

How Self-Efficacy Could Relate To Tam Theory For M-Wallet Due To Technophobia In Jakarta And Surrounding Areas

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ABSTRACT

In this era of technology, m-wallet is widely used in Indonesia, m-wallet. However, despite many young tech-savvy users, there are also non-tech savvy users. These are usually older people without self-efficacy in technology, and this phenomenon is called technophobia. So, this research aims to analyze how self-efficacy could relate to TAM theory for m-wallet due to technophobia. This research was distributed in Jakarta & surrounding areas with quantitative data resulting from online questionnaires distributed to 200 respondents who are m-wallet users with convenience sampling. Data was processed using SEM (Structural Equation Modelling) with SmartPLS3 software. The findings in this research confirmed that m-wallet self-efficacy does not have a significant influence on intention to use m-wallet in Jakarta & surrounding areas. Meanwhile, the TAM theory, perceived usefulness, and perceived ease of use have a significant influence on intention to use as they have been proven most of the time in previous literatures.

Keywords

M-Wallet Self Efficacy, Perceived Usefulness, Perceived Ease of Use, and Intention to Use

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Introduction

Some people know it as e-wallet, some know it as m-wallet. They are simply the same. It is just the name "m-wallet" that emphasizes the usage of mobile. Due to electronic and digital are too wide of a term, m-wallet is the narrowed simplification of the term. The idea is a wallet that is even more portable because it is in everyone's smartphones or tablets. As simple as top-up from a bank account to that m-wallet which is connected to users' email and phone number, and it simply works, by either scanning a physical store's QR code to pay or online transfer directly from the m-wallet (Zhou, 2014; Zhou et al., 2018; Tam et al. 2017; Maureen et al., 2019).

Scientifically, m-wallet is a mobile application of service that allows customers to link their debit or credit cards, do transactions when buying goods and services, and even send or request digital money from customers' contacts (Matemba & Li, 2018; Lew et al., 2020). However, the debit/credit card m-wallets are simply just the older m-wallet models. What makes the concept so different in Indonesia is m-wallets have their own digital money stored on users' m-wallet accounts, which can be topped up or withdrawn.

Originally, not all stores in JABODETABEK area (Jakarta, Bogor, Depok, Tangerang, Bekasi in Indonesia) accept all brands of m-wallet brands. However, more and more are accepted, and they are unified in a system of QRIS machines that can accept almost all major QR payment m-wallets. The m-wallets used in JABODETABEK (Indonesia) are GoPay, OVO, DANA, ShopeePay, LinkAja, and many more, which mainly use QR code scan and have the ability to "PayLater" like credit cards.

In this research, we choose TAM (Technology Acceptance Model) variables such as perceived ease of use, perceived usefulness, and intention to use, with the most popular and

significant TAM extension which is compatibility (Mallat, Rossi, & Tuunainen, 2006; Kim et al, 2010).

M-wallet self-efficacy is also another extension variable that fits TAM in the context of m-wallet. This makes sense because users with high self-efficacy would benefit more from technology; hence Igarria and Iivari (1995) created the variable of computer self-efficacy (Shaw, 2014).

There is no doubt that the TAM theory can be used to predict the IU of the m-wallet (Shaw, 2014). For these reasons, researchers chose TAM as the base theory because it has been used for many m-wallet researches. In addition, the model is simple, with only three main variables, which are two mediating variables of Perceived Ease of Use and Perceived Usefulness, and one independent variable of Intention to Use. So, in total of four variables and five hypotheses fit researchers' time limitation.

There is less research connecting mobile wallet self-efficacy with the intention to use m-wallet. It is limited to Duane et al. (2012) and Shaw (2014), which back then m-wallet's concept is generally known for pocket credit/debit card instead of electronic money inside mobile wallets that can be topped up. So authors want to explore the mobile wallet self-efficacy in the context of modern m-wallets, which are slowly replacing debit and credit card usage in Indonesia.

Connecting to MSE (m-wallet self-efficacy), there are still a lot of people in JABODETABEK, Indonesia who have low MSE. This phenomenon of technophobia in Indonesia is rampant but less likely to be talked about and thought about. It is an underestimated phenomenon; which people are shy to admit if they are unable. While there are tech savvy people who are mostly millennials, there are people who are not tech-savvy, aka technophobic, who are mostly Gen X and Baby Boomers.

