

Integration of technology acceptance model (TAM) and theory of planned behavior (TPB): An e-wallet behavior with fear of covid-19 as a moderator variable

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ABSTRACT

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E-wallet usage in transactions during the Covid-19 pandemic is a cashless movement that supports breaking the chain of transmission of the Covid-19 virus. Intention to use E-wallet during the pandemic is high due to the stay-at-home recommendation that was enforced since the beginning of the breakdown of the first case in Indonesia. Several studies on technology acceptance have been carried out and this study presents a research framework by integrating technology acceptance model (TAM) and theory of planned behavior (TPB) to obtain more comprehensive results to increase technology acceptance intentions by adding virus fear and risk perception to the models that have been tested previously, since the research was conducted when the pandemic is ongoing. The results reveal that perceived usefulness, perceived ease of use, and perceived risk have a direct or indirect effects on attitudes toward using and behavioral intention to use, moderating results of fear of covid-19 on attitudes and intentions as well was found to significantly increase behavioral intention to use E-wallet during the Covid-19 pandemic.

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1. Introduction

Changes in transaction behavior using E-Wallet in a pandemic situation is one of the steps to support the cashless society movement launched by all countries to anticipate the spread of the Covid-19 virus. This movement was well received by the people in Indonesia as well as the Province of Bali with an increase in contactless non-cash transactions, one of which was the use of E-Wallet, in the second quarter of February 2020. This increase was not significant due to the risk concerns of the fintech platform. This behavioral change can be identified as a technology acceptance model (TAM). The theory develops a framework of thought regarding the intention to use information technology based on perceived usefulness and perceived ease of use (Dulloo et al., 2005). Several previous research results reveal that perceived usefulness and perceived ease of use have a significant positive effect on attitudes toward using technology, and behavioral intention to use (Amoroso & Watanabe, 2012; Cabanillas et al., 2014; Wu & Ke, 2015; Oentario et al., 2017; Wu & Chen, 2017). This situation arises since the benefits of technology are indeed quite felt in today's highly dynamic life (Oentario et al., 2017; Ma'ruf, 2018). In another study it was revealed that online shopping was actually beneficial, but students did not intend to do it (Juniwati, 2014). Research GAP is also still found in this study (Pavlou, 2003; Azkariandhi & Zaky, 2018); which revealed that perceived ease of use did not affect students' intentions to transact online or through e-commerce. Chayomchai et al. (2020) revealed that apart from perceived usefulness and perceived ease of use, risk considerations are also an important factor in technology adoption, especially during the pandemic, although other studies have found that perceived risk does not affect behavioral intention to use technology (Aldhmour et al., 2016). In pandemic conditions, fear of viruses is categorized as an adaptive emotion that mobilizes

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energy in individuals to deal with potential threats (Mertens et al., 2020). Fear of a disease has an impact on changing intentions in using a product or service. Changes in intention will occur when there is an impulse of fear regarding health conditions, with these conditions, consumers will be willing to make changes to their intentions (Al-Marouf et al., 2020; Yuen et al., 2020).

This empirical study explores changes in the behavior of E-wallet users during the Covid-19 pandemic, so it is hoped that the results of this study bridge the gap (research GAP) in the literature on the integration of TAM (Technology Accepted Model) and TPB (Theory of Planned Behavior), in measure and improve behavioral intention to use E-Wallet in relation to the Covid-19 pandemic situation in Bali Province.

2. Literature Review and Novelty

2.1 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior is a further development of The Theory of Reasoned Action (TRA). Ajzen (2005) explains in Theory of Planned Behavior that a person can act based on intentions or intentions only when that person has control over his behavior. Perceived Behavior Control (PBC) was added by Ajzen (1998) as a construct that does not yet exist in TRA. This additional variable changes TRA to TPB. However, both TRA and TPB still consider a person's best predictor of behavior to be due to intention. Ajzen (1991), states that a person's behavior is not only influenced by individual control. However, there are two things that can influence a person's behavioral intentions (intentional behavior), attitudes toward behavior and subjective norms of behavior. Venkatesh et al. (2012) define behavioral intention as a person's intention to use a technology continuously assuming they have access to the system. So, behavioral intention can be interpreted as behavior carried out by someone who is measured by the strength of his intention.

