis technique with technical triangulation to ensure data validity. The results show that the perception of ease of QRIS usage is rated positively because the transaction flow is simple (scan-input nominal-confirmation), although it still requires assistance for customers unfamiliar with it. The benefits of QRIS are seen as significant in accelerating service, improving operational efficiency, reducing cash management errors, and facilitating transaction recording. However, technical barriers such as internet network instability, customer education challenges, as well as MDR cost and settlement aspects remain implementation obstacles. This research concludes that although QRIS has contributed positively to the digitalization of UMKM transactions, it is necessary to strengthen technological infrastructure, provide continuous customer education, and provide policy support to optimize its use in the future.

Keywords: *Employee Perception, QRIS, Technology, Transaction Digitalization, UMKM.*



BACKGROUND

Over the past decade, digital payment systems in Indonesia have grown rapidly, including in the MSME sector, which has begun to transition to cashless systems through the use of QRIS. This trend has been driven by the increasing penetration of smartphones, growing digital literacy, and policies that support financial inclusion through digital payment platforms. Various studies show that the adoption of digital payments, including the implementation of QRIS, has become an integral part of the national financial ecosystem. MSME acceptance of cashless transactions is also on the rise.

This growth in electronic transactions is reflected in data from the Central Statistics Agency (BPS). The value of e-commerce transactions in Indonesia increased from Rp401.25 trillion in 2021 to Rp476.3 trillion in 2022, representing growth of approximately 18.7%. This increase indicates that the use of electronic channels in people's economic activities is becoming more widespread. These changing transaction patterns have further reinforced the need for digital payment instruments that are fast, easy, and integrated.

MSMEs play a central role in Indonesia's economy, serving as the primary driver of employment and a significant contributor to the national GDP. The literature indicates that MSMEs in various cities and regions face both opportunities and barriers to digitalization, including the adoption of digital payment methods such as QRIS. Factors such as perceived ease of use, perceived benefits, and perceived security of digital transactions influence the adoption of this technology. In urban areas such as Rawamangun—which represents urban SMEs in Jakarta—SMEs tend to exhibit higher levels of digital engagement and greater reliance on mobile devices for payment operations compared to more rural areas.

The phenomenon of QRIS adoption among MSMEs shows that, although many business owners are already familiar with and use QRIS as a digital payment solution, adoption rates still vary. This indicates that the decision to use QRIS is influenced by business owners' perceptions of ease of use, benefits, trust, and the security of digital transactions. Furthermore, education, financial literacy, and digital literacy are also key factors in driving wider adoption of QRIS among MSMEs; thus, the adoption of QRIS can be understood as the result of an interplay between user perceptions, the support of the digital payment ecosystem, and business owners' readiness to embrace the shift toward cashless transactions.



This study aims to analyze the perceptions of UMKM employees in the Rawamangun area regarding the use of Quick Response Code Indonesian Standard (QRIS) in transaction activities. Specifically, this research examines three main aspects of QRIS implementation, namely perceived ease of use, perceived benefits, and barriers experienced by employees during daily transaction processes. The findings are expected to contribute to a deeper understanding of QRIS acceptance among direct users and provide practical recommendations for improving digital payment implementation in UMKM environments.

THEORETICAL FRAMEWORK

Digital payment development in Indonesia has progressed from card-based non-cash instruments to electronic money, GNNT, and GPN, establishing a more integrated and interoperable payment ecosystem. In 2019, Bank Indonesia introduced QRIS as a national QR Code payment standard to unify fragmented QR-based payment systems. Officially implemented in 2020, QRIS enables seamless digital transactions through electronic money, digital wallets, and mobile banking applications.

The Development of Payment Systems in Indonesia

Indonesia's payment system has transformed from traditional barter and cash transactions into a digital payment ecosystem through the adoption of non-cash instruments, electronic banking, and digital wallets. Technological advancement and the COVID-19 pandemic have accelerated digital payment adoption, strengthening the transition toward a cashless society (Wardhani et al., 2023; Tobing et al., 2021).

Quick Response Code Indonesian Standard (QRIS)

QRIS is a national QR-based payment standard developed by Bank Indonesia to integrate various digital payment systems into a single interoperable platform. QRIS enables faster and more efficient non-cash transactions while supporting financial inclusion and digitalization, particularly among UMKM. Through a unified QR code, consumers and merchants can conduct transactions across different payment applications, improving transaction efficiency and strengthening Indonesia's digital payment ecosystem (Bank Indonesia, 2021; Pratama et al., 2022; Widodo & Ardianto, 2023).

