

HOW PERCEIVED SECURITY INFLUENCES CONTINUANCE INTENTION TO USE MOBILE WALLET

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ABSTRACT: This study's primary goal is to examine the effect of perceived security on mobile wallet users' continuance intention using the Cognitive Model. A survey was conducted, and 230 responses from mobile wallet users were collected through the distribution of online-questionnaire. The data was analyzed using Partial-Least-Square Structural-Equation-Model (PLS-SEM). This study revealed that perceived security directly correlates with satisfaction and attitude but not with users' continuance intention. However, perceived safety still has a critical role in users' decision to continue using the mobile wallet since this study found that satisfaction and attitude lead to users' continuance intention. Moreover, happiness is also the predictor of users' perspectives.

Keywords: Perceived Security; Satisfaction; Attitude; Continuance Intention; Cognitive Model.

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INTRODUCTION

A mobile wallet is one of the mobile payment tools functioning as a replacement for a physical wallet (Sumathy & KP, 2017). It enables users to make a financial transactions using the smartphone as the medium (Ramadan & Aita, 2018). Although amongst other tools of mobile payments (e.g. QRIS), the mobile wallet is the most popular tool in 2021 in Indonesia (Bhwana, 2021), it is still less popular than cash as the payment mode. Based on Fintech Report 2021 (Daily Social, 2021), Indonesians use the money on delivery (COD) rather than digital payment when shopping online. Moreover, two third of Indonesian are reported to have the intention to leave the digital platform when they hear the news about online scamming and data breaches (Entrust, 2022). This shows that Indonesians prioritize the digital platform's security system in adopting digital services, as Nurhayati-Wolff (2021) reported that security concerns are said to be one of the reasons that inhibit users from replacing cash with mobile wallets as the payment mode. Therefore, the mobile payment service providers (e.g., DANA, ShopeePay and GoPay) have invested significantly in improving their platforms' security systems (Fajar, 2022; Fernandez, 2020; Mulyawan, 2020).

Increasing mobile wallets used as a payment mode is imperative for creating financial inclusivity that later affects economic growth (Massi et al., 2019). Financial inclusivity is a state where every member of society has access to various qualified formal financial institutions in real-time, secure and streamlined with affordable costs t. Talwar et al. (2020) stated that mobile wallets offer an easy and convenient way to perform financial transactions with no limitation of location or time. This enables people living in remote areas unreached by formal financial institutions to gain access to financial services. Bae et al. (2012) revealed a positive relationship between access to financial services and income inequality and poverty ratio.

Moreover, to create financial inclusivity in Indonesia, the government has developed the National Strategy for Financial inclusivity. One of the priorities is to strengthen users' protection to improve users' trust in financial services. Therefore, this study addresses the issues about mobile wallet security and investigates the effect of users' perception of mobile wallet security on their satisfaction and attitude and the intention to continue using mobile wallets as the payment mode.

According to Garrouch (2021), perceived security is one of the essential components of financial services. Users of mobile wallet services usually deposit their money and store personal data on the platform, exposing them to cyber crimes (e.g., stolen personal information, theft). It is exacerbated by the inexistence of human interaction during a financial transaction, increasing users' anxiety about using the services. To overcome this, the providers have offered several security measures, such as asking pin and password before accessing the services. Subsequently, these security measures form users' perception of the security of the services, which later affects their decision to adopt and continue using the services (Garrouch, 2021; Susanto et al.,2016). In other words, users

evaluate the security of the mobile wallet before deciding to continue using the service.

The role of perceived security on user behaviour has gained scholars' attention. They confirmed that perceived safety acts as the predictor of users' intention in the pre-adoption stage (Chawla & Joshi, 2019; de Luna et al., 2019; Johnson et al., 2018; Lai & Liew, 2021; Lee & Kim, 2020). However, little attention has been given to the study of perceived security in the post-adoption stage (Lim et al., 2019; Sahi et al., 2021). Garrioch (2021) asserted that maintaining and continuously improving the security of mobile wallets is essential for the continuous use of the services. Santhanamery and Ramayah (2017) stated that due to the experience users have with the services, users' behaviour in the pre-adoption stage may be different in the post-adoption location. Therefore, the study focuses on users' continuance intention in the post-adoption scene is essential.

