

## **CROSS-BORDER PAYMENT DIGITALIZATION: THE PHENOMENON OF QRIS ACCEPTANCE IN MALAYSIA FROM THE PERSPECTIVE OF THE DIGITAL ECONOMY AND MSME EMPOWERMENT**

**Andi Hasryningsih Asfar<sup>1)</sup>, Siti Fatonah<sup>2)</sup>, Malik Fatoni<sup>3)</sup> Surti Zahra<sup>4)</sup>, Didi  
Wandi<sup>5)</sup>, Hendry Gunawan<sup>6)</sup>**

Universitas Bina Bangsa<sup>1,2,3,4)</sup> Universitas Faletehan<sup>5)</sup>, Universitas Serang Raya<sup>6)</sup>

[andiharyningsih@gmail.com](mailto:andiharyningsih@gmail.com)<sup>1</sup>, [nesifa70@gmail.com](mailto:nesifa70@gmail.com)<sup>2</sup>,  
[malikbmd@yahoo.com](mailto:malikbmd@yahoo.com)<sup>3</sup>, [zahra3803@gmail.com](mailto:zahra3803@gmail.com)<sup>4</sup>,  
[didiwandi14@gmail.com](mailto:didiwandi14@gmail.com)<sup>5</sup>, [hendrygunawan@unsera.ac.id](mailto:hendrygunawan@unsera.ac.id)<sup>5</sup>

### **ABSTRACT**

This study aims to analyze a unique phenomenon identified during an International Community Service activity in Malaysia, namely the refusal of cash payments in Indonesian Rupiah and Singapore Dollars in several souvenir shops, while digital payments based on QRIS were accepted. This phenomenon is noteworthy as it reflects a shift in cross-border transaction practices from conventional systems toward regionally integrated digital payment systems. The study employs a descriptive qualitative approach through field observation and a literature review related to payment connectivity between Bank Indonesia and Bank Negara Malaysia. The analysis focuses on the implications of digital economy development for transaction efficiency and MSME empowerment. The findings indicate that cross-border QR code interoperability not only enhances transaction efficiency and convenience but also strengthens financial inclusion and ASEAN economic integration. These results suggest that payment digitalization has the potential to become a new model of technology-based economic integration in Southeast Asia. This study provides a contemporary perspective on the transformation of cross-border payment systems and opens further discussion on the future of the regional digital economy.

**Keywords:** QRIS, Digital Payment, MSMEs, Digital Economy, ASEAN.

### **INTRODUCTION**

The development of financial technology over the past decade has driven significant transformation in the global payment system. The shift from cash-based transactions to digital payments has occurred not only at the domestic level but



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

has also expanded into cross-border transactions. In Southeast Asia, payment system integration has become a strategic agenda to strengthen regional economic connectivity. The cooperation between Bank Indonesia and Bank Negara Malaysia under a QR code-based payment connectivity scheme represents a concrete manifestation of this transformation. The implementation of QRIS (Quick Response Code Indonesian Standard), which is linked to Malaysia's payment system, demonstrates a new direction for ASEAN financial integration based on digital technology.

Previous studies have examined the adoption of digital payments from various perspectives. Research on the cashless society indicates that payment digitalization enhances transaction efficiency, increases transparency, and reduces cash management costs (Arner et al., 2016; Ozili, 2018). Other studies highlight that QR code adoption by MSMEs contributes to increased transaction volumes and more systematic financial record-keeping (Liu & Hew, 2020). In the ASEAN context, several analyses emphasize that cross-border payment system interoperability has the potential to strengthen intra-regional trade and tourist mobility (ADB, 2022).

However, most previous studies have focused either on the domestic adoption of digital payments or on macro-level policy aspects of regional financial integration. Empirical research examining real-world practices, particularly within small retail sectors and souvenir shops that directly interact with cross-border tourists, remains limited. Furthermore, few studies have highlighted the intriguing paradox of rejecting foreign physical currencies while simultaneously accepting cross-border digital payments through integrated QR systems.

This phenomenon was observed during an International Community Service activity in Malaysia. Several souvenir shops and shopping centers did not accept cash payments in Indonesian Rupiah or Singapore Dollars but accepted payments via QRIS, which is systemically connected to Malaysia's payment network. This condition indicates a shift in preference from foreign currency-based physical instruments toward digital systems that automatically perform exchange rate conversion. From the perspective of the digital economy, this phenomenon is not merely a technical payment issue; rather, it reflects a structural transformation of cross-border transactions toward systems that are more efficient, secure, and digitally integrated.