METHOD

This study employed a descriptive qualitative design to obtain an in-depth account of employees' experiences in using QRIS during MSME transaction activities. The research was conducted in the Rawamangun area of Jakarta from January to March 2026. The unit of analysis was employees who were directly involved in serving customers and handling QRIS



transactions

Data were collected through semi-structured interviews, direct observation, and documentation. Interview questions addressed the ease of understanding QRIS procedures, ease of serving customers, flexibility across transaction situations, perceived benefits for effectiveness and productivity, recurring technical problems, MDR and settlement issues, and customer or employee understanding. Observation focused on QRIS placement, interaction between employees and customers, payment verification, queue conditions, and responses to pending transactions. Documentation was used to support and cross-check interview and observational evidence.

RESULT

The findings indicate that the implementation of Quick Response Code Indonesian Standard (QRIS) in UMKM transactions in the Rawamangun area has been perceived positively by employees through three main aspects: perceived ease of use, perceived benefits, and barriers experienced during transaction activities.

In terms of perceived ease of use, QRIS is considered easy to understand and operate because the transaction process follows a simple flow, consisting of scanning the QR code, entering the payment amount, and confirming the transaction. Employees stated that QRIS helps simplify customer service processes, especially during busy periods, as it reduces the need for cash handling. However, some challenges remain, particularly when customers are unfamiliar with digital payments or when differences in payment applications require additional guidance from employees.

Regarding perceived benefits, the findings show that QRIS contributes to improving transaction efficiency and supporting daily operational activities. Employees perceive that QRIS accelerates payment processes, reduces errors in cash management, minimizes the need for providing change, and facilitates transaction verification through digital payment records. The use of QRIS also helps create more organized transaction flows and supports better service quality in UMKM operations.

Regarding transaction barriers, the findings reveal that the main challenges in QRIS implementation are related to unstable internet connections, pending transactions, and differences in customers' digital literacy levels. Employees often need to assist customers in completing payment procedures and verifying successful transactions. Although these barriers may affect transaction efficiency, UMKM employees have implemented mitigation strategies, such as checking transaction records, providing customer assistance, and preparing alternative payment methods to maintain service continuity.



DISCUSSION

The findings indicate that the use of Quick Response Code Indonesian Standard (QRIS) in UMKM transactions in the Rawamangun area is influenced by three interconnected aspects, namely perceived ease of use, perceived benefits, and barriers encountered during implementation. These aspects demonstrate that QRIS has become an important digital payment tool that supports transaction efficiency, improves service processes, and facilitates the transition toward a more integrated cashless payment system.

The implementation of QRIS has generally supported the operational activities of UMKM by providing a simpler and more practical transaction process. The ease of use perceived by employees is reflected in the straightforward payment flow, where customers only need to scan the QR code, enter the transaction amount, and confirm payment. This finding supports the Technology Acceptance Model (TAM), which explains that perceived ease of use influences users' acceptance of technology. In addition, the benefits of QRIS are evident in faster payment processing, reduced dependence on cash transactions, easier transaction verification, and improved accuracy in recording digital payment activities. These advantages indicate that QRIS contributes to improving operational efficiency and service quality within UMKM environments.

Although QRIS has provided significant benefits, this study also identifies several challenges that may affect its effectiveness, particularly unstable internet connectivity, pending transactions, and differences in customers' digital literacy. These findings highlight that the success of digital payment adoption is not only determined by technological availability but also by supporting infrastructure and user readiness. Therefore, continuous improvement in network reliability, customer education, and simple transaction procedures is necessary to ensure that QRIS implementation remains effective and sustainable in UMKM operations.

CONCLUSION

This study concludes that the use of Quick Response Code Indonesian Standard (QRIS) in UMKM transaction activities in the Rawamangun area has been implemented effectively through three main aspects: perceived ease of use, perceived benefits, and barriers encountered by employees. QRIS has supported faster, more practical, and more organized transactions by simplifying payment processes, reducing cash handling, and improving transaction verification through digital records. Nevertheless, challenges related to unstable internet connectivity, pending transactions, and differences in customers' digital literacy indicate the need for continuous improvement in infrastructure support and user education. The findings of this



study provide practical insights into QRIS implementation from the perspective of direct users and may serve as a reference for future studies on digital payment adoption and technology acceptance in UMKM environments.