According to Cognitive Model (COGM) developed by Oliver (1980), consumers' decision to repurchase a product/service depends on their satisfaction and attitude. This study adapts COGM and proposes that the decision to continue using mobile wallet services is determined by users' satisfaction and attitude toward the overall performance of the services. Satisfaction and attitude are two components that impact users' behaviour differently. According to Liao et al. (2009), satisfaction had a profound effect on the behaviour of new users. However, as users continue using the services, the satisfaction falls, while the attitude gradually improves its influence and overtakes satisfaction in the long-term period. In other words, the attitude has a more prolonged effect on behaviour than satisfaction. Therefore, Liao et al. (2009) asserted the importance of determining users' satisfaction and attitude toward the sustainability of the services.

Hence, to understand how users' perceived security affects users' continuous use of the mobile wallet service, this study integrates perceived security with COGM. The novelty of this study is twofold. First, it focuses on perceived safety as the predictor of user satisfaction, attitude, and continuance intention. Second, this study uses COGM as the theoretical foundation. According to Sahi et al. (2021), most studies on mobile wallets apply technological foundation-based theory (e.g. Technology Acceptance Model, Unified Theory of Acceptance and Use of Technology).

THEORETICAL REVIEW

Continuance Intention

The study of continuance intention focuses on measuring users' behaviour in the post-adoption stage. It is defined as users' willingness to continue using a technology-based service in the future (Bhattacharjee et al., 2008). It differs from behaviour intention in the pre-adoption stage, where users decide to adopt a service (Bhattacharjee et al., 2008). Further, they stated that users' intention to continue using the service is shown by their willingness to increase the use of the service in the future and their commitment to using it.

A recent development in technology-based services has stolen the attention of scholars to study the matter as their contribution to the diffusion of the services. As a result, some theories have been developed to better understand users' behaviour after adopting the services. Bhattacharjee (2001) is considered one of the pioneers in studying users' continuance behaviour. He developed the Expectation Confirmation Model of Information Systems (ECM-IS) built upon the theory of Expectation Disconfirmation Theory by Oliver (1980) and Technology Acceptance Model (TAM) by Davis (1980). He argued that users' decision to continue using technology-based services is similar to their decision to repurchase products. Based on ECM-IS, continuance intention depends on users' satisfaction with the past usage and the perceived usefulness of the continued usage. Moreover, ECM-IS is a commonly used theory in studying continued intention (Yan et al., 2021).

However, it is criticized for being dependent only on users' satisfaction to determine users' continuance behaviour. Foroughi et al. (2019) asserted that satisfaction and attitude determine users' behaviour. Therefore, relying on satisfaction or attitude as the central construct connecting users' beliefs and behaviour is inaccurate. Liao et al. (2009) acknowledged the weakness of ECM-IS and developed Technology Continuance Theory (TCT) by integrating three models, ECM-IS, TAM, and COGM, into one model. With this integration, satisfaction and attitude are the central constructs of the theory.

Moreover, Liao et al. (2009) measured the explanatory power of the three models. The study found that COGM has higher explanatory power than ECM-IS and TAM in explaining continuance behaviour. Therefore, this study argued that satisfaction and attitude, two components of COGM, should be the central construct of any theory of continuance behaviour.

Perceived Security

Perceived security is defined as users' perception that the adoption of the new product is safe and that the organization has provided security (Mombeuil, 2020). The elimination of the human role in mobile wallet platforms, a common element in conventional banking services, may be perceived as a risk by users. Shao et al. (2019) stated that the security of the mobile wallet acts as a wall against the risk and uncertainties of using mobile wallets. According to Hassan et al., (2020), providers can achieve a favourable perception of security with the presence of these characteristics in the platform: confidentiality, authentication, data integrity, and non-repudiation. Creating the perception of security is conducted cognitively, influencing the users' emotional and behavioural intentions (Lim et al., 2019). Subsequently, this process results in users' decision to adopt and continue using the services (Garrouch, 2021; Susanto et al., 2016).

