

Analysis of Factors Affecting Behavioral Intention in Using Mobile Wallets in Batam City

By Edy Yulianto Putra

Analysis of Factors Affecting Behavioral Intention in Using Mobile Wallets in Batam City

Edy Yulianto Putra

Universitas Internasional Batam

Feby Fitria Salim

Management, Universitas Internasional Batam

Author's correspondence: fbysalim@gmail.com

Abstract. This study aims to determine the relationship between perceived risk, self efficacy, enjoyment, trust, perceived usefulness, perceived ease of use on behavioral intention to use mobile wallets in Batam City. Therefore, the researcher targets the questionnaire to users who have made transactions using Go-Pay, OVO, Dana, Shopee, and Link Aja in Batam City, by using a google form which was distributed to 375 respondents. The results of these respondents will be processed using smartPLS version 3.0 software. The results of this study indicate that the second and third hypotheses, namely trust and self-efficacy, do not at all affect behavioral intention to use mobile wallets in Batam City. In addition, the 15th hypothesis, namely trust also unable to mediate the relationship between enjoyment and behavioral intention to use mobile wallets in Batam City. Apart from hypotheses 2,3, and 15 have an influence on behavioral intention to use mobile wallets in Batam City.

Keywords: Behavioral intention; Mobile wallets; Perceived ease of use; Perceived usefulness; and trust.

Abstrak. Pada penelitian ini memiliki tujuan untuk mengetahui hubungan antara *perceived risk, self efficacy, enjoyment, trust, perceived usefulness, perceived ease of use* terhadap behavioral intention pada penggunaan mobile wallets di Kota Batam. Oleh sebab itu, peneliti menargetkan kuesioner kepada pengguna yang pernah melakukan transaksi menggunakan Go-Pay, OVO, Dana, Shopee Pay, dan Link Aja di Kota Batam, dengan memanfaatkan google form yang disebarkan kepada 375 responden. Hasil dari responden tersebut akan diolah dengan menggunakan software smartPLS versi 3.0. Hasil pada penelitian ini menunjukkan bahwa hipotesis ke-2 dan 3 yaitu trust dan self efficacy sama sekali tidak mempengaruhi behavioral intention pada penggunaan mobile wallets di Kota Batam. Selain itu, hipotesis ke-15 yaitu trust juga tidak mampu memediasi hubungan antara enjoyment terhadap behavioral intention pada penggunaan mobile wallets di Kota Batam. Selain dari hipotesis ke-2,3, dan 15 memiliki pengaruh terhadap behavioral intention pada penggunaan mobile wallets di Kota Batam.

Kata kunci: Behavioral intention; Mobile wallets; Perceived ease of use; Perceived usefulness; dan trust.

BACKGROUND

There is technological innovation so that payment method are also experiencing development. In the past, transactions only used barter but along with the times, legitimate transactions were transactions using cash or cash, after the presence of payment instrument technology began to adapt to digital payments or called mobile wallets (Bank Indonesia, 2020b). According to Kata Data (2022), the value of transactions using mobile wallets has increased by 58.60% or Rp. 35.10 trillion in 2021, when viewed in 2020, transactions using mobile wallets only reached Rp. 22.13 trillion. In addition, the volume of transactions using mobile wallets in 2021 reached 602.29 million times compared to 2020, the volume of transactions using mobile wallets only reached 438.04 million times. Therefore, it can be seen that there is an increase in the use of mobile wallets from 2020 to 2021. This increase can occur due to people's preference for online using digital payment methods or mobile wallets (Kontan, 2022). Based on data from the Media Center Batam (2020) which states that in April 2020 the use of digital payments was recorded at IDR 128.3 billion with a total transaction of 1.34 million transactions.

During the COVID-19 pandemic, users of mobile wallets increased 10 times from 2019, this was due to reducing the number of virus spreads and government policies related to health protocols so that people were advised to use digital transactions or non-cash transactions (Media Indonesia, 2021), (Merdeka, 2021). The Indonesian government has also implemented policies related to digital payments as regulated in PBI No. 2016/2018 regarding electronic money (Bank Indonesia, 2018). According to Bank Indonesia, (2020a) mobile wallet is a digital form of payment where the money can be stored in electronic media. Before using it, users are expected to top up their balance or top up before making a transaction.



Source: Good News From Indonesia (2022)

Figure 1. mobile wallets that dominate in Indonesia

According to Good News From Indonesia (2022) the mobile wallet applications that are most in demand by the Indonesian people are OVO, Go-Pay, ShopeePay, Dana and Link Aja. The five applications took the first, second, third, fourth and fifth

positions respectively. OVO can occupy the first position with a percentage gain of 31%. This is because OVO has the largest number of new active users among mobile wallets. On the other hand, OVO was able to increase online merchant in the first half of 2021. Go-Pay can occupy the second position with a percentage of 25%, because Go-Pay offers security in transactions so that users are interested in using it. ShopeePay is one of the mobile wallets applications, so this application can occupy the third position with a percentage of 20%. ShopeePay offers many promotions to users so that they are interested in using the application. ShopeePay actively used since the Covid-19 pandemic. Dana can occupy the fourth position with a percentage of 19%, because the majority of Dana users believe in the application, In addition, the majority of users of Dana are Generation Z and Millennials. The Link Aja application managed to occupy the fifth position with a percentage of 4%, because Link Aja is a mobile wallet produced by government.

In making users more interested in using mobile wallets, these users must have behaviors that can make them have the intention to use them more often. Therefore, research from Al-Saedi et al. (2020), which states that the role of perceived risk and self-efficacy (hint) will influence users to use mobile wallets. In addition, research from To & Trinh (2021), also states that enjoyment, trust, perceived usefulness, and ease of use play a very important role in growing user behavioral intention.

