

The Influence of Perceived Ease of Use, Perceived Usefulness, Trust and Perceived Risk on Intention to Use Go-Pay After Pandemic COVID-19 (Case Study on Gojek Application Users in Batam)

Lulu'ul Munawarah¹, Rizki Lanniari HS²

{munawarah27sy@gmail.com¹, rizkilanniari@polibatam.ac.id²}

Politeknik Negeri Batam, Management and Business Department, Batam City, Indonesia¹²

Abstract. This research was conducted to find out whether the views of the people of Batam City about the benefits, ease of use, trust and risks of Go-Pay significantly affect their intention in using it. This study uses a quantitative method by distributing questionnaires to one hundred respondents using a non-probability sampling technique through a purposive method, and the data is then processed with the help of SPSS 24. The results of the study are obtained if the perceived benefits, ease of use, trust have a positive and significant effect on intention use of Go-Pay, the perceived risk have a negative effect on intention used of Go-Pay.

Keywords: perceived usefulness, perceived ease of use, trust, perceived risk, intention to use

1 Introduction

As technological systems develop, there are many changes that occur in society. One of them is the payment system which switches from cash payments to digital or cashless payments. The development of digital-based payment technology has attracted a lot of public intention as an alternative transaction when making purchases or sales because it is considered easier to use without having to use cash. This form of innovation in the financial sector is called financial technology (Fintech), which is an innovation that combines the financial system with a technology that was developed to switch from traditional to modern payment systems.

During the COVID-19 pandemic, the government issued Government Regulation (PP) Number 21 of 2020 concerning the implementation of Large-Scale Social Restrictions (PSBB) in all cities in Indonesia. This makes it difficult for people to do things outside the home. This includes carrying out economic transactions. In this situation, people are starting to use digital wallets to meet their economic needs and make non-cash transactions. This is expected to reduce the impact of the spread of COVID-19 in communities where mobility is limited.

Therefore, it is not surprising that the potential use of digital wallets in Indonesia continues to increase today.

According to research in 2022 [2], it shows that there are several choices of digital wallet applications that are popularly used in Indonesia based on a survey conducted by Populix of 1000 people in Indonesia. Populix survey shows the results that the Go-Pay digital wallet is the most popular used by 88% of respondents who filled out the survey. At first, Go-Pay was just a digital wallet for GOJEK services, but now it has officially become a means of payment in Indonesia.

Go-Pay is an electronic payment tool under the auspices of the local online transportation company GOJEK, which was opened to the public in 2016. Initially, Go-Pay was only used for internal payments via the GOJEK application. However, as it develops, Go-Pay is also starting to be used for general transactions. By using Go-Pay, the community can easily order services such as GoFood, GoRide/GoCar, GoSend, GoGlam, and others [2].

Utilizing the Go-Pay service has many advantages and ease of use. One of them is the Go-Pay digital wallet, which allows people to make transactions without using cash. There are various valid promo codes that also make service costs cheaper. Apart from that, Go-Pay balance top-ups can also be done easily at any time [3].

Behind the convenience and benefits obtained by Go-Pay users, there are definitely risks posed by this service. Of course, the risks that arise will affect the level of trust of service users if the risks that occur cause them to experience discomfort or loss [4]. Quoted from Kompas daily (4/12/2019), Go-Pay experienced problems with its service system which caused all Go-Pay users to be unable to carry out any transactions. Apart from that, it cannot be denied that data breaches by irresponsible parties can happen at any time without us realizing it. Therefore, the level of trust is the most important thing to increase people's attractiveness when using Go-Pay services [5].

In previous research [6] it was explained that the results of the risk perception, trust and ease of use variables had a positive influence on intention in using Go-Pay. Furthermore, from previous research conducted by [2], it was explained that the variables of benefit and ease of use have a positive influence, but perceived risk has a negative influence on intention in using Go-Pay.

2 Theoretical and literature review

2.1 Theoretical review

Technology Acceptance Model (TAM)

TAM theory was developed to analyze and explain the attitude factors of computer technology users. This theory explains how usefulness and ease of use factors influence user behavior in using information systems [7].

Theory of Planned Behavior (TPB)

Theory of Planned Behavior is the development of a theory that is influenced by the individual's intention to do something which is influenced by certain behavior due to beliefs or beliefs and risks within the individual [14].

2.2 Literature Review

Financial Technology

Financial technology is an innovative combination of a financial system with a technology developed to switch from payment systems from traditional to modern.

Electronic Money

E-Money or electronic money is a means of payment that is stored in electronic form where the value of the money is stored in certain electronic media.

