

THE INFLUENCE OF PERCEIVED TRUST, PERCEIVED RISK AND PERCEIVED EASE OF USE ON ONLINE PURCHASE INTENTION TO CONSUMERS IN PADANG

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Abstract

This research is aimed to investigate how perceived trust, perceived risk and perceived ease of use influence online purchase intention to consumers in Padang. It was a causative research. The population is citizens of Padang who knows about online shopping and has been visited the online store but never did an online purchasing. As many as 200 respondents are represented as a sample. The data was collected by questionnaire. Using Structural Equation Modeling (SEM), the results revealed that perceived trust and perceived ease of use affect online purchase intention as long as perceived risk affect perceived trust, while perceived risk did not show the effect towards online purchase intention. Thus, the data reflects that consumers in Padang have an intention to shop online.

Keywords: Perceived trust, perceived risk, perceived ease of use and online purchase intention.

I. Introduction

Nowadays, the Internet development is growing rapidly and helpfully helps and facilitates our society in order to fulfill their various daily needs, starting from reading the news to shopping. Shopping through the Internet or also known as online shopping is one of many activities that can be done using Internet. The online shopping activity is a form of electronic commerce where there is a transaction between seller and seller or between buyers and seller (Turban *et al.*, 2012).

In 2014, Association of Internet Service Provider in Indonesia (APJII) has conducted a survey which shown that 34% Internet user in Indonesia use Internet to search for an information about the product or service they are willing to buy, 27% user confessed that they have been shop online and the rest used the Internet for another needs. This situation explains that more than half citizens of Indonesia use the Internet to something related with online shopping. However, the high intention to buy online, in fact, does not meet the proportion of user who has done an online shopping.

Research conducted by Brand & Marketing Institute (2015) showed only 24% from total Internet user who has done an online shopping. This is also supported by the information accessed from alexa.com on September 22, 2015 who has summarized the percentage of visitors who accessed several popular online sites in Indonesia. It shows that more than 50% user has visited the popular sites such as kaskus.co.id, bukalapak.com, lazada.co.id, tokopedia.com, olx.co.id, or zalora.co.id. Yet, the total of visitors who has been done an online transaction less than a half of those who has been visited the sites. It is necessary for the seller and the online shops' owner all at once to know the factors influencing consumers' intention to purchase online.

II. Teoritical Framework

Online Purchase Intention

Online purchase intention can be defined as a condition when customer intend and have the willingness to engage in an online transaction (Pavlou, 2003). In this case, online

transaction can be referred to an activity where information retrieval, information transfer and product purchase are about to happen. Online purchase intention is concerned about the likelihood to purchase products online (Ganguly *et al.*, 2009). Based on definitions above, it can be concluded that online purchase intention is customers' willingness to engage with purchasing transaction online through an online shop or a website.

The dimensions of online purchase intention consist of (1) the willingness to purchase products online, (2) providing time to purchase online, (3) the willingness to purchase online in short time and (4) consideration to shop online (Utomo *et al.* in Prahardikatama, 2013).

Perceived Trust

Trust defined as the willingness to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Mayer *et al.* in Büttner & Göritz, 2008). Using Mayer *et al.* terminology, we will refer to this belief-based conceptualization of trust as perceived trust. Therefore, it can be concluded that perceived trust is a firm belief or a hope from customer towards a website or an online shop in a purchase transaction, especially the online purchase transaction.

There are four dimensions of perceived trust; ability, benevolence, integrity and predictability (Büttner & Göritz, 2008). Ability refers to the trustee's competence to fulfil promises given (in this case is the seller or the owner of online shop). Benevolence denotes that the trustee is interested in the trustor's well-being (it is mentioned customer), where the seller will try to give the best service towards its customer. Integrity means that the trustee follows a set of desirable principles while predictability is a prediction towards the behavior that might be shown by a trustee.

H1 : Perceived trust has positive influence towards online purchase intention.

Perceived Risk

Perceived risk is the uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions (Schiffman & Wisenblit, 2015). Perceived risk exists in a consumer's decision process when he or she cannot foresee the purchase outcome and then uncertainty takes place (Hoover *et al.* in Wang & Tsai, 2014). In addition to lowering the online purchase intention, perceived risk also has a negative relationship towards trust (Kimery and McCord, 2002) or in this research it has a negative relationship towards perceived trust. Higher level of trust will affect to the lower level of risk to be happened. In the same way, the reduction of perceived risk will influence the trust level and attitude towards online purchase, which can increase the customers' intention to buy online (Mansour *et al.*, 2014).