THEORETICAL REVIEW

Behavioral Intention

According to Al-Emran et al. (2020) interpreting behavioral intention as the ease of using a technology so that users have the intention to reuse it in the future. According to Wu et al. (2021) explain that behavioral intention is a risk experienced by consumers when using the technology which will be a determinant for consumers to reuse the technology or not. Behavioral intention is an attitude of consumer loyalty to the product / service used, behavioral intention is not only used to measure current consumer behavior but also potential consumers (Suhartanto, 2019).

The Effect Perceived Risk On Behavioral Intention

Wu et al. (2021) perceived risk or the risk perceived by consumers will greatly affect their behavior to use a technology. Perceived risk in the study of Wu et al. (2021)

said that the risk of personal data leakage would prevent consumers from using technology. Based on research in the context of mobile wallets, perceived risk is an important factor influencing consumer behavioral intentions (Al-Saedi et al., 2020). Fear and hacking among users can trigger negative risk perceptions that will lead to blocking of personal information (Bashir & Madhavaiah, 2015). So it can be concluded the following hypothesis:

H1: Perceived risk has an effect on behavioral intention to use mobile wallets in Batam City.

The Effect Self-Efficacy On Behavioral Intention

Kumar et al. (2020), Al-Saedi et al. (2020), and Zhang et al. (2020) states ⁷ self-efficacy has an effect on behavioral intention, this is because The existence of innovation from technology on how to use a service will make consumers have the behavior to use the service (Al-Saedi et al., 2020). Consumers who have a high ability to use digital payments will substantially return to using these services (Zhang et al., 2020). Therefore, it can be concluded that the relationship between variables is as follows:

H2: Self-efficacy has an effect on behavioral intention to use mobile wallets in Batam City.

The Effect Perceived Usefulness On Behavioral Intention

¹ According to To & Trinh (2021), Al-Emran et al. (2020), and Zhai & Ma (2021) perceived usefulness has an effect on behavioral intention because consumers get the positive side of using it such as increasing its performance and effectiveness (Al-Emran et al., 2020). Usually users will use mobile wallets, if the services provided generate benefits (To & Trinh, 2021). Thus, consumers who assume that the use of mobile wallets are useful for them can make consumers return to use the service. So there is a hypothetical relationship as follows:

H3: Perceived usefulness has an effect on behavioral intention to use mobile wallets in Batam City.

The Effect Perceived Ease of Use On Behavioral Intention

According to To & Trinh (2021), Chen & Aklikokou (2020), and Zhai & Ma (2021) ¹ ease of use has a positive relationship with behavioral intention. Because In

using the system if the user feels that it is easy to use it will attract the user's attention to return to using the system (Chen & Aklikokou, 2020). Users of mobile wallets consist of young people and the oldster, so the use of the application must be easy to use (To & Trinh, 2021). Therefore, the following hypothesis can be formulated:

H4: Perceived ease of use has an effect on behavioral intention to use mobile wallets in Batam City.

The Effect Trust On Behavioral Intention

Saprikis & Markos (2018), Hallem et al. (2021), and Madhavaiah (2015) explains the positive influence on trust with behavioral intention. Because consumers trust their personal data to be given to responsible parties such as banks (Madhavaiah, 2015). Hallem et al. (2021) states that trust in the platform will make users have a loyal attitude towards the platform. According to Saprikis & Markos (2018) user trust will make consumers have a behavioral intention in reusing the application. This is because users believe that the application will not harm them so that they will use it again. So it can be concluded the following hypothesis:

H5: Trust affects behavioral intention in using mobile wallets in Batam City.

The Effect Trust On Perceived Usefulness.

To & Trinh (2021), Zhai & Ma (2021), and Saprikis et al. (2018), states that trust with perceived usefulness has a positive effect because trust in a service can increase the benefits used (Saprikis et al., 2018). According to To & Trinh (2021) that trust in mobile wallets is able to increase consumer effectiveness. Based on research from Seo & Lee (2021) also proves the same thing. In the study of Seo & Lee (2021) explained that the adoption of service robots can be successful because of the user's trust in the benefits that will be obtained such as being able to use social media as a marketing strategy for their business. following hypotheses can be concluded:

H6: Trust has an effect on perceived usefulness in the use of mobile wallets in Batam City.

The Effect Enjoyment On Behavioral Intention

Research conducted by To & Trinh (2021), Saprikis (2018), and Saprikis et al. (2018) explain that enjoyment has a positive relationship on behavioral intention.

Consumers who feel happy in using a technology, the consumers will return to use it (To & Trinh, 2021). Consumers can return to using online transactions because these consumers feel good about using them (Saprikis, 2018). According to Saprikis et al. (2018) the enjoyment felt by consumers can increase the loyalty of a product / service that makes consumers return to use it. Therefore, there is a hypothetical relationship as follows:

H7: Enjoyment affects behavioral intention in using mobile wallets in Batam City.

The Effect Enjoyment On Perceived Usefulness

According to To & Trinh (2021), Saprikis (2018), Putra (2021), and Saprikis & Markos (2018) state that there is a positive relationship between enjoyment and perceived usefulness. The enjoyment felt by consumers will make consumers feel that the use of *mobile wallets* is very beneficial for them (To & Trinh, 2021). Pleasure is an emotional trait which is an extrinsic value of perceived usefulness (Saprikis, 2018). In the use of technology by consumers, if they feel happy or enjoyable, the user will assume that the use of this technology is very useful because it can improve performance and effectiveness (Saprikis & Markos, 2018). So it can be concluded that there is a relationship between variables as follows:

H8: Enjoyment affects perceived usefulness in the use of mobile wallets in Batam City.