This study is relevant as it provides empirical evidence of cross-border payment digitalization practices through direct observation in Malaysia's retail sector. By linking field findings to the frameworks of the digital economy and payment interoperability, this research analyzes how QR-based payment acceptance



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

contributes to transaction efficiency, business adaptation, and indications of payment system integration that support ASEAN economic connectivity.

The objective of this study is to investigate the phenomenon of QRIS-based digital payment acceptance in Malaysia within the context of cross-border retail transactions and to analyze its implications for transaction efficiency, MSME empowerment, and ASEAN regional payment system integration. In this context, the study explores the factors that encourage business actors to prefer digital payment systems over the acceptance of foreign physical currencies, as well as identifies how cross-border QR system interoperability shapes new transaction patterns within the digital economic ecosystem.

To achieve these objectives, this study employs a descriptive qualitative approach through field observations conducted during the International Community Service activity in Malaysia. Data were collected through direct observation of payment practices in souvenir shops and shopping centers and were supported by a review of relevant literature and policy documents concerning payment connectivity between Bank Indonesia and Bank Negara Malaysia. The collected data were analyzed thematically to identify patterns of transactional transformation, payment preferences, and the digital economic implications emerging from these practices.

Through this study, it is expected that a deeper understanding will be developed regarding the dynamics of technology-based cross-border payment systems in Southeast Asia. The implications of this research are anticipated to provide both conceptual and practical contributions to strengthening regional payment connectivity policies, enhancing digital financial literacy, and formulating MSME empowerment strategies in response to increasingly integrated digital economic transformation.

## LITERATURE REVIEW

### 1. Conceptual Framework of the Digital Economy

The concept of the digital economy has evolved alongside the increasing role of information and communication technology (ICT) in economic activities. Bukht and Heeks (2017) define the digital economy as the portion of economic activity that relies on digital technologies, including digital infrastructure, digital services, and digitally enabled economic activities. They distinguish between the core digital economy (the ICT sector and digital platforms) and the digitalised economy



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

(traditional economic activities that have been transformed through digitalization).

Savastano et al. (2024) further argue that the digital economy is not solely related to technology but also encompasses the transformation of business models, data-driven innovation, and changes in market structures as well as producer-consumer relationships. In their conceptual framework, the digital economy consists of three main elements: (1) digital infrastructure, (2) digital platforms and services, and (3) governance and public policies that support the digital ecosystem.

Thus, the conceptual framework of the digital economy incorporates the integration of technology, regulatory frameworks, and adoption by economic actors as the foundation of structural transformation.

## 2. Digitalization of Payment Systems and the Cashless Society

The digitalization of payment systems constitutes a crucial component of digital economic transformation. Rinaldi (2025) explains that payment digitalization is characterized by a shift from cash-based transactions to electronic payment systems such as mobile banking, e-wallets, and QR codes. This transformation fosters the emergence of a cashless society, defined as a society that relies primarily on non-cash payment instruments in daily economic activities.

According to Rinaldi (2025), the primary benefits of digital payment systems include transaction efficiency, enhanced transparency, and reduced cash distribution costs. However, the challenges faced include digital literacy gaps, cybersecurity risks, and infrastructure disparities.

From the perspective of modern financial system theory, payment digitalization also strengthens financial inclusion by expanding public access to formal financial services.

## 3. QRIS and Regional Payment Interoperability

The Quick Response Code Indonesian Standard (QRIS) is a QR code-based payment system innovation that integrates multiple payment service providers under a single national standard. Ananda et al. (2025) explain that QRIS enhances transaction efficiency by reducing the need for multiple different QR codes for each payment service provider.

The central concept in the development of QRIS is interoperability, defined as the ability of different payment systems to connect and operate in an integrated



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

manner. Nurrokhim et al. (2025) found that QRIS interoperability reduces transaction costs and increases MSME transaction volumes.

In the regional context, the integration of cross-border QR systems within ASEAN constitutes part of the broader strategy to harmonize digital payments. ASEAN (2021), in its *Policy Brief on Payment Systems*, emphasizes the importance of cross-border payment interoperability in accelerating regional economic integration and reducing dependence on traditional global payment systems.