Some studies have investigated the effect of perceived security on users' satisfaction. For Example, Gupta et al. (2020), Kumar et al. (2018), and Singh et al. (2017) have confirmed the effect of perceived security on users' satisfaction in the context of mobile wallets. Similar findings were also found in other contexts, such as digital contact tracing apps (Prakash et al., 2021), innovative city services (Abu

Salim et al., (2021), social networking sites (Tran et al., 2019), and mobile banking Aggarwal & Rahul, (2018). Therefore, this study hypothesizes that:
H1a: Perceived security influences the satisfaction of mobile wallet users

The study that analyzes the effect of perceived security on the post-adoption attitude is considered limited. Most studies focus on studying the influences of perceived safety on pre-adoption attitudes in which they have found a relationship between perceived security and users' perspective (e.g., Chawla & Joshi, 2019; Fan et al., 2018; Johnson et al., 2018; Khalilzadeh et al., 2017). In the post-adoption stage, users have experienced the security system provided by the service providers. As a result, it affects their attitude toward the services. Lim et al. (2019) asserted that if users perceive mobile wallets as a fast service, they will use the service rather than other modes of payment. In other words, a favourable perception of security contributes to users' acceptance of the service. Hence, this study argued that there is a direct relationship between perceived safety and users' attitude. Subsequently, the hypothesis is formulated:
H1b: Perceived security influences the attitude of mobile wallet users

Several studies have examined the influence of perceived security on users' continuance intention in various contexts. For Example, Shao, Zhang, Li, et al. (2019) conducted a study on the continuance intention of mobile payment users (e.i., AliPay, WeChat) by integrating a trust-building framework and innovation diffusion theory. They found that perceived security directly influences users' continuance intention. The finding is consistent with Jiaxin Zhang et al. (2019), who examined the effect of perceived security on mobile payment users' continuance intention. Garrioch (2021) investigated mobile wallet users' continuance intention and found that safety affects users' intention to continue using the mobile wallet. This shows that the security system of the mobile wallet services determined users' willingness to continue using the service. Therefore, this study hypothesizes that:
H1c: Perceived security influences continuance intention

Satisfaction

After users decide to adopt a service, they will evaluate its usefulness to make the next decision on whether to continue using it or not. For the evaluation, they use the expectation before the adoption of the service and compare them with the service's overall performance after the adoption. Subsequently, satisfaction emerges as the form of users' positive feelings about the benefits when the performance of the service matches their expectations. Oliver stated that satisfaction is the function of expectation and disconfirmation. In that sense, satisfaction is the users' emotion resulting from a cognitive evaluation of the service (Oliver, 1997). Subsequently, the positive feeling will turn into a positive attitude toward the services. According to Cognitive Model, satisfaction is the predecessor of the post-adoption philosophy Oliver, (1980). Several studies have confirmed the influence of satisfaction on users' attitudes. For Example, employing Technology Continuance Theory (TCT), Foroughi et al. (2019) found

that users' satisfaction affects their attitude toward mobile banking. The influence also emerges on mobile wallet users (Abdul-Halim et al., 2021; Daragmeh et al., 2021). Thus, this study formulates the hypothesis as follows:

H2a: satisfaction affects attitude

Besides attitude, satisfaction influences users' decision to continue using a service. Concluded from the previous studies, satisfaction can predict future value causing it to impact users' intentions (Yang, 2021). Further, they described that satisfied users are more inclined to increase service use and respond positively to the seller. Several studies have demonstrated the influence of satisfaction on users' intention to continue using a service in various contexts, such as mobile wallets (Abdul-Halim et al., 2021; Daragmeh et al., 2021), mobile banking (Foroughi et al., 2019) as well as portable music and parking (Hepola et al., 2020). Therefore, the hypothesis is formulated as follows:

