



INFLUENCE OF PERCEIVED USEFULNESS, TRUST, PERCEIVED EASE OF USE AND SOCIAL INFLUENCE ON E-WALLET ADOPTION IN GENERATION Z

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| Article info | ABSTRACT (Time new roman 10 PT) |
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| <p>Corresponding Author: Melva Hermayanty Saragih, melva.saragih@binus.ac.id, Universitas Bina Nusantara,</p> | <p>The purpose of this study was to analyze the factors that influence e-wallet adoption, including perceived usefulness, trust, perceived ease of use, and social influence. The research method is a quantitative method with data collection through a 1–5–point Likert scale questionnaire. The population of the study was Gen Z living in South Tangerang. The sampling technique was carried out using nonprobability sampling with a purposive sampling type. Respondent data in the study were obtained from 130 people and analyzed using multiple linear regression through the SPSS application. The results showed that perceived usefulness, trust, perceived ease of use, and social influence had a significant influence on e-wallet adoption. Social influence is the factor with the greatest influence on e-wallet adoption.</p> <p><i>Keywords: Perceived Usefulness, Trust, Perceived Ease of Use, Social Influence, e-wallet adoption</i></p> |
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INTRODUCTION

Technology is advancing quickly, bringing innovations and making life easier. One sector experiencing remarkable growth due to technological evolution is the economy. Financial technology (fintech) has grown the most in Indonesia, showing how technology is changing the economy. Improvements in technology, the internet, and mobile devices have helped boost the use of fintech. One of the latest innovations to emerge for making payments via mobile devices is the e-wallet. This technology must be downloaded onto a smartphone, allowing consumers to store money and make online transactions directly from a digital wallet (Singh et al., 2020). According to a report by RedSeer Consulting, in 2020, the value of e-wallet transactions in Indonesia reached US\$17.8 billion, reflecting public interest and trust in digital payment solutions (Devina & Lukman, 2024). In addition, the compound annual growth rate (CAGR) of e-wallets in Indonesia is estimated to reach 31.5% by 2025, indicating a continued positive trend.

E-wallets have now become a popular alternative for individuals to make transactions, as shown by East Ventures survey data showing that e-wallets are the preferred payment method of choice for the public with a percentage of 81%. The use of digital payment platforms in Indonesia continues to grow in line with technological developments and changes in consumer

behavior patterns. During the development of the financial technology industry in Indonesia, the role of digital wallets is very important.

Concerning this, the increasing number of e-wallet users also presents a major challenge for e-wallet companies. One of the challenges that arises is related to data security and privacy issues where this is one of the challenges to gain user trust in adopting e-wallets. Another factor that is also a challenge for e-wallets in Indonesia is the perception of use, where the acceleration of digital literacy that is not evenly distributed in several regions also makes e-wallets difficult to use by people who are not familiar with financial technology. The influence of the environment also plays an important role, especially in urban areas, social influences such as from friends, family, or relatives who use e-wallets will encourage others to adopt e-wallets. However, for areas with relatively low technology penetration, social influences can be in the form of concerns about fraud to confusion in use which can hinder the adoption of the e-wallet. This is because users tend to take the opinions of those around them into greater consideration when deciding to adopt new technology.

This study focuses on examining the adoption of e-wallets in Indonesia. According to Senali et al., e-wallet adoption can be explained as a person's decision to optimally utilize a digital banking innovation or technology (Senali et al., 2023).

The basis of this study began with the adoption of e-wallets which continues to increase over time. Driven by the innovation factor of non-cash payment transactions, e-wallets have advantages that can provide easy digital transaction services and make investments for their users. In addition, e-wallets are not just a means of payment but can also reflect changes in people's behavior patterns in daily transactions. Therefore, this study will analyze more deeply the role of e-wallets in shaping people's behavior patterns and further understand the factors needed to implement the right strategy in developing wider e-wallet adoption.

METHOD

The purpose of this study was to analyze the effect of perceived usefulness, trust, perceived ease of use, and social influence on e-wallet adoption. This study uses a quantitative method where data is collected and analyzed to measure the relationship between variables. The period of this study was cross-sectional with data collected in a certain period and only done once. Data collection was carried out through a questionnaire instrument distributed online via Google Forms and measured using a 5-point Likert Scale.

The population studied in this study was Generation Z who are e-wallet users and live in South Tangerang. To determine the sample, this study adopted a non-probability sampling type with a purposive sampling method, namely an approach that takes samples that are not random and do not provide equal opportunities for each member of the population to be selected, samples are selected with certain considerations.

