

Analysis Of Factors Affecting Intention Sustainability Of E-Wallet Fund Adoption In Post Batam City Covid-19 Era Using The UTAUT2 Model

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Abstract. Using the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), this study investigates the factors that impact users desire to keep using e-wallets fund (Dana) service in Batam City. This study is a replica with differences in geographic, object, e-wallet specifications, and research time. Ewallets, as a means of electronic payment, have become popular amidst the COVID-19 pandemic due to their ability to minimize physical contact. This research involved 400 respondents in Batam City who used e-wallets Dana. The Partial Least Square-Structural Equation Modeling (PLS-SEM) method technique was employed to analyze the data obtained from an online questionnaire, with the assistance of SmartPLS 3.0. The study's findings indicate that four factors have no effect on be-havior intentions and six elements have an impact. According to this study, behavior intentions are significantly influenced by price value, trust, habit, social influence, performance anticipation, and effort expectancy. Concurrently, in Batam City, Riau Islands, factors that do not significantly in-fluence be-havior intentions for utilizing the Dana e-wallet application include facilitating conditions, perceived risk, hedonic motivation, and perceived COVID threat.

Keywords: E-wallet, DANA, Behavioral Intention, UTAUT2.

1 Introduction

Technology based financial services (Fintech) in Indonesia have developed rapidly since fintech was introduced in 1986, when ATMs were first used by Indonesian people [1]. Advances in digitalization via the internet have encouraged globalization and a shift in payment methods from manual transactions to internet-based systems. People are becoming more dependent on electronic money to carry out transactions [2]. The Industrial Revolution 4.0 era shows the growth of technology which is increasingly influencing the payment system, which the general public uses in a variety of ways for electronic payment tools [3]. Consumers can use mobile devices, PCs, and other enabling equipment to conduct electronic transactions. E-wallets are useful for a variety of things, including making online purchases or using a mobile device to make transactions in person [4]. One of the factors causing increased e-wallet usage as a journey

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F. Arif Rahman et al. (eds.), *Proceedings of the Sixth International Conference on Applied Economics and Social Science (ICAESS 2024)*, Advances in Economics, Business and Management Research 312, https://doi.org/10.2991/978-94-6463-640-6_40

towards a cashless economy is the COVID-19 pandemic [5]. In conditions like this, ewallet is the main option for carrying out these transactions. The virus can spread physically from an infected individual to a healthy individual, so WHO emphasizes the importance of using digital money [5].

The 2023 "E-Wallet Industry Outlook" study reveals e-wallets are the most popular payment method, with GoPay, OVO, DANA, and ShopeePay being the four most widely used e-wallet brands [6]. DANA is a digital wallet designed to make cashless and cardless transactions fast, easy, and secure, both online and offline. It supports various economic activities and the digital lifestyle in Indonesia while aiding government efforts to reduce currency production costs and boost financial inclusion [7]. With 144% year-over-year user growth and significant increases in money transfers (232%) and financial service solutions (769%), DANA's popularity continues to rise. It also supports cross-border transactions via QRIS and is recognized by Bank Indonesia for its security and reliability [8]. These factors make DANA a strong focus for analyzing continued e-wallet adoption

However, behind the ease of using e-wallets, there are security threats that users must be aware of. The electronic wallet, which is the result of human innovation, has shortcomings that often cause concern for its users [9]. Threats to security in using ewallets can include theft, duplication of the original card, manipulation of data or applications on the original card, and the like [10]. This is because there have been multiple occurrences involving the use of e-wallets. In the case study [11], Mrs. Sheryla, a user of the Dana e-wallet, suffered financial losses as a result of her transaction displaying a "successful" status, the specified service not being received, and a deduction from her e-wallet balance. Another instance was the OVO e-wallet, where a number of users reported that it took a while to get their concerns resolved [12]. An individual's experience of security risks can significantly influence their choice to employ fintech services. Considering earlier studies, the findings indicated that the choice to use an ewallet is influenced by perceived risk [13], [14], [15]. The trust factor is another element that can impact the desire to stick with the usage. According to the study [13] users' inclination to conduct transactions online influenced by a number of factors, including perceived usefulness, perceived ease of use, perceived risk, and trust. Recent research also shows that usability, security, and trust are factors that affect the interest of users in implementing internet banking services [16] Apart from that, perceived COVID threat (COVID-19 threat factor) is also a factor that influences users' intentions to make transactions using e-wallets.