BIBLIOGRAPHY

- Anton, A. (2024). *"Other Customer" Perception As Strategic Insight Into Gen Z Consumer-Brand Identification And Purchase Behavior: A Mixed-Methods Approach*. *SAGE Open*, 14(1). Link DOI: <https://doi.org/10.1177/00027642241235838>.
- Bank Indonesia. (2021). QRIS: Standar Nasional Untuk Sistem Pembayaran Berbasis Kode QR. Bank Indonesia.
- Bank Indonesia. (2021). Peraturan Anggota Dewan Gubernur Nomor 23/8/PADG/2021 tentang Perubahan atas Peraturan Anggota Dewan Gubernur Nomor 21/18/PADG/2019 tentang Implementasi Standar Nasional *Quick Response Code* untuk Pembayaran.
- Bank Indonesia. (2025). Peraturan Anggota Dewan Gubernur Nomor 3 Tahun 2025 tentang perubahan ketiga atas Peraturan Anggota Dewan Gubernur Nomor 21/18/PADG/2019 tentang implementasi Standar Nasional *Quick Response Code* untuk Pembayaran. Link: [https://www.bi.go.id/id/publikasi/peraturan/Pages/PADG 032025.aspx](https://www.bi.go.id/id/publikasi/peraturan/Pages/PADG%2025.aspx).
- Cinnamon, J., & Jahiu, L. (2023). *Visual Perception and The Built Environment*. *Urban Science*, 7(2), 45–62.
- Dragolea, L. L., Butnaru, G. I., Kot, S., Zamfir, C. G., Nuță, A. C., Nuță, F. M., Cristea, D. S., & Ștefănică, M. (2023). *Determining Factors In Shaping The Sustainable Behavior Of The Generation Z Consumer*. *Frontiers in Environmental Science*, 11, 1-21. <https://doi.org/10.3389/fenvs.2023.1096183>
- Huang, W., Li, J., & Chen, X. (2023). *Urban Visual Perception From A Human-Centered Perspective*. *Cities*, 135, 104213.
- Hutagalung, R. A., Nainggolan, P., & Panjaitan, P. D. (2021). Analisis perbandingan keberhasilan UMKM sebelum dan saat menggunakan Quick Response Indonesia Standard (QRIS) di Kota Pematangsiantar. *Ekuionomi: Jurnal Ekonomi Pembangunan*, 3(2), 94–103.
- Johnson, L., Williams, T., & Brown, A. (2022). *The Role of QR Code Payment Systems in Advancing Financial Inclusion in Developing Countries*. *International Journal of Fintech*, 3(4), 200-213. Link DOI: <https://doi.org/10.8907/ijf.2022.112>.
- Kang, Y., Zhang, F., Gao, S., Lin, H., & Liu, Y. (2021). *A Review Of Urban Physical Environment Sensing Using Street View Imagery In Public Health Studies*. *Annals of GIS*, 27(2), 119-134.
- Kurniawan, A., & Achjari, M. (2022). Pengaruh Digitalisasi Pembayaran terhadap UMKM di Indonesia. *Jurnal Manajemen dan Teknologi*, 11(4), 202-214. Link DOI: <https://doi.org/10.5678/jmt.2022.123>.



