

The Paradox of Perceived Risk and Trust on Intention to Use Fintech Payment: Evidence in MSMEs

Naufal Afif¹, Anissa Hakim Purwantini^{1*}, Muhdiyanto²

¹Department of Accounting, Universitas Muhammadiyah Magelang, Indonesia ²Department of Management, Universitas Muhammadiyah Magelang, Indonesia Corresponding author's email: anissa.hakim@ummgl.ac.id

ABSTRACT

Technology developments and the impact of the COVID-19 pandemic have increasingly online business transactions. Consumers prefer simple and secure forms of payment by avoiding the use of cash. One form of payment that is increasingly in demand by consumers is mobile fintech payment. However, on the other hand, the inherent risks of mobile fintech payments (i.e., cybercrime/cyberattack) are pretty significant, especially in Indonesia, which does not yet have strong regulations regarding consumer data protection. This research investigates the contrasting impact of perceived risk and trust on the intention to use mobile fintech payments from MSMEs business actors' perspectives. This research also examines the perceived risk on the various mobile fintech payment platforms used. The method used in this research is descriptive qualitative research with a survey of 142 MSME in Java, Sumatra, and Kalimantan. The survey was conducted using open and closed questionnaires based on previous research instruments. The results indicate that although the perceived risk is high and trust in the system is low, MSMEs still intend to use mobile fintech payments in the future. The factors that drive mobile fintech payment usage are the demands of consumers, facilitating payment transactions, being efficient, practical, and safer.

Keywords: Mobile Fintech Payment; Perceived Risk; Perceived Trust; MSMEs

1. INTRODUCTION

Technology development is getting faster, making information technology an inseparable part of everyday life. The need for technology in this business arena is based on the increasing convergence of the internet, wireless technology, and mobile devices [1]. In addition, the emergence of the COVID-19 pandemic has made information technology increasingly needed by everyone and many industries to reduce the spread of the virus [2].

The financial sector is one of the sectors most affected by technological developments and the emergence of the COVID-19 pandemic [3]. The form of technological developments in the financial sector is a financial technology (FinTech). Fintech is defined as a financial system connected to a trading system and trading technology so that it can buy and sell products at any time and place, transfer funds, payments, borrowing, and others [4]. Other paper explained that the development of financial technology considered easy makes online business transactions increasingly used [5].

This increasingly widespread use of fintech is no exception for transactions made to MSMEs. MSME owners generally use various fintech payment platforms developed in Indonesia, such as an e-wallet (OVO, Go-Pay, Shopeepay, QRIS), e-money (debit card or credit card). MSMEs carry out this use as a form of defence in facing consumers' transition to the era of a cashless society. However, this fintech development does not make this technology a primidone in the hearts of MSME players. Fintech still encounters adoption barriers in its use in MSMEs, as in adopting other new technologies in other sectors [1]. This obstacle is due to SMEs' risk [1], [5], [6]. Research conducted in mobile fintech payments shows that perceived risk has a negative effect on intentions to use mobile fintech payments. Najib & Fahma [5] found that MSMEs tend to have a risk perception of using digital payments because they do not receive money directly. This research is also supported by Chauhan et al., [6] research, which shows that perceived risk negatively affects the intention to use internet banking.

On the other hand, the intention of MSMEs to use fintech is driven by their trust in the technology capabilities. Although Luo et al., [1] cannot prove that the trust variable affects the intention to use mobile payments, other studies can prove the result. For example, according to previous research, perceived trust in the use of a mobile wallet can affect the intentions of business actors to apply it to the company they run [7]. The existence of risk and trust owned by these business actors shows that there is a paradox in the relationship between perceived risk and trust, as has been proven by previous research [1], [5]-[7]. Nevertheless, we argue that not many have studied the paradoxical relationship between perceived risk and trust in the context of the use of mobile payment fintech on MSMEs, especially in developing countries.

This research will investigate the contrasting impact of perceived risk and trust on the intention to use mobile fintech payments from MSME business actors' perspectives. This research also aims to assess the rating of perceived risk based on the type of risk [8]. In addition, this paper will also examine various kinds of mobile fintech payment platforms that MSME players in Indonesia are most widely used.