In the second quarter of 2023, there will be an increase in non-cash payment transactions in Riau Islands Province, especially through QRIS. The number of QRIS merchants increased to 464,347, up 4.79% from the previous quarter, with the number of transactions reaching 4,130,105 a value of around IDR 598.68 billion. QRIS users also increased to 344,673 in the second quarter of 2023. This reflects the positive adoption of digital payment technology in the Riau Islands region. There are five districts, two cities, 52 subdistricts, and 299 subdistricts in the Riau Islands. Batam City, as the largest city in the Riau Islands, has a population of 1,240,792 people, covering around 57% of the total population of the Riau Islands which reaches 2,150,329 people [17]. Therefore, researchers chose Batam City as the research location because it was considered to represent research on "Analysis Of Factors Affecting Intention Sustainability Of E-wallet Fund Adoption In Post Batam City Covid-19 Era Using The UTAUT2 Model."

Many research frameworks have been created to discover the reasons that may influence the urge to utilize technology and its adoption. In this study, the author uses UTAUT2, which stands for Unified Theory of Acceptance and Usage of Technology 2. A lot of people have utilized the UTAUT2 model to analyze the success of e-money adoption and its level of acceptance in various regions in Indonesia [14]. The objective of this research is to analyze the factors present in the UTAUT2 Model while also considering additional variables such as trust and perceived risk by users. This is being done in order to better understand why Batam City adopted the DANA e-wallet, particularly in considering the rise in digital transactions that occurred during the COVID-19 outbreak.

2 Theory, Literature Review and Hypothesis

2.1 Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

[18] introduced the Unified Theory of Acceptance and Use of Technology (UTAUT). This concept uses eight criteria to forecast the adoption and usage of technology. These variables are Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Motivational Model (MM), Model of PC Utilization (MPCU), Social Cognitive Theory (SCT) and Innovation Diffusion Theory (IDT). [18] Objectively testing the eight models and involving developing these models longitudinally. The measurement results then form a new model which is produced through the integration of several variables that are known to be significant and have a meaningful influence.

The four primary constructs serve as direct predictors of action intentions and usage. They are behavioral intention and use behavior, namely, performance expectancy, effort expectancy, social influence, and facilitating conditions. Furthermore, gender, experience, age and voluntariness are used as moderating variables [19]. Compared with the previous eight models, which could only predict a range of 17-53%, UTAUT can explain 70% of the variation in interest in technology use [18]. [20] developed a new model that built upon the UTAUT, which previously known as UTAUT2. Hedonic motivation, price value, habit, and three moderator variables genders, experience, and age were added to the model. UTAUT2 model helps understand how users view information technology. This model is built from various theories regarding acceptance and behavior of using technology [21]. UTAUT2 construct explains 74% of the variation in consumer behavior related to technology use, as well as 52% of the variance related to consumer technology use [20].

2.2 **Performance Expectancy (PE)**

Performance expectancy is the extent to which an individual thinks that putting a system in place will benefit them, perform better or achieve their professional goals [18] plays role in this context. Research conducted by [22] and [5] indicates a favorable effect on the behavioral intentions that indicates people are more likely to use the digital wallet if they are easy to use. By considering the previous explanation, the researcher found the subsequent hypothesis formulation:

H1: Performance expectancy (PE) positively affects the intention of users to continue using the e-wallet DANA.

2.3 Effort Expectancy (EE)

Effort expectancy describes the amount of effort is required how to utilize an electronic wallet [23]. Effort expectancy reflects an extent to which someone is interested in using new technology [24]. E-wallets are created to make it easier to pay via mobile phone, but if they are difficult to use or require extra effort, it can affect users' interest in using them [25]. With considering explanation previously, researchers found a formula the subsequent hypothesis:

H2: Effort expectancy (EE) positively affects the intention of users to continue using DANA E-wallet.

2.4 Social Influence (SI)

[18] define social impact as the extent to which people feel that other people in charge think they ought to implement new system. Social influence is the way customers perceive support and assistance from important individuals that influences their choice to use an e-wallet [26]. Previous research concluded that SI had a beneficial impact on interest in using electronic wallets [2], [14]. With considering explanations previously, Researchers found the subsequent hypothesis formulation:

H3: Social influence (SI) positively affects the intention of users to continue using DANA E-wallet.