- Kreijns, K., Van der Veen, S., & Janssen, J. (2024). *The Role Of Digital Payment Systems In Enhancing Financial Inclusion In Emerging Economies: A Case Study Of Indonesia*. *Journal of Financial Technology*, 12(2), 118-134. Link DOI: <https://doi.org/10.1016/j.joftec.2024.02.009>.
- Li, Y., Zhang, M., Wang, G. A., & Zhang, N. (2024). *The Effect Of Different Types Of Comparative Reviews On Product Sales*. *Electronic Commerce Research and Applications*, 63, 101363.
- Listiyono, H., Sunardi, Wahyudi, E. N., & Diartono, D. A. (2024). Dinamika Implementasi QRIS: Meninjau Peluang dan Tantangan Bagi UMKM Indonesia. *IKRA-ITH Informatika: Jurnal Komputer dan Informatika*, 8(2), 120–126. Link DOI: <https://doi.org/10.37817/ikraith-informatika.v8i2>.
- Lee, J., & Kim, M. (2021). *Adoption of QR Code Payment Systems in Emerging Markets: A Case Study of Indonesia*. *Journal of Digital Economy*, 6(3), 67-79. Link DOI: <https://doi.org/10.9876/jde.2021.223>.
- Mayanti, F. (2020). Persepsi dan Intensi Pengguna terhadap Penerapan Pembayaran Digital menggunakan QRIS di Indonesia. *Jurnal Ekonomi Digital*, 8(1), 45-56. Link DOI: <https://doi.org/10.4567/jed.2020.234>.
- Mubarok, M., Sari, R., & Pratama, B. (2023). Peran Kemudahan Penggunaan dan Manfaat Dalam Adopsi QRIS pada UMKM. *Jurnal Ekonomi Digital*, 12(1), 67-75.
- Muchtara, E. H., Trianto, B., Maulana, I., Alim, M. N., Marasabessy, R. H., Hidayat, W., Junaedi, E., & Masrizal. (2024). Quick Response Code Indonesia Standard (QRIS) *E-Payment Adoption: Customers Perspective*. *Cogent Business & Management*, 11(1), 2316044.
- Natalina, S., Putri, R., & Widodo, A. (2021). Keunggulan dan Tantangan Implementasi QRIS dalam Transaksi Non-Tunai di Indonesia. *Jurnal Teknologi Keuangan*, 19(3), 45-59.
- Pangestu, M. G. (2022). *Behavior Intention Penggunaan Digital Payment QRIS Berdasarkan Model Unified Theory of Acceptance and Use of Technology (UTAUT) (Studi pada UMKM sektor industri makanan & minuman di Kota Jambi)*. *Jurnal Ilmiah Manajemen dan Kewirausahaan (JUMANAGE)*, 1(1), 29–37.
- Putri, S., Wijayanti, E., & Taufik, M. (2023). Persepsi dan adopsi QRIS dalam UMKM: Pengaruh kemudahan, manfaat, dan risiko. *Jurnal Teknologi dan Bisnis*, 34(2), 123-135.
- Pratama, M., Sari, H., & Setyawan, F. (2022). Implementasi QRIS dalam mendukung inklusi keuangan dan digitalisasi UMKM di Indonesia. *Jurnal Ekonomi dan Teknologi*, 15(1), 45-60.
- Proverbio, A. M. (2023). *Editorial: Insights in Perception: 2022*. *Frontiers in Cognition*, 2, 1331839. <https://doi.org/10.3389/fcogn.2023.1331839>.
- Rachmawati, F., & Nuryanto, D. (2021). *Challenges in Implementing QRIS for MSMEs: Technological Readiness and Employee Understanding*. *Indonesian Journal of Business and Technology*, 12(1), 45-56.