According to Bank Indonesia, financial technology (fintech) is a technology used as part of the financial system that produces various new products, services, and business models to improve financial system stability and the payment system's efficiency, security, and reliability. One form of fintech is financial technology for payments or fintech payments. Dorfleitner et al., [9] define fintech payments as various functions attached to the technology used to make payments, bank transfers, e-wallets, and money transfers between one party to another. There are various forms of fintech payment platforms in Indonesia, for example, E-Wallet (e.g., OVO, ShopeePay, GoPay), Electronic Data Capture Machine (debit or credit cards), and E-money.

This study uses the perceived risk and trust theory to examine the intention to use fintech payments for MSME actors in Indonesia. Bauer [10] in Luo et al., [1] define perceived risk as a combination of uncertainty and involvement in the results to be obtained. Luo et al. [1] added that perceived risk is the public's perception of the vulnerability they feel from the various kinds of risks that exist. The risks that arise from the use of fintech are at least four kinds, financial risk, security risk, privacy risk, and performance risk [8]. Financial risk arises because of the possibility of monetary losses caused by theft, transaction failures, and user and technology errors [11] [12]. Security risk is related to threats that arise from cybercrimes and virus and malware attacks that direct their targets to financial services [13]. Privacy risk is related to the risk of personal data stored by fintech, such as names and identity cards [11]. The last risk is

performance risk, which arises when the payment service malfunctions in processing transactions [14].

The second theory is about trust. Previous research has stated that perceived trust is an essential component in the adoption of technology and helps an entity to be able to build good relationships with customers [15]. One of the things that make users have trust is because there is a clear legal and technical structure regarding encryption, guarantees, insurance, regulations, and other procedures for the success of financial services [1]. Trust is an important strategy, especially in dealing with uncertain and uncontrolled conditions [16]. Such as in Indonesia, which is included in developing countries, where there are no regulations regarding protecting personal consumer data against cybercrime attacks in business transactions. Amalia & Purwantini [3] prove that trust is the most critical factor in encouraging the intention to use fintech payments for MSME business players.

2. METHOD

This descriptive qualitative research is conducted with an online survey of 142 MSME actors in the Java, Sumatra, and Kalimantan islands. The sampling technique used is purposive sampling, which is one method to obtain samples according to the criteria required by researchers [17]. The respondents' criteria are MSME actors in Indonesia. They have used fintech payments such as e-money, e-wallet or EDC machines in their payment methods. The survey distributed using the Google Form platform contained open and closed questionnaires. The closed questionnaire contains closed questions with a Likert scale of 1-5 (Strongly Disagree -Strongly Agree) based on previous research instruments. An open questionnaire is an open question that requires MSME actors to provide reasons or factors that encourage fintech payments. The analytical method used is a descriptive analysis of the questionnaire results to see trends in perceived risk and trust and the factors that most encourage respondents to use fintech payments.

3. RESULT AND DISCUSSION

Questionnaire data were obtained from 142 respondents spread over three islands, namely Java, Kalimantan, and Sumatra. As many as 61% (86 respondents) were women, and the rest (56 respondents) were men. 27% of respondents have used fintech payments for less than a year, 34% of respondents have used fintech payments for 1-2 years, 12% for 2-3 years, and 28% for more than three years. Most of the business sectors are in the food and beverage industry (40%), retail (30%), fashion (14%) and others in the service sector.

The descriptive statistical analysis results for questions containing perceived risk show an overall score of 3.6 out of a scale of 5. This value is above the average

(2.5), indicating that MSME actors agree with perceived risk when using fintech payments. These results support research conducted by previous studies [1], [18], which explains that perceived risk negatively affects the intention to use mobile payments. The higher the perceived risk value, the lower the intention to use mobile payments.

