

## The Influence of Perceived Risk and Perceived Ease of Use on Consumer's Attitude and Online Purchase Intention

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### Abstract

This research analyzed the perceived risk and perceived ease of use on consumer's attitude and online purchase intention. The type of this research is causative research. This research was conducted in the city of Bukittinggi, West Sumatra, Indonesia. The population in this study is the whole community in Bukittinggi who knows about online shopping activities and has visited the shopping sites or online stores but never made an online purchase. The number of the sample is 100 people. The type of the data is primary data. The data were collected through questionnaires and analyzed using SmartPLS 2.0 version. The results of this study indicate that perceived risk has a positive and insignificant effect on consumer's attitude in online purchasing. Further, perceived ease of use has positive and significant effect on consumer's attitude in online purchasing. Moreover, consumer's attitudes have positive and significant effect to online purchase intention.

**Keywords:** perceived risk, perceived ease of use, consumers attitude, and online purchase intention

### Introduction

Basically, internet users used the access for online shopping activities or searching information about products and services. Then, the consumers will process the information to determine whether they make purchase decision or not. According to Schiffman and Kanuk (2007, 222), attitude is a tendency used of behaving in a pleasant or unpleasant way to a particular object. Meanwhile, according to Engle et al., (1995) in Terenggana et al. (2013) attitude consists of five dimensions, namely, (1) valance, which means positive and negative attitudes, or neutral objects; (2) extremities indicate likes and dislikes; (3) resistance, which is indicating attitude resistant to change; (4) perseverance, reflecting that attitude held by the consumer within a certain period, (5) self-confident is the level of consumer confidence.

After searching and processing information, the consumers will give response about the products. If consumers have the positive attitude or response to the object, it will be very easy for consumers to make a purchase of the object, but the negative attitude or response will block consumer's interest to make a purchase decisions. According to Pavlou (2003), interest in transactions is defined as consumer involvement in an online exchange relationship with a web retailer, such as sharing business information, and business transactions. Meanwhile, Ghosh (1990) in Septialana and Kusumastuti (2017) also added that purchase interest is an effective tool to predict the purchase processing. Usually, purchase interest is related to consumers' behavior, perceptions and attitudes. In addition, consumers will be affected by the environment and influenced externally during the purchase process.

Based on information which are obtained by the consumers, and then those information's will impact to consumer's attitudes and interests in online changes. There are several factors that affect and call the consumer's, one of them is perceived risk. (The perceived risk is caused of the consumers' fear to receive the risk in online shopping) This perceived risk arises with what enables risks that consumers will accept if online. According to Sciffman and Kanuk (2008, 170), those perceived risk are defined as uncertainties that already reach the customers if they cannot predict. Besidesthe risk perception factor, there is the other factor namely the perception of ease of use, it means that consumer's perceptions about the use of online sites. According to Adriyano and Rahmawati (2016), perceived ease of use in the use of information technology is defined as a belief that the use of such information technology can be easily understood and used so as to reduce one's effort both time and technology to learn or simultaneously in its use.

According to Gefen et al. (2003), interest in online purchases should be predicted by some models of TAM (Technology Acceptance Model) developed from Theory of Reasoned Action (TRA) proposed by Fishbein and Ajzen (1975) in Renko (2015). This model of the theory is used to describe technology and is often used on the use of the website, Gefen and Straub (2000) in Chen (2011). TAM suggests that consumers' behavior is determined by their attitudes toward the adoption of technologies that are shared by two beliefs: the perceived usefulness and the perceived ease of use in the interaction of online shopping or transactions between e-vendors and consumers (individual buyers) have similar characteristics and according in this theory, both attitudes toward actions and subjective norms on behavioral interest. This is considered as the most effective theory in information systems (Benbasat and Barki, 2007 in Renko, 2015). Many researchers still consider attitudes as an important factor in predicting user's behavior, and previous researchers also suggested TAM applications and examined the effects of other factors related to interests such as risk perception and consumer confidence in online purchases (Nicolaou and McKnight, 2006 in Chen, 2011).

There are many research about this study that have been done by some researchers before. The first research is conducted by Rahmiati (2017), this study shows the perceived ease of use has a positive and significant effect on student attitude in the digital library usage. The second research is done by Hsu and Bayarsaikhan (2012), they found that perceived risks have an effect on online shopping attitude and online shopping attitude directly positively affects the interest of online shopping.