#### **4. MSMEs in the Digital Payment Ecosystem**

MSMEs play a strategic role in the digital economy, particularly as direct beneficiaries of payment digitalization. Zakariya and Arifin (2025) demonstrate that the use of QRIS and e-wallets helps MSMEs improve operational efficiency, accelerate transaction processes, and establish more systematic financial record-keeping.

The acceptance of digital payments by MSMEs and the retail sector can be viewed as part of an adaptive marketing mix strategy. The integration of digital payment systems enhances transaction efficiency and convenience, which ultimately contributes to increased sales. Asfar, Aziz, and Mahendra (2024) emphasize that marketing mix strategies aligned with changes in consumer preferences have a significant impact on sales performance. Therefore, the adoption of digital payments is not merely technical in nature but also strategic in strengthening business competitiveness.

Wasilah et al. (2025), in their literature review, conclude that digital payment systems contribute to improving MSME financial inclusion by enabling access to financing based on digital transaction records. The key success factors for adoption include digital literacy, government policy support, and technological infrastructure.

Thus, the integration of MSMEs into the digital payment ecosystem affects not only transaction efficiency but also access to financing and long-term business growth.

This study does not aim to examine institutional factors in depth through interviews or surveys; rather, it seeks to describe observable phenomena, such as the availability of non-cash payment methods, the use of QR codes by merchants, and the ease of transactions for consumers, including international tourists. Through these observations, the research attempts to understand how digital



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

payment practices contribute to transaction efficiency, market access expansion, and the potential for cross-border payment connectivity within the ASEAN region.

This study places greater emphasis on empirical description based on direct field experience. The observational findings are subsequently linked to the concepts of a cashless society, payment interoperability, and regional financial integration to provide a contextual understanding of how payment system transformation occurs in practice, particularly within the retail and MSME sectors. Thus, the study not only expands conceptual understanding of the digital economy and payment digitalization but also offers empirical contributions to policy strategies that support cross-border transformation within the framework of ASEAN financial integration.

## **RESEARCH METHOD**

This study employs a qualitative approach using direct field observation as the primary method. This approach was selected because the objective of the research is not to explore respondents' perceptions or opinions through interviews, but rather to directly examine how digital payment systems are implemented in everyday economic activities. Through direct observation, the researcher is able to obtain a more authentic depiction of digital payment implementation and the potential for cross-border interoperability.

The research data were obtained entirely from a field visit to Malaysia, particularly in several souvenir shops that served as the observation sites. During the visit, the researcher directly observed the payment methods available and used by consumers. The observations focused on the availability of non-cash payment options, the use of QR codes, the possibility of cross-border payment acceptance, and the smoothness of digital transaction processes between buyers and sellers.

All findings were systematically documented in the form of structured field notes. The researcher described transaction situations as they occurred, including how merchants displayed payment options, how consumers conducted transactions, and how the payment systems operated within the retail trade context. In this manner, the data were derived strictly from actual practices rather than from interpretations or narratives provided by particular parties.

The analysis of this study was conducted descriptively based on direct observations in several souvenir shops in Malaysia. The data obtained provide a concrete depiction of the use of non-cash payment methods, particularly QR codes, in daily retail transactions. The observations indicate that digital payment systems



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

have been operationally implemented and have become an integral part of commercial activities carried out efficiently and smoothly.

The field findings were subsequently interpreted within the framework of the digital economy and the digitalization of payment systems. The observed non-cash transaction practices reflect technological adaptation that supports convenience, speed, and payment flexibility. Therefore, this study offers a contextual empirical illustration of how digital payment transformation is realized in retail practices in Malaysia.

In general, the observations indicate that non-cash transactions occurred naturally without significant obstacles. Both sellers and buyers appeared accustomed to digital payment procedures. This suggests that the transition toward a cashless society has been practically realized in the observed retail sector.

## **DISCUSSION**

The findings of this study demonstrate that the digitalization of payment systems is not merely a policy discourse but has become a tangible economic practice at the micro level. The availability of various digital payment methods in souvenir shops reflects a digital economic ecosystem that has developed and been widely accepted. Within the framework of the digital economy, this phenomenon indicates that digital infrastructure and technology adoption have reached a mature operational stage.