Measurement of the minimum number of samples was carried out by adapting the theory of Hair et al., (Hair et al., 2019) with a minimum sample size of 5-10x more than the number of question items (Wang et al., 2022). This study has 26 question items, so a minimum of 130 respondents were obtained.

Perceived usefulness is measured through effectiveness and efficiency adopted from Wang et al., (Wang et al., 2022). Trust is measured through perceived trustworthiness, perceived security, and perceived privacy adopted by Siagian et al., (Siagian et al., 2022). Perceived ease of use is measured through flexible, easy-to-learn, proficient in using adopted

from Singh et al., (Singh et al., 2020). Social influence is measured through informational and normative adopted by Hussain et al., (Hussain et al., 2019). E-wallet adoption is measured through planned behavior, social cognitive, social influence, and technology acceptance adopted by Wei et al., (Wei et al., 2023)

RESULT AND DISCUSSION

Finding

This study obtained 130 respondents who were Generation Z and e-wallet users and domiciled in South Tangerang. The majority of respondents from this study were male with a percentage of 56% and the remaining 44% were female respondents. The average age of most respondents in this study was 24-27 years old (65%) who were mostly students (72%).

Table 1. Validity and Reliability Test Results

| Indicator | Nilai R Count | R Table | Description |
|---|---------------|---------|-------------|
| Perceived Value (Cronbach's Alpha:0.924 > 0.7) | | | |
| PV01 | 0.720 | 0.16 | Valid |
| PV02 | 0.721 | 0.16 | Valid |
| PV03 | 0.770 | 0.16 | Valid |
| PV04 | 0.766 | 0.16 | Valid |
| PV05 | 0.830 | 0.16 | Valid |
| PV06 | 0.802 | 0.16 | Valid |
| Perceived Quality (Cronbach's Alpha: 0.955 > 0.7) | | | |
| PQ01 | 0.890 | 0.16 | Valid |
| PQ02 | 0.867 | 0.16 | Valid |
| PQ03 | 0.846 | 0.16 | Valid |
| PQ04 | 0.890 | 0.16 | Valid |
| PQ05 | 0.828 | 0.16 | Valid |
| PQ06 | 0.840 | 0.16 | Valid |
| Brand Experience (Cronbach's Alpha: 0.965 > 0.7) | | | |
| BE01 | 0.818 | 0.16 | Valid |
| BE02 | 0.825 | 0.16 | Valid |
| BE03 | 0.852 | 0.16 | Valid |
| BE04 | 0.900 | 0.16 | Valid |
| BE05 | 0.876 | 0.16 | Valid |
| BE06 | 0.880 | 0.16 | Valid |
| BE07 | 0.882 | 0.16 | Valid |
| BE08 | 0.892 | 0.16 | Valid |
| Brand Loyalty (Cronbach's Alpha: 0.934 > 0.7) | | | |
| BL01 | 0.887 | 0.16 | Valid |
| BL02 | 0.878 | 0.16 | Valid |
| BL03 | 0.860 | 0.16 | Valid |
| BL04 | 0.784 | 0.16 | Valid |

Table 1 shows the results of the validity and reliability tests in this study. The validity test is shown through each indicator of each variable that has a value of R Calculation greater than the value of R Table of 0.16 so that it can be concluded that $R \text{ Calculation} > R \text{ Table}$ so that all variable data in this study are valid. The results of the reliability test are also obtained as indicated by the Cronbach's Alpha value for each variable of perceived value of 0.924, perceived quality of 0.955, brand experience of 0.965, and brand loyalty of 0.934 which is greater than the value of 0.7 so that it can be stated that the data in this study is reliable.

Furthermore, the data in this study were also tested through the Classical Assumption Test which includes the Normality Test, Multicollinearity Test, and Heteroscedasticity Test. In the Normality Test, a sig value of 0.200 was obtained which is greater than the alpha value of 0.05 so it can be stated that the data in this study have a normally distributed residual value. For the Multicollinearity Test, the Tolerance value for the perceived value variable was 0.210, perceived quality was 0.118, and brand experience was 0.125 which is greater than the value of 0.10. In addition, the VIF value for the perceived value variable was 4.759, perceived quality was 9.288, and brand experience was 8.011 which is less than the value of 10. Based on the results of the Multicollinearity Test, the tolerance value was > 0.10 and $VIF < 10$ for each variable so that it can be stated that there is no multicollinearity in this study. In addition, the results of the Heteroscedasticity Test conducted using the Glejser Test showed a sig value for the perceived value variable of 0.795, perceived quality of 0.569, and brand experience of 0.302 which is greater than the alpha value of 0.05 so that it can be stated that the data in this study does not contain heteroscedasticity.

