

ANALYSIS OF FACTORS AFFECTING THE INTENTION TO TRANSACT OF XYZ E-COMMERCE USERS IN JAKARTA: A STUDY OF PERCEIVED EASE OF USE, PERCEIVED USEFULNESS AND PERCEIVED RISK

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ABSTRACT

This Research aims to investigate how perceived ease of use, perceived usefulness, and perceived risk affect the intention to transact on XYZ e-commerce users in Jakarta. The research population involves XYZ e-commerce users who are in Jakarta during the period of this study, which is for 3 months from June to August 2023. The sampling technique used a non-probability sampling method with a purposive approach, involving 147 respondents. Data collection was carried out through distributing questionnaires offline and online. Data analysis was carried out using the Structural Equation Modeling (SEM) method with the Smart PLS 3.0 application. The results showed that 39.8% of the variation in the intention to transact variable could be explained by perceived ease of use, perceived usefulness, and perceived risk. The remaining 60.2% may be influenced by other factors outside the scope of this study. The research findings also show that both perceived ease of use and perceived usefulness have a positive and significant influence, both individually and jointly on intention to transact at XYZ e-commerce in Jakarta. Meanwhile, perceived risk shows a negative and significant influence on the intention to transact on XYZ e-commerce in Jakarta.

Keywords: Perceived Ease Of Use, Perceived Usefulness, Perceived Risk, Intention To Transact

1. INTRODUCTION

In the era of rapid technological development, people's lifestyles have undergone significant changes, especially in the desire to fulfill life's needs quickly and instantly. The high level of mobility in people's daily activities is one of the main factors driving this transformation. Service providers compete to provide convenience to consumers, focusing on creativity, convenience, and benefits that consumers feel through the sales system. The application of communication technology, particularly e-commerce, is increasingly coming into focus, with e-commerce as a fast-growing business mechanism. However, while e-commerce promises great business opportunities, challenges arise regarding the complexity of the system which is often difficult for users to understand. Therefore, understanding users' perceptions towards the use of such technology is crucial. Factors such as perceived ease of use are the main motivation for individuals to adopt new methods, while perceived benefits evaluate the usefulness or benefits gained from using the technology. This study aims to investigate the influence of perceived ease of use, perceived benefits, and perceived risk on transaction intention for XYZ e-commerce users in Jakarta. By analyzing these factors, this study seeks to provide new insights into consumer behavior in the use of e-commerce in a society that is increasingly accustomed to transacting online, with the hope of contributing to the optimization of e-commerce services and supporting the development of an economy that is increasingly dependent on personal consumption.

In this study, using the Extended Technology Acceptance Model (ETAM) theory, which is a development of the Technology Acceptance Model (TAM) introduced by Davis in 1989. As an adaptation of the Theory of Reasoned Action (TRA) by Ajzen and Fishbein in 1980, TAM and ETAM have the same goal, which is to explain the acceptance and use of information technology. ETAM expands the TAM concept by including external variables such as social, cultural, situational, psychological, and individual factors, which are considered to influence the acceptance and use of technology. In the context of this research, ETAM is used to analyze the variables of perceived ease of use, perceived usefulness, attitude toward using, behavioral intention to use, and actual system usage in e-commerce users. Perceived ease of use in this study indicates the extent to which users find it easy to use e-commerce technology, while perceived usefulness evaluates the benefits of technology in making transactions. ETAM also includes external factors such as social influence, facilitating conditions, and cognitive instrumental processes. This study aims to analyze the effect of perceived ease of use, perceived usefulness, and perceived risk on intention to transact on e-commerce users in Jakarta, with the hope of providing deeper insight into the factors that influence transaction intentions and the use of e-commerce.

According to Indarsin and Ali (2017), stating that perceived ease of use is the level of confidence of individuals in the use of technology which can help reduce excessive effort. User perceptions of the ease of use of a technology can affect a person's desire to interact and use that technology. For example, if an e-commerce user has the perception that using the XYZ e-commerce platform is relatively easy and does not require excessive effort and effort, then the user will tend to have a higher intention to transact using a platform that he feels is easy to use.

According to Alalwan (2016), states that perceived usefulness is a person's belief that by using certain technologies or innovations, and they will improve their performance or performance. Users' perceptions of the perceived benefits of using information technology will be able to influence their intention and desire to use the technology. For example, if an e-commerce user has the belief that using e-commerce will help them find and buy the products they need efficiently, easy payment, or the platform can provide relevant special offers, then users will tend to have a higher intention to make transactions through the platform.