In most situation, the consumers' perception towards risk denotes the function of several elements from perceived risk (Liu *et al.*, 2013). These elements are financial risk, product risk, time risk and psychological risk. Based on those elements of perceived risk, then it will be the indicators for this research.

H2 : Perceived risk has negative influence towards online purchase intention.

H4 : Perceived risk has negative influence towards perceived trust.

Perceived Ease of Use

The term perceived ease of use firstly introduced by Davis (1989) in Technology Acceptance Model (TAM). In this model, Davis introduced perceived ease use as one of two variables which forms TAM, with perceived usefulness as the second variable.

Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). Perceived ease of use concept directly explains the purpose of utilizing the information system and facilitating system utilization so that it will fit the consumers' need where in using an online shopping site; there is no need for the consumers to do more effort to understand the site and use it.

There are several indicators on perceived ease of use for a shopping website such as (1) easy to use, (2) easy to learn, (3) easy to become skillful and (4) clear or understandable (Segars & Grover, 1993).

H3 : Perceived ease of use has negative influence towards online purchase intention.

As the above explanation, the conceptual model of this research will be shown as below.

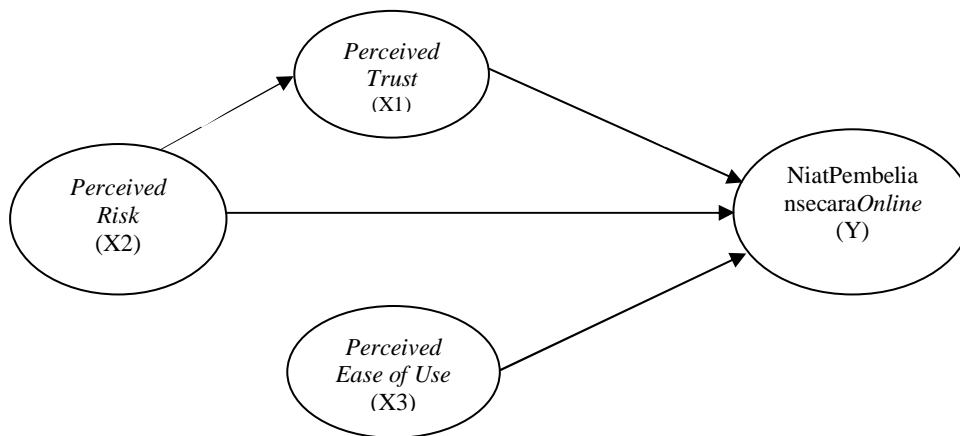


Figure 1: Conceptual Model

III. Research Methods

This study employs causative research with one time collection of information from the respondents. Target population of this study is citizen in Padang which is knowing about online shopping activities and have visited online shop or online website yet they still have not done an online purchase. The sample was drawn using non-probability sampling method and accidental sampling technique. Accidental sampling is a technique to draw a sample based on spontaneous factor where possible respondents whose match with the characteristic may become a respondent or here we call them as a sample (Riduwan, 2008).

A research instrument i.e. questionnaire was constructed based on the past studies. The questionnaire consists of three components which are respondents' identity, pre-statement and statement for research variables. It was given in a list of question using closed-ended questions system with five-point Likert scaling techniques. Respondents may respond to the questions by choosing one option from several alternative choices written in the questionnaire.

For a brief explanation of operational definition for each variable, online purchase intention is related to consumers' plan or willingness to do an online transaction while perceived trust was measured as consumers' belief towards the seller or the owner of online shop to do an online purchase transaction. Moreover, perceived risk measures consumers' perception towards uncertainty which is dealt when the consequence of the online purchase transaction cannot be predicted and perceived ease of use was measured as

how far the consumers feel that online purchase transaction is not as difficult as it may seem.