People with low m-wallet self-efficacy might still use m-wallet, but they would not be able to use it effectively and

efficiently. As a result, outlets that allow m-wallet payments would have a long and slow queue due to many people unable to do simple m-wallet transactions. Simple problems like lack of funds (customers forget to top up their account balance), forgetting PIN, expired data package, forgetting to update the m-wallet app, etc. These personal problems are caused by them being unprepared, which would cause slow transaction and queue traffic. Slowing down other customers, especially tech-savvy customers, and can QR pay their bill in a few seconds, would find it absolutely ridiculous to wait that long.

Currently, m-wallet has become a critical determinant in global economic and e-commerce growth (T. Dahlberg et al., 2015) (Karsen et al., 2019). More and more retail stores have accepted m-wallet payments, especially in Indonesia (restaurants, supermarkets, specialty stores, etc.).

The research objective is to determine how M-Wallet Self-Efficacy could relate to TAM Theory for M-Wallet due to technophobia in JABODETABEK Area, which means how M-Wallet Self-Efficacy could have a direct impact on Intention to Use M-Wallet, mediated by Perceived Ease of Use and Perceived Usefulness.

Theoretical background

Literature review

M-Wallet Self Efficacy

The theory of self-efficacy was first proposed by Bandura (1977), which explains that people that feel low self-efficacy in doing a task may stay away from it; however, people who think that they are capable would perform a task in a ready manner (Lew et al., 2020). Self-efficacy itself is a personal belief that they are capable of using or doing something (Hsu et al. 2011; Duane et al, 2012). Self-Efficacy can be said as the confidence of an individual's competence (Christensen and Knezek, 2015; Bubou & Job, 2020) and it is based on the perception of an individual's magnitude of competence (Frank, 2019; Bubou & Job, 2020). Self-efficacy is individuals' beliefs to solve problems related to information (Hwang et al., 2015; Ali & Wairraich, 2020).

Ever since its birth, self-efficacy has a role that has been studied in various domains of research like acceptance and adoption of technology (Schunk & Pajares, 2009; Hwang, 2003; Scott & Walczak, 2009; Lew et al, 2020). By principle, if users have a perception and belief in their favor to use technology, they are more willing to accept and adopt new technology. (Zhang et al, 2019; Lew et al, 2020). Since self-efficacy deals with perception like personal belief, it could sync and connect with the TAM in the m-wallet context, which fundamentally explains the technology context factors (Lew et al., 2020).

The term Mobile Wallet Self-Efficacy was used in Shaw (2014) in his research model involving TAM in the m-wallet context. This term is even more specific to emphasize the mobile wallet and the self-efficacy to use it. Researchers used this term as the independent variable instead of using self-efficacy, mobile self-efficacy, or computer self-efficacy to fit the context of m-wallet. M-wallet self-efficacy (MSE) is belief and confidence in individuals that they are capable of using m-wallet (Shaw, 2014). In newer research, mobile

self-efficacy in the m-wallet context defines an individuals' perception of their skills to pay using m-wallet (Bailey et al., 2017; Lew et al., 2020).

Perceived Ease of Use

Perceived Ease of Use is a personal feeling of a person to be able to do things effortlessly (Davis, 1989; Shin, 2009; Matemba & Li, 2018). So they believe the thing that they are doing is easy. Perceived Ease of Use is an essential factor for mobile payment because they have to compete with conventional payment methods like cash, debit cards, and credit cards (Schierz et al., 2010; Duane et al., 2012).

In the mobile phone and m-wallet context, Perceived Ease of Use might be called Mobile Ease of Use (MEOU) as used in Lew et al. (2020). MEOU is the magnitude in the perception of easiness in studying and using a mobile gadget or application services (Ooi & Tan, 2016; Lew et al., 2020). In this research, Perceived Ease of Use was used because of many previous studies used as references, used Perceived Ease of Use, mainly in mobile and m-wallet contexts, and it stayed true to the original TAM theory. Even previous literature used by Lew et al. (2020) used the term Perceived Ease of Use. Meaning MEOU is a new model proposed by Lew et al. in 2020 as a modified term name in their modified MTAM model. The variable name of MEOU has not been tested or used a lot for that term.

In Indonesia, m-wallets like GoPay and OVO have to compete against BCA Flazz and Mandiri e-money, which are the widely used top up e-money cards. They work the same because they require to top up. The difference is that m-wallet is an app on a smartphone with a PIN, so more secure than e-money. In case a user's smartphone ever gets stolen, the thief cannot use the m-wallet because it has a PIN access code. With an e-money card, the thief can just straight up use it without a PIN. With the arrival of m-wallets in Indonesia, this shifted e-money card usage into parking and toll, especially for the mandatory toll. E-money cards, which are widely used in restaurants in JABODETABEK, were quickly replaced by m-wallet. Because of the proven ease of use and the cashback promotions.