H2b: Satisfaction affects users' Continuance Intention

Attitude

Users' attitude is formed after learning about a product/service, resulting in a favourable or unfavourable attitude towards the product/service. Fishbein and Ajzen (1975) defined the attitude as a "learned predisposition to respond in a consistently favourable or unfavourable manner concerning a given object". It consists of two components, cognitive and affective; the mental is the users' knowledge and understanding of the product/service, and the affective component is their feeling about the product/service (Loo, 2010). Although the process of attitude formulation is similar to satisfaction, they differ in how the experience with the product/service contributes to the formulation. Taylor and Todd (1995) explained that satisfaction results from a particular incident, and the effect is momentary, while attitude covers all experiences and may last longer than satisfaction. Figure 1 compiles all proposal of relationships as in this study.

Moreover, users' post-adoption attitude is shaped by their experience with the product/service in the adoption stage. In other words, the background during the adoption of the mobile wallet shape users' post-adoption attitude toward the mobile wallet. Subsequently, their attitude towards the mobile wallet will determine their future behaviour. Oertzen and Odekerken-Schröder (2019) stated that a favourable attitude leads to positive behaviour, such as continuing to use and give a positive review about the product/services. Previous studies have indicated that attitudes toward mobile wallet contributes to users' intention to continue using the product/service (Abdul-Halim et al., 2021; Cheng et al., 2019; Foroughi et al., 2019; Hepola et al., 2020; Khayer & Bao, 2019; Oertzen & Odekerken-Schröder, 2019; Raman & Aashish, 2021). Thus, this study hypothesizes that:

H3: Attitude affect user continuance intention

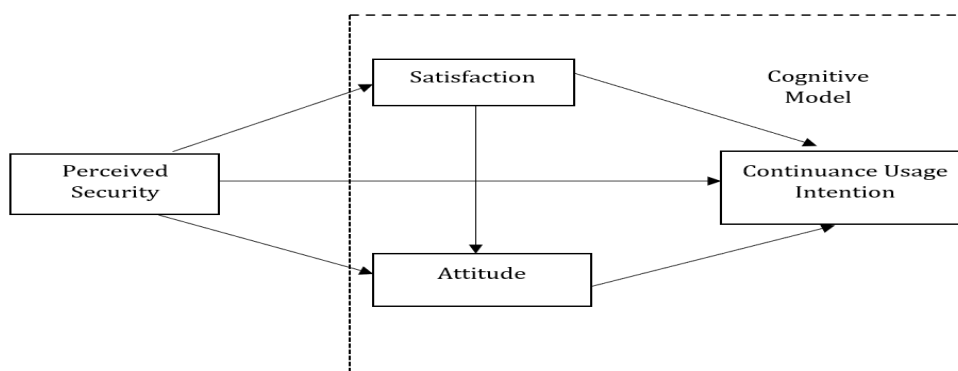


Figure 1. Conceptual Framework

METHODOLOGY

This study is a quantitative study that used a survey for hypothesis testing. The survey is divided into two parts, part one consists of a set of items for construct measurement, and part two comprises questions for the demographic profile of the respondents. For part one of the survey, the things were adapted from previous studies. The measurement of perceived security (PS) was adapted from Garrouch (2021), Shao, Zhang, Li, et al. (2019), and Mombeuil (2020), which consisted of 5 items. It was adapted from Khayer and Bao (2019) for satisfaction, which comprised three things. For attitude, it was adapted from Schmerz et al. (2010) and Abdul-Halim et al. (2021), consisting of 4 items. It was adapted from Bhattacharjee (2001) for continuance usage intention, which comprised three items. The survey has 15 things measured using a seven-point Likert scale with “strongly disagree” to “strongly agree” as the anchors.

