

The Integration of Perceived Usefulness, Ease of Use and Perceived Risk in Increasing Customer Usage Intention to Access E-channel during Covid-19: Evidence from Indonesia

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ABSTRACT

This research aimed at investigating and analyzing how the integration of perceived usefulness, ease of use, and perceived risk increases the usage intention of Indihome e-channel customers during Covid-19 in the Jakarta Area. The research method used was quantitative research using Partial Least Square analysis and the SmartPLS program to analyze data. The number of samples taken was 180 respondents using closed questionnaires and distributing questionnaires online using e-questionnaires. Four hypotheses were proposed, resulting in three pathways positively affecting perceived usefulness and usage intention, namely ease of use and perceived risk. Meanwhile, perceived usefulness did not have a significant effect on usage intention.

Keywords: E-Channel, Ease Of Use, Perceived Risk, Perceived Usefulness, Usage Intention.

1. INTRODUCTION

The ease of using e-channel has always been an attraction for consumers. In general, consumers will choose applications such as e-channels that have easy to learn and access quickly. Ease of use can represent the various conveniences consumers feel in relation to using the internet for various goals to be achieved [1]. According to [2], ease of use can represent the perception of simplicity, namely how easy it is for the internet to be used as a medium to simplify daily activities. The user believes that using this system will make his life easier.

In the context of this study, ease of use (EOU) is meant when customers feel easy and happy in accessing e-channel programs. The perception that is formed in customers' minds is that when they access e-channels, they feel entertained in their daily routine so that the intention or interest of customers to access e-channels increases along with their need to be entertained.

Perceived usefulness (PU) is also a determining factor intensity of e-channel. According to [3], perceived usefulness describes the extent to which individuals

believe that using technology will improve their work performance. On the other hand, if the individual considers information media less useful, he will not use it.

The primary purpose of perceived usefulness as the extent someone believes that the use of technology, such as the internet, will improve job performance [4]. Someone trusts and feels that accessing e-channels is very helpful and enhances work performance that they will achieve, or in other words, the person believes that the use of IT has provided positive benefits that have an impact on work and achievement of work performance [5].

They will consider subscribing to e-channel to be more helpful. As [6] argued, if technology such as the internet and e-channel would increase customers' efficiency in living everyday life, it would positively affect the entire online transaction process. Perceived usefulness is people's perception that is using some technologies, in this case by accessing e-channel, will be able to improve people skill and performance to use that technology.

On the other hand, virtual transactions are vulnerable to fraud, which may inflict financial loss on online customers and constitute a financial risk that discourages customers from making online purchases [7-8]. The emergence of customers' interest, changes, or postponing the purchase process is heavily affected by their perception of risk in doing transactions. [9] stated that this perception of risk, or perceived risk (PR), is the customer's belief that a potential negative risk exists in a certain condition or situation. This amplifies [10] findings stating that customers often use the perceived risk to form certain behaviors as they would often try more to avoid mistakes than to maximize utility in the purchase process. Therefore, the perceived risk theory plays an important part in explaining the usage intention of accessing e-channel.

This study aims to determine and analyze how the integration of perceived usefulness, ease of use, and perceived risk increases the usage intention (IU) of Indihome e-channel customers during Covid-19 in the Jakarta Area.

2. METHODS

The research method used was quantitative research and used Partial Least Square analysis with the SmartPLS program to analyze data. The number of samples taken was 180 respondents using questionnaires and distributing questionnaires online using e-questionnaires. These respondents were customers who access the MyIndihome e-channel in the Jakarta Area, Indonesia. 77% of the respondents were male, and 59.2% of them possessed a minimum graduate degree. 63.8% of respondents had subscribed to Indihome internet services for more than two years, and 34.3% had used the MyIndihome e-channel for more than two years.

3. MATH AND EQUATIONS

The PLS evaluation model is performed by assessing the outer and inner models based on the research model in Figure 1. The results of data processing obtained Cronbach's alpha results. Each latent variable has a value of > 7 , the value for composite reliability > 6 , and the AVE value > 5 so that the questionnaire data can be declared valid and reliable and can be used to analyze the inner model further. From the data processing results, the R-squares value for the perceived usefulness variable was 0.182, and the usage intention variable was 0.465. Research model show by Figure 1.

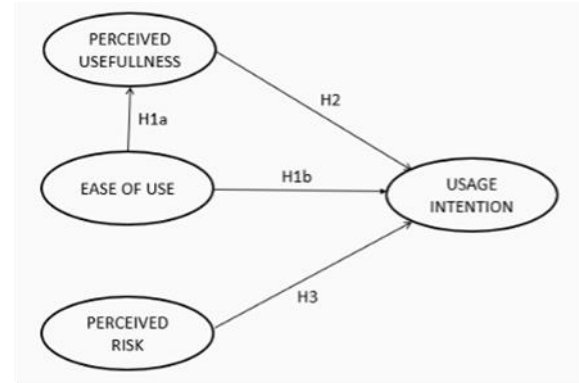


Figure. 1 Research model

Table 1 show initial path coefficient and significant value.