The Effect Enjoyment On Perceived Ease of Use

According to To & Trinh (2021), Putra (2021), Madhavaiah (2015), Saprikis et al. (2018) enjoyment has a positive influence with ease of use. Enjoyment of using mobile wallets makes it easier to use the service (To & Trinh, 2021). Enjoyment represents an intrinsic motivation value because perceived ease of use is an intrinsic motivator that can increase enjoyment in using a system so as to increase acceptability (Madhavaiah, 2015). So it can be concluded the following hypothesis:

H9: Enjoyment affects the perceived ease of use in the use mobile wallets in Batam City.

The Effect Enjoyment On Trust

According to To & Trinh (2021), Chunxiang (2014), and Liu et al. (2021) enjoyment has a positive relationship with trust. Because the higher the sense of

pleasure from consumers, the greater the consumer's confidence in the technology used (Liu et al., 2021). The perceived level of enjoyment can make consumers reduce their fear / anxiety about mobile wallets (To & Trinh, 2021). S. H. Kim et al. (2020) prove that there is a significant effect on the hypothesis. When the individual is interested in the story being told so that the individual believes in the story (S. H. Kim et al., 2020). Therefore, these variables can be concluded as follows:

H10: Enjoyment affects trust in the use of mobile wallets in Batam City.

The Effect Enjoyment On Behavioral Intention With Perceived Ease Of Use As A Mediation

According to Madhavaiah (2015) and Saprikis & Markos (2018) which states that there is a significant positive effect enjoyment on behavioral intention mediated by perceived ease of use. The existence of a higher level of enjoyment intensifies the intrinsic motivation of consumers, thus making consumers perceive using the system as an easy thing which results in users having the intention to use it again (Madhavaiah, 2015). Research from Tao et al. (2019) also explain the relationship significant positive effect. This is because users feel they are quite skilled in using the technology so they often use it because of the ease of use that makes them master quickly and makes them happy to use it (Tao et al., 2019). Therefore, it can be concluded as follows:

H11: Enjoyment affects behavioral intention with perceived ease of use as a mediation in the use of mobile wallets in Batam City.

The Effect Enjoyment On Behavioral Intention With Perceived Usefulness As A Mediation

Based on research from Tao et al. (2019) and Saprikis & Markos (2018) which states that there is a significant positive relationship on the hypothesis. When users feel the technology used is useful for their lives, then the user has a greater tendency to use it (Tao et al., 2019). When users feel the benefits indirectly, it also makes users feel happy for the benefits they get (Saprikis & Markos, 2018). According to Madhavaiah (2015), there is also a significant positive relationship. This is because a higher level of enjoyment increases the perceived efficiency of the system and increases the perceived value of a system or technology (Madhavaiah, 2015). Therefore, there is a hypothetical relationship as follows:

H12: Enjoyment affects ¹ behavioral intention with perceived usefulness as a mediation in the use of mobile wallets in Batam City.

The Effect Trust On Behavioral Intention and Perceived Usefulness As A Mediation

According to To & Trinh (2021) and Chen & Aklikokou, (2020), there is a significant effect on the hypothesis relationship. If mobile wallets do not have proper security, users will feel that the wallet is less useful so that it can reduce the intention to use it (To & Trinh, 2021). Trust can influence a person's interest in adopting a service (Chen & Aklikokou, 2020). Research from Schlaegel (2015) also stated that there was a significant positive relationship on the hypothesis. Trust can increase the expected benefits in market conditions, causing some behavior in its use (Schlaegel, 2015). So that the hypothesis can be concluded as follows:

H13: Trust affects ¹ behavioral intention with perceived usefulness as a mediation in the use of mobile wallets in Batam City.

The Effect Enjoyment On Behavioral Intention With Trust and Perceived Usefulness As A Mediation

According to Koenig-Lewis et al. (2015), Saprikis et al. (2018), and Kim & Kim (2020) explain the existence of a significant relationship. An individual who feels happiness is indirectly able to feel the benefits obtained so that he has the intention to use it (Kim & Kim, 2020). In using an application, if the user has trust and feels the benefits, it will indirectly affect their enjoyment of behaving to use it (Koenig-Lewis et al., 2015). When users believe that the application can be trusted so that they enjoy its use, then the user feels the benefits derived from the application which makes the user have the intention to reuse the application (Saprikis et al., 2018). Therefore, the hypothesis can be formulated as follows:

H14: Enjoyment affects ⁶ behavioral intention with trust and perceived usefulness as a ⁶ mediation in the use of mobile wallets in Batam City.

The Effect Enjoyment On Behavioral Intention With Trust As The Mediation

Hallem et al. (2021) and Ye et al. (2019) stated that the positive effect was not significant. This is because users will not have the intention to use it if they only feel

pleasure (Hallem et al., 2021). Trust is not able to change an individual's perception of the happiness obtained in using something. Lack of user trust will reduce the intention to use it (Ye et al., 2019).

Based on research from S. H. Kim et al. (2020), entitled "story telling by medical tourism agents and its effect on trust and behavioral intention". His research has proven a significant positive relationship. This is because the enjoyment obtained from the story makes the listener believe so that the listener has some behavior towards the story (S. H. Kim et al., 2020). So that these variables can be formulated as follows:

H15: Enjoyment affects behavioral intention with *trust* as the mediation in the use of mobile wallets in Batam City.