According to Schiffman & Kanuk (2008), perceived risk is the uncertainty that consumers will face if they are unable to predict the consequences of decisions in making a purchase transaction. Perceived risk perceived by users will be able to influence the user's intention to make a transaction. For example, if e-commerce users feel that buying a product through an e-commerce platform will be high risk, for example, they feel that they will experience the risk of personal data security, or the risk if the product obtained does not match what the user expects, with this perception, users tend to have a lower intention to transact through the platform.

According to Zwass (in Pavlou, 2003) intention to transact is the intention of consumers to engage in online exchange relationships with sellers through websites, including information exchange, maintaining business relationships, and conducting business transactions. Intention to transact also refers to a person's desire or intention to make transactions or interact using information technology media, such as e-commerce platforms. If an e-commerce user has a strong intention to purchase a certain product through an e-commerce platform and is confident to interact with the seller through the website, then the user will tend to be active and committed in making the transaction.

According to Devi (2012), it was found that perceived ease of use has a positive and significant effect on intention to transact. This means that when someone feels that a technology is easy to use, it will increase the individual's intention to make a transaction. If an e-commerce user feels that the purchasing process from e-commerce is easy to use and the platform tends to be intuitive, then they tend to be more motivated to continue the transaction and shop on the platform.

H1: There is a positive and significant influence between perceived ease of use on intention to transact.

According to research by Yassed & Zayed (2010), it was found that perceived usefulness has a positive and significant influence on a person's willingness to use technology. If someone feels that the technology can provide benefits and can increase user efficiency, productivity, or performance in performing tasks or work, then users are more likely to have a strong intention to use the technology.

H2: There is a positive and significant influence between perceived usefulness on intention to transact.

According to Lui and Jamieson (2003), it was found that the intention to make a transaction can be negatively affected by perceived risk. In the context of using in the context of e-commerce use, the uncertainty associated with using an e-commerce website or platform can reduce the intention of individuals to use the site to make buying and selling transactions.

platform can reduce the intention of individuals to use the site to conduct buying and selling transactions. If users feel uncertain about the security of online payments or their trust in unknown sellers, users may be reluctant to make such transactions. This is because users feel the risk that will be accepted if they make the transaction.

H3: There is a negative and significant influence between perceived risk and intention to transact.

This research model can be displayed as follow:

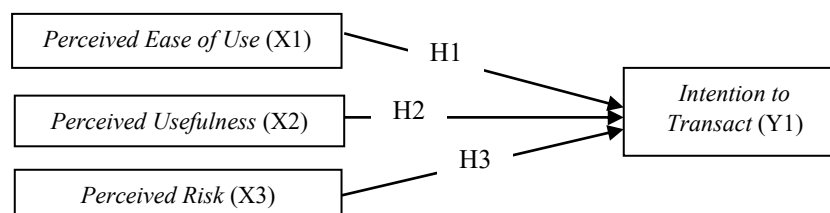


Figure 1. Research Model

2. RESEARCH METHOD

This research uses a descriptive method, which Sekaran & Bougie (2013) define as a data collection method that can describe the characteristics of a person, condition, or situation. The data source that will be used in this research is using primary data. Sekaran & Bougie (2013) state that primary data is data that refers to information obtained from the first person by researchers, where the variables of interest for the purpose of a study. The data collected will be obtained from distributing questionnaires to XYZ e-commerce users in Jakarta. The sampling method in this study is non-probability sampling. Where non-probability sampling is a sampling method where not all members in the population are selected as samples. Sampling is done by

convenience sampling where the sampling technique is based on the availability of elements and the ease of obtaining them. There are 3 variables in this study, the variables perceived ease of use, perceived usefulness and perceived risk are independent variables. Meanwhile, intention to transact is the dependent variable. According to Sekaran & Bougie (2013), stating that variable operationalization is a reduction in abstract concepts in variables to make these variables measurable. This can be done so that each variable can be broken down into several characteristics so that it can be observed. In this study, a Likert scale was used which is included in the interval scale. Likert scale is a scale that can be used to add up and find out how strongly the subject agrees or disagrees with the statements on the scale. This Likert scale can be used to determine whether or not a subject agrees or disagrees with the statements on a five-point scale. Cross sectional data analysis is used in this study, which is data with many objects in the same year, at the same time for many objects. The population of this study was conducted on XYZ e-commerce users in Jakarta who have made purchase transactions at XYZ e-commerce in Jakarta. The total respondents involved in this study were 147 people. Of the total respondents, 101 people or around 69% were women, while 46 people or around 31% were men. Furthermore, analyzing characteristics based on age, out of a total of 148 respondents, 89 respondents or 61% were between 23-29 years old, while 30 respondents or 20% were between 30-35 years old and 28 respondents were 36-42 years old. Meanwhile, characteristics based on occupation show that out of 147 respondents, the majority are private employees as many as 103 respondents or 70%, followed by students as many as 20 respondents or 14%. There are also a number of respondents with other types of jobs, such as civil servants, and those who do not work. And finally, the characteristics of respondents based on the number of transactions in a month reveal that out of a total of 148 respondents, 63 respondents or 43% make transactions 1-3 times a month. In addition, 55 respondents or 37% made transactions 4-6 times, 20 respondents or 13% made transactions 7-10 times, and 9 respondents or 6% made transactions more than 10 times a month. In the variable measurement process, the scale applied is a Likert scale with a range of 1 to 5. On this scale, the number 5 indicates the level of "strongly agree," while the number 1 reflects the level of "strongly disagree."