Table 1. Initial path coefficient and significant value

Path	Original Sample Estimate (O)	Sample Mean (M)	Standard Deviation (STD)	T Statistics	P Value
EOU → PU	0.426	0.435	0.083	5.136	0.000
EOU → UI	0.456	0.450	0.142	3.203	0.001
PR → UI	0.237	0.255	0.091	2.613	0.009
PU → UI	0.152	0.146	0.096	1.581	0.115

These results indicate that each variable, namely perceived usefulness, had an R² value of 0.182, which was in the weak category, and usage intention had an R² value of 0.465, which was included in the moderate category. Based on the results, it could be seen that the model formed is robust so that hypothesis testing can be carried out. The next step was resampling the model. The PLS is commonly known as bootstrapping and doing hypothesis testing. This study used a significant level of 5%.

Based on Table 1, the determination of the significant figure taken in this study was 5%, and the degree of freedom $df = n - 2 = 180 - 2 = 178$, then the T table value is 1.653. The path coefficients table shows that there is one path that has no less significant effect with a significance level of less than 0.05, namely the path of influence of perceived usefulness on usage intention with a significance value of 0.115. Meanwhile, the other three paths significantly affect the P values < 0.05 .

Based on the output results on the ease of use pathway for perceived usefulness, it has a T Statistics value of $5.136 > T$ table (1.653) followed by a P value of $0.000 < 0.05$, which means that the ease of use variable has a significant effect on the perceived usefulness variable. The original sample estimate value shows a positive value of 0.426 which means that the direction of the ease of use variable relationship to the perceived usefulness variable is positive.

In the second path, the ease-of-use variable on usage intention has a T Statistics value of 3.203 > T table (1.667) followed by a P value of 0.001 < 0.05, which means that the ease-of-use variable has a significant influence on the usage intention variable. The original sample estimate value shows a positive value of 0.456, which means that the direction of the relation of the ease-of-use variable to the usage intention variable is positive.

The path of perceived risk to usage intention has a T Statistics value of 2.613 > T table (1.667) followed by a P value of 0.009 < 0.05, which means that the perceived risk variable has a significant effect on the usage intention variable. The original sample estimate value showed a negative value of -0.237 which means that the direction of the relationship between perceived risk and usage intention variables is negative.

The path of perceived usefulness for usage intention had a T Statistics value of 1.581 < T table (1.653) followed by a P value of 0.115 > 0.05, which means that the variable perceived usefulness had no effect on usage intention. The original sample estimate value shows a positive value of 0.152 which means that the direction of the perceived usefulness variable on the usage intention variable is positive.

This study uses intervening variables in the structural model, causing the model's output direct effect and indirect effect. The intervening variable in this study is perceived usefulness, which mediated the relationship between ease of use and usage intention. It is necessary to discuss and compare the direct and indirect effects on the model to determine the role of the mediating variable.

Based on the output results from Table 2, it showed that the indirect effect of the ease of use variable on usage intention through perceived usefulness as a mediating variable had a T statistics of 1.491 < T table (1.653) and P values 0.137 > 0.05, indicating that the path did not have significant influence and had a positive path marked by a positive value of the original sample estimate of 0.065. Thus, it can be concluded that the perceived usefulness variable only had a slightly mediating effect of 65% on the relation of ease of use to usage intention.

Based on the results of the output, Table 3 showed that the amount of direct influence of 0.456 was more significant than the indirect effect of 0.065, meaning that the role of the mediating variable perceived usefulness in the model is smaller than the direct effect of the dependent variable, namely ease of use on the dependent variable, namely usage intention. Criteria for determining the mediation characteristics in a model could be determined by approaching the difference in coefficients using the examination method by analyzing with and without involving the mediating variable.

Table 2 show path coefficient and significance value of direct effect.

Table 2. Path coefficient and significance value of direct effect

Path	Original Sample Estimate (O)	Sample Mean (M)	Standard Deviation (STD)	T Statistics	P Value
EOU → PU → UI	0,065	0,064	0,043	1,491	0,137

Table 3 show path coefficient comparison.

Table 3. Path coefficient comparison

Path	Direct Effect	Indirect Effect	Total Effect
EOU → PU → UI	0,456	0,065	0,521

Table 4 show path coefficient without mediating variables.