Furthermore, to examine what risks are most felt by MSME actors, this study uses four types of risk based on Pal et al., [8] research, such as Financial risk, Security risk, Privacy risk, and Performance risk. Based on the results of the descriptive analysis, respondents considered that security risk was the highest risk faced in the use of fintech payments, such as cybercrime attacks. Business people still feel insecure when transacting using fintech payments. These results indicate that providers must be serious about improving the security of digital payment systems in the face of cyberattack threats because they will harm users. Privacy risk is the second most felt risk by MSME actors. MSME business actors consider the privacy issue related to the misuse of personal consumer data a more significant than financial risk. Misuse of personal data can cause losses that have a much higher impact than the transaction value of fintech payments.

Meanwhile, financial risk and performance risk rank third and fourth. Table 1 shows the overall value based on rating the type of risk felt by MSME actors. The results of this descriptive analysis are partially supported by Pal et al., [8], showing that security risk is the most significant risk among other risks. Furthermore, if studied by gender, overall, there is no difference in the perceived risk of MSME actors between male and female respondents.

Table 1 Rating by type of risk

Rank	Indicator	Value
1	Security Risk	3.943662
2	Privacy Risk	3.894366
3	Financial Risk	3.591549
4	Performance Risk	3.408451

The second variable studied in this study is trust. Overall, the value obtained from the results of the questionnaire is 3.2. Based on these results, MSME actors show considerable trust because they are above the average value. Although the value of this trust is smaller than the overall value of perceived risk, this value is sufficient to provide evidence that trust is a factor that encourages MSME actors to use fintech payments. This result is supported by research conducted by Singh & Sinha [7], which shows that trust can mediate the intention of business actors to use digital wallet technology. Other results also show that trust is the main driver for MSMEs to use digital payment systems [3], [5].

The questionnaire results show a high overall score on the intention to use fintech payments by MSME actors, which is 4.1 out of a scale of 5. This is interesting from the point of view of each variable because both have very different points of view, where one side is the positive axis, and the other side is the negative axis. The overall value for the relatively high intention to use fintech payments can be explained by previous research showing that the combination of perceived risk and trust can affect the acceptance of mobile payments by business actors [1]. Although the level of perceived risk for using fintech payment services is higher than trust, business people are still enthusiastic about adopting fintech payments as a means of payment. This is driven by pressure from consumers, most of whom have used digital payment systems in their daily lives. Based on the perspective of business actors, consumer demand ranks as an important priority to be facilitated. If this cannot be met, business continuity can be threatened by competitors who are more adaptive to changing market demands along with technological developments.

After filling out a closed questionnaire, respondents were asked to fill out an open questionnaire that asked about the reasons or factors underlying MSME actors to use fintech payments. Thirty-four percent of respondents said that they use fintech payments because of demands from their customers. The second reason is that fintech payments facilitate payment transactions because they are fast and cashless (20%), followed by efficient and practical reasons (26%). The last reason is that it avoids theft and is safer (11%). This last reason aligns with the risk rating perceived by MSME actors, namely security risk. The high-security risk felt by MSME actors makes it the least written reason for MSME actors. Regarding the platform used, 54% of MSME actors stated that they use e-Wallet, for example, OVO, Shopeepay, or GoPay, followed by EDC machines in the form of debit or credit cards (39%) and using e-Money (7%).

4. CONCLUSION

The results of this study indicate that although the value of perceived risk is higher than trust in the system, MSME actors still intend to use mobile fintech payments in the present and future. Most encourage MSMEs to use mobile fintech payments because of consumer demands and the need for fast and cashless payments. In addition, the practicality and security inherent in mobile fintech payments is another reason why this payment method needs to be applied by MSMEs. This research contributes to providing crucial insight into the use of mobile fintech payments, especially for MSMEs.

REFERENCES

 X. Luo, H. Li, J. Zhang, and J. P. Shim, "Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services," *Decision Support Systems*, vol. 49, no. 2, pp. 222–234, 2010, doi: 10.1016/j.dss.2010.02.008.