Perceived Usefulness

Davis (1989) has standardly defined Perceived Usefulness (PU) as the magnitude of personal belief whereby using a specific system will improve the performance of a task (Davis, 1989; Shin, 2009). PU emphasized if a technology can be used to its full benefits.

PU is a non-objective possibility if technology can help a user fulfill his objective (Vijayarathy, 2004; De Luna et al., 2018). PU can also increase consumer's intention to use m-wallet (De Luna et al., 2018). Based on TAM theory, PU is the magnitude of personal belief that a specific system will improve tasks' performance, hence making it effective (Davis, 1993; De Luna et al., 2018).

Intention to Use

Intention to use can be defined by TAM (Davis, 1989; Shaw 2014). Intention to use is predicted by PU & PEOU of TAM

(Davis, 1989; Junadi & Sfenrianto, 2015). Intention to use cannot exist as standalone, it needs to be influenced by factors because it is a dependent variable, it does not have its definition without being affected by other variables. IU is claimed to be based on TAM variables (Slade et al., 2015a; Singh et al., 2020). Intention to Use is originated from Behavioral Intention, which can be defined as the magnitude of user's intention to use something (Fishbein & Ajzen, 1975; Nysveen et al., 2005)

Hypothesis Development

M-Wallet Self Efficacy and Perceived Ease of Use

M-Wallet Self-Efficacy (MSE) positively affected Perceived Ease of Use (PE) in previous literature about the study on smartphone acceptance using TAM (Chen et al., 2011; Duane et al., 2012). In the computer context, Computer self-efficacy was found to strongly and directly affected perceived ease of use, stressing its significance in technology usage decisions (Igarria & Iivari, 1995; Duane et al., 2012). Duane et al. (2012) found that mobile self-efficacy positively influenced PE in the m-payment context in their supported H4a.

Recent literature found out that MSE has a relation with mobile technology ease of use (Sezgin et al. (2018); Nikou and Economides (2019); Lew et al., 2020). Other research on adoption in the mobile application found out that MSE has a positive relation to consumers' perceived ease of use (Keith et al., 2015; Lew et al., 2020). To emphasize, MSE boosts the perception of Perceived Ease of Use in m-wallet adoption context (Lew et al, 2020). Results in Lew et al (2020) found that Mobile Self-Efficacy has a positive and significant influence on Mobile Ease of Use in their supported H7. Results in Bailey et al (2019) also found that mobile payment self-efficacy has a significant effect on perceived ease of use of mobile payment in their supported H2b.

Accordingly, researchers hypothesized:

H1: M-Wallet Self-Efficacy positively affects Perceived Ease of Use

M-Wallet Self Efficacy and Perceived Usefulness

In previous research, users with high mobile SE claimed to get more perceived usefulness from their gadget's usage (Duane et al., 2012; Keith et al., 2011; Shaw, 2014). So, this supported that high m-wallet self-efficacy will result in high perceived usefulness in the m-wallet context. In the computer self-efficacy context, people with high self-efficacy have a perception that they acquired better benefits from using IT (Igarria & Iivari, 1995; Shaw, 2014). However, Shaw (2014)'s H3 is not supported.

Other research on adoption in the mobile application found out that MSE has a positive relation to consumers' perceived usefulness (Keith et al, 2015; Lew et al., 2020). To emphasize, MSE boosts the perception of Perceived Usefulness in the m-wallet adoption context (Lew et al., 2020). Results in Lew et al. (2020) found that M-Wallet Self Efficacy has a positive and significant influence on Mobile Usefulness in their supported H8. Results in Bailey et al. (2019) also found that mobile payment self-efficacy has a

significant effect on the perceived usefulness of mobile payment in their supported H2a.

Accordingly, researchers hypothesized:

H2: M-Wallet Self Efficacy positively affects Perceived Usefulness

Perceived Ease of Use and Intention to Use

Models of TAM claimed that perceived ease of use significantly influences intention to use technology (Dwivedi et al., 2017; Singh et al., 2020). Results in Singh et al (2020) found that PE has positive and direct relation on Intention to Use in m-wallet context in their supported H1.

Previous researches found that PE critically affects Intention to Use (Davis et al., 1989; Venkatesh & Davis, 1996, 2000; Agarwal & Prasad, 1999; Kim et al, 2010). This is supported by the result of Kim et al. (2010)'s in their supported H7b, whereby PE has a significant effect on IU.

Perceived Ease of Use was increasingly important to predict adoption of technology in older people (McCloskey, 2006; Shen, 2019). This is supported by Shen's (2019) results in their supported H1.