2.2 Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) focuses on the behavioral characteristics of individuals to use an application system or information technology, with a relationship to the available variables (Davis et al., 1989). Based on the findings reported in empirical research, there are two main factors that influence user attitudes: perceived usefulness and perceived ease of use. Perceived usefulness describes a person's level of belief in the use of a technology in which the technology can maximize their work (Wallace & Sheetz, 2014). According to Nasri and Charfeddine (2012), perceived ease of use is a person's belief that the use of a technology can be easily used and understood. Many previous studies that have expanded the study of TAM to explain the acceptance or use of online technology models revealed by several researchers (e.g. Wallace & Sheetz, 2014; Wu & Ke, 2015; Wu & Chen, 2017; Aldhmour et al., 2016; Silva et al., 2018) in their research carried out the integration between TAM and TPB to strengthen the acceptance of online learning technology.

In conditions of a global pandemic, risk is a consideration for users in using technology. Kaur and Arora (2021) revealed that perceived risk is defined as a customer's perceptions of one's concerns about the loss of personal control or personal information that can hinder the adoption of banking technology. Risk can create fear of unexpected and extraordinary situations such as disease outbreaks (Pakpour & Griffiths, 2020). This empirical study expands TAM by adding a perceived risk construct, this is because transacting using online technology is full of uncertainty (Ahorsu et al., 2020) considering that stay at home conditions force users to transact more online, even though they are aware of the risks and arising from the use of the technology (De et al., 2016) but they prefer to accept the risk than contracting the virus in this global Covid-19 pandemic situation (Bae et al., 2021).

A person's attitude in using technology can be categorized as a positive or negative feeling when carrying out an activity or action in a system, a person's attitude of acceptance or rejection because of using a technology system in meeting his work needs is called an attitude toward using (Kanuk, 2008).

This study proposes novelty, namely the addition of the perceived risk variable as an antecedent of the TAM (Technology Acceptance Model) and the fear of Covid-19 variable, because the study was conducted during a pandemic and tested when the incident was taking place. Fear of Covid-19 will be tested as a moderator to increase the positive attitude toward using behavioral intention to use E-Wallet, this is because there is still a research gap between attitude toward using and behavioral intention to use. The TAM and TPB integration model in this study is a development of the model by Ma'rif et al. (2005), Wu and Ke (2015), Aldhmour et al. (2016), Wu and Chen (2017) and Chao (2019).

3. Research Model and Hypotheses

This study develops an integrated model of TAM and TPB, where the relationship between the six variables will provide a reference for a new conceptual model that is integrated by developing nine hypotheses whose results provide an empirical model that describes behavioral intention to use E-Wallet mediated by attitude toward using and in moderation by fear of Covid-19.

3.1 Perceived Usefulness

Nasri and Charfeddine (2012) define perceived usefulness, namely the extent to which a person believes that using a technology will be beneficial to increase the effectiveness of his work. This concept also describes the benefits of the system for users related to productivity, job performance, effectiveness, and overall usefulness, so that consumer perceptions of usability will have a positive impact on consumer attitudes (Ma'ruf et al., 2005; Amoroso & Watanabe, 2012; Mulyani & Kurniadi, 2015; Oentario et al., 2017; Rahmayanti et al., 2021). Thus, we propose the following research hypotheses:

H1: *Perceived usefulness (PU) has a positive effect on attitude toward using (ATU).*

H4: *Perceived usefulness (PU) has a positive effect on behavioral intention to use (BIU).*

