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UTILIZATION OF QRIS E-WALLET IN GENERATION Z: RISK AND SECURITY PERSPECTIVE

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Abstract

Technological advancements have revolutionized payment systems, notably through the adoption of the Quick Response Indonesian Standard (QRIS) in e-wallet platforms. This study investigates the impact of Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Perceived Risk (PR) and Perceived Security (PS) on Generation Z's intention to use QRIS e-wallets. The Technology Acceptance Model (TAM) serves as the theoretical framework, employing snowball sampling for data collection. The analysis is conducted using SmartPLS 4.0, yielding significant findings: PU and PS positively influence the intention to use QRIS e-wallets for transactions, whereas PEOU and PR show no significant impact. These results suggest that enhancing user-friendly features and ensuring robust security measures could bolster QRIS e-wallet adoption rates among Generation Z. In its practical implications, financial institutions and platform providers are encouraged to improve security and minimize the risks posed by QRIS e-wallets. The limitations of research is that only focuses on one generation and not in general QRIS e-wallet users. In addition, this research contributes to evaluating the effectiveness and efficiency of a non-cash payment system that can provide benefits, convenience, minimize the risk and security of users, especially generation Z in the context of QRIS e-wallet.

Keywords: QRIS, E-wallet, Generation Z, Intention to Use, TAM

INTRODUCTION

Technological advancements have catalyzed significant transformations across various sectors, particularly revolutionizing the financial landscape with digital-based payment systems. These systems continuously evolve by harnessing technology to create platforms that streamline user transactions (Ifada & Komara, 2023). In Indonesia, one notable innovation is QRIS, jointly developed by banks, the Indonesian Payment System Association (ASPI), governmental bodies, and Payment System Service Providers (PJSPPs) to promote non-cash transactions (Bank Indonesia, 2021)

The implementation of QRIS has resulted in great uptake and impact. For instance, the use of QRIS has spread widely to ASEAN countries, the QRIS innovation is called QRIS Cross-Border (Bank Indonesia, 2024). Domestically, QRIS transactions in Indonesia have surged by 175.44% with 48.12 million users and 31.61 million merchants adopting the systems

(Bank Indonesia, 2024b). QRIS adoption transcends traditional banking, with digital wallets (e-wallets) such as DANA, OVO, and ShopeePay integrating QRIS at higher rates compared to conventional bank accounts (Agusta, 2018). Notably, Generation Z (aged 18-24 years) constitutes as significant demographic among QRIS and e-wallet users, attracted by the convenience and accessibility these platforms offer (Adinda, 2022).

Despite these advantages, Generation Z expresses apprehensions about the risks and security implications associated with digital payment technologies (Kumala et al., 2020; Mareta, 2023). Therefore, this study aims to investigate Generation Z's Intention to use QRIS e-wallets, focusing on PU, PEOU, PR, and PS as primary variables. TAM serves as the foundational framework for this investigation, providing a structured approach to measure the adoption of QRIS e-wallets among Generation Z.

DISCUSSION

1. QRIS

QRIS consolidates various VR codes from PJPs into a unified payment system, developed jointly by Bank Indonesia and ASPI (Bank Indonesia, 2020). This system aims to facilitate non-cash transactions, offering convenience for users to conduct transactions directly from their mobile phones.

2. E-wallet

E-wallet, mobile wallets, are applications developed by banks to facilitate non-cash transactions (Singh & Sinha, 2020). They serve as alternative payment systems designed for transactional ease, speed, and reduction of counterfeit currency circulation (BI Institute, 2023). E-wallets have gained popularity due to their practicality and efficiency in transaction processing, enabling users to save time.

3. Generation Z

Generation Z was born between 1997 and 2012, comprises a substantial portion of the Indonesian population, alongside Millennials (Badan Pusat Statistik, 2021). This generation has grown up in a digital age marked by internet ubiquity, smartphones, and social media, making them adept at adopting new technologies (KPKNL Pontianak, 2021).

