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# Is an Intention to Use Electronic Wallets Being Driven by Perceived Susceptibility, Perceived Usefulness, and Confirmation to the Covid-19 Virus?

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**Abstract**

The marketing environment and client behavior may both be altered by technology especially during the COVID-19 epidemic. The goal of this study is to see how people's intentions on electronic wallets (e-wallet) change during the COVID-19 epidemic. People's perceptions about the virus's susceptibility may cause them to avoid direct monetary transactions, because of the virus to spread. The study indicated that perceived usefulness, and the amount of confirmation of excellent technological experience impact the continuing intention to use the e wallet after collecting data from 154 e-wallet users in Indonesia and analyzing the data using SEM PLS. Four of the five hypothesis were accepted on this study. Perceived usefulness and confirmation increase continuance intention to use e-wallet technology in the future.

**Keywords:** Covid-19, Indonesia, Perceived Susceptibility, Expectation-Confirmation Model, Perceived Usefulness

## 1. Introduction

Technology has the capacity to change both the marketing environment and the behavior of customers. Covid-19's expansion, particularly in early 2020, drives individuals to reduce physical interaction and increase digitalization. To eliminate direct cash payments, mobile payments such as electronic wallets (e-wallets) are the ideal option (Lee, et al., 2019). Many people are drawn to e-wallets because of its convenience, speed, customer satisfaction, and numerous promotions (The Jakarta Post, 2020). The millennial generation has dominated e-wallet adoption, because this generation on their productive stage then see more benefits in utilizing an e-wallet than previous generations (Kompas.com, 2020). This generation were born between 1982-2002 (Howe & Strauss, 2009). Many studies have been conducted on financial technology applications. However, there hasn't been much study done on the link between its use and pandemic susceptibility perception. The purpose of this study is to assess if or not people in the Covid 19 epidemic want to use an e-wallet in the long run. This study is supposed to explain the increasing use of e-wallets throughout the epidemic and, ideally, after it has ended.

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## 2. Theory and Hypothesis Development

### *2.1. The Expectation-Confirmation Model (ECM)*

The Expectation-Confirmation Model (ECM) of Bhattachrejee deals with the continuing of utilizing a product or service. ECM looks at two aspects of satisfaction: the expectation of utilizing technology and the fulfillment of those expectations for actual use. The intention to continue utilizing technology after first acceptance (adoption) is referred to as continuing intention to use (Bhattacherjee, 2001). The continuation stage in this study is the point at which the client, assuming technological approval, moves on to the next step based on first adoption of technology (Bhattacherjee, 2001).

### *2.2. Perceived Susceptibility*

Perceived susceptibility is a person's estimation of the likelihood that something may risk their safety (Sreelakshmi & Sangeetha, 2020). Due to the restriction of physical contact to prevent the virus from spreading, people's behavior has changed. Using contactless technology to make cashless payments is regarded to be a safer option. A previous research on the year 2020 discovered that perceived susceptibility had a positive impact on confirmation (Sreelakshmi & Sangeetha, 2020).

People who are concerned about the dangers to their health during the pandemic will be more positive about the benefits of technology use (Sreelakshmi & Sangeetha, 2020). To put it another way, the increased perceived susceptibility increases the perceived value of using e-wallets. According to previous study, perceived susceptibility affects perceived usefulness in a favorable way (Puriwat & Tripopsakul, 2021).

H1: Perceived susceptibility positively impact on confirmation

H2: Perceived susceptibility positively impact on perceived usefulness

### *2.3. Confirmation*

Confirmation is when a user's experience meets the reality of the service that was provided (Bhattacherjee, 2001). Customers frequently have preconceived notions about how they will be used before they actually do so. Users' validation of technology's utility will be bolstered by their experience with it. Furthermore, confirmation may lead to a continued desire to employ technology (e-wallet). Because the user's expectations were realized, the product was used for a long time.

Confirmation has a positive effect on perceived usefulness, according to previous studies. Previous study on mobile instant messaging features (Sreelakshmi & Sangeetha, 2020) and smartphone banking services (Zhou, et al., 2018) has verified the links between the two; as a result, it's critical to look into how user confirmation affects perceived usefulness. Finally, previous study into confirmation variables on long-term intention to use in the context of mobile banking was found to be inconclusive (Poromatikul, et al., 2020).