This research will be carried out validity and reliability tests. The validity test consists of loading factor analysis, convergent validity, and discriminant validity. The loading factor results will be considered valid if each indicator has a value of more than 0.7 while convergent validity is measured through the Average Variance Extracted (AVE) value which must exceed 0.5. The discriminant validity test pays attention to the value of cross loading, with a value greater than 0.5 and the loading on the measured construct must be higher than other constructs. Fornell lacker test is also used to ensure the quality of the results of discriminant validity. In the reliability test, it is tested through the composite validity and Cronbach's alpha indicators, and is considered reliable if the composite validity value is greater than 0.7 and Cronbach's alpha is greater than 0.6 (Hair et al., 2014).

Meanwhile, the analysis of the inner model involves assessing the coefficient of determination (R^2), goodness of fit, predictive relevance (Q^2), effect size, and path coefficient. There are 3 coefficient values, where the R^2 value is 0.25 with a weak indication; a value of 0.5 with a moderate indication and a value of 0.75 with a strong indication. While in predictive relevance, if the value of Q^2 has a value greater than 0, it indicates that the model has predictive relevance. In goodness of fit, if the result of a value of 0.1 can be said to be small Gof; a value of 0.25 can be said to be moderate Gof; a value of 0.36 can be said to be large Gof. There are 3 constructs in the effect size analysis, if the value is around 0.02, it means that the model of this study has a small effect, a value of 0.15 means that it has a moderate effect, and if the model has a value of

0.35, the model is declared to have a large effect. And analysis on Path coefficients which have values ranging from -1 to +1. A value of +1 can mean that the research variables carried out have a positive influence and a value of -1 states a negative influence (Ghozali and Latan (2015). Hypothesis testing is done by looking at the value of the path coefficient in testing the inner model. In hypothesis testing, a statistical value is used to determine the acceptance or rejection of the hypothesis. At a significant level of alpha value of 5%, and the t-statistic value used is 1.96. Therefore, the hypothesis H_a will be accepted and H_o will be rejected if the $t\text{-statistic} > 1.96$. In addition, hypothesis testing can also use the probability of the H_a hypothesis will be accepted if the p value is < 0.05 .

Table 1. Variables and Measurement

No	Variable	Indicator	Code
1	<i>Perceived Ease Of Use</i>	I feel easy to learn the use of XYZ e-commerce	PEU 1
		I feel that using XYZ e-commerce will make it easier for me to make transactions	PEU 2
		I feel that with the existence of XYZ e-commerce, I feel easier in making purchase transactions.	PEU 3
		I feel that XYZ e-commerce is easy for me because there is guidance in using it.	PEU 4
2	<i>Perceived Usefulness</i>	I feel that XYZ e-commerce helps me to find and buy the products I want.	PU 1
		I feel that XYZ e-commerce can improve my performance in finding and buying the products I want.	PU 2
		I feel XYZ e-commerce allows me to search and make purchases more quickly	PU 3
3	<i>Perceived Risk</i>	I will experience losses if I make transactions using XYZ e-commerce	PR 1
		I will make a mistake if I use XYZ e-commerce to make a transaction	PR 2
		I feel that transacting in XYZ e-commerce will cause problems that I do not want to experience	PR 3
		I feel insecure in making transactions in XYZ e-commerce	PR 4
4	<i>Intention To Transact</i>	With access to the internet I want to use XYZ e-commerce in making transactions	ITT 1
		With access to using XYZ e-commerce, I will consider using it for transactions.	ITT 2
		I will make a transaction using XYZ e-commerce in the near future	ITT 3

3. RESULTS AND DISCUSSIONS

In this study, the authors have conducted a validity test in the form of convergent validity and discriminant validity indicators. The results of this analysis show that each statement indicator has a value of more than 0.7. Therefore, at the factor loading analysis stage in this study related to the variables perceived ease of use (X1), perceived usefulness (X2), perceived risk (X3) on intention to transact (Y1), it can be considered valid because it meets the requirements and illustrates the strong correlation between each indicator and the construct in this study.