4. Intention to Use

Intention to use denotes an individual's readiness to adopt technology, influenced by attitudes and perceived behavioral control (Saripudin et al., 2023). It reflects a behavioral inclination toward technology adoption, emphasizing the strength of user adoption (Prakosa & Wintaka, 2020).

5. TAM

TAM was introduced by Davis et al. (1989), extends from the Theory of Reasoned Action (TRA) to explain individual behavior toward technology adoption. TAM focused on the PU and PEOU of a technology, predicting user satisfaction with its utilization (I. G. Ayu & Giantari, 2022). PU and PEOU are key variables influencing an individual's intention to adopt technology (Mareta, 2023). Additionally, PS and PR play crucial roles in influencing PU and PEOU, thus affecting adoption decisions of QRIS e-wallets (Kumala et al., 2020; Mareta, 2023).

6. Hypothesis Development

Effects of PU on Intention to Use QRIS e-wallet

PU refers to an individual's belief in how technology can enhance their performance or achieve goals (Wicaksono, 2022). Research indicates that PU positively influences the adoption of QRIS e-wallets for non-cash transactions (Adinda, 2022; Gunawan et al., 2023; Ming & Jais, 2022). However, conflicting findings suggest that perceived benefits may also deter adoption in some cases (Violinda & Khorunnisya, 2022).

H1: PU has a positive effect on Intention to Use QRIS e-wallet.

Effects of PEOU on Intention to Use QRIS e-wallet

PEOU reflects an individual's perception of how user-friendly a technology is, influenced by accessibility and technical support (Wicaksono, 2022). Studies generally support a positive relationship of between PEOU and the adoption of QRIS e-wallets (Rahmawati & Narsa, 2019; Sefrika, 2023). Although some research finds no significant impact (S. Ayu et al., 2023).

H2: PEOU has a positive effect on Intention to Use QRIS e-wallet.

Effects of PR on Intention to Use QRIS e-wallet

PR encompasses an individual's perception of risks associated with using technology for financial transactions (Mareta, 2023). Concern such as data breaches or financial loss may deter adoption of QRIS e-wallets, as suggested by several studies (Mareta, 2023; Ryu, 2018; Tang et al., 2020). Conversely, conflicting research indicates that PR may not necessarily hinder adoption (Putri et al., 2022).

H3: PR has a negative effect on Intention to Use QRIS e-wallet.

Effects of PS on Intention to Use QRIS e-wallet

PS refers to user's confidence that their private data remains secure and inaccessible to unauthorized parties during online transactions (Kumala et al., 2020). A robust security system positively influences user's decisions to adopt QRIS e-wallets for non-cash transactions (Kumala et al., 2020; Suryati & Yoga, 2021; Umaningsih & Wardani, 2020). However, like PR, PS may also have a negative impact on adoption under certain circumstances (Putri et al., 2022).

H4: PS has a positive effect on Intention to Use QRIS e-wallet.

CONCLUSION

This study identifies two significant factors influencing the adoption of QRIS e-wallets as a transaction tool: PU and PS. The perceived benefits derived from using QRIS e-wallets incentivize continued usage, while robust security features provided by the platform contribute to users' decisions to employ QRIS e-wallets for transactions. Platform providers can leverage these security features as compelling attributes to encourage the adoption of QRIS e-wallets as a preferred payment method, enhancing user trust and satisfaction. TAM has been instrumental in understanding the acceptance of QRIS e-wallet technology, particularly in assessing its usefulness, ease of use, risk and security features. However, this study has limitations, primarily focusing on perceived usefulness and security perceptions without comprehensive coverage of perceived ease of use and risk considerations size, potentially affecting the generalizability of findings. Future research should expand on these dimensions by exploring additional independent variables and updating generational

perspectives among respondents. This would provide a more comprehensive understanding or the factor influencing QRIS e-wallet adoption and further enhance the applicability of findings in practical settings.

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