2.5 Facilitating Conditions (FC)

[18] explain that facilitating conditions relate to a person's degree of trust in the accessibility of technical and organizational infrastructure needed to support system use. Regarding e-wallets, facilitating conditions describe consumers opinion about how well e-wallets work with other technologies they use, as well as how easy it is to get the information and resources needed to utilize them [26]. FC affects user's behavioral intentions in a number of studies [22], [27], [28]. Considering explanation previously, researchers found a formula the subsequent hypothesis:

H4: Facilitating conditions (FC) positively affects the intention of users to continue using DANA E-wallet.

2.6 Hedonic Motivation (HM)

The happiness and satisfaction retrieved by using technology is called hedonic motivation. This has been demonstrated by having a significant impact on understanding how to use and accept of technology [20]. According to consumer assessments, hedonic motivation generates a high degree of e-wallets satisfaction, especially with the discount and voucher features [29]. Several previous studies have found that intention is positively and significantly impacted by hedonic motivation to continue using [25], [30]. Based on the explanation given previously, the researcher proposed the subsequent hypothesis:

H5: Hedonic motivation (HM) positively affects the intention of users to continue using DANA E-wallet.

2.7 Price Value (PV)

Price value describes how much e-wallet user are willing to pay to get benefit or profits from their use [14]. Consumers are usually responsible for the cost and use of technology, while employees do not have to pay personally. This is an important difference between using technology from consumers and organizations [20]. Previous research shows that usage intention is influenced by price value [25], [31], [32]. According on the explanation given previously, the researcher proposed the subsequent hypothesis: H6: Price value (PV) positively affect the intention of users to continue using DANA E-wallet

2.8 Habit (H)

Habit is formed when individuals naturally use technology because they are used to learning it repeatedly [20]. Habits are formed from past experiences and behavior, creating routines in technology use. Current behavior also plays an important role in forming habits, so that the use of technology becomes automatic in everyday life [31]. Several studies have concluded that intention to use is significantly impacted by habit [5], [29], [31]. Based on the explanation given previously, the researcher proposed the subsequent hypothesis:

H7: Habit (H) positively affects the intention of users to continue using DANA E-wallet.

2.9 Perceived Risk (PR)

Perceived risk is a condition where customers feel worried when they cannot predict what the outcome of their purchase will be [33]. Even so, perceived risk is excluded in the UTAUT2 model. Several researches have extended to incorporate perceived risk as an additional variable. The safety of their personal information worries users, and they see perceived risk as the main variables influencing their decisions in using or adopting electronic platforms to make payments [5]. Based on the explanation given previously, the researcher proposed the subsequent hypothesis:

H8: Perceived risk negatively affects the intention of users to continue using DANA E-wallet.

2.10 Trust (T)

Trust is an important component in using e-wallets because this may influence users decision to keep using electronic wallets. Based on studies [34] user interest in using e-wallets is positively influenced by trust. If customers feel that they trust the services, they receive from the electronic wallet provider, they will become comfortable and have confidence when making transactions from the application. This result in those customers continuing to use the same app and increases loyalty levels [35]. Based on the explanation given previously, the researcher proposed the subsequent hypothesis: H9: Trust positively affects the intention of users to continue using DANA E-Wallet.

2.11 Perceived COVID Threat (CVD)

The COVID-19 pandemic and the rise of FinTech contribute to the rise in transactions volume carried out without cash. Electronic wallets (e-wallets) are gaining traction as a way to reduce the risk of infection by encouraging social distancing behavior [36]. Using electronic wallets clearly supports the use of non-cash transaction during the pandemic, thereby contributing to efforts to stop the spread of COVID-19 [37]. The use of e-wallets is seen by the public as a preventive measure against the risk of virus transmission, presenting a safer alternative for transactions [38]. Based on the explanation given previously, the researcher proposed the subsequent hypothesis:

H10: Perceived COVID Threat positively affect the intention of users to continue using DANA E-Wallet.