Data Analysis

A total of 200 questionnaires were distributed and retrieved from 200 respondents in Padang. More than half of the respondents (63 per cent) were female. The majority of respondents were in the 21-25 age group (56.5 per cent). Most (52 per cent) were student. All respondents reported knowing the online shopping activities and nearly 90 per cent respondents (86 per cent) were having intention to shop online. Almost half of the respondents reported earnings IDR 1,000,000 – IDR 2,000,000 per month (22 per cent) and IDR 2,000,000 – IDR 4,000,000 per month (20.5 per cent). Lazada.co.id (16.89 per cent), Tokopedia.com (13.46 per cent) and OLX.co.id (12.66 per cent) were the most visited online sites by respondents.

IV. Result And Discussion

This research model was tested with Structural Equation Modeling using SMART-PLS 3.0. This section included validity test, reliability test, hypotheses testing and indirect effect. We represent each items in these parts below.

Validity Test

In this test, we will measure how well an instrument that is developed measures the particular concept it is intended to measure (Sekaran & Bougie, 2013). A construct is considered to be distinctive from another constructs if the square root of Average Variance Extracted (AVE) from it is greater than its correlations with other latent constructs (Fornell & Larcker, 1981). The following table presents the square root values of each constructs.

Table 1. Square Root of Average Variance Extracted (AVE)

Items	Online Purchase Intention (Y)	Perceived Ease of Use (X ₃)	Perceived Risk (X ₂)	Perceived Trust (X ₁)
Online Purchase Intention (Y)	0.809			
Perceived Ease of Use (X ₃)	0.531	0.732		
Perceived Risk (X ₂)	-0.089	-0.083	0.722	
Perceived Trust (X ₁)	0.470	0.439	-0.212	0.716

The correlations indicate the internal consistency of each construct. It is shown that the square root values of AVE are higher than the correlation values below it. Therefore, the estimated model can be assumed valid.

Reliability Test

Reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring (Sekaran & Bougie, 2013). Reliability can be measured by seeing the value of Composite Reliability and Cronbach's Alpha which is shown below.

Table 2. Composite Reliability and Cronbach's Alpha

Items	Composite Reliability	Cronbach's Alpha
Online Purchase Intention (Y)	0.850	0.739
Perceived Trust (X ₁)	0.863	0.814
Perceived Risk (X ₂)	0.922	0.911
Perceived Ease of Use (X ₃)	0.873	0.830

Table 2 shows the value of both Composite Reliability and Cronbach's Alpha of each construct. From the table above it can be seen that each construct has value over 0.7. Refer to the rule of thumb of Composite Reliability and Cronbach's Alpha value that must be bigger than 0.7 (Hair *et al.*, 2006) it can be stated that the measurement used in this research is reliable.

Hypotheses Testing

This research evaluates four hypotheses for direct correlation between independent variables towards dependent variables. The test was done using SMART-PLS version 3.0 and the followings are summary of hypotheses test output of all variables in this research.

Table 3. Output of Hypotheses Testing

	Hypotheses	Sig.	Result
H1.	Perceived trust has positive influence towards online purchase intention.	0.000	Supported
H2.	Perceived risk has negative influence towards online purchase intention.	0.933	Not Supported
H3.	Perceived ease of use has positive influence towards online purchase intention.	0.000	Supported
H4.	Perceived risk has negative influence towards perceived trust.	0.035	Supported

Based on the output above, the correlation between perceived trust and online purchase intention is positive. The result revealed that the path between these two constructs was indeed positive ($\beta=0.000$, $p < 0.05$) and lead H1 as a supported hypothesis. The proposed positive relationship also can be seen on perceived ease of use and online purchase intention as H3 ($\beta=0.000$, $p < 0.05$) which make it as the second hypothesis supported.

For perceived risk, H4 hypothesizes the negative relationship between perceived risk and perceived trust ($\beta=0.035$, $p < 0.05$) and it was also supported. Meanwhile, the negative relationship between perceived risk and online purchase intention (H2) found to be not supported ($\beta=0.933$, $p < 0.05$). Thus, it can be concluded that out of four hypotheses proposed, three hypotheses are supported and one hypothesis is not supported.

Indirect Effect

The addition of a third variable to the independent variable and dependent variable relationship, which enables the independent variable to cause the mediator and the resulting mediator variable to cause the dependent variable is called indirect effect or mediation model. It should be noted that the relationship between independent variable and dependent variable is via the direct and mediated effect indirectly causing independent variable to affect dependent variable through mediator variable (Jenatabadi, 2015). The following is the output of indirect effect found in this research.