The Effect Enjoyment On Perceived Usefulness With Trust As A Mediator

Based on Koenig-Lewis et al. (2015) and Chunxiang (2014) there is a significant positive relationship. The individual feels pleasure when using the application so that it can increase its benefits (Chunxiang, 2014). According to Seo & Lee (2021) also stated that there was a significant positive relationship. When individuals believe that the technology is able to entertain users, the user will indirectly feel the benefits (Seo & Lee, 2021). So there is the following statement:

H16: Enjoyment affects perceived usefulness with trust as the mediation in the use of mobile wallets in Batam City.

From the formulation of the hypothesis above, it can be seen the relationship between the variables in the diagram below.

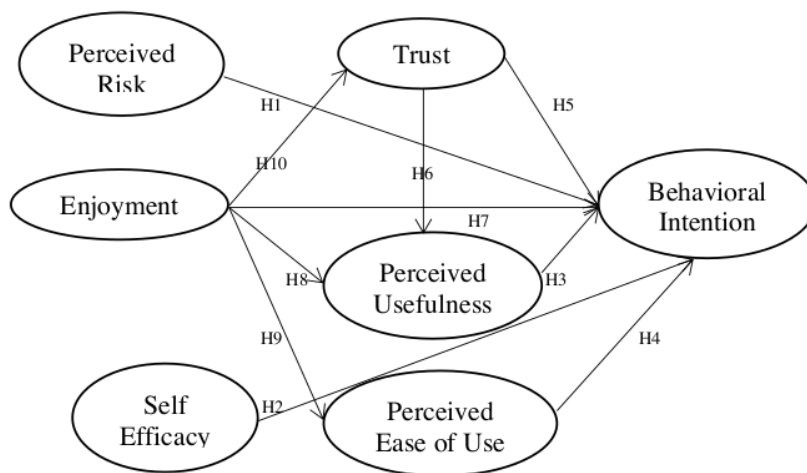


Figure 2. Framework of the Research Model

RESEARCH METHODS

This research uses a comparative causal type of research. The object of this research is to find out what causes can make users have behavioral intentions in using *mobile wallets* in Batam. For this reason, the researcher decided that the population of this study were users who had used mobile wallets in conducting transactions in Batam City and the sample to be used were users who had made transactions using Go-Pay, OVO, Dana, Shopee Pay and Link Aja in Batam City. The aim of the researcher is to choose the five mobile wallet applications because these five applications are the most dominant in Indonesia and Batam is one of the regions Indonesia (Good News From Indonesia, 2022). The sample needed in this study was 375 respondents with a sampling technique in the form of purposive sampling, where the sample needed in the study was adjusted to the research criteria (Patten & Newhart, 2018). The data collected will be processed using smartPLS software related to validity, reliability, and hypothesis test.

RESULTS AND DISCUSSION

Respondent Demographics

The results of the demographics show that the majority of mobile wallets in Batam City are domiciled by women by 72.4%, the rest are men. For the age range of mobile wallets in Batam City, they are in the range of 17 – 24 years or 85.3% of mobile wallets in Batam City. Then on the type of work, the average respondent is a student or students of 44.5%. Then users from mobile wallets in Batam City tend to use Go-Pay by 28%, followed by Shopee pay, OVO, Dana, and Link Aja.

Validity and Reliability

Table 1. Validity and Reliability Test Results

Variable	AVE	Composite Reliability
Behavioral Intention (BI)	0.601	0.857
Enjoyment	0.661	0.854
Perceived Ease Of Use (PEOU)	0.592	0.813
Perceived Risk (PR)	0.778	0.913
Perceived Usefulness (PU)	0.582	0.848
Self Efficacy (SE)	0.759	0.863
Trust	0.719	0.885

Source: Researchers (2022).

According to Joseph F. Hair et al. (2019) if the AVE value is not less than 0.5 then it can be declared valid. Meanwhile, for composite reliability above 0.7, it is declared reliability. The table above proves that the AVE and composite reliability values have exceeded 0.5 and 0.7. Therefore, both tests have met the criteria.

Hypothesis Test (Direct Effect)

Table 2. Direct Effect

Hypothesis	Sample Mean	T-Statistics	P Values	Conclusion
PR → BI	-0,105	2,735	0,006	Significant Negative
SE → BI	0,061	1,525	0,127	Positive Insignificant
PU → BI	0,196	2,553	0,011	Positive Significant
PEOU → BI	0,283	4,316	0,000	Positive Significant
Trust → BI	0,088	1,676	0,094	Positive Insignificant
Trust → PU	0,190	3,528	0,000	Positive Significant
Enjoyment → BI	0,250	3,585	0,000	Positive Significant
Enjoyment → PU	0,392	5,489	0,000	Positive Significant
Enjoyment → PEOU	0,556	9,070	0,000	Positive Significant
Enjoyment → Trust	0,400	7,330	0,000	Positive Significant

Source: Researchers (2022).

H₁: Perceived risk has a significance negative effect on behavioral intention

This study proves that perceived risk has a negative relationship on behavioral intention. These results can be seen in the sample mean of -0.105 with P value of 0.006 and T-statistics of 2.735. A hypothesis can be stated as significant if it has P value of at least 0.05 and the T-statistics value is more than 1.96 (J. F. Hair et al., 2019). It can be concluded that the lower the risk felt by mobile wallet users in Batam City or the smaller the risk that arises when using mobile wallets, the greater the user will return to using these mobile wallets (behavioral intention). Obtaining this relationship is in accordance with research Al-Saedi et al. (2020), Wu et al. (2021), and Bashir & Madhavaiah (2015).