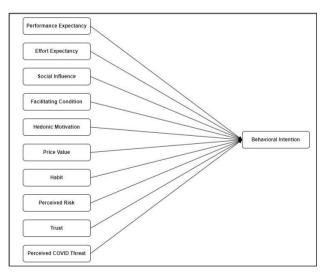


Fig. 1. Research Model

3 Research Methods

To test the current hypothesis, a quantitative approach was applied in this study. The decision of this quantitative method is based on the fact that the research subject will be displayed in numerical format and analyzed statistically.

Purposive sampling was applied in this study to estimate the number of samples with criteria for selecting respondents.

$$n = \frac{N}{1 + Ne^2} \tag{1}$$

n = Quantity of Samples

N = Quantity of Population

e = Maximum tolerable error limit

So the required sample size is as follows:

$$n = \left[\frac{1.240.792}{1 + (1.240.792)(0.05)^2} \right]$$
$$n = \left[\frac{1.240.792}{3.102.98} \right] = 399.871092 \approx 400$$

In this study, 400 individuals were used as samples. Use of 400 respondents as a sample is considered representative because it exceeds the minimum required limit. In addition, with this number, it is also possible that if there is a questionnaire that is incomplete or contains incorrect information, there is still enough data to be analyzed validly.

Nonprobability sampling method with a purposive sampling approach is used in this study to Dana e-wallet users in Batam City. Samples will be selected based on respondent criteria:

1. Respondents must live in Batam City.

2. Respondents must be active Dana e-wallet users.

An electronic survey platform, Google Forms, was used to complete the online questionnaire completion process. Each item is rated using a likert scale of 1 to 5, where 5 represents strong agreement and 1 represents significant disagreement. SmartPLS 3.0 software and PLS (Partial Least Square) data analysis method was used to process path analysis data in this study. PLS is one classification of the SEM method that was developed from Path Analysis and Multiple Regression methods, and is generally used to analyze research that has multiple independent and dependent variables as well as moderating variables. PLS consists of two stages: an inner model with predictive relevance (Q^2) , coefficient of determination (R^2) , and hypothesis testing, and an outer model analysis with convergent validity, discriminant validity, and reliability [39].

	Table 1. Operational Variable				
No	Variable	Indicator	Item	Reference	
1	Performance	PE.1	It is easier to make payments	[5]	
1.	Expectancy		using the DANA e-wallet	[3]	

	PE.2	The DANA e-wallet helps		
	PE.3	Using the DANA e-wallet in- creases my efficiency in han-		
	PE.4	Using the DANA e-wallet enhances productivity		
	EE.1	The DANA e-wallet is easy to use		
Effort ex- pectancy	EE.2	The usage and functions of the DANA e-wallet are clear and understandable	[5]	
_	EE.3	Using the DANA e-wallet saves time and energy		
	SI.1	People important to me will recommend using the DANA e-wallet		
3. Social influ-		Family members and friends use the DANA e-wallet	[5]	
	SI.3	Family and friends influence me to use the DANA e-wal- let		
	FC.1	The support needed to use the DANA e-wallet is ade-		
condition	FC.2	The software and hardware needed to use the DANA e-	[5]	
	HM.1	It is very enjoyable to use the DANA e-wallet		
Hedonic motivation	HM.2	It is very convenient to use the DANA e-wallet	[5]	
mouvation —	HM.3	I feel pleased using the DANA e-wallet		
	PV.1	The cost of the DANA e- wallet is reasonable		
Price value	PV.2	The benefits provided by the DANA e-wallet outweigh its cost	[5]	
	PV.3	The DANA e-wallet offers good value for the package		
Habit	H.1	Using the DANA e-wallet has become routine for me	[5]	
	pectancy	PE.3 $PE.4$ $PE.4$ $EE.1$ $EE.1$ $EE.3$ $SI.1$ $Social influence$ $SI.2$ $SI.3$ $FC.1$ $Facilitating condition$ $FC.2$ $FC.1$ $FC.2$ $FC.1$ $FC.2$ $FC.3$ $FC.2$ $FC.3$	speed up paymentsPE.3Using the DANA e-wallet increases my efficiency in handling financial transactionsPE.4Using the DANA e-walletenhances productivityEE1The DANA e-wallet is easy to useEffort expectancyEE2The usage and functions of the DANA e-wallet are clear and understandableEE3Using the DANA e-wallet are clear and understandableEE3Using the DANA e-walletSocial influenceSI.1People important to me will recommend using the DANA e-walletSocial influenceSI.2Family members and friends use the DANA e-walletSocial influenceSI.3Family and friends influence me to use the DANA e-walletFacilitating conditionFC.2FC.1The support needed to use the DANA e-walletFacilitating conditionFC.2Hedonic motivationHM.1HM.1It is very enjoyable to use the DANA e-walletHM.3I feel pleased using the DANA e-walletPrice valuePV.1PV.2The benefits provided by the DANA e-wallet outweigh its costPV.3The DANA e-wallet offers good value for the package	

