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Evaluating the Application of the Theory of Planned Behavior in Predicting QRIS Adoption Among Indonesian University Students

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Abstract: The use of digital-based transactions in Indonesia continues to increase; however, the adoption of QRIS as the national payment standard still faces challenges among university students. Despite being predominantly digital natives with high potential to adopt payment technologies such as QRIS, students' actual usage remains suboptimal. Several previous studies have employed various technology adoption theories to explain similar phenomena, utilizing a range of theoretical approaches. This study develops a conceptual model based on the Theory of Planned Behavior (TPB) to identify the predictors influencing students' intention to use QRIS. Drawing from a literature review, this study aims to evaluate the relationship between key TPB constructs—attitude, subjective norm, and perceived behavioral control and students' intention to use QRIS. The proposed model is expected to serve as a foundation for future empirical research and to inform the development of more effective strategies for increasing QRIS adoption among university students.

Keyword: Theory of Planned Behavior, QRIS, Subjective Norm, Technology Adoption, Digital Payment

INTRODUCTION

The rapid growth of smartphone usage and internet penetration has accelerated the development of financial technology in Indonesia. As of 2023, there were 215.6 million internet users in the country, with an internet penetration rate of 78.19%, and 98% of the population using smartphones to access the internet (Paramita & Cahyadi, 2024). This condition creates a highly favorable opportunity for the widespread implementation of digital payment systems. In 2019, Bank Indonesia and the Indonesian Payment System Association (ASPI) launched the Quick Response Code Indonesian Standard (QRIS) as the national standard for QR code-based payments (Nurhapsari & Sholihah, 2022). QRIS aims to simplify payment systems, facilitate collaboration among digital financial service providers, and promote financial inclusion across the country (Tenggino & Mauritsius, 2022).

University students, as part of the digital native generation, have become one of the primary target groups for the development of QRIS. With their adaptive nature toward technology, students hold significant potential as early adopters of this digital payment system (Lau & Kulsum, 2023). However, data indicate that the intensity of QRIS usage among students remains uneven. Several barriers still exist, including perceived risk, limited understanding of benefits, and a preference for cash payments (Paleni & Indah, 2025).

Previous studies have shown that the intention to use QRIS is influenced by various factors such as perceived ease of use, perceived usefulness, social norms, and perceived risk control (Kristiyono et al., 2021). Therefore, examining the intention to use QRIS among university students is essential to support the development of an inclusive and sustainable digital payment ecosystem.

Research Problem

Based on the background described above, the research problem addressed in this study is: What factors influence university students' intention to use QRIS as a digital payment tool in Indonesia?

Objective

The objective of this study is to evaluate and develop a conceptual model within the framework of the Theory of Planned Behavior (TPB) to predict the factors influencing university students' intention to adopt QRIS in Indonesia.

METHOD

This study will employ a quantitative research approach using a cross-sectional survey design to investigate factors influencing university students' intention to use QRIS. Data will be collected from a sample of Indonesian university students through a self-administered questionnaire utilizing a Likert scale to measure constructs from the Theory of Planned Behavior (Attitude Toward Behavior, Subjective Norm, and Perceived Behavioral Control) and Intention to Use QRIS. The collected data will be analyzed using Structural Equation Modeling (SEM), likely with Partial Least Squares SEM (PLS-SEM), to test the hypothesized relationships between these variables and evaluate the proposed conceptual model.

RESULT AND DISCUSSION

Conceptual Model Development

To explain university students' intention to use QRIS as a digital payment tool, the conceptual framework in this study is developed based on the Theory of Planned Behavior (TPB). TPB consists of three main constructs:

1. Attitude toward behavior: Students' attitudes toward using QRIS, including positive perceptions of its benefits, efficiency, and transactional convenience.
2. Subjective norm: Students' perceptions of social pressure or influence from their surrounding environment, such as peers, lecturers, and educational institutions.
3. Perceived behavioral control: The extent to which students feel they have control or the capability to use QRIS, including access to technology and digital literacy.

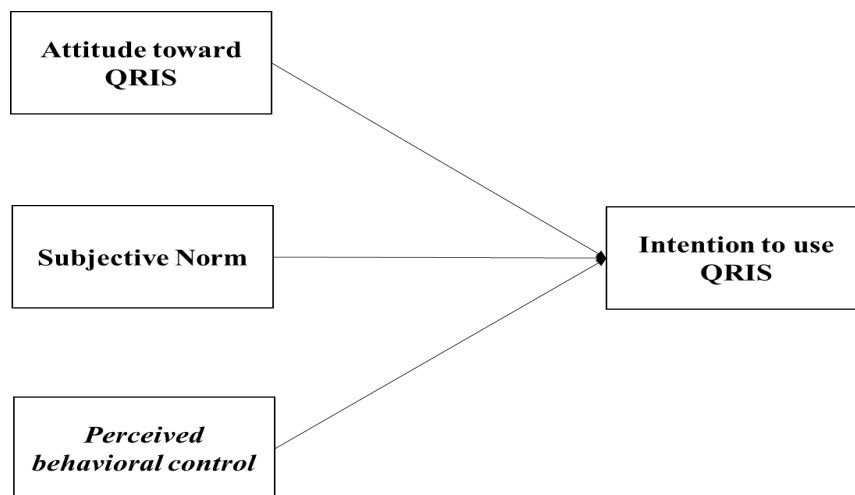


Figure 1. Conceptual Model

Hypothesis Development

Based on the literature review, the following three hypotheses are proposed:

H1: Attitude toward QRIS has a positive effect on the intention to use QRIS.