H₂: Self efficacy has a positive and insignificant effect on behavioral intention

This exploration proves that self-efficacy has a positive but not significant effect. These results can be seen in the sample mean of 0.061, T-statistics 1.525 and P-value of 0.127 which has a T-statistics of less than 1.96 and P-value greater than 0.05. This positive influence identifies that the self-efficacy and behavioral intention is unidirectional, but the effect is very small which causes no significance or no effect so that the tutorial provided by the mobile wallets will not affect users to use the

application at all. Exploration research is contrary to Kumar et al. (2020), Al-Saedi et al. (2020), and Zhang et al. (2020).

H3: Perceived usefulness has a significant positive effect on behavioral intention

This finding states that perceived usefulness has a positive and significant relationship on behavioral intention. These results can be seen in the numbers sample mean, T-statistics, and the P-value is 0.196, T-statistics is 2.553, and 0.011 for the P-value. Therefore, it can be stated that mobile wallets in Batam City have a perception that the more they feel the benefits, the more they will return to using the mobile wallets and vice versa. One of the perceived benefits can be in the form of improving the quality of life. Therefore, perceived usefulness plays an important role in getting users to use mobile wallets. This finding is in line with researchers from To & Trinh (2021), Al-Emran et al. (2020), and Zhai & Ma (2021).

H4: Perceived ease of use significance positive effect on behavioral intention

Based on hypothesis testing, it can be seen that there is a significant positive relationship between perceived ease of use and behavioral intention. These results can be seen in the sample mean of 0.283, T-statistics of 4.316, and P value of 0.000. This proves that mobile wallets in Batam City have the perception that they as users feel easy when using mobile wallets. In addition to finding it easy to use, users also consider that its use is simple so that it can be understood and clear which makes users interested in using these mobile wallets. This finding is also in accordance with research conducted by To & Trinh (2021), Chen & Aklikokou (2020), and Zhai & Ma (2021).

H5: Trust has an insignificant positive effect on behavioral intention

Based on the results of hypothesis testing, it has been proven that trust has an insignificant positive relationship on behavioral intention. This can be seen in the sample mean which shows a positive number of 0.088, T-statistics of 1.676, and P-value of 0.094 so that this hypothesis shows an insignificant positive effect, because it has a T-statistics of less than 1.96 and a P value of more of 0.05. This result not in accordance with the research from Saprikis & Markos (2018), Hallem et al. (2021), and Madhavaiah (2015). This relationship can occur because the type of mobile wallets used by mobile wallets in Batam City is more than 1 type. The types mobile wallets used are different, so the security offered by each mobile wallet is also different. Therefore, users

of mobile wallets in Batam City do not trust mobile wallets party which causes no significance to behavioral intention.

H₆: Trust has a significant positive effect on perceived usefulness

This exploration proves this hypothesis test indicate that there is a significant positive effect between trust and perceived usefulness. Because the results of this test show a number of 0.0190 on the sample mean, 3.528 on the T-statistics, and 0.000 on the P value. This proves that mobile wallets in Batam City believe that by providing financial information or personal information to mobile wallets, they will feel the benefits such as being able to complete tasks more efficiently if they provide personal data. For example, by verifying personal data using an ID card. This study is also in accordance with To & Trinh (2021), Zhai & Ma (2021), Saprikis et al. (2018), and Seo & Lee (2021).

H₇: Enjoyment significant positive effect on behavioral intention

This research exploration shows that enjoyment has a significant positive effect on behavioral intention. This event can be observed in the number of sample mean, T-statistics, and P values of 0.250, 3.585, and 0.000, respectively. The results of these findings are also in accordance with research conducted by To & Trinh (2021), Saprikis (2018), and Saprikis et al. (2018). It can be concluded that the enjoyment felt by mobile wallets in Batam City will greatly influence them in making decisions to use mobile wallets. The more they enjoy their use, the more users will want to use mobile wallets. Therefore, enjoyment plays a very important role in using mobile wallets in Batam City.

H₈: Enjoyment has a significant positive effect on perceived usefulness

This exploration proves enjoyment has a significant positive effect on perceived usefulness. This result can be seen in the sample mean of 0.392 while the significance level can be seen in the T-statistics and the P-value of 5.489 (T-statistics) and 0.000 (P-value). This can explain that the enjoyment will be felt when using mobile wallets. When users of mobile wallets feel happy, they indirectly also feel the benefits obtained from using mobile wallets, such as improving their quality of life. For example, when users get discounts or cashback in transactions using mobile wallets, they feel pleasure so that they can improve their quality of life. This research is also supported by To & Trinh (2021), Saprikis (2018), Putra (2021), and Saprikis & Markos (2018).

H₉: Enjoyment has a significant positive effect on perceived ease of use

The results in this study can be seen in the sample mean, T-statistics, and P values, respectively, which show numbers of 0.556, 9.070 (T-statistics), and 0.000 (P-value). It can be concluded that enjoyment found to have a significant positive effect on perceived ease of use. This means that the high value of enjoyment will increase perceived ease of use and vice versa. When users who use mobile wallets find it fun, it will be easy for them to understand how to use it, in fact they will find it very easy to use mobile wallets because they have had fun before. This research is in line with researchers from To & Trinh (2021), Putra (2021), Madhavaiah (2015), Saprikis et al. (2018).

H₁₀: Enjoyment has a significant positive effect on trust

This study shows the mean sample of 0.400, T-statistics of 7.330, and P-value of 0.000. From this figure, it can be stated that enjoyment has a significance positive effect on trust. In addition, these results also show that the higher the value of the enjoyment, the greater the effect on trust. Users who feel happy when transacting using mobile wallets, they also feel safe and believe that in transacting using mobile wallets these pleasant. The results in this study are supported by researchers To & Trinh (2021), Chunxiang (2014), Liu et al. (2021), and S. H. Kim et al. (2020).