Digital Wallet

A digital wallet is a form of electronic service developed to store payment instrument data using cards or electronic money for various types of payments.

Intention to Use

Intention in using or purchasing decisions is closely related to consumer behavior because when purchasing an item/service the consumer will make a decision to use the technology or choose not to use it based on an analysis of the two options to determine the best product [3].

Perceived Usefulness

Perceived usefulness is explained as a condition when someone feels confident in a technology can help improve or increase its performance [17]. If someone feels that information technology can provide useful and useful benefits for him, then there will be an intention in using it [7]. This is in line with research [8] where it is explained that there is a positive influence of perceived benefits on intention use.

H1: Perceived Usefulness (X1) has a positive effect on intention to use Go-Pay

Ease of Use

A technology is said to be easy to use if it can be done without additional effort or free from effort [10]. This is reinforced by [9] who explain the positive influence of perceived ease of use on intention use.

H2: Perceived Ease of Use (X2) has a positive effect on intention to use Go-Pay

Trust

Consumer trust is a form of consumer knowledge of an object, its attributes and benefits [16]. If someone believes that the technology or fintech service they are using will benefit them, they will use it. However, if the technology is not useful then consumers will not be intentioned in using the technology. This is reinforced by [7] explains if belief (Trust) has an influence positive towards intention to use.

H3: Perception of Trust (X3) has a positive effect on intention to use Go-Pay

Perceived Risk

On Intention in Using Go-Pay when someone chooses to use a fintech service or digital wallet to carry out a transaction, of course there will be several risks and uncertainties that arise [10]. This opinion is in line with research [4] which explains that there is a negative influence between perceived risk and intention in use.

H4: Perceived risk (X4) has a negative effect on intention to use Go-Pay

3 Research Methodology

3.1 Operational Variable

A variable is something that is the object of research in any form that produces influence and has influence value to be the focus of the research to be carried out [15]. The dependent variable is a variable whose value is tied to or influences other variables. The dependent variable in this research is intention in use (Y). An independent variable is a variable whose value depends on the value of other variables. The independent variables in this research are perceived benefits (X1), perceived ease of use (X2), perceived confidence (X3) and perceived risk (X4).

3.2 Research Instrument

A research instrument is a measuring tool that functions as a measure and data collection medium during research. The research instrument used is questionnaire. Assessment is determined based on a Likert scale which consists of four points, namely:

SD = Strongly Disagree (1)

D = Disagree (2)

A = Agree (3)

SA = Strongly Agree (4)

3.3 Research Subject and Sample

The subjects studied were the general public in Batam City from various age groups who use Go-Pay services as the object of this research. A total of 100 respondents became the sample this study by fulfilling the following requirements:

1. Residents of Batam City.
2. Go-Pay service user.
3. Use the Go-Pay application with minimum payment transaction >1 time.

4 Results and Discussion

Descriptive Analysis

The following is some primary data that has been collected using a questionnaire instrument distributed via Google form to 100 Gojek Go-Pay users in Batam City. Of the number of questionnaires distributed, 100 respondents met the following criteria:

Table 1. Characteristics of Respondents

Characteristic	Category	Amount	Percentage
Gender	Male	18	16,4%
	Female	82	83,6%
Age	<17 Years Old	2	1,8%
	17-20 Years Old	73	66,4%
	21-25 Years Old	34	30,9%
	26-30 Years Old	1	0,9%
	>30 Years Old	2	1,8%
Profession	Student	1	0,9%
	College Student	94	85,5%
	Employees	8	7,3%
	Employees	2	1,8%
	Etc	6	5,5%
How many using Go-Pay	1-2 time	45	40,9%
	>2 time	65	59,1%

Validity test

Data can be said to be valid if the calculated r value $>$ r table. Testing was carried out with a total sample of 100 people with a significance of 0.05 and r table is 0.195.