Perceived Ease of Use also positively impacts consumer willingness to make mobile payments (Dahlberg et al., 2007; Viehland & Young, 2010; Duane et al., 2012). Duane et al. (2012) found that PE has a positive influence on willingness to m-pay in their supported H3a.

Accordingly, researchers hypothesized:

H3: Perceived Ease of Use positively affects Intention to Use

Perceived Usefulness and Intention to Use

Models of TAM also claimed that perceived usefulness significantly influenced the intention to use technology (Dwivedi et al., 2017; Singh et al., 2020). Singh et al. (2020) found that PU has a positive and direct relation to Intention to Use in the m-wallet context in their supported H2.

Perceived usefulness was important to predict the internet usage in older people (Porter and Donthu, 2006; Shen, 2019). However, this relationship is not tested in Shen's (2019) results.

In the IT context, Intention to Use (IU) is critically determined by Perceived Usefulness (Davis et al., 1989; Kim et al., 2010). This is also supported by Kim et al. (2010)'s results in m-wallet context in their supported H8, which PU has a significant effect on IU.

Previous research also found that PU directly affects IU (Huang et al., 2013; De Luna et al., 2018). This is supported by De Luna et al. (2018) in their supported H5 in a mobile wallet or payment context.

Perceived Usefulness also has a positive impact on consumer willingness to make mobile payments (Dahlberg et al., 2007; Viehland & Young, 2010; Duane et al., 2012). There is a huge willingness to use mobile payments for consumers if they think it has usefulness, which fulfills their transaction needs (Kim et al., 2010; Duane et al., 2012). Duane et al. (2012) found that PU has a positive influence on willingness to m-pay in their supported H3b.

Accordingly, researchers hypothesized:

H4: Perceived Usefulness positively affects Intention to Use M-Wallet Self Efficacy and Intention to Use

The relationship between MSE & IU has correspondence. This means the higher the MSE, the higher the IU M-Wallet (Shin, 2009). However, results in Shin (2009) found that MSE did not have a significant effect on the intention to use in m-wallet context, which their H8 is not supported.

In the mobile advertising context, mobile self-efficacy affects mobile advertising adoption by consumers (Lee et al., 2011; Duane et al., 2012). In the e-commerce context, situation-specific self-efficacy has a positive influence on intention to purchase online (Young et al., 2009; Duane et al., 2012). However, Duane et al. (2012)'s H4b is not supported.

Previous m-wallet research found that self-efficacy affects the behavioral intention to use mobile payment (Boonsiritomachai et al., 2017; Luarn & Lin, 2006; Dasgupta, 2011; Yu, 2012; Al-Saedi et al., 2020). This is supported in Al-Saedi et al. (2020) in the m-payment context in their supported H4, in which the effect is significantly positive.

Self-efficacy, having a role in technological adoption, has been used in many researches of various technology acceptance (Reid and Levy, 2008; Yang, 2010; Liu, Huang, and Chiou, 2012; Faqih, 2013; Lewis and Loker, 2014; Bailey et al., 2017). However, Bailey et al. (2017) do not test the direct effect of MSE to IU but mediated by PE & PU.

A high degree of mobile self-efficacy would trigger high m-wallet adoption intention or intention to use (Lew et al., 2020). Results in Lew et al. (2020) found that MSE has a positive and significant effect on Behavioral Intention in the m-wallet context in their supported H5.

Accordingly, researchers hypothesized:

H5: M-Wallet Self Efficacy positively affects Intention to Use

Research Model

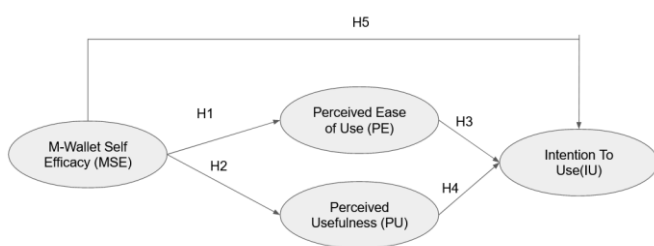


Figure 1: Authors' research model

Research Method

The research subject is m-wallet users. The population in this research is people of JABODETABEK. The research object is m-wallet users in JABODETABEK. JABODETABEK (Jakarta, Bogor, Depok, Tangerang, Bekasi) is an area consisting of major cities on the Java island of Indonesia. Non-probability sampling is chosen for this research, and specifically, convenience sampling will be

implemented to save time and cost. Convenience sampling (haphazard/accidental) is used to survey people who are available in convenience (Zikmund, 2003).