Table 4. Output Indirect Effect

Items	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics ((O/STERR))	P Values
Perceived Ease of Use (X_3) \rightarrow Online Purchase Intention (Y)					
Perceived Risk (X_2) \rightarrow Online Purchase Intention (Y)	-0.062	-0.068	0.034	1.855	0.064
Perceived Risk (X_2) \rightarrow Perceived Trust (X_1)					
Perceived Trust (X_1) \rightarrow Online Purchase Intention (Y)					

The result shown in the table above indicates that perceived risk does not have indirect effect towards online purchase intention through its mediator variable, perceived trust ($\beta=0.064$, $p < 0.05$). In summary, perceived trust cannot be a mediator variable for perceived risk and online purchase intention.

Discussion

Based on the result of hypotheses testing, perceived trust found to give a significant and positive influence towards intention to purchase online. This indicates that the higher consumers' perceived trust the higher the customers' intention to purchase goods and services online. This signifies that in online purchasing context, consumer has a good level of trust which can affect their online purchase intention. This research was confirmed the initial researches which explained that perceived trust has positive significant effect towards intention to purchase online (Büttner&Göriz, 2008; Setiawan&Achyar, 2012). The result above also proved that the consumers' intention to do an online transact positively related to trust (Pavlou, 2003).

Another result found in this research is perceived risk did not influence the consumers' online purchase intention. In general, perceived risk should have a negative influence towards online purchase intention where the higher the risk perceived, the lower the consumers' intention to purchase online will be. It can be said although the online shopping seems to contain risk, the consumers' in Padang will keep their intention to shop online. To support this research there was previous study proved that online purchase intention did not significantly influenced by perceived risk (Wang & Tsai, 2014).

Even though the relationship between perceived risk and online purchase intention has no influence, perceived ease of use reported to have significant and positive influence towards online purchase intention. The result revealed that perceived ease of use can become an important factor which can increase the intention to purchase online to consumer in Padang. It is also supporting the proposed hypothesis where the more consumers find an ease on using online shop or online website, the more they will have intention to shop online. The significant influence given by perceived ease of use towards online transaction suggesting that Technology Acceptance Model (TAM) could also extend into consumer online behavior to explain acceptance of business-to-consumer (B2C) ecommerce (Pavlou, 2003).

Finally, the result provided from the last hypothesis testing showed that there are negative and significant influence on consumers' perceived risk towards consumers' perceived trust in Padang. This supports the observation that the more online risk perceived by consumers it will reduce their perceived trust. Several risks such as financial risk, product risk, psychological risk and time risk may appear as consideration towards consumers in Padang. It is also quite possible that the relationship between risk and trust may be non-recursive and each may cause each other in the decision making process of organizations and consumer in online transaction (D'Alessandro *et al.*, 2012). An indirect effect also found in this research although it does not give any contribution towards online purchase intention.

V. Conclusion

This research shows that perceived risk does not have any influence towards online purchase intention. It shows that even online shopping perceived to be risky, most citizen in Padang tend to continue their online shopping experience. On the other hand, perceived trust and perceived ease of use showed to have positive correlation towards online purchase intention which means the more trusted and easier an online website, the more intention to purchase online increases. This research also proved that perceived risk

inversely reflect perceived trust or it can be said that it has negative relationship towards perceived trust. It can be concluded that the consumers' trust will be perceived higher if the risk perceived to be low.

There are several limitations for this research that may differ the previous research. The overall smaller size of sample may cause the high sampling error that would be expected. The results obtained from 200 respondents may lack generality, although they were retrieved from the population which met the characteristic for this research. Other than that, since this research was conducted in Padang, the findings found here may not generalize to other areas such as big cities in Indonesia or even the cities abroad. In order to enhance the better result, a rigorous study may be needed to improve the findings of this research in the future. Furthermore, it is necessary to add several suitable factors that may give a better effect and performance towards the intention of purchasing online (e.g. interview or else). Future researchers are encouraged to explore online shopping activities since this is a next interesting topic to be discussed and the expansion seems to be more rapid than today.

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