		Н.2	I conduct all my financial transactions solely through the DANA e-wallet	
	_	Н.3	Using the DANA e-wallet has become easy for me	
		PR.1	Using the DANA e-wallet is not entirely safe	
0	– Perceived	PR.2	I feel unsafe sharing my per- sonal and financial infor- mation when using the DANA e-wallet	[6]
8.	Risk	PR.3	The risk of fraud and misuse of information is high when paying through the DANA e- wallet	[5]
		PR.4	Overall, using the DANA e- wallet is not safe and secure	
9.	Trust	T.1	The DANA e-wallet always provides secure financial ser- vices	[5]
		T.2	I can rely on the DANA e- wallet service provider	[0]
		CVD.1	I prefer using the DANA e- wallet to avoid physical con- tact	
10.	Perceived COVID Threat	CVD.2	Using the DANA e-wallet helps avoid COVID-19 virus infection	[5]
	_	CVD.3	It is safe to use the DANA e- wallet during the COVID phase	
		BI.1	I am likely to use the DANA e-wallet in the near future	[5]
11.	Behavioral Intention	BI.2	I plan to use the DANA e- wallet frequently for my daily transactions	
	_	BI.3	I want to use the DANA e- wallet for all my financial transactions	

4 Result and Discussion

4.1 Result

The period of data collection in 2024 was from March 9 to March 31, in Batam City. Four hundred of the 420 respondents that completed the survey met the requirements. The following is a list of respondent profiles:

		Frequency	Percentage
Age	$17 - \leq 21$ years	93	23%
-	$> 21 - \leq 25$ years	272	68%
	> 25 years	35	9%
Level of education	Senior High School	284	71%
	Diploma III	33	8%
	Bachelor	81	20%
	Postgraduate	2	1%
Length of Use of	< 1 month	52	13%
Dana E-wallet	1 month - 6 months	52	13%
	6 months - 12 months	59	15%
	>12 months	237	59%
Frequency using in	1-2 times	185	46%
1 month	3 - 5 times	94	24%
	More than 5 times	121	30%
Total		400	100%

Table 2. Participants demographics

Outer Model Analysis Test Results

a. Convergent Validity & Reliability Test

> The convergent validity test evaluates how far a measurement instrument can be considered to reflect the concept being measured. In this research, the value of Convergent Validity has met the validity of > 0.7 for each construct. Next, convergent validity will be confirmed using the AVE (Average Variance Extracted). According to [40], the AVE value needs to be higher than 0.5. The test results in table 3 for each question both the AVE and the outer loading value larger than 0.5.

h. Reliability Test

> Values for Cronbach Alpha and Composite Reliability in this study must be more than 0.7 to guarantee reliability indicators. For exploratory studies, values greater than 0.60 are still appropriate [43]. A Composite Reliability and Cronbach Alpha of greater than 0.6 are present in the values displayed in table 3 for this study.

	Table 3. Convergent Validity and Reliability Test Results							
Constructs	Items	Outer Loading	Cronbach Alpha	Composite Reliability	AVE			
Performance Expectancy	PE 1 PE 2 PE 3 PE 4	0,864 0,845 0,819 0,822	0,859	0,904	0,702			
Effort expec- tancy	EE 1 EE 2 EE 3	0,820 0,846 0,874	0,805	0,884	0,717			
Social influ- ence	SI 1 SI 2	0,848 0,843	0,800	0,881	0,712			