3.2 Perceived Ease of Use

The TAM theory states that the perceived ease of use variable is an important determinant of the attitude variable. This concept describes the ease of the system for its users related to being flexible, clear and understandable and easy to use as a whole, so that consumers' perceptions of convenience will have a positive impact on consumer attitudes and intentions (Ma'ruf et al., 2005; Sidharta & Sidh, 2014; Wu & Chen, 2017; Oentario et al., 2017; Sana et al., 2019; Al-Marouf et al., 2020; Dewi et al., 2020; Miandari et al., 2021; Rahmayanti et al., 2021). Different research results say that perceived ease of use does not affect students' intention to transact online and e-commerce (Gefen et al., 1997). Thus, we will propose research hypotheses as follows:

H2: *Perceived ease of use (PEoU) has a positive effect on attitude toward using (ATU).*

H5: *Perceived ease of use (PEoU) has a positive effect on behavioral intention to use (BIU).*

3.3 Perceived risk

Perceived risk is defined as a customer's perceptions of uncertainty and undesirable consequences in carrying out activities (Featherman & Pavlou, 2003). Several researchers suggest three main factors that influence the adoption of mobile banking; such as perceived risk, security and trust (Lafraxo et al., 2018). Some studies, suggest that perceived risk has a negative and significant influence on the attitude and behavioral intention of online shopping sites, other research empirically proves that perceived risk has no effect on intention to use technology (Hsu, 2012; Moshrefjavadi et al., 2012; Nunkoo et al., 2013; Juniwati, 2014; Indiani et al., 2015; Fortes et al., 2017; Bae et al. 2021; Rahmayanti et al., 2022). This situation is expected to arise due to the situation of online transactions which are full of uncertainty. Users, in this case the buyer, will usually reduce the risk of financial loss by minimizing the transaction value (Ahorsu et al., 2020). Thus, we design the research hypothesis as follows:

H3: *Perceived Risk (PR) has a negative effect on attitude toward using (ATU).*

H6: *Perceived Risk (PR) has a negative effect on behavioral intention to use (BIU).*

3.4 Attitude Toward Using

Perceptions of consumer attitudes towards the intensity of using the system that can increase the effectiveness of their work can psychologically encourage the user to accept the use of technology in their work. In previous studies, attitude was the strongest predictor in influencing intention to use technology (Setyawati, 2020; Al-Marouf et al., 2020; Chayomchai et al., 2020; Christina & Yasa, 2021; Sánchez-Cañizares et al., 2021; Yasa et al., 2022). In their role as mediators, Wu and Ke (2015) and Bae and Chang (2021) in their research suggest that attitude is a strong and significant mediator between perceived usefulness, perceived ease of use, and perceived risk on behavioral intention to use. This finding is supported by the research of Taghrir et al., 2020, which found attitudes can act as a mediator in strengthening the influence on intention to make online purchases during lockdown conditions. Thus, we propose the following research hypotheses:

H7: *Attitude toward using (ATU) has a positive effect on behavioral intention to use (BIU).*

H8: *Attitude toward using (ATU) plays a role in mediating the effect of perceived usefulness (PU), perceived ease of use (PEoU), and perceived risk (PR) on behavioral intention to use (BIU).*

3.5 Fear of Covid-19

The oldest tool used to change behavioral intentions is fear, historically fear has been used by controlling forces, to force people to adopt certain attitudes followed by behavioral intentions (Al-Marouf et al., 2020). Yet another study found that consumers are very reluctant to change, habits are stronger than intentions (Ahorsu et al., 2020). Although changes in intentions may occur, habits can still hold consumers back for their habit choices (Vermeir & Verbeke, 2006; Yuen et al., 2020). So Fear of Covid-19 was added as a moderator to strengthen the influence of attitude on behavioral intention to use. From the results of the research above, we propose the following research hypotheses:

H₉: Fear of Covid-19 can moderate the effect of attitude toward using (ATU) on behavioral intention to use (BIU).