Hypothesis Testing (Indirect Effect)

Table 3. Indirect Effect

Hypothesis	Sample Mean	T-Statistics	P Values	Conclusion
Enjoyment→PEOU →BI	0,157	3,820	0,000	Positive Significant
Enjoyment→PU→BI	0,075	2,588	0,010	Positive Significant
Trust→PU→BI	0,036	2,489	0,013	Positive Significant
Enjoyment→Trust→PU→BI	0,014	2,349	0,019	Positive Significant
Enjoyment→Trust→BI	0,035	1,613	0,107	Positive Insignificant
Enjoyment→Trust→PU	0,076	3,133	0,002	Positive Significant

Source: Researchers (2022).

H₁₁: Enjoyment has a significant positive effect on behavioral intention mediated by perceived ease of use

This study found a significant positive relationship between enjoyment and behavioral intention with perceived ease of use as a mediation variable. This can be seen in the sample mean of 0.157 with P value of 0.000 and T-statistics of 3.820. It can be concluded that users of mobile wallets in Batam City who have a sense of pleasure,

users will have some behavior in using them, the more enjoy their use, the more easily users will feel the ease of transacting using mobile wallets which can make them have behavioral intentions in using applications from mobile wallets. Therefore, users who feel pleasure will have behavioral intentions in using mobile wallets because these users find it easy to use or easy to transact so that they can increase behavioral intentions in using mobile wallets. This exploration corresponds to Madhavaiah (2015), Saprikis & Markos (2018), and Tao et al. (2019).

H₁₂: Enjoyment has a significant positive effect on behavioral intention mediated by perceived usefulness

Experimental findings the indirect effect hypothesis show that enjoyment with behavioral intention mediated by perceived usefulness has a significant positive relationship. These results can be seen in the sample mean of 0.075 with P value of 0.010 and T-statistics of 2.588. It can be concluded that when using mobile wallets is fun, users will also get benefits in the form of being able to help them complete their tasks more efficiently, so that it can indirectly help users to use mobile wallets more often. Without the benefits obtained, then the user will have no intention of using these mobile wallets. The findings in this study are in accordance with Tao et al. (2019), Saprikis & Markos (2018), and Madhavaiah (2015).

H₁₃: Trust has a significant positive effect on behavioral intention mediated by perceived usefulness

This exploration proves significant positive relationship between trust and behavioral intention mediated by perceived usefulness. This can be seen in the sample mean, T-statistics, and P-values of 0.036 (sample mean), 2.489 (T-statistics), and 0.013 (P-value). It can be seen that when users feel the benefits obtained by providing personal data, then the user has a sense of trust that by providing personal information the benefits obtained will be greater and make them have some behavior in using mobile wallets. Therefore, perceived usefulness has a very important role between trust and behavioral intention. This exploration is in accordance with research To & Trinh (2021), Chen & Aklikokou, (2020), and Schlaegel (2015).

H₁₄: Enjoyment has a significant positive effect on behavioral intention with trust and perceived usefulness as mediation

This study proves that enjoyment and behavioral intention have a significant positive effect with trust and perceived usefulness as mediation. These results can be seen in the sample mean which shows a number of 0.014 with P value of 0.019 and T-statistics of 2.349 so that there is a significant positive effect. The pleasure felt by mobile wallet users can create user trust which then the user can feel the benefits so that the user has behavioral intentions in using mobile wallets. This study was also supported by several researchers including, Koenig-Lewis et al. (2015), and Kim & Kim (2020).

H₁₅: Enjoyment has an insignificant positive effect on behavioral intention with trust as a mediation

Testing the indirect effect has shown that enjoyment has an insignificant positive effect on behavioral intention with trust as mediation. These results can be seen in the sample mean of 0.035, T-statistics of 1.613, and P value of 0.107. Because when users have to provide their personal data to the mobile wallet to be able to enjoy bank transfers without admin fees, the user's trust is reduced so they have no behavioral intentions in using the mobile wallet. The results of this study are the same as Hallem et al. (2021) and Ye et al. (2019). However, the results of this study contradict of S. H. Kim et al. (2020).

H₁₆: Enjoyment has a significant positive effect on perceived usefulness with trust as the mediation

This exploration proves that enjoyment has a significant positive effect on perceived usefulness mediated by the trust. This can be seen in the sample mean of 0.076, T-statistics of 3.133, and P value of 0.002. It can be concluded, trust plays a very important role in the relationship between enjoyment and perceived usefulness. The enjoyment that users get when using mobile wallets in the form of feeling happy, excited, and happy makes them get several benefits in using mobile wallets so that these users have a sense of trust in mobile wallets. This exploration is in accordance with Koenig-Lewis et al. (2015), Chunxiang (2014), and Seo & Lee (2021).

CONCLUSIONS AND RECOMMENDATIONS

In the explanation above, it can be concluded that the factors that can make users use mobile wallets are the perceived risk that must be low, such as data privacy is safe and not misused, having a sense of pleasure when using or transacting using mobile

wallets, then mobile wallets must easy to use and has benefits such as transaction processing can be done anytime and anywhere. Therefore, mobile wallet providers must pay attention to this because it can affect someone in using mobile wallets. For instructions on the use of mobile wallets (self efficacy) it will not affect users in using mobile wallets. Because users tend to be self-taught so it won't really affect users in using mobile wallets. Then trust does not affect because each mobile wallet has a different level of trust. Therefore, each mobile wallet must be registered with the OJK so that users have confidence in each application.