Due to pandemic, where communication is not as easy as it was, to spread the online questionnaires quickly, it will be spread to a lot of M-Wallet users in JABODETABEK who are consent and available. Meaning authors will use connections and mutual connections in large social circles. Hence, convenience sampling is chosen.

This research uses measurement items which are adapted from previous literatures and they are all validated. For M-Wallet Self-Efficacy, five items were adapted from Luarn & Lin (2005), which was adapted in Shaw (2014); however, one is deleted because of it being invalid. Perceived Ease of Use, 5 items were adapted from Shaw (2014) and Kim et al. (2010). Perceived usefulness, 5 items were adapted from Shaw (2014), Schierz et al. (2010), which was adapted in DeLuna et al. (2018), and Kapoor et al. (2015) & Rana et al. (2015), which were adapted in Cabanillas et al. (2020). Intention to use, 5 items were adapted from Venkatesh et al. (2012), which was adapted in Shaw (2014) and Singh et al. (2020).

Researchers will use the Likert scale, which is to examine the degree of agreement and disagreement of the subjects researched on 5 points of scale (Sekaran & Bougie, 2016). This research used the Likert scale, which is formally an ordinal scale due to its popularity in many questionnaires. It is a scale to determine the degree of agreement to disagreement by the subjects or respondents on a 5 points scale (Sekaran & Bougie, 2016). This research used an internet survey, which is part of a self-administered questionnaire. A self-administered questionnaire is a questionnaire given to respondents, so they can fill it themselves instead of being filled by the interviewer (Zikmund, 2003).

Internet survey is literally online self-administered questionnaires that require respondents to click on the survey link to go to the survey website (Zikmund, 2003). The questionnaire was written in the Indonesian language in Google Form and distributed to all m-wallet users in the JABODETABEK area in Java Island, Indonesia, through online channels such as social media and instant messages. The collected data will be calculated in Smart PLS 3 Software because of multiple regression, so it needs to be calculated in SEM (Structural Equation Modelling).

The most appropriate sample sizes for most researches are greater than 30 and fewer than 500, which is one of Roscoe's (1975) rules of thumb (Sekaran & Bougie, 2016). Hair et al., (2010) proposed that 10:1 ratio is the appropriate sample size technique or 1 item for 10 samples, or in other words, "10 times rule" which has been largely used in PLS-SEM (Partial Least Squares - Structural Equation Modelling) as estimation method of minimum sample size (Kock & Hadaya, 2018). This research has 20 items, multiplied by 10, whereby sample size is 200. Siddiqui (2013) proposed that 200 sample size is required for 10 items, 250 sample size is required for 25 items (Siddiqui, 2013). Since there are 20 items, 200 sample sizes would be appropriate. Therefore, sample sizes of 200 were determined. However, in the final, only 19 items are used due to MSE5 is invalid.

Table 1: Authors' items construct

Construct	Items	References
M-wallet Self Efficacy (MSE)	MSE1: I'm capable of using m-wallet, if there is no one around to guide me.	Luarn & Lin (2005), Shaw (2014)
	MSE2: I'm capable of using m-wallet, if I have never used something like it previously.	
	MSE3: I'm capable of using m-wallet if I had seen other people using it before me.	
	MSE4: I'm capable of using m-wallet if I could ask someone to teach me if I don't understand.	
Perceived Ease of Use (PE)	PE 1: Paying with m-wallet would be as easy as using actual payment card	Shaw (2014), Kim et al (2010)
	PE 2: Understanding how to pay using m-wallet would be clear	
	PE 3: Learning to pay with m-wallet would be easy for me	
	PE 4: I would easily become skillful at using m-wallet	
	PE 5: Procedure of m-wallet payment would be flexible	
Perceived Usefulness (PU)	PU 1: Using m-wallet is useful for my daily life	Shaw (2014), Schierz et al. (2010); De Luna et al. (2018), Kapoor et al. (2015); Rana et al. (2015); Cabanillas et al. (2020)
	PU 2: Using m-wallet is more practical for me	
	PU 3: M-wallet would make my life easier	
	PU 4: Using m-wallet helps me pay quicker	
	PU 5: I use m-wallet for variety of transactions.	
Intention To Use (IU)	IU1: I plan to use m-wallet in the future.	Venkatesh et al. (2012); Shaw (2014); Singh et al. (2020)
	IU2: My payments using m-wallet would keep increasing in the future.	
	IU3: I would use m-wallet immediately, if there is an opportunity.	
	IU4: I will always prioritize using m-wallet than other payment methods	
	IU5: I intend to use m-wallet on regular basis	