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H3: Confirmation positively impact on perceived usefulness

H4: Confirmation positively impact on continuance intention to use

*2.4. Perceived Usefulness*

Perceived usefulness is one of the characteristics that influences continued intention to use (Daragmeh, et al., 2021). If individuals find e-wallets beneficial, it's likely that they'll use them again in the future. The behavior of technology adoption after its initial adoption is referred to as the continued intention to use (Limayem, et al., 2007). Perceived usefulness has a positive influence on the persistence of intention to use, according to study on mobile short messaging service users (Oghuma, et al., 2016) and smartphone banking service users (Susanto, et al., 2016). According to another study, the greater the perceived usefulness, the greater the desire to continue using mobile fitness apps (Huang & Ren, 2019). The application of good technology usually delivers favorable outcomes.

H5: Perceived usefulness positively impact on continuance intention to use

*2.5. Research Model*

The interconnectedness of factors is described in this study model.

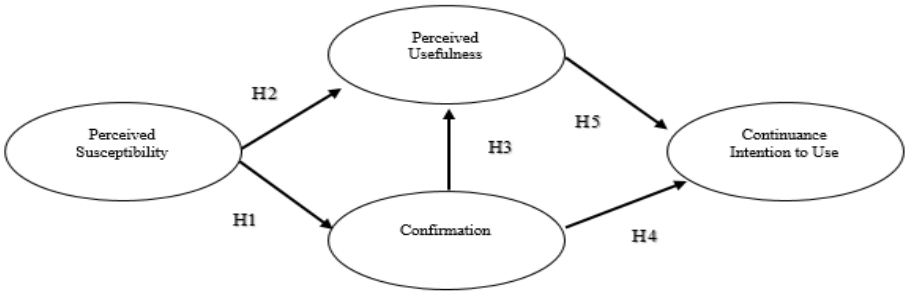


**Figure 1. Research Model**

## 3. Method

*3.1.Research Design and Data Collection*

The study gathered 154 samples using an online survey platform that satisfied specified inclusion criteria (E-wallet providers user and aged 19-39 years/millenial generation). Respondents were chosen using the purposive sample method. The poll links were distributed using the Instagram and WhatsApp apps. Five Likert scales were used to create the questionnaire. This information was gathered between May 21 and 27, 2021.

*3.2. Questionnaire*

Integrated ECM was used to create the questionnaire, which took into consideration perceived susceptibility. To assess perceived susceptibility, six modified questions from (Ahadzadeh, et al.,

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2015) were employed. Three questions derived from (Bhattacherjee, 2001) were used to measure confirmation. Four questions derived from (Anderson & Srinivasan, 2003) were used to gauge satisfaction. Ten questions derived from (Davis, 1989) were used to measure perceived usefulness. The intention to continue was assessed using three questions adapted from (Bhattacherjee, 2001).

## 4. Result

The survey included a total of 154 participants. However, 20 surveys were unable to be processed because they did not meet the requirements. The bulk of the respondents were female (80 percent), between the ages of 20 and 25, bachelor graduates (75 percent), residing in Central Java (40 percent), and earning between 2-4 million Rupiah a month, according to the investigation (30 percent ). Table 2 shows the results of the convergent validity test, whereas Table 3 shows the results of the discriminant validity test.

### *4.1. Validity Test*

In this study, researchers used both convergent and discriminant validity tests. Table 2 shows the convergent validity test results, which show that following removal. Furthermore, the AVE value of each construct is more than 0.5, suggesting that it is valid. Table 3 shows the results of the discriminant validity test.