This study only involved independent and intervening variables. Therefore, further researchers can use moderator variables. Then can also add some independent variables.

REFERENCES

- Al-Emran, M., Al-Marooif, R., Al-Sharafi, M. A., & Arpaci, I. (2020). What impacts learning with wearables? An integrated theoretical model. *Interactive Learning Environments*, 0(0), 1–21. <https://doi.org/10.1080/10494820.2020.1753216>
- Al-Saedi, K., Al-Emran, M., Ramayah, T., & Abusham, E. (2020). Developing a general extended UTAUT model for M-payment adoption. *Technology in Society*, 62(June), 101293. <https://doi.org/10.1016/j.techsoc.2020.101293>
- Bank Indonesia. (2018). *Peraturan Bank Indonesia Nomor 20/6/PBI/2018 tentang Uang Elektronik*. <https://www.bi.go.id/id/publikasi/peraturan/Pages/PBI-200618.aspx>
- Bank Indonesia. (2020a). *Apa itu Uang Elektronik*. <https://www.bi.go.id/id/edukasi/Pages/Apa-itu-Uang-Elektronik.aspx>
- Bank Indonesia. (2020b). *Evolusi Sistem Pembayaran*. <https://www.bi.go.id/id/fungsi-utama/sistem-pembayaran/default.aspx>
- Bashir, I., & Madhavaiah, C. (2015). Trust, Social Influence, Self-Efficacy, Perceived Risk and Internet Banking Acceptance: An Extension of Technology Acceptance Model in Indian Context. *Metamorphosis: A Journal of Management Research*, 14(1), 25–38. <https://doi.org/10.1177/0972622520150105>
- Chen, L., & Aklkokou, A. K. (2020). Determinants of E-government Adoption: Testing the Mediating Effects of Perceived Usefulness and Perceived Ease of Use. *International Journal of Public Administration*, 43(10), 850–865. <https://doi.org/10.1080/01900692.2019.1660989>
- Chunxiang, L. (2014). Study on Mobile Commerce Customer Based on Value Adoption. *Journal of Applied Sciences*, 14(9), 901–909. <https://doi.org/10.3923/jas.2014.901.909>
- Good News From Indonesia. (2022). *Ketahui 5 Dompok Digital Paling Banyak Digunakan di Indonesia 2021*. <https://www.goodnewsfromindonesia.id/2021/11/24/ketahui-5-dompok-digital-paling-banyak-digunakan-di-indonesia-2021>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.

- <https://doi.org/10.1108/EBR-11-2018-0203>
- Hallem, A. P. Y., Abbes, A. P. I., Hikkerova, P. L., & Taga, M. P. N. (2021). A trust model for collaborative redistribution platforms: A platform design issue. *Technological Forecasting and Social Change*. <https://doi.org/10.1016/j.techfore.2021.120943>
- Joseph F. Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *MULTIVARIATE DATA ANALYSIS Multivariate Data Analysis* (8th ed.). Annabel Ainscow.
- Kata Data. (2022). *Bank Indonesia: Transaksi Uang Elektronik RI Tembus Rp 35 Triliun per Desember 2021*. <https://databoks.katadata.co.id/datapublish/2022/01/31/bank-indonesia-transaksi-uang-elektronik-ri-tembus-rp-35-triliun-per-desember-2021>
- Kim, B., & Kim, D. (2020). Exploring the Key Antecedents Influencing Consumer's Continuance Intention toward Bike-Sharing Services: Focus on China. *International Journal of Environmental Research and Public Health*, 1–14. <https://doi.org/10.3390/ijerph17124556>
- Kim, S. H., Song, M. K., & Shim, C. (2020). Storytelling by medical tourism agents and its effect on trust and behavioral intention. *Journal of Travel and Tourism Marketing*, 37(6), 679–694. <https://doi.org/10.1080/10548408.2020.1795046>
- Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and social influence: predicting mobile payment adoption. *Service Industries Journal*, 35(10), 537–554. <https://doi.org/10.1080/02642069.2015.1043278>
- Kontan. (2022). *BI Catat Transaksi Uang Elektronik Senilai Rp 305,4 triliun Sepanjang 2021*. <https://keuangan.kontan.co.id/news/bi-catat-transaksi-uang-elektronik-senilai-rp-3054-triliun-sepanjang-2021>
- Kumar, J. A., Bervell, B., Annamalai, N., & Osman, S. (2020). Behavioral intention to use mobile learning: Evaluating the role of self-efficacy, subjective norm, and whatsapp use habit. *IEEE Access*, 8. <https://doi.org/10.1109/ACCESS.2020.3037925>
- Liu, Y., Gan, Y., Song, Y., & Liu, J. (2021). What influences the perceived trust of a voice-enabled smart home system: An empirical study. *Sensors*, 21(6), 1–22. <https://doi.org/10.3390/s21062037>
- Madhavaiah, irfan bashir C. (2015). Consumer attitude and behavioural intention towards Internet banking adoption in India. *Journal of Indian Business Research*, 7(1), 67–102. <https://doi.org/10.1108/JIBR-02-2014-0013>
- Media Center Batam. (2020). *Transaksi Non Tunai Meningkatkan Selama Pandemi Covid-19*. <https://mediacenter.batam.go.id/2020/06/25/transaksi-non-tunai-meningkat-selama-pandemi-covid-19/>
- Media Indonesia. (2021). *COVID-19 Mewabah, WHO Sarankan Transaksi Digital*. Media Indonesia. <https://mediaindonesia.com/weekend/296138/covid-19-mewabah-who-sarankan-transaksi-digital>
- Mehmet Haluk Koksall. (2016). The intentions of Lebanese consumers to adopt mobile banking. *International Journal of Bank Marketing*, 34(3), 327–346. <https://doi.org/http://dx.doi.org/10.1108/IJBM-03-2015-0025>
- Merdeka, R. (2021). *Jumlah Konsumen Dompot Digital Melonjak Pengguna Butuh Jaminan Transaksi Dan Simpanan*. Rm.Id. <https://rm.id/baca-berita/nasional/80885/jumlah-konsumen-dompot-digital-melonjak-pengguna-butuh-jaminan-transaksi-dan-simpanan>