Table 2. Hypothesis Test Results – Significance T

| Coefficients ^a | | | | | | |
|---------------------------|-----------------------|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.013 | 0.154 | | 0.087 | 0.931 |
| | Perceived_Usefulness | 0.342 | 0.087 | 0.041 | 3.486 | 0.000 |
| | Trust | 0.348 | 0.107 | 0.340 | 3.254 | 0.001 |
| | Perceived_Ease_of_Use | 0.361 | 0.132 | 0.354 | 3.221 | 0.002 |
| | Social_Influence | 0.430 | 0.093 | 0.422 | 4.645 | 0.000 |

Table 2 shows the results of the hypothesis test through the t significance test to prove hypothesis 1 - hypothesis 4 related to the partial influence between the variables of perceived usefulness, trust, perceived ease of use, and social influence. It can be shown that the calculated t value for the variable perceived usefulness is 3.486, trust is 3.254, perceived ease of use is 3.221, and social influence is 4.645 which is greater than the t table of 1.66. In addition, sig values are also obtained for the variables perceived usefulness of 0.000, trust is 0.001, perceived ease of use is 0.002, and social influence is 0.000 which is smaller than the alpha value of 0.05. It is concluded that the calculated t value $> t$ table and the sig value $< \alpha 0.05$, thus proving that all hypotheses 1 - hypothesis 4 in this study are accepted and it is stated that there is a significant partial influence between perceived usefulness, trust, perceived ease of use, and social influence on e-wallet adoption.

Table 3. Hypothesis Test Results – F Significance

| ANOVA ^a | | | | | | |
|--------------------|----------------|--------|-------------|--------|---------|--------------------|
| Model | Sum of Squares | df | Mean Square | F | Sig. | |
| 1 | Regression | 68.302 | 4 | 17.075 | 178.578 | 0.000 ^b |
| | Residual | 11.952 | 125 | 0.096 | | |
| | Total | 80.254 | 129 | | | |

Table 3 shows the results of the F test for hypothesis 5, where the calculated f value is 178.578 which is greater than the f table value of 2.44 and the sig value is also 0.000 which is smaller than the alpha value of 0.05. It can be concluded that the calculated $f > f$ table and the sig value $< \alpha$ 0.05 so that it can be stated that hypothesis 5 is accepted and there is a significant simultaneous influence between perceived usefulness, trust, perceived ease of use, and social influence on e-wallet adoption.

Table 4. Results of the Determination Coefficient Test

| Model Summary | | | | |
|---------------|--------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | 0.923 ^a | 0.851 | 0.846 | 0.30922 |

Based on Table 4, the results of the determination coefficient test are shown through the Adjusted R Square value of 0.846, which means that the magnitude of the ability of the independent variables including perceived usefulness, trust, perceived ease of use, and social influence on the dependent variable, namely e-wallet adoption, is 84.6%. The remaining 15.4% can be explained by the influence of variables outside this study. It can be concluded that the ability of the independent variables to explain the influence on the dependent variable in this study is very good.

Discussion

1. The Effect of Perceived Usefulness on E-wallet Adoption

The results of this study indicate that perceived usefulness has a significant effect on e-wallet adoption. This study found that users who feel that e-wallets can provide real benefits such as ease of transactions, time, and easy access to their users, then the tendency of users to adopt e-wallets and continue to use them is very high. The results of this study are also in line with the results of previous research conducted by Siagian which stated that perceived usefulness has a significant effect on consumer behavioral intention in using e-wallets (Siagian et al., 2022). This explains that perceived usefulness plays a role in the advantages of information technology, where e-wallet users feel the perception of the usefulness of digital payment applications is quite high and meets their expectations. In the context of digital wallets, users will tend to adopt this technology if they believe that its use will bring real benefits in facilitating financial transactions, increasing efficiency, or providing convenience in managing personal finances. Previous research by Tay et al., also explained that perceived usefulness is a

key factor in understanding user attitudes and intentions towards the adoption and use of digital wallets. To maintain the continuity of an information system, perceived usefulness plays a significant role in impacting user intentions in utilizing the system (Tay et al., 2022).