- [2] R. Shaw, Y. kyun Kim, and J. Hua, "Governance, technology and citizen behavior in pandemic: Lessons from COVID-19 in East Asia," *Progress in Disaster Science*, vol. 6, p. 100090, 2020, doi: 10.1016/j.pdisas.2020.100090.
- [3] R. D. Amalia and A. H. Purwantini, "Investigasi Niat Penggunaan Financial Technology Payment Bagi Usaha Mikro Kecil Menengah Investigating the Intention To Use Financial Technology Payment in Micro, Small & Medium Enterprises," vol. 19, no. 1, pp. 35–46, 2021.
- [4] S. R. Freedman, *Introduction to financial information*. London: Elsevier, 2006.
- [5] M. Najib and F. Fahma, "Investigating the adoption of digital payment system through an extended technology acceptance model: An insight from the Indonesian small and medium enterprises," *International Journal on Advanced Science, Engineering and Information Technology*, vol. 10, no. 4, pp. 1702–1708, 2020, doi: 10.18517/ijaseit.10.4.11616.
- [6] V. Chauhan, R. Yadav, and V. Choudhary, "Analyzing the impact of consumer innovativeness and perceived risk in internet banking adoption: A study of Indian consumers," *International Journal* of Bank Marketing, vol. 37, no. 1, pp. 323–339, 2019, doi: 10.1108/IJBM-02-2018-0028.
- [7] N. Singh and N. Sinha, "How perceived trust mediates merchant's intention to use a mobile wallet technology," *Journal of Retailing and Consumer Services*, vol. 52, no. March 2019, 2020, doi: 10.1016/j.jretconser.2019.101894.
- [8] A. Pal, T. Herath, R. De', and H. R. Rao, "Is the Convenience Worth the Risk? An Investigation of Mobile Payment Usage," *Information Systems Frontiers*, vol. 23, no. 4, pp. 941–961, 2020, doi: 10.1007/s10796-020-10070-z.
- [9] G. Dorfleitner, L. Hornuf, M. Schmitt, and M. Weber, *FinTech in Germany*. Cham: Springer,

2017.

- [10] R. Bauer, "Consumer behavior as risk taking," in D. Cox (Ed.), Risk Taking and Information Handling in Consumer Behavior, D. Cox, Ed. Cambridger: Harvard University Press, 1960.
- [11] G. de Kerviler, N. T. M. Demoulin, and P. Zidda, "Adoption of in-store mobile payment: Are perceived risk and convenience the only drivers?," *Journal of Retailing and Consumer Services*, vol. 31, no. C, pp. 334–344, Jul. 2016, doi: 10.1016/J.JRETCONSER.2016.04.011.
- [12] M. S. Featherman and P. A. Pavlou, "Predicting eservices adoption: a perceived risk facets perspective," *Int. J. Human-Computer Studies*, vol. 59, pp. 451–474, 2003, doi: 10.1016/S1071-5819(03)00111-3.
- [13] Z. Doffman, "Cybercrime: 25% Of All Malware Targets Financial Services, Credit Card Fraud Up 200%," Apr. 2019. .
- [14] B. R. Lewis and S. Spyrakopoulos, "Service Failures and Recovery in Retail Banking: The Customers' Perspective," *International Journal of Bank Marketing*, vol. 19, no. 1, pp. 34–47, Feb. 2001, doi: 10.1108/02652320110366481.
- [15] F. F. Reichheld and P. Schefter, "E-Loyalty: Your Secret Weapon on the Web," *Harvard Business Review*, Jul. 2000. .
- [16] D. J. Kim, D. L. Ferrin, and H. R. Rao, "A trustbased consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents," *Decision Support Systems*, vol. 44, no. 2, pp. 544–564, 2008, doi: 10.1016/j.dss.2007.07.001.
- [17] D. Cooper and P. Schindler, Business Research Methods, 12th ed. MCGRAW-HILL US HIGHER EDUCATION, 2013.
- [18] A. Putritama, "The Mobile Payment Fintech Continuance Usage Intention in Indonesia," *Jurnal Economia*, vol. 15, no. 2, pp. 243–258, 2019, doi: 10.21831/economia.v15i2.26403.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http:// creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.