The respondents of this study were mobile wallet users. The sampling technique used in this study is purposive sampling. The number of samples is decided following the suggestion of Hair Jr et al. (2019) to multiply the number of items with a number ranging from five to ten. Therefore, the required number of respondents ranges from 75 to 150. Subsequently, using Google Forms, the questionnaire was distributed to Whatsapp, generating 230 respondents. The data is analyzed using Partial Least Square-Structural Equation Model (PLS-SEM) generated from SmartPLS 3.3. According to Hair et al. (2019), PLS-SEM is an appropriate analysis tool when the study aims to examine a theoretical framework from the prediction viewpoint and improve an understanding of an established theory by adding new variables.

RESULTS

This study has 230 respondents, dominated by females (54.8%) with ages ranging from 18 to 22 (34.3%). Based on occupation, there is a slight difference between respondents' employment as college students (34.3%) and civil servants (31.7%). Subsequently, according to their educational background, most respondents are high school graduates (36.1%) and university graduates (30.9%). Based on their income, most of the respondents have a gain of more than 5 million

(37%) and based on the duration of using their mobile wallet, most of them have used the service for more than three months (89.1%). In other words, the respondents of this study are dominated by long-time mobile wallet users. Table 1 illustrates the demographic profile of the respondents in more detail.

Table 1. Respondent Demographic Profile

Variable	Category	Count	Percentage (%)
Gender	Male	104	45.2
	Female	126	54.8
Age	18 - 22	79	34.3
	23 - 27	50	21.7
	28 - 32	25	10.9
	33 - 37	37	16.1
	38 - 42	30	13.0
	43 - 47	5	2.2
	48 - 52	4	1.7
	Occupation	College Student	87
Civil Servant		73	31.7
Private Employee		21	9.1
State-Owned Company Employee		6	2.6
Businessperson		12	5.2
Others		31	13.5
Education		High school Diploma	83
	University	22	9.6
	Post-Graduate	71	30.9
	Doctor	48	20.9
	Others	5	2.2
		1	0.4
Income	≤ 1.000.000	65	28.3
	1.001.000-2.000.000	32	13.9
	2.001.000 - 3.000.000	24	10.4
	3.001.000 - 4.000.000	12	5.2
	4.001.000 - 5.000.000	12	5.2
	≥ 5.001.000	85	37.0
Duration of Usage	Less than three months	25	10.9
	More than three months	205	89.1

Measurement Model

The measurement model aims to measure the reliability and validity of the construct. The reliability of the items is measured using indicator loadings. Hair et al. (2019) stated that the recommended loading value is higher than 0.708, indicating that the construct has greater than 50% explanatory power in explaining the indicator's variance. The reliability of a construct is measured by evaluating the internal consistency using composite reliability and Cronbach Alpha. The recommended value is more significant than 0.6 (Hair et al., 2019).

This study also measures convergent and discriminant validity. Hair et al. (2019) state that a construct convergently validates when the average variance extracted value is above 0.50. It reflects the explanatory power of the construct to explain its items' variance by at least 50 per cent. To measure the discriminant validity of the construct, this study used the Fornell-Larckell criterion, which is that the value of the shared variance of the constructs should be less than their AVE (Hair et al., 2019). Moreover, discriminant validity aims to evaluate the unprecedented power of the construct in the structural model (Hair et al., 2019).

Table 2 shows the result of the reliability and convergent validity measurement, and table 3 shows the development of the discriminant validity measurement. It shows that all the items and constructs reached the recommended values. Therefore, it can be concluded that the things and constructs of this study are reliable and valid as well as distinct from each other.