Table 2. Convergent Validity

| Variable | Indicator | Convergent Validity Test | |
|---|---|---|---|
| | | AVE | Factor Load |
| Perceived susceptibility | PK1 | 0.830 | 0.945 |
| | PK2 | | 0.946 |
| | PK3 | | 0.928 |
| | PK6 | | 0.817 |
| Confirmation | K1 | 0.748 | 0.872 |
| | K2 | | 0.881 |
| | K3 | | 0.842 |
| Perceived usefulness | PM3 | 0.602 | 0.811 |
| | PM5 | | 0.772 |
| | PM6 | | 0.794 |
| | PM8 | | 0.710 |
| | PM9 | | 0.837 |
| | PM10 | | 0.723 |
| Continuance intention to use | NPK1 | 0.767 | 0.873 |
| | NPK2 | | 0.888 |
| | NPK3 | | 0.865 |

Notes: NPK = Continuance Intention to Use, PM = Perceived Usefulness, K = Confirmation, PK = Perceived Susceptibility.

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Table 3. Discriminant Validity

| Variable | Discriminant Validity Test | | | |
|---|---|---|---|---|
| | **PK** | **PM** | **K** | **NPK** |
| **PK** | **(0.911)** | 0.090 | 0.233 | 0.121 |
| **PM** | 0.090 | **(0.865)** | 0.513 | 0.665 |
| **K** | 0.233 | 0.513 | **(0.776)** | 0.537 |
| **NPK** | 0.121 | 0.665 | 0.537 | **(0.876)** |

Notes: NPK = Continuance Intention to Use, PM = Perceived Usefulness, K = Confirmation, PK = Perceived Susceptibility.

*4.2. Reliability Test*

In this study, composite reliability is employed. The reliability test results are shown in Table 4. The test results show that all structures are trustworthy because the value is more than 0.7.

Table 4. Composite Reliability

| **Variable** | **Composite Reliability** | **Notes** |
|---|---|---|
| PK | 0.951 | Reliable |
| PM | 0.899 | Reliable |
| K | 0.901 | Reliable |
| NPK | 0.908 | Reliable |

Notes: NPK = Continuance Intention to Use, PM = Perceived Usefulness, K = Confirmation, PK = Perceived Susceptibility.

*4.3. Structural Model*

The results of the structural model test are shown in Table 5. The model used in this study is capable of representing the occurrences properly.

Table 5. Model Fit

| Indicator | Value | Requirement | Conclusion |
|---|---|---|---|
| *Average Path Coefficient* (APC) | 0.325 | *P sig* | Accepted |
| *Average R-Squared* (ARS) | 0.280 | *P sig* | Accepted |
| *Average adjusted R-Squared* (AARS) | 0.274 | *P sig* | Accepted |
| *Average block VIF* (AVIF) | 1.190 | Accepted if ≤ five and ideal if ≤ 3.3 | Ideal |
| *Average full collinearity VIF* (AFVIF) | 1.628 | Accepted if ≤ five and ideal if ≤ 3.4 | Ideal |
| *Tenenhaus GoF* (GoF) | 0.455 | Small ≥0.1; Medium ≥0.25; Large ≥0.36 | Strong model |
| *Sympson's paradox ratio* (SPR) | 1.000 | Accepted if ≥ 0.7 and ideal if = 1 | Ideal |
| *R-Squared Contribution Ratio* (RSCR) | 1.000 | Accepted if ≥ 0.9 and ideal if = 1 | Ideal |
| *Statistical Suppression Ratio* (SSR) | 1.000 | Accepted if ≥ 0.7 | Ideal |
| *Nonlinear Bivariate Causality Direction Ration* (NLBCDR) | 1.000 | Accepted if ≥ 0.7 | Accepted |

*4.4. Hypothesis Testing*

The path analysis findings are shown in Table 6.

Table 6. Path Analysis

| Paths | H | Beta (β) | *p-values* |
|---|---|---|---|
| Hypothesis 1: PK → K | + | 0.119 | 0.123 |
| **Hypothesis 2: PK → PM** | + | 0.196 | 0.003* |
| **Hypothesis 3: K → PM** | + | 0.505 | <0,001* |
| **Hypothesis 4: K → NPK** | + | 0.544 | <0.001* |
| **Hypothesis 5: PM → NPK** | + | 0.262 | <0,001* |

Notes: NPK = Continuance Intention to Use, PM = Perceived Usefulness, K = Confirmation, PK = Perceived Susceptibility.