	SI 3	0,841			
Facilitating	FC 1	0,908	0,680	0,859	0,754
conditions	FC 2	0,826	0,080	0,839	0,754
Hedonic moti-	HM 1	0,937			
vation	HM 2	0,917	0,915	0,946	0,853
vation	HM 3	0,917			
	PV 1	0,845			
Price value	PV 2	0,887	0,836	0,901	0,753
	PV 3	0,871			
	H 1	0,902			
Habits	H 2	0,834	0,820	0,893	0,736
	Н3	0,835			
	PR1	0,897			
Perceived	PR2	0,840	0,886	0,919	0,739
Risk	PR3	0,875	0,880	0,919	0,739
	PR4	0,825			
Trust	T 1	0,942	0,886	0,946	0,898
TTUSt	T 2	0,953	0,880	0,940	0,898
Perceived	CVD1	0,884			
COVID	CVD2	0,863	0,848	0,907	0,764
Threat	CVD3	0,875			
Behavioral In-	BI 1	0,849			
tention	BI 2	0,919	0,865	0,918	0,789
tention	BI 3	0,896			

Analysis Of Factors Affecting Intention Sustainability

c. Discriminant Validity Test

Discriminant validity used to ensure that every idea differs from other variables in each latent model. A validity test is performed to make sure that a measuring device performs its measurement job as precisely as possible [41]. Fornell and Larcker compare the correlation between the constructs and the square root of AVE for each construct [42]. Table 4 displays the results.

	Table 4. Discriminant Validity Test Result										
	BI	EE	FC	Н	HM	CVD	PR	PE	PV	SI	Т
BI	0,889										
EE	0,474	0,847									
FC	0,525	0,642	0,868								
Н	0,761	0,466	0,560	0,858							
HM	0,509	0,647	0,661	0,582	0,924						
CVD	0,549	0,560	0,596	0,550	0,553	0,874					
PR	0,083	0,105	0,170	0,066	0,220	0,084	0,860				
PE	0,460	0,671	0,617	0,539	0,605	0,553	0,106	0,838			
PV	0,560	0,584	0,609	0,598	0,642	0,545	0,100	0,612	0,868		
SI	0,596	0,488	0,596	0,651	0,547	0,507	0,077	0,478	0,486	0,844	
Т	0,644	0,493	0,619	0,629	0,602	0,615	0,231	0,531	0,568	0,554	0,947

Table 4. Discriminant Validity Test Result

556 A. Pratiwi and N. F. Lawita

When discriminant validity is tested with Fornell-Larcker criteria, it is considered very good if the correlation is higher than the square root of AVE for each construct of that construct with other latent variables. The research test results displayed in table 3 show that for each variable, the square root of AVE has a higher value compared to the value of correlation of the construct with other factors.

Inner Model Analysis Test Results

a. R-Squared (R^2) Test

The size of R^2 value indicates the impact of exogenous variables on endogenous variables. According to [43], the R^2 value are 0.25 weak, 0.50 moderate, and 0.75 high. Table 5 displays the test results, which indicate that the R2 model value is 0.646, indicating a moderate category. In this case, the variables that have been constructed in this research can explain around 64% of behavioral intentions variable for using the e-wallet.

- b. Predictive Relevance Test (Q^2) cross-validation and fitting functions with construct parameter estimation through a blindfolding process and prediction of observed variables is shown in Predictive Relevance (Q^2) . According to [43], the values for predictive relevance are 0.02 weak, 0.15 moderate, and 0.35 strong. The value of Q^2 is shown in table 5 which obtained an outcome of 0.494, suggesting that the model has a small error gap with a high value of Q^2 , the relevance of predictions in this study obtained high results with a prediction relevance of 49.4%.
- c. Effect Size Test (F^2)

According to [43], if the impact size is less than 0.02, it is considered small, if it is greater than 0.15, it is considered medium, and if it is higher than 0.35, it is considered large. The variable in this study with the biggest effect size on behavior intention is habit with a value of 0.310.

Hypothesis	Path	R ²	F^2	Q^2
H1	PE -> BI		0,011	
H2	EE -> BI		0,013	
H3	SI -> BI		0,014	
H4	FC -> BI		0,001	
H5	HM -> BI	0,646	0,007	0,494
H6	PV -> BI	0,040	0,011	0,494
H7	H -> BI		0,310	
H8	PR -> BI		0,000	
H9	T -> BI		0,060	
H10	CVD -> BI		0,0008	

Table 5. R-squared, Predictive relevance, and Effect size test result

d. Hypothesis Test (Path Coefficient)

According to [44], an alpha level of 5% or 0.05 is used as the p-value limit in this research. A construct is considered to have a significant influence when the T-