2. The Influence of Trust on E-wallet Adoption

The results of this study indicate that trust has a significant influence on e-wallet adoption. In this study, it can be explained that trust as a level of belief that the e-wallet used is safe and reliable plays a very important role in e-wallet adoption because it can reduce user doubts and concerns regarding existing risks. In this regard, users who have high trust in the security of e-wallets, the protection of personal data, and the reputation of good e-wallets tend to have a higher level of e-wallet adoption. The results of this study support the results of previous research conducted by Tay which explained that trust refers to the level of trust or belief of users in the security, integrity, and credibility of the digital wallet they use (Tay et al., 2022). According to Viviana et al., this trust includes the belief that their personal and financial information will be protected, transactions will be carried out safely, and digital wallet service providers are willing to fulfill their promises. Customers who trust a brand are less likely to switch brands or use e-money if they are not satisfied with the service (Viviana & Mulyono, 2022). In addition, in previous research by Kiew et al., it was also explained that perceived trust refers to the security and reliability of using an e-wallet, indicating that perceived trust has a significant impact on e-wallet adoption. For users who store money in the system, trust is very important, and users will believe that the security of the e-wallet is adequate when their money is safe (Kiew et al., 2022). In addition, user trust will also be built when the integrity of the service provider is considered good.

3. The Effect of Perceived Ease of Use on E-wallet Adoption

The results of this study indicate that perceived ease of use has a significant effect on e-wallet adoption. This study found that if users feel that e-wallets are easy to use and do not require much effort to use them, then they will tend to adopt e-wallets. It can be explained that this convenience plays an important role in reducing barriers to using new technology. The results of this study are also in line with the results of previous research (Singh et al., 2020) which showed that perceived ease of use has a positive and direct effect on behavioral intentions to reuse technology services. In the long term, this can influence users to adopt technology services, and it was also found that perceived ease of use can also increase the prediction of the use of technology services including internet banking. Although consumers may believe that technology is useful, at the same time they may assume that technology is difficult to use. In addition, according to previous research by Nawi et al., perceived usefulness is also a determining factor in adopting technology (TANOS et al., 2024). The results of the study show that perceived ease of use has a significant influence on e-wallet adoption, where ease of use promotes user intention to use e-wallet.

4. The Influence of Social Influence on E-wallet Adoption

The results of this study indicate that social influence has a significant influence on e-wallet adoption. In this study, it is explained that users who feel the influence of people around them, such as friends, family, or close relatives, are more likely to adopt e-wallets. This social influence can be formed through recommendations, the use of the surrounding environment, or social trends that support the use of e-wallets. The results of this study support the results of previous research conducted by Hussain et al., which explained that social influence as opinions

and recommendations from influential and important parties influences the intention to adopt mobile payments (Hussain et al., 2019). In addition, according to the results of previous research conducted by Yang et al., it was also shown that social influence has a positive and significant effect on consumer intentions to use e-wallets (Yang et al., 2021). Social influences such as family and friends influence consumers' mindsets towards the use of new innovative products through technology services. The most influential determinant of consumer intention is social influence, which can drive consumer intention to use e-wallets, as it can build emotional and logical perspectives among consumers in developing countries (Yang et al., 2021).

CONCLUSION

This study aims to analyze the effect of perceived usefulness, trust, perceived ease of use, and social influence on e-wallet adoption among e-wallet brand X users who are Gen Z in South Tangerang. Based on the results of the study, it was concluded that perceived usefulness, trust, perceived ease of use, and social influence have a significant partial and simultaneous effect on e-wallet adoption intention. In addition, based on the results of the study, results were also obtained showing that social influence has the greatest effect on e-wallet adoption intention.

Based on the results of the study, the suggestions that can be given to e-wallet providers are to increase perceived usefulness, e-wallet service providers are advised to develop superior features such as integrated payments for bills and payment features that are integrated with many applications that are specifically used by Generation Z such as streaming applications, concert payments, and gaming. To increase trust, e-wallet service providers can continue to update the latest security technology to ensure that user transactions and personal data are safe. This can be done by implementing data encryption, two-factor authentication, and fraud detection systems. To increase perceived ease of use, e-wallet service providers can develop a simple design display but have navigation and features that make it easier to use e-wallets. To increase social influence, e-wallet service providers can conduct promotional campaigns in collaboration with influencers, celebrities, and artists. In addition, e-wallet service providers can also implement a referral code system and provide promos or other incentives to encourage higher e-wallet adoption.

Suggestions for further research include exploring e-wallet adoption in different segments or other age groups and different domiciles to provide clearer insights into e-wallet adoption in different demographics and environmental conditions. Further research is also expected to examine the influence of other factors such as perceived risk, technological compatibility, innovation, and others on e-wallet adoption.

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