- Patten, M. L., & Newhart, M. (2018). Understanding Research Methods. In *Understanding Research Methods* (10th ed.). <https://doi.org/10.4324/9781315213033>
- Putra, E. Y. (2021). Instant Shopping – Millennial User in Batam City During Covid-19 Pandemic Services. *Jurnal Riset Bisnis Dan Manajemen*, *14*(1), 1–6. <https://doi.org/10.23969/jrbm.v14i2.3558>
- Saprikis, V. (2018). Examining behavioral intention towards social commerce: An empirical investigation in university students. *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018 - Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional Expansion to Global Growth*, 831–843.
- Saprikis, V., & Markos, A. (2018). Modeling users' acceptance of social commerce. *International Journal of E-Business Research*, *14*(4), 28–50. <https://doi.org/10.4018/IJEER.2018100102>
- Saprikis, V., Markos, A., Zarpou, T., & Vlachopoulou, M. (2018). Mobile shopping consumers' behavior: An exploratory study and review. *Journal of Theoretical and Applied Electronic Commerce Research*, *13*(1), 71–90. <https://doi.org/10.4067/S0718-18762018000100105>
- Schlaegel, C. (2015). Understanding individuals' initial and continue use online auction marketplace. *Management Research Review*, *38*(8), 855–907. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2013-0210>
- Seo, K. H., & Lee, J. H. (2021). The emergence of service robots at restaurants: Integrating trust, perceived risk, and satisfaction. *Sustainability (Switzerland)*, *13*(8). <https://doi.org/10.3390/su13084431>
- Suhartanto, D. (2019). Predicting behavioural intention toward Islamic bank: a multi-group analysis approach. *Journal of Islamic Marketing*, *10*(4), 1091–1103. <https://doi.org/10.1108/JIMA-02-2018-0041>
- Tao, D., Fu, P., Wang, Y., Zhang, T., & Qu, X. (2019). Key characteristics in designing massive open online courses (MOOCs) for user acceptance: an application of the extended technology acceptance model. *Interactive Learning Environments*, 1–14. <https://doi.org/10.1080/10494820.2019.1695214>
- To, A. T., & Trinh, T. H. M. (2021). Understanding behavioral intention to use mobile wallets in vietnam: Extending the tam model with trust and enjoyment. *Cogent Business and Management*, *8*(1). <https://doi.org/10.1080/23311975.2021.1891661>
- Wu, W., Wu, Y. J., & Wang, H. (2021). Perceived city smartness level and technical information transparency: The acceptance intention of health information technology during a lockdown. *Computers in Human Behavior*, *122*(March), 106840. <https://doi.org/10.1016/j.chb.2021.106840>
- Ye, S., Ying, T., Zhou, L., & Wang, T. (2019). Enhancing customer trust in peer-to-peer accommodation: A “soft” strategy via social presence. *International Journal of Hospitality Management*, *79*, 1–10. <https://doi.org/10.1016/j.ijhm.2018.11.017>
- Zhai, N., & Ma, X. (2021). Automated writing evaluation (AWE) feedback: a systematic investigation of college students' acceptance. *Computer Assisted Language Learning*, *0*(0), 1–26. <https://doi.org/10.1080/09588221.2021.1897019>
- Zhang, X., Liu, S., Wang, L., Zhang, Y., & Wang, J. (2020). Mobile health service adoption in China: Integration of theory of planned behavior, protection motivation theory and personal health differences. *Online Information Review*, *44*(1), 1–23. <https://doi.org/10.1108/OIR-11-2016-0339>

Analysis of Factors Affecting Behavioral Intention in Using Mobile Wallets in Batam City

ORIGINALITY REPORT

5%

SIMILARITY INDEX

PRIMARY SOURCES

- | | | |
|---|---|---------------|
| 1 | ejournal.umm.ac.id
Internet | 56 words — 1% |
| 2 | jurnal.ibik.ac.id
Internet | 56 words — 1% |
| 3 | Theodora Zarmpou, Vaggelis Saprikis, Angelos Markos, Maro Vlachopoulou. "Modeling users' acceptance of mobile services", <i>Electronic Commerce Research</i> , 2012
Crossref | 42 words — 1% |
| 4 | ijbmi.org
Internet | 40 words — 1% |
| 5 | e-journal.president.ac.id
Internet | 33 words — 1% |
| 6 | "Recent Advances in Technology Acceptance Models and Theories", Springer Science and Business Media LLC, 2021
Crossref | 32 words — 1% |
| 7 | Karrar Al-Saedi, Mostafa Al-Emran, T. Ramayah, Eimad Abusham. "Developing a general extended UTAUT model for M-payment adoption", <i>Technology in Society</i> , 2020 | 32 words — 1% |

Crossref

EXCLUDE QUOTES	ON	EXCLUDE SOURCES	< 1%
EXCLUDE BIBLIOGRAPHY	ON	EXCLUDE MATCHES	OFF