From the hypothesis above, the research concept framework can be described as follows:

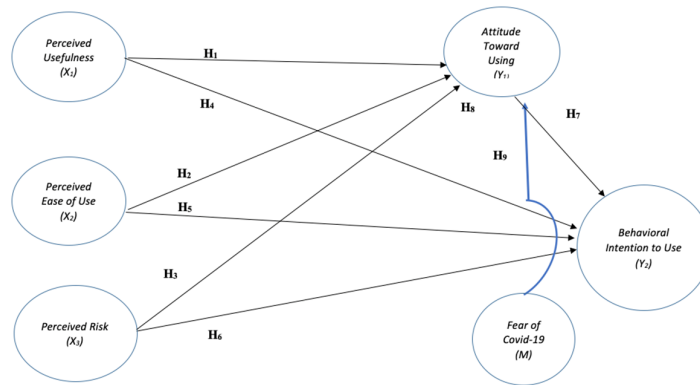


Fig. 1. Research Concept

4. Research model

This empirical study uses surveys to test the hypotheses formulated in the previous section, in this section we will discuss the development of questionnaires and data collection. The questionnaire in this study refers to previous studies, where each questionnaire item is measured using a Likert scale with a value of 1-5, with categories from “strongly disagree” to strongly agree”, the reference items of the questionnaire used in this study can be summarized as the following table:

Table 1

Types of Research Questionnaires

No	Variable	Total Item	Questionnaire Reference Source
1.	PU	6	Venkatesh et al.,2003; Jogiyanto (2008); Cabanillas et al., 2014; Ho et al., 2020
2.	PEoU	6	Jogiyanto (2008); Nasri & Charfeddine, 2012; Juniwati, 2014; Ho et al., 2020.
3.	PR	3	Featherman & Pavlou, 2003; De et al., 2016; Bae et al. 2021
4.	ATU	3	Kanuk, 2008; Cabanillas et al., 2014; Oentario et al., 2017; Ho et al., 2020.
5.	BIU	4	Venkatesh et al., 2003; Oentario et al., 2017; Bae et.al. 2021.
6.	FoC	4	Simard & Savard, 2009; Haddad et al., 2018; Al-Marroof et al., 2020; Ahorsu et al., 2020

Note: PU,Perceived Usefulness; PEoU Perceived Ease of Use; PR,Perceived Risk; FoC, Fear of Covid-19; ATU, Attitude Toward Using; BIU, Behavioral Intention To Use

4.1 Validity and Reliability

Based on the reference to the questionnaire items in previous empirical studies, in this study, questionnaire testing was carried out at the pretest to ensure the validity and reliability of the questionnaire to be used. Testing the questionnaire consisting of 6 variables and 25 indicators that have been filled in by 30 respondents shows that all indicators have an r-count value greater than the r-table, so the questionnaire indicators in this study are valid, and the results of Cronbach's alpha are greater than the baseline value of 0 ,60 these results prove that all statements of the six variables can be trusted or reliable. Data collection in this study used a contactless non-cash transaction data population, in the form of server-based electronic money, mobile banking, internet banking, and QRIS which increased at the beginning of the Covid-19 period from January to May 2020 data from Bank Indonesia Bali Province. The target sample uses the criteria, namely users who are at least 17 years old and over and have used an E-wallet before. Data collection was carried out from June to December 2021, a total of 398 valid surveys were received, all respondents came from regency cities in Bali Province. The final data collection was carried out using an online-based survey (google form), the distribution of the survey was carried out online because it was cheaper, more convenient, and most importantly safer because it was carried out during a pandemic and provided more control than offline surveys. In terms of quality, the data collected, and the items answered are useful for reducing social desirability bias (Wallace & Sheetz, 2014). The research method used is a quantitative method with a structural equation modeling approach based on partial least squares (PLS) with the smart PLS 3.0 program, to examine the relationships between variables and their moderating role.

5. Result and Discussion

Table 2 presents the results of the personal characteristics of the participants in our survey.