Table 2. Average Variance Extracted Value Result

Variables	Average Variance Extracted (AVE)	Validity
<i>Perceived Ease Of Use</i>	0,610	VALID
<i>Perceived Usefulness</i>	0,601	VALID
<i>Perceived Risk</i>	0,675	VALID
<i>Intention To Transact</i>	0,665	VALID

Table 3. Cross Loading Result

	Intention To Transact	Perceived Ease Of Use	Perceived Risk	Perceived Usefulness	Validity
ITT1	0,858	0,231	-0,185	0,466	VALID
ITT2	0,780	0,180	-0,272	0,386	VALID
ITT3	0,807	0,289	-0,112	0,565	VALID
PEOU1	0,206	0,771	0,053	0,211	VALID
PEOU2	0,184	0,749	-0,101	0,157	VALID
PEOU3	0,189	0,767	-0,001	0,266	VALID
PEOU4	0,295	0,833	-0,062	0,258	VALID
PR1	-0,192	-0,006	0,767	-0,062	VALID
PR2	-0,217	0,005	0,870	-0,013	VALID
PR3	-0,165	0,070	0,851	-0,034	VALID
PR4	-0,166	-0,208	0,793	-0,030	VALID
PU1	0,367	0,130	-0,030	0,712	VALID
PU2	0,300	0,074	-0,084	0,704	VALID
PU3	0,469	0,265	-0,044	0,795	VALID
PU4	0,495	0,273	0,052	0,853	VALID
PU5	0,559	0,298	-0,073	0,801	VALID

In the Reliability test, tested through composite reliability and crobach's alpha indicators. The results of the test show that the value of the composite reliability on each indicator has a value greater than 0.7 and the crobach's alpha value on each indicator has a value greater than 0.6. So this research can be declared reliable because it has met the requirements.

Table 4. Values of Composite Validity and Crobach's Alpha

Variabel	Composite reliability	Crobach's Alpha	Reliability
<i>Intention To Transact (X1)</i>	0,856	0,748	RELIABLE
<i>Perceived Ease Of Use (X2)</i>	0,862	0,790	RELIABLE
<i>Perceived Risk (X3)</i>	0,892	0,839	RELIABLE
<i>Perceived Usefulness (Y1)</i>	0,882	0,836	RELIABLE

At the inner model analysis stage, it is carried out by looking at the value of the coefficient of determination (R²), predictive relevance (Q²), goodness of fit, effect size, and path coefficient

Table 5. Values of Coefficient of Determination, Predictive Relevance, Goodness of Fit

Analysis Result	Value	Indication
Koefisien Determinasi	0,398	MODERATE
Predictive Relevance	0,247	GOOD
Goodness Of Fit	0,504	BIG

The coefficient of determination can be indicated as Moderate, this indicates that as much as 39.8% in the intention to transact variable in this study can be explained by perceived ease of use, perceived usefulness and perceived risk. While the remaining 60.2% may be influenced by other factors not included in this study. The predictive relevance value is greater than 0 and so the observation value can be concluded to be good. The goodness of fit value is greater than the value of 0.36 so that it can be indicated that it has a large GoF value.

Table 6. Values of Effect Size

Variable	F-Square	Effect Size
<i>Perceived Ease Of Use (X1) → Intention To Transact (Y1)</i>	0,024	SMALL
<i>Perceived Usefulness (X2) → Intention To Transact (Y1)</i>	0,443	BIG
<i>Perceived Risk (X3) → Intention To Transact (Y1)</i>	0,067	SMALL

The effect size of the perceived ease of use variable on intention to transact is 0.024, indicating a small effect. Although there is a relationship between the two variables, the effect is relatively low. In contrast, perceived usefulness shows an effect size of 0.443, indicating a large effect, and is a strong dominant factor in influencing the intention to make a transaction. While perceived risk, with an effect size of 0.067, has a small effect, and indicates that although there is a perceived risk, it does not significantly reduce the intention to transact.