Table 2. Reliability and Convergent Validity

Constructs/Indicators	Loadings	Alpha	CR	AVE
Perceived Security (PS)		0.905	0.929	0.725
PS1	0.786			
PS2	0.852			
PS3	0.876			
PS4	0.902			
PS5	0.836			
Attitude (ATT)		0.930	0.950	0.827
ATT1	0.903			
ATT2	0.903			
ATT3	0.926			
ATT4	0.906			
Satisfaction (SAT)		0.932	0.956	0.880
SAT1	0.949			
SAT2	0.941			
SAT3	0.924			
Continuance Intention (CI)		0.894	0.934	0.825
CI1	0.896			
CI2	0.947			
CI3	0.881			

Table 3. Discriminant Validity

	ATT	CI	PS	SAT
ATT	0.910			
CI	0.866	0.908		
PS	0.703	0.656	0.851	
SAT	0.856	0.833	0.682	0.938

Before measuring the structural model, Hair et al. (2019) suggested evaluating the collinearity of the construct using the variance inflation factor (VIF). Further, Hair et al. stated that a construct shows a collinearity issue when the value of VIF is more significant than 5.00. As can be seen from table 4, the constructs of this study have no collinearity issues. Therefore, it can proceed to evaluate the structural model.

Table 4. Variance Inflation Factor (VIF)

	ATT	CI	SAT
ATT	-	4.152	-
PS	1.869	2.074	1.000
SAT	1.869	3.930	-

Structural Model Measurement

The measurement of the structural model consists of the measurement of the coefficient of determination (R^2) and cross-validated redundancy (Q^2). The R^2 value reflects the explanatory power of the model, and it is divided into three groups, 0.25 (weak), 0.50 (moderate), and 0.75 (substantial) (Hair 2018). The model of this study can explain 75.9% of attitude, 46.5% of satisfaction, and 78.2% of continuance intention (see table 4). In other words, the model's explanatory power ranges from moderate to substantial. The Q^2 is a tool to measure the predictive accuracy of a model generated from the blinding procedure (Hair et al., 2019). The value must reach above zero for a model to have higher predictive accuracy (Hair et al., 2019). Based on table 4, the Q^2 value of this study's model is higher than zero, indicating a higher predictive accuracy of attitude, satisfaction, and continuance intention.

Table 5. Coefficient of Determination (R^2) and Predictive Accuracy (Q^2)

Measures	Attitude	Satisfaction	Continuance Intention
Coefficient of Determination. R^2	0.759	0.465	0.782
Cross-Validated Redundancy. Q^2	0.618	0.402	0.634

Hypothesis testing involves measuring the significance level and path coefficient. It is generated from the bootstrapping procedure using 5000 sub-sample. Based on table 5, all hypotheses are supported except for hypothesis 1c, which has a path coefficient value larger than 0.00, meaning there is no significant relationship between perceived security and continuance intention.

Table 6. Hypothesis Testing

Relationships	Coefficient (β)	Std. Dev.	t-value	p-value	Hypothesis
H1 (a) PS -> SAT	0.682	0.037	18.379	0.000	Yes
H1 (b) PS -> ATT	0.222	0.056	3.979	0.000	Yes
H1 (c) PS -> CI	0.042	0.053	0.783	0.434	No
H2 (a) SAT ->ATT	0.704	0.053	13.399	0.000	Yes
H2 (b) SAT -> CI	0.304	0.081	4.055	0.000	Yes
H3 ATT -> CI	0.329	0.082	6.773	0.000	Yes

DISCUSSION

This study aims to identify the path connecting perceived security and users' continuance intention to use mobile wallets using the Cognitive Model. This study found that perceived safety has a significant relationship with satisfaction. This indicates that users evaluate the security of the mobile wallet to determine their happiness with the overall services of the mobile wallet. When they are convinced that the provider of the mobile wallet services has provided a secure platform to perform a financial transaction, they will satisfy with the service. This finding is consistent with the previous works of Gupta et al. (2020), Kumar et al. (2018), Singh et al. (2017), Tran et al. (2019), Abu Salim et al. (2021), Prakash et al. (2021) as well as Aggarwal and Rahul (2018) who found that perceived security affects users' satisfaction.

Moreover, not only does perceive security affect users' satisfaction, but it also contributes to the formulation of users' attitudes toward the services. Providers can improve users' acceptance of or attitudes toward the services by providing a secure platform. It also indicates that perceived security influences users' attitudes before and after adoption. Therefore, maintaining the platform's security system throughout the consumer's adoption journey is imperative.