Table 2. Validity Test

Variable	item	Validity Test		
		r count	r table	description
Perseived Usefulness (X1)	X1.1	0.923	0.195	Valid
	X1.2	0.921	0.195	Valid
	X1.3	0.780	0.195	Valid
	X1.4	0.745	0.195	Valid
	X1.5	0.893	0.195	Valid
Ease of Use (X2)	X2.1	0.790	0.195	Valid
	X2.2	0.840	0.195	Valid
	X2.3	0.676	0.195	Valid
	X2.4	0.767	0.195	Valid
	X2.5	0.777	0.195	Valid
Trust (X3)	X3.1	0.895	0.195	Valid
	X3.2	0.820	0.195	Valid
	X3.3	0.796	0.195	Valid
	X3.4	0.876	0.195	Valid
Perceived Risk (X4)	X4.1	0.845	0.195	Valid
	X4.2	0.806	0.195	Valid
	X4.3	0.797	0.195	Valid
	X4.4	0.823	0.195	Valid
	X4.5	0.804	0.195	Valid
Intention to Use (Y)	Y1	0.805	0.195	Valid
	Y2	0.749	0.195	Valid
	Y3	0.806	0.195	Valid
	Y4	0.880	0.195	Valid
	Y5	0.878	0.195	Valid

In the table above, all items are considered valid because the test results show that if the r value of all items is greater than the r value found in the table, then the results are said to be valid and can be used to measure the variables to be studied.

Reliability Test

The reliability test is used to see the level of consistency of the measuring instrument using the Cronbach Alpha method. A questionnaire is considered good if it has a Cronbach Alpha value > 0.60.

Table 3. Reliability Test

Variable	Cronbach's Alpha	Description
Perceived Usefulness (X1)	0.906	Reliabel
Ease of Use (X2)	0.818	Reliabel
Trust (X3)	0.868	Reliabel
Perceived Risk (X4)	0.873	Reliabel
Intention to Use (Y)	0.876	Reliabel

Based on the results in the table above, it is obtained The Cronbach Alpha value for each variable is different with a value of 0.906 for the variable benefits, a value of 0.818 for the variable ease of use, a value of 0.868 for the trust variable, a value of 0.873 for the risk variable, and a value of 0.876 for the intention in use variable in accordance with the results of the table above. Because all answers in the survey received a value greater than 0.60, all answers can be declared reliable.

Normality test

The following are the results of data processing using SPSS.

Table 4. Normality Test

Sample	Colmogorov-Smirnov value	Sig	Description
100	0.115	0.05	Normal

According to the processing results shown in the table above, it was found that the significance of 0.115 is greater than 0.05, which indicates that the tested data contribute normally. In addition, the histogram graph shows spikes, not leaning to the right or left, which indicates that the data is contributing normally.

Multicollinearity Test

The Multicollinearity Test is used to find out if there is a correlation between independent variables. Here are the test results of the multicollinearity test.

Table 5. Multicollinearity Test

Variable	Tolerance	VIF
Perseived Usefulness (X1)	0.555	1.801
Ease of Use (X2)	0.428	2.339
Trust (X3)	0.477	2.097
Perceived Risk (X4)	0.555	1.802

Based on the results of data processing shown in the table above, it was found that the value of the benefit variable tolerance (X1) was 0.555 and the VIF value was 1.801; ease of use variable tolerance value (X2) of 0.428 and VIF value of 2.339; the tolerance value of the confidence variable (X3) is 0.477 and the VIF value is 2.097; and risk variable tolerance value (X4) of 0.555 and VIF value of 1.802. Thus, it can be concluded that there are no signs of multicollinearity.

Heteroscedasticity Test

The existence of deviations from the conditions of classical assumptions in regression models is determined through heteroscedasticity tests.

Table 6. Heteroscedasticity Test

Sample	Variable	Sig
100	Perseived Usefulness (X1)	0.471
	Ease of Use (X2)	0.231
	Trust (X3)	0.843
	Perceived Risk (X4)	0.673

According to the table above, the benefit variable is 0.471, the perceived ease of use variable is 0.231, the trust variable is 0.843, the risk variable is 0.673. There is no heteroscedasticity if the overall significance value is greater than 0.05. From scatterplot table, it can be concluded that the data dispersal points do not clump together in one place or form a wavy pattern, so it can be said that the regression model does not show symptoms of heteroscedasticity.

Multiple Regression Analysis

Multiple linear regression analysis is necessary in cases where there are more than two independent variables.

Table 7. Multiple Regression Test

Variable	Unstandardized	Standardized	t	sig
	B	Beta		
Perceived Usefulness (X1)	0.213	0.187	5.166	0.000
Ease of Use (X2)	0.802	0.891	21.644	0.000
Trust (X3)	0.168	0.153	3.917	0.000
Perceived Risk (X4)	0.269	0.280	-7.750	0.000

Based on the table above, the multiple linear regression equation can be described as follows:

$$Y = 0.801 + 0.213X1 + 0.802X2 + 0.168X3 - 0.269X4 \quad (1)$$

From this equation it can be explained that:

- 1) The constant value of 0.801 is a constant number where the value will not change if the variables Benefit (X1), Ease of Use (X2), Trust (X3), and Risk (X4) do not change at all or have a value of zero.
- 2) The benefit variable (X1) has a regression coefficient of 0.213, which shows a positive influence on intention in use. Thus, if the benefit variable increases by 1%, intention in using Go-Pay will increase by 0.213.
- 3) The regression coefficient for the perceived ease of use variable (X2) of 0.802 shows a positive influence on intention in use, so that if the perceived ease of use variable increases by 1% then intention in using Go-Pay will increase by 0.802.
- 4) The regression coefficient for the trust variable (X3) is 0.168, indicating a positive influence on intention in use, so that if the perceived ease of use variable increases by 1%, intention in using Go-Pay will increase by 0.168.
- 5) The risk variable regression coefficient (X4) is -0.269 indicating a negative influence on intention in using Go-Pay. Thus, the negative value indicates the opposite value, where if the risk variable increases by 1%, intention in using Go-Pay will decrease by 0.269.

T test

The T test is used to measure how much influence variable X has on variable Y. The results of the T test are as follows:

Table 8. T-test

Sample	Variable	Sig
100	Perceived Usefulness (X1)	0.000
	Ease of Use (X2)	0.000
	Trust (X3)	0.000
	Perceived Risk (X4)	0.000

Based on the results listed in the table above, it shows that the hypotheses from the four variables are accepted. Judging from the significance value of the independent variable (X), it has a value <0.05 . The variables X1, X2, X3 and X4 have a significance value of $0.000 < 0.05$. It can be said that the four hypotheses are accepted and the variable (X) has a significant effect on the dependent variable (Y).

Coefficient Determination (R²)

Testing the coefficient of determination (R²) is carried out with the aim of finding out what percentage of an independent variable can explain the dependent variable well.

Table 9. Coefficient Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.974	0.931	0.947	0.53018

In the table above, the R Square (R²) result is 0.931. It can be concluded that the variable intention in use (Y) is 0.931 or 93% which can be explained by perceived benefits (X1), ease of use (X2), trust (X3), and risk (X4). Other factors outside the research model explain the remaining 7%.

Discussion

- 1) The t-test findings show that H1 is accepted and H0 is rejected. Perceived usefulness provides a positive regression coefficient of 0.213, as can be seen from the regression analysis findings. It implies that perceived usefulness has a positive impact on intention to use. The higher the usefulness, the higher the intension to use, and vice versa. This result is consistent with those of prior studies, which show that perceived usefulness has a positive and significant impact on intention to use Go-Pay.
- 2) The t-test findings show that H2 is accepted and H0 is rejected. Perceived ease of use provides a positive regression coefficient of 0.802, as can be seen from the regression analysis findings. It implies that perceived ease of use has a positive impact on intention

to use. The higher the perceived ease of use, the higher the intention to use, and vice versa. This result is consistent with those of prior studies, which show that perceived ease of use has a positive and significant impact on intention to use Go-Pay.

- 3) The t-test findings show that H3 is accepted and H0 is rejected. Trust provides a positive regression coefficient of 0.168, as can be seen from the regression analysis findings. It implies that trust has a positive impact on intention to use. The higher the trust, the higher the intention to use, and vice versa. This result is consistent with those of prior studies, which show that trust has a positive and significant impact on intention to use Go-Pay. Because trust is a key factor and is also considered as one of the important factors in increasing online transactions, user trust is very important
- 4) The t-test findings show that H4 is accepted and H0 is rejected. The findings of the regression analysis also show that the perceived risk has a negative regression coefficient of -0.269. It implies that the perceived risk has a negative impact on actual use. The higher the risk, the lower the actual use, and vice versa. This study's findings are consistent with prior research which finds that perceived risk has a considerable negative impact on the adoption of electronic payment technologies

5 Conclusion

The results of hypothesis testing for the variables perceived usefulness, ease of use, and trust show that there is a positive and significant influence on intention in use. A positive meaning indicates that the higher the perception, the greater the intention in use, and conversely, the lower the level of perception, the lower the intention in use. Meanwhile, the risk variable shows a negative and significant influence on intention in use. The negative meaning indicates the existence of an opposite relationship, where the higher the risk perception, the lower the intention in use.

Researchers realize that the research that has been conducted still has many shortcomings, so it is hoped that future research can include other variables that have an influence on people's intention in using Go-Pay, such as service quality, promotions, prices, and so on. Thus, this research can be investigated more deeply if there are additional variables that influence people's intention in using Go-Pay. Apart from that, further research can also use other technological financial services as research objects.

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