Field observations show that digital payment practices in Malaysia’s retail sector are widely implemented and operational. These findings align with the conceptual framework of the digital economy proposed by Rumman Bukht and Richard Heeks (2017), which asserts that the digital economy encompasses not only core technology sectors but also traditional economic activities that have been digitalized. The use of QR code-based payments in souvenir shops illustrates how the retail sector has been digitalized through the integration of payment technology.

Furthermore, Savastano et al. (2024) emphasize that the digital economy is supported by three main elements: digital infrastructure, digital platforms/services, and governance that facilitates the ecosystem. The findings of this study show that all three elements are present in practice. Network infrastructure enables fast transactions, digital payment platforms are widely available and used, and the existence of standardized payment systems reflects the role of regulation in creating an integrated ecosystem.



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

The finding that digital payments are used routinely and without significant obstacles indicates the presence of institutional and technological readiness supporting the transformation toward a cashless society. The fast and straightforward transaction processes demonstrate that payment digitalization provides tangible added value in terms of time efficiency and consumer convenience.

From the perspective of the transition to a cashless society, these results are consistent with Rinaldi (2025), who explains that a cashless society is characterized by increased convenience, efficiency, and habitual use of electronic payments in daily activities. Observations show that both consumers and merchants conduct digital transactions naturally and without major difficulties, indicating a high level of technology acceptance. This reinforces the argument that the adoption of digital payment systems is strongly influenced by ease of use and practical benefits directly experienced by users.

In the context of interoperability, the availability of QR codes usable across multiple payment applications reflects the principle of efficient system integration. Nurrokhim et al. (2025) state that payment interoperability can reduce transaction costs and increase transaction volumes by minimizing system fragmentation. Field findings support this perspective, as merchants do not need to provide multiple devices or separate systems for each payment service provider.

From the perspective of regional integration, digital payment practices that can be used by cross-border tourists support the ASEAN financial integration agenda. The Asian Development Bank (2012) report on ASEAN financial integration emphasizes the importance of harmonizing payment systems to facilitate trade and regional economic mobility. Furthermore, the ASEAN (2021) policy document on digital payment systems highlights that cross-border interoperability is a critical foundation for accelerating regional economic connectivity. The findings of this study indicate that such integration is no longer merely conceptual but is already reflected in retail practices on the ground.

In relation to MSMEs and the retail sector, Zakariya and Arifin (2025) assert that the implementation of digital payments enhances operational efficiency and business competitiveness. Observations in souvenir shops show that the acceptance of digital payments enables merchants to serve consumers more quickly and flexibly, including international tourists. This demonstrates that payment digitalization is not only a technological instrument but also an adaptive strategy for responding to the dynamics of the global market.



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher  
Education through Academic, Industrial, and Global  
Empowerment Collaboration”**

Malaysia, February, 11. 2026

Overall, this discussion demonstrates consistency between field findings and existing theories and studies. The transformation of digital payment systems, QR interoperability, and ASEAN regional integration are not isolated phenomena but rather interconnected components of the structural processes of the digital economy. This study strengthens the existing literature by providing empirical evidence based on direct observation that payment digitalization has been concretely implemented in cross-border retail practices at the micro level.

From the perspective of MSMEs or retail business actors, the adoption of digital payments reflects adaptation to market demands and technological advancements. By accepting non-cash payments, merchants can expand their consumer reach, including international tourists, while enhancing business professionalism and competitiveness.

Conceptually, the findings of this study reinforce the understanding that digital economic transformation occurs through the integration of macro-level policies, infrastructure readiness, and micro-level practices in the field. Cross-border digital payment integration is not merely a regional policy agenda but has begun to be reflected in everyday commercial practices.

This study provides an empirical contribution by presenting a concrete depiction of the implementation of payment digitalization in a cross-border context. These findings can serve as a basis for developing more targeted policies to strengthen regional interoperability and support ASEAN financial integration. Future research may expand the scope of observation to other business sectors or compare digital payment practices across multiple countries to gain a more comprehensive understanding of payment system transformation in the region.

## **CONCLUSION**

This study demonstrates that the digitalization of payment systems has been concretely implemented in retail trade practices in Malaysia, particularly in the souvenir shops that served as observation sites. The availability of various non-cash payment methods, especially QR code-based systems, reflects that the transformation toward a digital economy is no longer merely a policy agenda but has become an integral part of everyday economic activities. These practices indicate the readiness of infrastructure and market acceptance of digital payment systems.