However, perceived security is found to have no connection with users' continuance intention. It shows that having a security system is insufficient to make users continue using the service. However, this finding is contrary to the previous studies (e.g., Jiabin Zhang et al., 2019; Shao, Zhang, Li, et al., 2019) Jiabin Zhang, 2019, Garrouch 2021), it is aligned with the study of Lim et al., (2019) who surveyed the impact of perceived security on continuance intention in the context of mobile fintech payment services. Others report that perceived safety has no direct relationship with users' continuance intention (Gotama & Indarwati, 2019; Kumar et al., 2018; Talwar et al., 2020). Another study in the context of E-banking conducted by Ogedengbe and Abdul-Talib (2020) also confirmed this finding.

Although perceived security has no direct relationship with perceived safety, it remains a critical component. Since it significantly impacts users' satisfaction and attitude, this study reveals that users' satisfaction and attitude lead to users' continuance intention. Several studies (e.g., Abdul-Halim et al., 2021; Daragmeh et al., 2021; Foroughi et al., 2019; Hepola et al., 2020) found that satisfaction is the predictor of users' continuance intention. Some studies also support the finding that users' attitude leads to continuance intention (Abdul-

Halim et al., 2021; Cheng et al., 2019; Foroughi et al., 2019; Khayer & Bao, 2019; Hepola et al., 2020; Oertzen & Odekerken-Schröder, 2019; Raman & Aashish, 2021). This indicates that users' satisfaction with the overall service performance and attitude (e.g., security system) are included in their evaluation set when deciding to continue using the mobile wallet. Hence, there are two paths for perceived security to influence users' continuance intention, i.e., satisfaction and attitude (Fan et al., 2018; Sumathy & KP, 2017).

To emphasize the importance of satisfaction to user behaviours, this study investigates the relationship between happiness and attitude. The finding shows a direct connection between pleasure and mood, indicating that when users are satisfied with the services, they will have a positive attitude toward the service (Abu Salim et al., 2021; Hepola et al., 2020; Wilson et al., 2019). In other words, in the post-adoption stage, users' satisfaction with the experience of using a mobile wallet increases their level of acceptance toward the mobile wallet (Chen, 2013; Chi, 2018; Rastini & Respati, 2021). Daragmeh et al. (2021), Abdul-Halim et al. (2021), and Foroughi et al. (2019) are some studies that found a relationship between satisfaction and attitude.

This study applies theory outside technology foundation-based theory to explain user behaviour on technology-based services. The cognitive model (COGM) application to explain the impact of perceived security on users' continuance intention has 78.2% explanatory power. This study also enriches the study of perceived security's role in the post-adoption stage. The findings show that perceived safety can influence users' satisfaction and post-adoption attitude. It also shows that perceived security has less power to influence user behaviour in the post-adoption stage than in the pre-adoption setting.

This study's practical contribution is enlightened on the importance of perceived security to users' satisfaction and attitude toward the mobile wallet. Therefore, it is suggested that the mobile wallet provider prioritize the services' security system (Choi & Chu, 2001; Hassan et al., 2020; Lim et al., 2019; Ramadan & Aita, 2018). It can be achieved by having more security measures, such as authentication requests when performing financial transactions and reminding the users to keep their passwords secret.

FURTHER STUDY

Despite its contribution to the academic and managerial, this study has some limitations. The number of samples is considered insufficient to formulate a general view of the relationship between perceived security and continuance intention. Therefore, it is suggested to increase the number of samples for future studies. Another limitation of this study is that it only integrates one variable for the first antecedent to the cognitive model; therefore, to enrich the use of COGM in understanding user continuance behaviour, this study advises integrating it with another theory, such as TAM and UTAUT. These behaviors certainly are subject to further explorations of investigations in the light of these theories. Another endeavor can explore the potentialities of the myriad psychological constructions pertaining to human behavior, as some might suggest that

behaviors are facing the biases creeping in during decision making. These interpolations would be left to other aspiring researchers.

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