Notes: * The hypothesis has been accepted

Table 7. Structural Model Analysis

| **Construct** | **Path to-Confirmation** | | |
|---|---|---|---|
| | **$R^2$** | **$Q^2$** | **$f^2$** |
| Perceived susceptibility | 0.014 | 0.016 | 0.014 |
| **Construct** | **Path to –Perceived usefulness** | | |
| | **$R^2$** | **$Q^2$** | **$f^2$** |
| Perceived susceptibility | 0.316 | 0.0317 | 0.049 |
| Confirmation | | | 0.266 |
| **Construct** | **Path to –Continuance intention to Use** | | |
| | **$R^2$** | **$Q^2$** | **$f^2$** |
| Confirmation | 0.512 | 0,516 | 0.369 |
| Perceived usefulness | | | 0.142 |

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According to this study, the quantity of confirmation received by e-wallet users is unaffected by perceived susceptibility. Users who have received confirmation from electronic wallets are not affected by the notion of susceptibility. This tendency might be fueled by other attributes that appeal to responders, such as service.

The findings indicated that perceived usefulness is influenced by perceived susceptibility. As a result of the COVID-19 epidemic, people are concerned about their health. People who are afraid of being sick will receive indirect compensation (Sreelakshmi & Sangeetha, 2020).

The perceived usefulness and confirmation of e-wallet users are connected in this study, with the higher the confirmation, the better the perceived usefulness. Favorable connections will impact the perceived usefulness (Susanto, et al., 2016). The results of this study suggest that confirmation has an impact on the intention to utilize in the future. It's possible that confirmation may lead to a choice to use technology indefinitely (e-wallet). The product will be utilized for a long time because the user's expectations were met.

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The influence of perceived usefulness and the intention to use indefinitely are intertwined. It is plausible to deduce that the greater the perceived usefulness of e-wallet users, the more likely they will continue to use them. Perceived usefulness is the most powerful factor in evaluating whether or not it makes sense to continue using it (Daragmeh, et al., 2021). If a user believes that an electronic wallet is useful, he or she is more likely to use it.

## 5. Conclusion

Four of the five hypotheses presented were found to be valid after data analysis. The COVID-19 pandemic has made individuals more anxious about their health as a result of the virus's spread. As a result, in order to avoid infection, people are obliged to shun physical social involvement. This research emphasizes the need of adopting e-wallets as a transition from direct transactions to reduce personal interaction. Customers utilize e-wallets for a number of reasons, including their perceived susceptibility to virus risk. In addition, the findings of this study were used by an e-wallet service provider to enhance and develop their services by targeting more users of all ages and delivering special incentives to entice consumers to use the e-wallet. In the end, while health risks have a bigger influence on early adoption than on continuous use, future study may include aspects like as trust and habit as significant factors affecting intentions to use electronic wallets in the future.

## 6. Discussion

Our research revealed the aspects that would have an impact on customers' long-term desire to

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utilize e-wallet services. Perceived susceptibility, confirmation, and perceived usefulness all play crucial roles in determining whether or not someone would continue to use something, according to the research. Due to time constraints, the study examined e-wallet users' continual willingness to use rather than analyzing their actual behavior in depth. Future research should progressively extend to cover more nations with diverse cultures. Thus, more people from different countries should be included in the study to discover whether there are any major variations in willingness to use e-wallet technology continuously. In the future, researchers will be able to look at the consequences of cultural differences. Finally, the impact of health risks on early acceptance is more apparent than the impact of continued adoption. As a consequence, it may be advantageous to continue investigating e-wallet technologies in the future in order to build a relationship between the services and benefits of such systems' widespread use.

**References**

Ahadzadeh, A. . S., Sharif, S. P., Ong, F. S. & Khong, K. W., 2015. Integrating Health Belief Model and Technology Acceptance Model: An Investigation of Health-Related Internet Use. *Journal of Medical Internet Research,* 17(2).

Al-Hattami, H. M., 2021. Determinants of intention to continue usage of online shopping under a pandemic: COVID-19. *Cogent Business & Management,* 8(1), p. 1936368.