H2: Subjective norm has a positive effect on the intention to use QRIS.

H3: Perceived behavioral control has a positive effect on the intention to use QRIS.

CONCLUSION

Various payment innovations, including Bank Indonesia's introduction of the Quick Response Code Indonesian Standard (QRIS), have emerged as a result of digital transformation within Indonesia's financial system. With promises of efficiency, security, and transaction convenience—especially for younger generations such as university students—QRIS has become the national standard for QR code-based digital payments.

However, despite being predominantly digital natives and highly accustomed to technology, university students have yet to adopt QRIS uniformly. This highlights the importance of understanding the factors that influence students' intention to use QRIS. By developing a conceptual framework based on the Theory of Planned Behavior (TPB), this study evaluates how a combination of attitude, social norms, and perceived behavioral control can shape students' willingness to adopt QRIS.

A positive attitude toward QRIS, peer or social influence, and a sense of control over using digital payment systems are key predictors in forming students' intention to use QRIS. Therefore, a deeper understanding of the psychological, social, and technological determinants is essential in designing effective strategies for outreach, education, and the development of a more inclusive digital payment ecosystem among students. The conceptual model proposed in this paper is expected to serve as a foundation for further empirical research and data-driven policy-making in Indonesia's digital financial sector.

REFERENCES

- Ajzen, I. (1991). The Theory of planned behavior. *Organizational Behavior and Human Decision Processes*.
- Copeland, L. R., Bhaduri, G., & Huang, O. (2023). Understanding Chinese Gen Z and their online shopping intentions through TAM. *Asia Pacific Journal of Marketing and Logistics*, 35(10), 2361–2376. <https://doi.org/10.1108/APJML-03-2022-0241>
- Dina, S., & Satria, U. (2024). *Cashless Behavior among Yogyakarta Muslim Students : Digital Financial Literacy and QRIS Payment Intention*. 02007, 1–11.

- Kristiyono, Y. R., Roring, E. R., & Suryawan, I. N. (2021). The Effect Of Perceived Benefits In Formatting Male Online Shoppers' Attitude. *Jurnal Manajemen*, 25(2), 290–311.
- Lau, E. A., & Kulsum, U. (2023). Becoming a Cashless Society: The Role of QRIS from the Z-Generation Student's Perspective. *Journal of Accounting and Strategic Finance*, 6(1), 172–191. <https://doi.org/10.33005/jasf.v6i1.404>
- Lee, M. C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8(3), 130–141. <https://doi.org/10.1016/j.elerap.2008.11.006>
- Nurhapsari, R., & Sholihah, E. (2022). Analysis of the factors of intention to use QRIS for MSMEs in Semarang City's traditional market. *Jurnal Ekonomi Modernisasi*, 18(2), 199–211. <https://doi.org/10.21067/jem.v18i2.7291>
- Paleni, H., & Indah, T. P. (2025). *Increasing University Students Intentional Use Of QRIS How to Cite : 13(3)*, 1975–1984.
- Paramita, E. D., & Cahyadi, E. R. (2024). The Determinants of Behavioral Intention and Use Behavior of QRIS as Digital Payment Method Using Extended UTAUT Model. *Indonesian Journal of Business and Entrepreneurship*, 10(1), 132–145. <https://doi.org/10.17358/ijbe.10.1.132>
- Sauchelli, S., Pickles, T., Voinescu, A., Choi, H., Sherlock, B., Zhang, J., Colyer, S., Grant, S., Sundari, S., & Lasseter, G. (2023). Public attitudes towards the use of novel technologies in their future healthcare: a UK survey. *BMC Medical Informatics and Decision Making*, 23(1), 1–13. <https://doi.org/10.1186/s12911-023-02118-2>
- Tenggino, D., & Mauritsius, T. (2022). Evaluation of Factors Affecting Intention To Use Qris Payment Transaction. *ICIC Express Letters*, 16(4), 343–349. <https://doi.org/10.24507/icicel.16.04.343>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly: Management Information Systems*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Zhilalul Haq, M., Hakim Handoko, L., & Asysyad Rasyid, A. (2023). Analysis of the Influence of Perceived Benefits, Easiness and Risk on Students' Interest in Using QRIS. *Journal of Business Management and Islamic Banking*, 02(2), 95–116. <https://doi.org/10.14421/jbmib.v2i2.2075>