	Table 6. Hypothesis test result					
Hypothesis	Path	Original	t-statistic	p-value	Signification	Decision
		Sample				
H1	PE -> BI	-0,094	2,207	0,028	Yes	No effect
H2	EE -> BI	0,105	2,279	0,023	Yes	Influential
H3	SI -> BI	0,103	2,094	0,037	Yes	Influential
H4	FC -> BI	-0,022	0,386	0,700	No	No effect
H5	HM -> BI	-0,079	1,400	0,162	No	No effect
H6	PV -> BI	0,095	2,004	0,046	Yes	Influential
H7	H -> BI	0,516	9,313	0,000	Yes	Influential
H8	PR -> BI	0,006	0,185	0,854	No	No effect
H9	T -> BI	0,224	3,558	0,000	Yes	Influential
H10	CVD -> BI	0,074	1,393	0,164	No	No effect

statistic value exceeds 1.96 and the p-value is less than 0.05. Table 6 displays the test results.

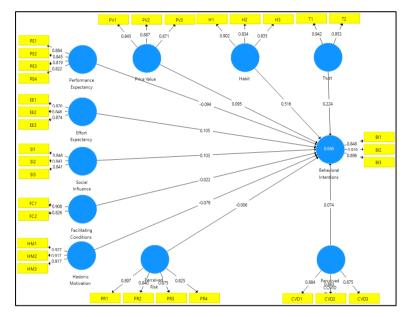


Fig. 2. Path Analysis Test Results

The analysis path shown in table 6 and figure 2 shows that from 10 factor variables that are thought to influence behavior intentions, performance expectancy, effort expectancy, price value, social influence, habit, and trust are the six-factor variables that significantly affect behavior intentions. The behavior intentions variable is not substantially influenced by the other four factors, which are hedonic motivation, perceived danger, perceived COVID threat, and facilitating conditions (p-value < 0.05).

4.2 Discussion

The results of research on variables affecting Dana's e-wallet adoption using PLS-SEM analysis show that there are four elements that do not influence behavior intentions and significantly influenced by six factors that also influence the research's performance expectancy, effort expectancy, social influence, price value, habit, and trust variables. Concurrently, in Batam City, Riau Island, facilitating conditions, hedonic motivation, perceived risk, and perceived COVID threat are not factors that impact behavior intentions for the Dana e-wallet application.

Performance Expectancy

In this research, performance expectancy significantly influences behavior intentions and has a negative correlation with behavior intentions. This negative correlation shows that even though users admit benefits of Dana's e-wallet in terms of convenience, speed, efficiency and productivity, there are unfulfilled expectations or other obstacles that reduce their intention to use the e-wallet consistently. The performance expectancy variable research findings do not align with the research findings of [22]. The findings indicate that there is a significant relationship between performance expectations and behavior intentions, which shows that respondents like to use e-wallet if performance expectations can increase their efficiency and productivity in handling financial transactions [5], [26], [29]. The fact that the results differ highlights the complexity of the factors affecting the adoption of e-wallet technology. It also raises the possibility that, in the absence of resolving other potential issues or barriers users may encounter, performance expectations alone may not be enough to encourage regular usage.

Effort Expectancy

Effort expectancy variable has a significant impact and is positively correlated with behavior intentions. This significant result and positive correlation confirm that the ease of use, clarity of function, as well as saving time and energy from the Dana e-wallet increases the customer intention to continue using this app. When an app's features are simple to use and don't need much effort to understand, users are more likely to adopt and continue using it. These findings are consistent with earlier research, where applications will be used more often if they have a comfortable appearance, features that make it easier for users [5], [45]. The hypothesis that a significant factor in encouraging frequent use is to make technical platforms, such as Dana's e-wallet, less complex and more user-friendly.

Social Influence

Social influence and behavioral intentions are positively and significantly correlated. These findings, that recommendations from important people increase users' intention to continue using the e-wallet. Support from family, friends and colleagues makes users more confident and comfortable using this app, so they are more likely to adopt it in their daily lives. This result is in line with other studies findings that respondents were influenced by their social circle and were more likely to use the e-wallet if the people around them do [2], [14]. Social influence is an important factor of technology acquisition and continuing use, highlighting the role that communities and peer support have in promoting technology acceptance.