Anderson, R. E. & Srinivasan, S. S., 2003. E-Satisfaction and E-Loyalty: A Contingency Framework. *Psychology & Marketing,* 20(2), pp. 123-138.

Bhattacherjee, A., 2001. Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly,* 25(3), pp. 351-370.

Chopdar , P. K. & Sivakumar, V. J., 2018. Understanding Continuance Usage of Mobile Shopping Application in India: The Role of Espoused Cultural Value and Perceived Risk. *Behaviour & Information Technology.*

Daragmeh , A., Sági, J. & Zéman, Z., 2021. Continuous Intention to Use E-Wallet in the Context of the COVID-19 Pandemic: Integrating the Health Belief Model (HBM) and Technology Continuous Theory (TCT). *Journal of Open Innovation: Technology, Market, and Complexity,* 7(2), p. 132.

Davis, F., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly,* pp. 319-340.

Hair, J. F., Hult, G. M., Ringle, C. M. & Sarstedt, M., 2014b. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* Los Angeles: SAGE Publication.

Howe, N. and Strauss, W., 2009. *Millennials Rising: The Next Great Generation*. Vintage.

Huang, G. & Ren, Y., 2019. Linking Technological Functions of Fitness Mobile Apps with Continuance Usage among Chinese Users: Moderating Role of Exercise Self-Efficacy. *Computers in Human Behavior,* Volume 103, pp. 151-160.

Kompas.com, 2020. *Kompas.com.* [Online]

Available at: https://money.kompas.com/read/2020/05/13/142320526/jadi-favorit-milenial-

dompet-digital-tawarkan-promo-dan-kemudahan-transaksi?page=all

[Accessed 10 April 2021].

Lee, J., Ryu, M. H. & Lee, D., 2019. A study on the reciprocal relationship between user perception and retailer. *Journal of Reatiling and Consumer Services*, Volume 48, pp. 7-15.

Limayem, M., Hirt, S. G. & Cheung, C. M. K., 2007. How Habit Limits the Predictive Power of Intention: The Case of Information Systems Continuance. *MIS Quarterly*, 31(4), pp. 705-737.

Nascimento, B., Oliveira, T. & Tam, C., 2018. Wearable Technology: What Explains Continuance Intention in Smartwatches. *Journal of Retailing and Consumer Services*, Volume 43, pp. 157-149.

Oghuma, A. P., Libaque-Saenz, C. F., Wong, S. F. & Chang, Y., 2016. An Expectation-Confirmation Model of Continuance Intention to Use Mobile Instant Messaging. *Telematics and Informatics*, 33(1), pp. 34-47.

Oliver, R. L., 1980. A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), pp. 460-469.

Poromatikul, C., Maeyer, P. D., Leelapanyalert, K. & Zaby, S., 2020. Drivers of Continuance Intention with Mobile Banking Apps. *International Journal of Bank Marketing*, 38(1), pp. 242-262.

Puriwat, W. & Tripopsakul, S., 2021. Explaining an Adoptioin and Continuance Intention to Use Contactless Payment Technologies: during the Covid-19 Pandemic. *Emerging Science Journal*, 5(1), pp. 85 - 95.

Sreelakshmi, C. C. & Sangeetha, K. P., 2020. Continuance Adoption of Mobile Based Payment in Covid-19 Context: An Integrated Framework of Health Belief Model and Expectation Confirmation Model. *International Journal of Pervasive Computing*, 16(4), pp. 351-369.

Susanto, A., Chang, Y. & Ha, Y., 2016. Determinants of Continuance Intention to Use the Smartphone Banking Services. *Industrial Management & Data Systems*, 116(3), pp. 508-525.

T. J. P., 2020. *The Jakarta Post.* [Online]

Available at: https://www.thejakartapost.com/news/2020/11/06/shopeepay-most-popular-e-wallet-in-october-survey-says.html

[Accessed 15 April 2021].

Venkatesh, V., Thong, J. Y. L. & Xu, X., 2012. Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), pp. 157-178.

Zhou, W., Tsiga, Z., Zheng, S. & Jiang, S., 2018. What Influence Users' E-finance Continuance Intention? The Moderating Role of Trust. *Industrial Management & Data Systems.*