Results and Discussion

Respondents Profile

Table 2 : Profiles of Respondents

Demographic Variable	Categories	Amount	Percentage
Gender	Male	97	48,5%
	Female	103	51,5%
	Total	200	100%
Age	17-24	55	27,5%
	25-30	73	36,5%
	31-35	13	6,5%
	36-40	22	11%
	41-49	18	9%
	50+	19	9,5%
	Total	200	100%
Current Status	Employees	121	60,5%
	College student	39	19,5%
	Others	23	11,5%
	Entrepreneur	17	8,5%
	Total	200	100%
Domicile	Jakarta	80	40%
	Bogor	5	2,5%
	Depok	7	3,5%
	Tangerang	100	50%
	Bekasi	8	4%
	Total	200	100%
	Frequency (usage in last month)	< 3 x	26
3 - 5 x		64	32%
6 - 8 x		27	13,5%
> 8 x		83	41,5%
Total		200	100%
Brands used	GoPay	167	28,4%
	OVO	174	29,6%
	Dana	95	16,2%
	ShopeePay	111	18,9%
	LinkAja	30	5,1%
	Others	10	1,7%

This table demonstrates the profile of respondents in the research. There are 2 options for gender female and male; 6

options for age 17 - 24, 25 - 30, 31 - 35, 36 - 40, 41 - 49 and 50+ years old; 4 options for current status is Entrepreneur, college student, employees, others; 5 options for domicile Jakarta, Bogor, Depok, Tangerang and Bekasi (JABODETABEK). There are 4 options for frequency < 3, 3 - 5 x, 6 - 8 x, 8 <. There are 6 options for Brands used, which are Gopay, OVO, Dana, ShopeePay, LinkAja, Others. It can be concluded that more females use m-wallets in JABODETABEK. The data collected above show that 51,5% of females use m-wallet and 48,5% of males use m-wallet in JABODETABEK. The majority of people using m-wallet in JABODETABEK are 25-30 years old. The data show that 25-30 years old have dominated 36,5%.

However, the number of people using m-wallets that are 17 - 24 years old has dominated 27,5% in second place. The average majority who use m-wallets based on current status are employees, which are 60,5%. The majority of people using m-wallets in Tangerang have dominated 50%. The majority of people using m-wallet in JABODETABEK more than 8 times in the last month have dominated 41,5%. The data collected above show that 29,6% used OVO and 28,4% used GoPay, of which the 2 are the most widely used m-wallets in JABODETABEK. Rarely anyone in JABODETABEK only used one brand of m-wallet; out of 200, people who only used GoPay are 13, and people who only use OVO are 15.

Outer Model Analysis

Table 3: Outer Model Analysis

Variable s	Items	Factor Loadings	CA*	CR*	AVE
M-Wallet Self Efficacy (MSE)	MSE1	0.856	0.784	0.855	0.601
	MSE2	0.867			
	MSE3	0.755			
	MSE4	0.591			
Perceived Ease of Use (PE)	PE1	0.634	0.848	0.893	0.628
	PE2	0.862			
	PE3	0.848			
	PE4	0.839			
	PE5	0.757			
Perceived Usefulness (PU)	PU1	0.867	0.925	0.944	0.771
	PU2	0.875			
	PU3	0.921			
	PU4	0.881			
	PU5	0.845			
Intention To Use (IU)	IU1	0.799	0.873	0.908	0.663
	IU2	0.799			
	IU3	0.796			
	IU4	0.816			
	IU5	0.860			

The method used is CFA (Confirmatory Factor Analysis) to test validity and reliability. The variables and items used are valid and reliable. Proven by each item and variables are more than 0.5. Each variable also has Cronbach Alpha,

Composite Reliability, Average Variance Extracted (AVE) more than 0.5.

Composite reliability (CR) has to be more than 0.7 (Hair et al., 1998; Chang et al., 2009). Which all of the CR are indeed above 0.7, and they are considered reliable. Factor loading and AVE above 0.5 are considered valid (Hair et al., 1998; Chang et al., 2009), Which all of the items have > 0.5 factor loading and all of the variables have > 0.5 AVE. Cronbach Alpha > 0.6 & 0.7 (Taber, 2017) are considered acceptable, which all of the variables are above 0.7. To be more specific, the range is fairly high, being in the range of 0.76 and 0.95 (Taber, 2017).