The findings of this study also indicate that payment interoperability is operationally functional. QR codes that can be used across multiple payment



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

applications demonstrate system integration that facilitates transactions and enhances efficiency. This supports the argument that interoperability is a key element in promoting connectivity within payment systems, both at the national and regional levels.

In the context of MSMEs and the retail sector, the acceptance of digital payments serves as an adaptive strategy to improve competitiveness and expand consumer reach, including international tourists. The convenience and speed of non-cash transactions provide tangible benefits for both merchants and consumers. Thus, payment digitalization impacts not only the technical aspects of transactions but also strengthens the ecosystem of small and medium enterprises within the digital economy.

The observed digital payment practices are relevant to the ASEAN financial integration agenda. The implementation of standardized payment systems with potential cross-border interoperability constitutes a critical foundation for strengthening regional economic connectivity. This transformation supports trade, tourist mobility, and cross-border transaction efficiency, ultimately contributing to regional economic integration.

Overall, this study confirms that the digitalization of payment systems is a structural process involving the integration of technology, policy, and economic practices at the micro level. Field observations provide empirical evidence that the transition toward a cashless society and cross-border payment interoperability has been actively realized. These findings are expected to serve as a basis for policy development and further research related to strengthening the digital economy and regional financial integration.

## REFERENSI

- Ananda, G. C. (2025). The Use of QRIS in Improving Digital Payment Efficiency and Financial Inclusion in Indonesia. In *Proceedings of The International Conference on Computer Science, Engineering, Social Science, and Multi-Disciplinary Studies* (Vol. 1, pp. 317-321).
- Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The evolution of fintech: A new post-crisis paradigm? *Georgetown Journal of International Law*, 47(4), 1271-1319.
- Asean. (2021). *Payment Systems In The Digital Age: Asean Policy Brief*. Asean Secretariat.



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

- Asfar, A. H., Aziz, A., & Mahendra, Y. (2024). Strategi Marketing Mix Dalam Meningkatkan Penjualan Produk Pada Pt Asuransi Ramayana, Tbk Cabang Serang Banten. PEKA, 12(2), 54-63.
- Asian Development Bank. (2012). The Road To Asean Financial Integration: A Combined Study On Assessing The Financial Landscape And Formulating Milestones For Monetary And Financial Integration In Asean. Asian Development Bank.
- Bukht, R., & Heeks, R. (2017). Defining, Conceptualising And Measuring The Digital Economy. Development Informatics Working Paper, (68), 1-24. University Of Manchester.
- Liu, Y., & Hew, J. J. (2020). The adoption of QR code mobile payment: The roles of perceived value, security, and trust. Telematics and Informatics, 47, 101-120. <https://doi.org/10.1016/j.tele.2019.101345>
- Nurrokhim, I., Et Al. (2025). Interoperability Of Digital Payment Platforms (Qris) And Its Effect On Transaction Costs. Pangaleh Journal Of Economics And Business, 5(1), 45-58.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. Borsa Istanbul Review, 18(4), 329-340. <https://doi.org/10.1016/j.bir.2017.12.003>
- Rinaldi, A. R. (2025). Transformation Of The Payment System Towards A Cashless Society. Journal Of Applied Welfare And Industrial Studies, 3(2), 112-125.
- Savastano, M., Et Al. (2024). Digital Economy: Towards A Conceptual Research Framework. Management & Marketing - Challenges For The Knowledge Society, 19(1), 34-49.
- Wasilah, A. A. K., Ashari, D. R. W., & Naimah, N. N. (2025). The Role Of Digital Payment Systems In Enhancing Financial Inclusion: A Literature Review In The Context Of Indonesian Banking. Journal Of Economics And Banking Espas, 2(1), 45-57.
- Zakariya, A., & Arifin, A. A. (2025). The Application Of Digital Payments (Qris & E-Wallet) On Msme Transactions. Jurnal Riset Ekonomi Dan Bisnis, 8(2), 77-91.



**PROSIDING SEMINAR INTERNASIONAL**  
**“Internationalization of the Tridharma of Higher**  
**Education through Academic, Industrial, and Global**  
**Empowerment Collaboration”**

Malaysia, February, 11. 2026

---