Table 2
Characteristics of Respondents

No	Characteristic	Classification	Number of Respondents (persons)	Percentage Respondent (%)
1	Gender	Male	114	28,6
		Female	284	71,4
2	Age	17 - 25 years old	289	72,61
		26 - 34 years old	36	9,05
		35 - 42 years old	29	7,29
		43 - 51 years old	26	6,53
		52 - 60 years old	18	4,52
3	Residence	Badung Regency	77	19,3
		Bangli Regency	9	2,3
		Buleleng Regency	21	5,3
		Gianyar Regency	58	14,6
		Jembrana Regency	37	9,3
		Karangasem Regency	22	5,5
		Klungkung Regency	23	5,8
		Tabanan Regency	27	6,8
		Denpasar City	124	31,2
4	Finished education degree	High school	254	63,8
		Associate's	40	10,1
		Bachelor's	63	15,8
		Master's and beyond	41	10,3
5	Average monthly income or allowance	< Rp. 1.000.000	228	57,3
		> Rp. 1.000.000 - Rp. 5.000.000	128	32,2
		> Rp. 5.000.000 - Rp. 10.000.000	26	6,5
		> Rp. 10.000.000 - Rp. 15.000.000	12	3,0
		> Rp. 15.000.000	4	1,0
6	Occupation	Police or The Military	2	0,5
		Public Sector employee	33	8,3
		Private Sector employee	59	14,8
		Students	233	58,5
		Self-employed	34	8,5
		Professional	37	9,3

5.1 Structural Model

The outer loading of the PU, PEoU PR, ATU, BIU, FoC variables can be seen from Table 3 below, which shows that all variables have an outer loading value greater than 0.50.

Table 3
The summary of the convergent validity results

Constructs	Item	Factor Loading	Cronbach 's Alpha	Composite Reliability	AVE
PU	X1.1	0.7568	0.8845	0.9125	0.6353
	X1.2	0.7864			
	X1.3	0.7315			
	X1.4	0.8341			
	X1.5	0.8247			
	X1.6	0.8422			
PEoU	X2.1	0.7971	0.9006	0.9236	0.6687
	X2.2	0.8014			
	X2.3	0.8541			
	X2.4	0.7808			
	X2.5	0.8630			
	X2.6	0.8068			
PR	X3.1	0.9133	0.9092	0.9425	0.8454
	X3.2	0.9280			
	X3.3	0.9170			
FoC	M1	0.8616	0.9205	0.9437	0.8076
	M2	0.9244			
	M3	0.8758			
	M4	0.9309			
ATU	Y1.1	0.8782	0.8781	0.9248	0.8038
	Y1.2	0.9041			
	Y1.3	0.9072			
BIU	Y2.1	0.8705	0.9007	0.9309	0.7711
	Y2.2	0.8898			
	Y2.3	0.9101			
	Y2.4	0.8406			

Note : PU, Perceived Usefulness; PEoU Perceived Ease of Use; PR, Perceived Risk; FOC, Fear of Covid-19; ATU, Attitude Toward Using; BIU, Behavioral Intention To Use

This states that the data in this study are valid and have a good correlation. Likewise, convergent validity testing is also carried out by looking at the average variance extracted (AVE) value of each latent variable. If the AVE of the latent variable is greater than 0.5, it is said to have good convergent validity (Jogiyanto, 2011). The results of the convergent validity test using AVE in Table 3 below, all variables with reflective indicators have an AVE value of more than 0.5, so it can be said that all of these variables are valid. In the results of the reliability test using Cronbach's alpha and composite reliability parameters in table 3, the results of the validity test above the reliability test were also carried out using the PLS algorithm technique, the parameter values of all constructs were above 0.7, (Table 3). Thus, from the reliability test, all constructs have good internal consistency to be used in model testing. Chin (1998) stated that the results of R² of 0.67 and above for endogenous latent variables in the structural model indicated that the effect of exogenous variables on endogenous variables was included in the good category. From the results of table 4, the results of the R² variable attitude toward using and behavioral intention to use are between 0.33 – 0.67 so that it can be said to have an R² value with a moderate category.