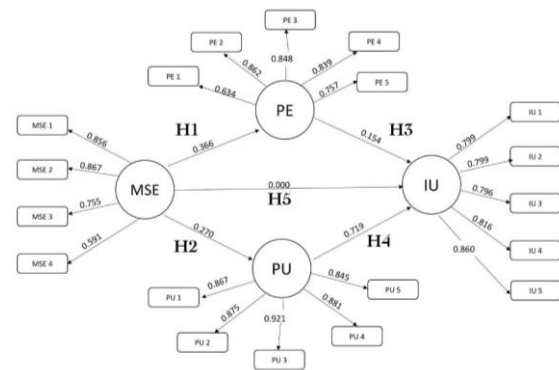


Figure 2: Outer Model

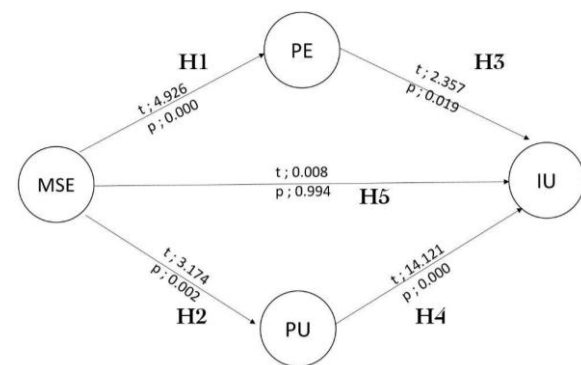


Figure 3: Final Structural Model

Results of Hypothesis Testing

M-Wallet Self Efficacy has a significant effect on Perceived Ease of Use. Because p-value= 0 < 0.05 alpha and t-stat = 0.4926 > 1.96 t-table, this concludes that H1 is accepted. This result is consistent with past results from Lew et al. (2020), Duane et al. (2020), and Bailey et al. (2019) in the mobile wallet or payment context. This means the self-confidence in someone's capability to use an m-wallet would positively influence the perception of how easy it is to use an m-wallet. By being tech-savvy, they will find it easy to use and master m-wallet.

M-Wallet Self Efficacy has a significant effect on Perceived Usefulness. Because p-value= 0.002 < 0.05 alpha and t-stat = 3.174 > 1.96 t-table, this concludes that H2 is accepted. This is consistent with past results from Lew et al. (2020) and Bailey et al. (2019). This means the self-confidence in

someone's capability to use an m-wallet would positively influence the perception of usefulness in using an m-wallet. By being tech-savvy, they can get more benefits and functions in m-wallet.

Perceived Ease of Use has a significant effect on the Intention to Use m-wallets. Because $p\text{-value} = 0.019 < 0.05$ alpha and $t\text{-stat} = 2.357 > 1.96$ t-table, this concludes that H3 is accepted. This is consistent with past results from Singh et al. (2020), Kim et al. (2010), Duane et al. (2020) in a mobile wallet or payment context, and Shen (2019) in communication technology and old people context. This means the more people find m-wallet easy, the more they will use them.

Perceived usefulness has a significant effect on the Intention to Use m-wallets. Because $p\text{-value} = 0.000 < 0.05$ alpha and $t\text{-stat} = 14.121 > 1.96$ t-table, this concludes that H4 is accepted. This is consistent with past results from Singh et al. (2020), Kim et al. (2010), Duane et al. (2012), and De Luna et al. (2018) in the mobile wallet or payment context. This means, the more the usefulness felt by users in m-wallet, the more they will use them.

Results show that M-Wallet Self Efficacy does not have a significant effect on the Intention to Use m-wallets. Because $p\text{-value} = 0.994 > 0.05$ alpha and $t\text{-stat} = 0.008 < 1.96$ t-table, this concludes that H5 is rejected. This contradicted the results of Al-Saedi et al. (2020), which was tested in Oman, and Lew et al. (2020), which was tested in Malaysia. However, this is consistent with results in Duane et al. (2012), who tested Irish smartphone users via an online survey in Ireland. The MSE's impact on willingness to m-pay was not significant in their unsupported H4b (Duane et al., 2012), which means people do not have to be tech-savvy to use m-wallet. They do not have to understand m-wallets to use them, and a lack of self-efficacy, expertise, and capability will not prevent users from using m-wallets. There could be a similar cultural dimension or even mindset between Irish people and Indonesian people, which makes this hypothesis rejected.

This result is also consistent with Shin (2009), who tested Korean university students and lecturers. This might indicate a similar cultural dimension mindset between Indonesian people and Korean people.

Conclusion

This research aims to find out how M-Wallet Self-Efficacy could relate to TAM Theory for M-Wallet due to technophobia in JABODETABEK Area, which means how M-Wallet Self-Efficacy could have a direct impact on Intention to Use M-Wallet, mediated by Perceived Ease of Use and Perceived Usefulness. Moreover, it turned out M-Wallet Self-Efficacy has a significant effect on Perceived Ease of Use and Perceived Usefulness. However, M-Wallet Self-Efficacy does not have a significant effect on the Intention to Use m-wallet in Jakarta and the surrounding areas.