Table 7. Path Coefficient, T-Statics, and P Values

	<i>Path Coefficient</i>	<i>T- Statics</i>	<i>P Value</i>	RESULT
<i>Perceived Ease Of Use (X1) → Intention To Transact (Y1)</i>	0,126	2.090	0.037	POSITVE
<i>Perceived Usefulness (X2) → Intention To Transact (Y1)</i>	0,540	7.969	0.000	POSITVE
<i>Perceived Risk (X3) → Intention To Transact (Y1)</i>	-0,201	2.563	0.011	NEGATIVE

The path coefficient analysis value for the perceived ease of use and perceived usefulness variables on intention to transact. Having a positive value, and t-statistics greater than 1.96, and a p-value smaller than 0.05 indicates that the relationship between variables is positive and the hypothesis can be accepted. As for perceived risk on intention to transact, it has a negative value, and t-statistics greater than 1.96, and p-value smaller than 0.05, indicating that the relationship between variables is negative and the hypothesis can be accepted.

In this study, the perceived ease of use variable has a positive and significant effect on intention to transact. Where the t-statistics value for XYZ e-commerce users in Jakarta is 2.090. This value has a value above 1.96. While the p-values are 0.037 which is less than 0.05. Therefore, the ease of use of the XYZ e-commerce platform has a positive impact on consumer intention to make transactions. The ease of using the platform, such as simple and easy payment processes, clear guidelines are factors that may have led to these results. This ease of use gives users the confidence to transact on XYZ e-commerce.

XYZ e-commerce.

Perceived usefulness has a positive and significant effect on intention to transact. Where the t-statistics value is 7.969, this value is above 1.96. While the p-values are 0.000 which is less than 0.05. Therefore, in this study it can be concluded that perceived usefulness greatly influences consumer intention to transact in XYZ e-commerce. Perceived usefulness explains the extent to which consumers feel XYZ e-commerce helps them achieve their shopping goals. The features contained in XYZ e-commerce such as product completeness, highly informative product reviews, easy ordering process, product suggestions with various types of products and fast customer service are the main factors in increasing perceived usefulness. By providing the right benefits and meeting consumer needs, XYZ e-commerce can increase consumer satisfaction and encourage them to make repeat transactions on the XYZ e-commerce platform.

Perceived risk has a negative and significant effect on intention to transact. Where the t-statistics value is 2.563. Both of these values have values above 1.96. While the p-values of 0.011 are smaller than 0.05. So, the higher the level of perceived risk felt by consumers regarding transactions in XYZ e-commerce, the lower their intention to transact. Perceived risk in this context explains the concerns or uncertainties of consumers regarding the risk of losses, errors, or problems that may arise when transacting in XYZ e-commerce. Therefore, to increase the intention to transact in XYZ e-commerce, companies need to be active in reducing this level of perceived risk. This can be done with efforts such as increasing transaction security, providing

product quality assurance. As well as providing a clear and easy product return policy so that it can help reduce consumer fears in making transactions in XYZ e-commerce.

4. CONCLUSIONS & SUGGESTIONS

The results of this research on XYZ e-commerce users show that 39.8% of the variables of intention to transact are explained by perceived ease of use, perceived usefulness and perceived risk. While the remaining 60.2% may be influenced by other factors not included in this study.

The perceived ease of use variable has a positive and significant effect on intention to transact. This indicates that the easier it is to use the platform, the greater the tendency of consumers to make transactions using XYZ e-commerce. With this understanding, companies can optimize the user experience through simplifying the appearance of XYZ e-commerce and the transaction process on the XYZ e-commerce platform. Improve clarity of instructions, provide clear guidance, and minimize barriers to users.

The perceived usefulness variable has a positive and significant effect on intention to transact. This shows that the more useful the use of the platform is for consumers, the greater the tendency of consumers to make transactions using XYZ e-commerce. By understanding the factors that influence user intentions, companies can develop their systems with features that can simplify every transaction process.

The perceived risk variable has a negative and significant effect on intention to transact. This indicates that the higher the risk perception felt by consumers towards using the platform, the less likely consumers are to make transactions using XYZ e-commerce. Companies can design steps to reduce the risk perceived by users, for example by increasing transaction security, and conducting regular system maintenance, so that no errors occur in the transaction process.

The practical implication of this study is that E-Commerce service provider XYZ needs to focus on developing user-friendly applications, optimizing perceived benefits, and risk management to increase users' transaction intentions. These steps can help in creating a more attractive and secure E-Commerce environment for users in Jakarta. And the results of this study are also consistent with previous research where the importance of perceived ease of use, perceived benefits, and risk management in e-commerce transaction intentions. These findings support and strengthen previous theories which state that these variables have an important role in shaping consumer behavior in making transactions in e-commerce.

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