Table 4
The results of R-Square

Endogen Variable	R Square	Result
ATU	0.5674	Moderate
BIU	0.6118	Moderate

Note : Attitude Toward Using; BIU, Behavioral Intention To Use

The results of the path coefficient analysis in Table 5 show that most of the direct effects are positive and significant, which can be seen from the positive coefficient value, the t-value is greater than 1.96, and the p-value is greater than 0.05 and the p-value is more smaller than 0.05. The results of this data test answer Hypotheses 1,2, and 3 where PU, and PEoU, have a positive and significant effect on ATU, the findings of this study support the results of previous studies from Amoroso and Watanabe (2012) and Oentario et al. (2017); for hypothesis 3 the test results support where PR has a negative and significant effect on BIU, this finding supports previous empirical studies from Hsu (2012), Nunkoo et al. (2013), De et al. (2016), Fortes et al. (2017) and Bae et al. (2021), which reveals that perceived risk has a negative and significant effect on attitudes toward using online shopping sites. Hypotheses 1,2 and 3 provide an indication that the higher the benefits and convenience felt by the user. E-Wallet can then build a positive attitude to use it, as well as when someone perceives using E-Wallet as a risky activity, he or she tends to have a negative attitude towards using E-Wallet.

The results of data processing from the relationship of exogenous variables to BIU found that the t-value of PU was 6.1585, and PEoU was 2.5573, which was greater than 1.96, and the respective v-value (PU is 0.0000 and PEoU 0.0108 <0.5), so that PU, and PEoU are said to have a positive and significant effect on BIU, these results can support hypotheses 4 and 5, (Downe & Taiwo, 2013), these results prove that the benefits and The perceived ease of payment transactions using E-Wallet can increase the intention of users to re-transact, the findings of this empirical study are different from previous research which found that PU has no effect on BIU (Choi et al., 2013). Likewise, different results say that perceived ease of use does not affect students' intentions to transact online and e-commerce (Gefen et al., 1997) in the relationship between PR and BIU. This study supports hypothesis 6, namely PR has a negative and significant effect on BIU with the results of t The -value (3.6395 >1.96) and p-value (0.0003 <0.05) and these findings are in line with previous empirical studies from (Lee, 2009; Kim et al., 2017; Sánchez-Cañizares et al., 2021; Kaur & Arora, 2021) which revealed that PR has a significant negative effect on behavioral intentions. This indicates that E-Wallet users are more likely to transact if their perception of system uncertainty is reduced.

The results of the statistical test found that ATU had a positive and significant effect on BIU and supported the proposed hypothesis 7, although there are still many GAP researches on the relationship between attitudes and intentions, including research from Vermeir and Verbeke (2006), which revealed that attitude had no effect on intentions, but this study supporting empirical studies from Wu and Chen (2017), Setyawati (2020), Al-Marroof et al. (2020), Chayomchai et al. (2020) and Sánchez-Cañizares et al. (2021). The findings of this study prove that the user's positive attitude towards the acceptance of the E-Wallet transaction system can affect the psychological intention to use the E-Wallet in the future.

Table 5
Path Analysis Results, Direct Effect

H	Relationship	Path	t-Value	P-Value	Direction	Decision
1	PU → ATU	0.5011	7.0016	0.0000	Positive	Supported
2	PEoU → ATU	0.2311	3.0515	0.0024	Positive	Supported
3	PR → ATU	-0.1148	2.7588	0.0060	Negative	Supported
4	PU → BIU	0.3849	6.1585	0.0000	Positive	Supported
5	PEoU → BIU	0.1547	2.5573	0.0108	Positive	Supported
6	PR → BIU	-0.1517	3.6395	0.0003	Negative	Supported
7	ATU → BIU	0.2345	3.9982	0.0001	Positive	Supported
9	FoC*ATT → BIU	0.0570	1.9901	0.0471	Positive	Supported

Note : PU, Perceived Usefulness; PEoU Perceived Ease of Use; PR, Perceived Risk; FOC, Fear of Covid-19; ATU, Attitude Toward Using; BIU, Behavioral Intention To Use