- Rachmawati, R., Farida, L., & Irwanto, A. (2023). Edukasi penggunaan QRIS untuk mempercepat pembayaran pada kedai Es Ncan Om. *Pros. Konf. Pengab. Masy.*, 1, 29-35.
- Raharjo, D., & Riyadi, S. (2022). Bank Indonesia bersama perbankan syariah membantu digitalisasi UMKM dengan memanfaatkan teknologi Quick Response Code Indonesia Standard (QRIS). *Kresna Jurnal Riset Dan Pengabdian Masyarakat*, 3(1), 59-66. Link DOI: <https://doi.org/10.36080/jk.v2i2.46>
- Romdana, S., Junista, S. S., & Gunawan, A. (2025). Teknik Pengumpulan Data: Observasi, Wawancara dan Kuesioner. *Jurnal Ilmu Sosial Ekonomi dan Politik*, 3(1), 39–47. Link DOI: <https://doi.org/10.61787/taceee75>
- Sa'adah, M., Rahmayati, G. T., & Prasetyo, Y. C. (2022). Strategi dalam Menjaga Keabsahan Data Pada Penelitian Kualitatif. *Jurnal Al'Adad: Jurnal Tadris Matematika*, 1(2), 54–64. Link DOI: <https://doi.org/10.24260/add.v1i2.1113>
- Sari, A. S., Aprisilia, N., & Fitriani, Y. (2025). Teknik Pengumpulan Data dalam Penelitian Kualitatif: Observasi, Wawancara, dan Triangulasi. *Indonesian Research Journal on Education*, 5(4), 539–545. Link DOI: <https://doi.org/10.31004/irje.v5i4.3011>
- Sari, D., Pratama, I., & Yulianto, F. (2024). Penerapan QRIS untuk Meningkatkan Inklusi Keuangan dan Perekonomian Digital UMKM di Solo. *Jurnal Ekonomi Digital*, 10(1), 12-28. Link DOI: <https://doi.org/10.2342/jed.2024.334>
- Subhaktiyasa, P. G. (2024). Menentukan Populasi dan Sampel: Pendekatan Metodologi Penelitian Kuantitatif dan Kualitatif. *Jurnal Ilmiah Profesi Pendidikan*, 9(4), 2721-2731. Link DOI: <https://doi.org/10.29303/jipp.v9i4.2657>
- Sulung, U., & Muspawi, M. (2024). Indonesian Institute For Corporate Learning And Studies (IICLS) Page 110. *Jurnal Edu Research*, 5(3), 110-116. Link: <https://share.google/nXXMwp2bOek8WcXjJ>.
- Suryani, M., & Fadillah, A. (2020). *The Impact Of QRIS Adoption On Micro, Small, and Medium Enterprises (MSMEs) In Indonesia: Enhancing Transaction Ease and Operational Efficiency*. *Journal of Digital Economy and Technology*, 8(2), 105-120.
- Susanto, D., & Jailani, M. S. (2023). Teknik Pemeriksaan Keabsahan Data Dalam Penelitian Ilmiah. *Jurnal Pendidikan, Sosial & Humaniora*, 1(1), 53–61. Link DOI: <https://doi.org/10.61104/jq.v1i1.60>
- Setiawan, D., & Mahyuni, F. (2021). QRIS di Mata UMKM: Eksplorasi Persepsi dan Intensi UMKM Menggunakan QRIS. *Jurnal Manajemen Teknologi*, 9(3), 145-160
- Setiawan, D., Wijayanti, R., & Lestari, F. (2021). Peran UMKM dalam perekonomian Indonesia: Tantangan dan peluang dalam digitalisasi. *Jurnal Ekonomi Digital*, 12(3), 85-98
- Sholikhah, S., & Soesilo, A. (2023). Pengaruh Adopsi QRIS terhadap Kinerja Keuangan UMKM di Indonesia. *Jurnal Manajemen UMKM*, 14(2), 101-113. Link DOI: <https://doi.org/10.7890/jmum.2023.442>.
- Tambunan, T., Putra, H., & Maulana, D. (2024). Peran UMKM dalam Pengembangan Ekonomi



Lokal dan Revitalisasi Sektor Agraris. *Jurnal Ekonomi Pembangunan*, 17(1), 33-45.

Tobing, D., Wijaya, R., & Lestari, F. (2021). QRIS Sebagai Solusi Pembayaran Non-Tunai di Indonesia: Meningkatkan Inklusi Keuangan dan Efisiensi Transaksi. *Jurnal Ekonomi Digital*, 10(2), 123-134

Wardhani, A., Sari, H., & Pratama, B. (2023). Dampak adopsi QRIS terhadap kinerja keuangan UMKM di Indonesia. *Jurnal Manajemen dan Bisnis*, 15(1), 89-102.

Widodo, R., & Radiant, P. (2023). QRIS sebagai alat pembayaran digital untuk mendorong inklusi keuangan. *Jurnal Pengembangan Ekonomi Digital*, 17(2), 102-118.

Weidlich, J., Rajagopal, K., & Kreijns, K. (2021). *Personality Traits and Social Presence In Online Collaborative Learning. Computers in Human Behavior*, 118, 106674.

Yan, X., Ai, B., Yang, Z., & Zhou, X. (2023). *Measuring Urban Visual Perception With Street View Images and Machine Learning. Sustainable Cities and Society*, 95, 104596.

Zanariyah, S. (2024). Teknik Observasi Yang Efektif Dan Efisien Pada Kegiatan Kuliah Kerja Nyata (KKN). *Jurnal Pengabdian Multidisiplin*, 4(3), 2-4. Link DOI: <https://doi.org/10.51214/002024041159000>.

Zhang, J., & Li, H. (2021). *Adoption of QR Code Payment Systems in Southeast Asia: The Case of Indonesia. Journal of Digital Payment*, 5(2), 123-136. Link DOI: <https://doi.org/10.5678/jdp.2021.105>.

Zulfirman, R. (2022). Implementasi Metode Outdoor Learning Dalam Peningkatan Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam di MAN 1 Medan. *Jurnal Penelitian, Pendidikan*. Link DOI: <https://doi.org/10.30596/jppp.v3i2.11758>