Facilitating Conditions

Behavior intentions are not significantly influenced by facilitating conditions. This negative and insignificant correlation may be caused by the perception that the available support and accessibility are not sufficient to increase customer intentions to use Dana's e-wallet. Although facilitating conditions may be considered important in encouraging technology adoption, this finding suggests that these aspects may not be the main factors in determining the aim of customer to use e-wallets Dana. This result is consistent with previous studies by [2] which found that consumers' intentions to use e-wallets as a payment method were not significantly influenced by facilitating conditions.

Hedonic Motivation

Behavior intentions are not significantly influenced by the hedonic motivation variable. This negative and insignificant correlation shows that although pleasant and comfortable use can improve the user experience, this has no apparent impact on the user's decision to continue using the Dana e-wallet. The lack of hedonic motivational effect suggests that users do not interact with e-wallets primarily for entertainment or pleasure. Rather, they are more likely to use the e-wallet out of need. This finding is in line with research which [5] states that people do not see using e-wallets as a fun activity, they more often use e-wallets out of necessity or necessity, especially during the pandemic

Price Value

In this study, price value is positively correlated and has a significant effect on behavioral intentions. The significant positive correlation between price value and behavioral intentions shows that users tend to have greater desire to make use of e-wallets Dana if they feel they are getting good value for their expenditure. Users feel they are receiving great benefits when the advantages outweigh the disadvantages, such as ease of transactions, security, and additional features, making users feel they are getting significant benefits. Attractive offers also increase user attraction to continue using the ewallet Dana. These findings are in line with earlier research showing if people think there are benefits, they are more likely to use the site platform outweigh the disadvantages [25], [31].

Habits

Habits have a positive relationship and influence the behavior intentions of users who use e-wallets Dana are part of their daily routine and find it simple for using them, they tend to have more desire to keep using the application. Users' habits of using the application will greatly influence the use of e-wallet applications [5]. This finding is consistent with earlier studies [46] which shows that behavioral intentions and habit has a strong and positive relationship.

Perceived Risk

On the other hand, intentions are not significantly impacted by the variable of perceived risk. High-risk perceptions are not enough to influence users' intentions to avoid using e-wallets Dana. High trust in technology, more prominent perceived benefits, and positive user experience influence users' decisions to continue using this application, even though there are concerns about security. The results on the perceived risk variable are consistent with research by [9]. This shows that in the COVID era the risks have been taken minimized by the government with various regulations but not specifically on the use of payments so that it does not influence respondents' behavioral intentions in using e-wallets

Trust

In this study, the trust variable also has a good relationship with the behavioral intentions of e-wallet users. User trust in this application is important in figuring out whether or not the user plans to use it. Factors that influence this result include trust in the security e-wallets Dana services offered and reliability of service providers in meeting user needs. These findings are in line with earlier research which states that the use of electronic wallets depends on information security guaranteed by digital platforms. To encourage more people to use electronic wallets, businesses that accept digital payments must continue to prioritize security [47].

Perceived COVID threat

Behavioral intentions are not significantly influenced by perceived COVID threat. The spread of the COVID outbreak in 2020 did indeed cause changes in the way people carry out transactions, as in research by [48], COVID caused an increase in the use of mobile wallet applications in society, but after research was carried out again after COVID, perceived The COVID threat is no longer a significant factor in behavioral intentions

5 Conclusions and Recommendations

The research finding indicates that six important factors, performance expectancy, effort expectancy, social influence, price value, habit and trust have a substantial impact on behavioral intentions to use the Dana e-wallet. If customers believe that the Dana ewallet performs well, easy to use, supported by the people closest to them, provides good value for money, they are more likely to plan to use it and it has become a habit in everyday life, and they have high confidence in the security and reliability of the services provided. However, there are four factors that do not influence significantly towards behavioral intentions, namely facilitating conditions, hedonic motivation, perceived risk, and perceived COVID threat. Expanding the research variable and areas is suggested for future research to have more in depth knowledge. Longer time-term analysis is also needed to understand the development of user behavior over time. Additionally, comparisons with other digital payment platforms need to be considered. It is also important to explore the reasons behind the rejection of some hypothesis in this research, as well as developing a more comprehensive framework for future research.

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564 A. Pratiwi and N. F. Lawita

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