From the explanation in Table 5, it can be seen that the total indirect effects of the PU, PEoU and PR variables on BIU are positive and significant, respectively, with PU: t-value greater than 1.96 ($3.1845 > 1.96$) and p-value is less than 0.05 ($0.0015 < 0.05$), PEoU : t-value is greater than 1.96 ($2.4679 > 1.96$) and p value is less than 0.05 ($0.0139 < 0.05$), PR : t-value is greater than 1.96 ($2.2977 > 1.96$) and p-value is less than 0.05 ($0.0220 < 0.05$). This indicates that attitude is an important predictor in strengthening the indirect effect of PU, PEoU and PR, to increase the intention to reuse E-Wallet during the Covid-19 pandemic. This finding supports research from (Ma'ruf et al., 2005; Aldhmour et al., 2016; Wu & Chen, 2017)

Table 6

Path Analysis Results, Indirect Effect

H	Relationship	Path	t-Value	P-Value	Direction	Decision
8	PU → ATU → BIU	0.1175	3.1845	0.0015	Positive	Supported
	PEoU → ATU → BIU	0.0542	2.4679	0.0139	Positive	Supported
	PR → ATU → BIU	-0.0269	2.2977	0.0220	Positive	Supported

Note : PU, Perceived Usefulness; PEoU Perceived Ease of Use; PR, Perceived Risk; F0C, Fear of Covid-19; ATU, Attitude Toward Using; BIU, Behavioral Intention To Use

6. Integration

The integration of TAM and TPB in this study adds PR and FoC constructs as moderators to moderate the effect of ATU on BIU. The results of statistical tests show that almost all constructs in the TAM and TPB framework have a significant influence, either directly or indirectly, on BIU. This proves that by integrating the two theories, more comprehensive results are obtained (Riemenschneider et al., 2001; Wu & Ke, 2015; Wu & Chen, 2017) in increasing the intention to use E-Wallet during the Covid-19 pandemic in Bali. From the results of statistical testing it was found that the PU variable had the greatest influence on user intentions, this is in line with the results of the Boku Inc survey, 2021 which said that 57% of users use E-Wallet because of the benefits it provides, while from the indicator the biggest influence is intention to try new technology. This indicates that the public's intention to adopt E-Wallet technology is very high, especially during the Covid-19 pandemic.

The results of hypothesis testing in this study found that perceived usefulness, perceived ease to use and perceived risk had a positive and significant effect on attitudes, as well as a positive and significant effect on the intention to reuse E-Wallet. The role of attitude toward using can mediate positively and significantly the effect of perceived benefits, perceived usefulness and perceived risk on behavioral intention to use, attitude also has a positive and significant effect on intention to reuse, and fear (fear of Covid-19) can moderate the influence of attitude toward using on behavioral intention to use. The findings above indicate that E-Wallet users greatly affect the perceived benefits, ease of use is also perceived to have an influence on user intentions, but often security is inversely proportional to convenience, the more secure the technology system, the more complicated its use, security is one of the things The most important thing in transacting with E-Wallet, because security is related to the risk perceived by the user, the findings of risk perception are negative, namely the higher the risk perceived by the user, the lower the user's intention to reuse, and it is proven that risk perception has a negative effect on intention. In a pandemic condition, health risk becomes the most important physiological factor, the findings in this study are that the role of fear is able to increase user intentions because from the results of empirical tests, the user's greatest fear is contracting the Covid-19 virus, so that fear can mobilize users' intentions to continue using e-mail. Wallet during this pandemic.

7. Implication

This research contributes to the literature in marketing management science, in the face of ongoing global issues that cause severe changes in the behavior of global people in everyday life. This research is also expected to enrich the TAM integration model and TPB theory. Practically, it is hoped that the results of this study are expected to be information for E-Wallet operators in taking advantage of the pandemic situation to find out the factors that can increase the intention to reuse E-Wallet during a pandemic, so that it will indirectly help break the spread of the Covid-19 virus and help recovery of conditions back to normal.

8. Limitation

This study only discusses cross-sectional data, so that behavioral intentions using E-Wallet may change after the pandemic period ends. This study only collects data for several periods so that it cannot produce longitudinal results on this problem and the focus of the research is not carried out on one group of people so that the use of E-Wallet in each community group will have a different perception.

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