Table 4. Path coefficient without mediating variables

Path	Original Sample Estimate (O)	Sample Mean (M)	Standard Deviation (STD)	T Statistics	P Value
EOU → UI	0.503	0.503	0.129	3.906	0.000

Based on the output, Table 1 showed that the analysis using mediation variables, namely the ease of use independent variable path to the usage intention dependent variable, has a P value of 0.001 < 0.05, the independent variable ease of use on the mediation variable perceived usefulness had P values of 0.000 < 0.05, and the mediation variable perceived usefulness on the dependent variable usage intention has a P value of 0.115 > 0.05. It can be concluded that two pathways had a significant effect, and one pathway had no significant effect. Whereas Table 4 is the second analysis without involving the mediating variable on the dependent variable, which had a P value of 0.000 < 0.05, meaning that this path has a significant effect.

The second step aimed at looking at the path coefficient in the original sample estimate column in the analysis by involving the mediation variable in the ease of use path to smaller usage intention than the analysis, without involving the mediation variable on the ease of use path to usage intention (0.456 < 0.503). Therefore, it is appropriate provided that the mediating variable perceived usefulness characteristics can be said to be partially mediated variables.

Generally, this study shows that the overall hypothesis proposed were acceptable. In this case, there is a significant influence between ease of use, perceived risk, perceived usefulness, and usage intention. However, one hypothesis is not accepted because this pathway does not have a significant effect on endogenous variables.

The study results proved that ease of use had a significant and positive effect on the usage intention of Indihome e-channel customers in the Jakarta Area, so the hypothesis stated that ease of use affected the usage intention of Indihome e-channel customers in the Jakarta Area was accepted. This means that if the ease of use felt by customers when accessing the Indihome e-channel is getting better, it will increase the perceived usefulness. The results of this study are in line with [11], where usage had a positive impact on usage intentions. Likewise, it is also in line with [12], which found that ease of use affected perceptions of use and intention to use. Whereas perceived usefulness refers to consumers' perceptions of the outcomes of using e-channels, ease of use refers to their perceptions of the processes that lead to the end results of using e-channels [13]. According to the Technology Acceptance Model (TAM), ease of use had a dual effect on usage intentions, both directly or indirectly. Indirect effects on the intention occur through perceived usefulness because the more effortless the technology to use, the more valuable it will be [14-15].

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The results proved that perceived usefulness did not have a significant effect on the usage intention of Indihome e-channel customers in the Jakarta Area. Therefore, the hypothesis that perceived usefulness affected the usage intention of Indihome e-channel customers was rejected. This means that when a customer perceived the benefits of an application, it did not impact the intensity of the customer to access the application. The results of this study are in line with [18], which proves that only perceived ease of use and perceived security had a significant effect on the intention to use. As for the effect of perceived benefits on intention to use, the results were not significant. These results were also similar to the research results [19], which showed that perceived benefits had no significant effect on the intention to use in buying through e-book applications.

The study results proved that perceived risk had a significant effect on the usage intention of Indihome e-channel customers in the Jakarta Area. Therefore, the hypothesis that perceived risk affects the usage intention of Indihome e-channel customers was accepted. This means that when customers perceive the risks of filling

in an account on Indihome e-channel, they feel that Indihome will maintain the confidentiality of their identity and prevent illegal financial transactions. The risk that customers had perceived can make customers feel comfortable to increase the intensity of using Indihome e-channel. These results are in line with the research [20], where the perception of risk had a positive effect on use. Likewise, research [21] found that risk perception will affect the choice. In addition, [22] stated that the perception of risk became one of the important components in processing the intention to use made by consumers.

The analysis results showed that the role of perceived usefulness in mediating the effect of ease of use on usage intention was smaller than the direct effect of ease of use on usage intention. This means that customers were aware of using an application in making payment transactions. Customers are not only looking for the importance of a benefit, but the convenience and simplicity factors are important and primary factors for customers in using an online application. These results support the research of [12], which found that ease of use affects perceptions of usefulness and usage intentions. This is in accordance with TAM, which stated that ease of use has a dual effect, directly or indirectly, on intention to use. Indirect effects on intention occur through perceived usefulness [14-15].

4. CONCLUSIONS

This research focuses on elements that can increase customer usage intention to access and use the Indihome e-channel application. The four hypotheses proposed in this study resulted in several findings. Three pathways had a significant effect those are the effect of ease of use on perceived usefulness, the effect of ease of use on usage intention, and the effect of perceived risk on usage intention. Meanwhile, one path, perceived usefulness on usage intention, had no significant effect. Comparison of the direct effect of ease of use on usage intention with the indirect effect of ease of use on usage intention through perceived usefulness as a mediation produces a smaller value than the direct effect. This is related to the insignificant pathway, namely perceived usefulness for usage intention.

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