Using a quantitative method & convenience sampling on 200 m-wallet users (respondents) in Jabodetabek. The number of female respondents is slightly higher than the male respondents, and most of them are 17-24 and 25-30. Testing 4 variables (M-Wallet Self-Efficacy, Perceived Ease of Use and Perceived Usefulness, and Intention to Use),

whereby MSE is the independent variable, PE & PU are mediating variables, and IU is the dependent variable. The correlations between these variables backed by past research built five hypotheses in which the only one is rejected and not supported (H1). All of the variables and items are proven valid and reliable.

TAM theory, which involves PE, PU, and IU, are proven to be consistent as PE and PU usually have significant and positive effects on IU. MSE, which is rare to be tested to affect PE significantly, and PU is supported by the results and past research, which are Duane et al. (2012) in Ireland and Shin (2009) in South Korea.

Some research, like Al-Saedi et al. (2020) in Oman and Lew et al. (2020) in Malaysia, found that MSE has a significant effect on IU. This indicate that Oman and Malaysian m-wallet users are more tech savvy than Indonesia due to their high m-wallet self-efficacy.

Implication

The main hypothesis that researchers want to prove, which is that MSE positively affects IU, is rejected. This makes sense in Indonesia, where technophobia is rampant. Many people from Gen X and boomers aren't tech savvy. Nevertheless, Indonesians welcome new technology innovations and will adapt to using it, especially if it is trendy, without fully understanding.

For example, housewives like to shop with m-wallets with promos; however, they do not fully understand the system. They seem to have difficulties in simple problems like forgetting their PIN, forgetting to top up or insufficient funds, forgetting to update the app, no internet services or their mobile data plan has expired or run out of data plan. Usually, it's up to the shop clerks to solve the problem. This is a huge problem, because the shop would be crowded with unnecessary lines.

A lot of them are m-wallet users; however, they do not have the m-wallet self-efficacy to use m-wallets and always need assistance. However, what is really surprising is that the majority of the respondents are 25-30 and 17-24. Meaning they are a lot of millennials and gen Z who are not tech-savvy. The majority of respondents are also employees and females. Usually, the stereotype is, females are less tech-savvy than males, and most of the time, they are the ones who need assistance in shops during transactions.

In Indonesia, people who are not advanced enough to use technology are called "gaptek" aka "non-tech-savvy", which is the opposite of "tech-savvy". So, without understanding much about m-wallets, it does not prevent them from using m-wallets or having an intention to use them.

So, the managerial implication, which m-wallet brands such as GoPay and OVO could guide the users of the simple way to use m-wallet. UI should be made simple and easy, so any Indonesian people can have the self-efficacy to use and master m-wallets without having to go through difficulties in malls or overloaded outlets. There should be clear tutorials in m-wallet apps to show users with low self-efficacy how to get things done. Or some creative short viral YouTube or Instagram videos.

They also need to conduct field research, what causes people with low m-wallet self-efficacy to keep forcing themselves to use m-wallet but unable to use it effectively in

stores, and people would have to wait in lines for m-wallet payment, which is not time efficient and why they cannot seem to improve their self-efficacy at all to be tech-savvy.

That is the problem of technophobia in Indonesia as if a lot of Indonesian people are still conservatives and completely blinded by technology. Ironically this happened in Tangerang and Jakarta, where they are supposed to be the modern areas of Indonesia, which actually support m-wallets first.

Limitations & Recommendations

With all of the information, results, explanations conducted by the researchers, this research still has limitations and is far from perfect. First of all, this research only covers the JABODETABEK area in Indonesia, covering most of the Java Island in Indonesia. Being an archipelago country, other islands and regions might have different results. The data mostly covers m-wallet users of young employees and college students in Jakarta and Tangerang, whereby the information might represent them in a nutshell, not on a broad generalization of Indonesia. Second, there are absolutely other variables which can be used in this research to expand and enrich the TAM extension, the ones here might not be broad enough due to time limitations.

Based on the limitations above, there are the recommendations for future researchers interested in developing this research topic. Future researchers could research m-wallets and the technophobia phenomena from other countries with heavy m-wallet usage such as China, India, and Singapore, or maybe research USA m-wallets because there is not a lot. They can also improve this research by testing the hypothesis on another island like Borneo, Sumatra, Papua, etc. They can also focus on 1 brand, or 1 generation, or finding the contrast between the young and the old generation's perception of m-wallet and technophobia.

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