The third research is written by Oentario, et al, (2017), the results shows that perceived ease of use has a positive and significant effect on consumers' attitude. Consumers' attitude gives the positive affect to the consumers' intention to buy online. The fourth research is conducted by Kusdani (2014), they found that there is a positive influence of ease of use on consumer attitudes in using internet insurance services, the positive influence of consumer attitudes toward consumer interest in using internet insurance services. The fifth research is done by Putro & Haryanto (2015) The results showed that a positive significance between perceived risk on consumer attitudes, and a significant and positive relationship between consumer attitudes and the desire to buy.

Based on previous research, the authors postulated some hypotheses:

- H<sub>1</sub> There is a negative and significant influence of perceived risk to consumer attitudes in online shopping.
- H<sub>2</sub> There is a positive and significant influence of perceived ease of use on consumer attitudes in online shopping.
- H<sub>3</sub> There is a positive and significant influence of consumer attitudes on consumer buying interest in shopping online.

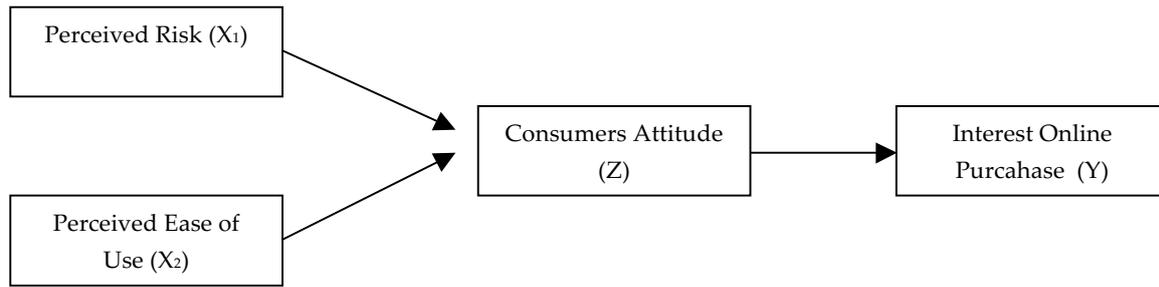


Figure 1 The research model

**Methods**

The population in this study is all people in Bukittinggi who know about online shopping activities and have visited the online site or online store but never done an online purchase. Sampling method which is used in this study is the method of non-probability sampling, because the number and identity of members of the population is not known. Besides, the sampling technique is done by purposive sampling method and the number of the sample is 100 people. The data are collected by distributing questionnaires to consumers in Bukittinggi.

The question items are used to manifest the impacts of previous research with some changes in the words in order to make them in line with online purchasing interest and the urban community context. In total, there are 24 items of question which are adapted from previous research. Items for perceived risk are adapted from Hansen et al. (2017). The question items for perceived of ease are adapted from Juniwati, (2014). The question items for consumers' attitude variables are adapted from Jarvenpa et al. (2000) and measurements for the constructs of consumer buying interest are adapted from Pavlou, (2003). All items for each construct are measured using Likert scales that use alternate five-point answers with categories ranging from strongly disagree to strongly agreeing to all questions.

The data were analyzed using structural equation modeling with analysis tool using partial least square (PLS) version 2.0. The measurement model was evaluated based on the validity and reliability of the instrument. The instrument validity is tested and determined by the convergent validity and discriminant validity. Convergent validity was measured by correlation between component scores and construct score considered high if loading factor is higher than 0.40. Discriminant validity relates to the principle that different construct measurements should not be highly correlated. Discriminant validity occurs when two different instruments measuring two predicted constructs that do not correlate produce a score that is not correlated.

All constructs are considered to have discriminant validity if the correlation between the construct indicators is greater than the correlation between the indicator and the other construct. To achieve better validity, one of the items of interest purchased online will be removed, after re-estimation. Thus, the test results indicate that all indicators have convergent validity with loading factors greater than 0.70 with the constructs to be measured. Nevertheless, for early stage research of developing a scale of measuring loading values of 0.5 to 0.6 is considered sufficient (Chin in Ghazali, 2008: 24).

Table 1 Reliability Analysis

Item	Composite Reliability	Cronbach Alpha
Consumer attitude	0.891589	0.847829
Online Purchase Intention	0.845366	0.762008
Perceived Ease of Use	0.897992	0.870469
Perceived Risk	0.892914	0,861171

Source: Primary Data 2018 (processed)

The reliability of the instrument was assessed using a composite of reliability and Cronbach alpha. The rule of thumb alpha value or composite reliability must be greater than 0.7 although a value of 0.6

is still acceptable. In summary, the measurement model demonstrates adequate reliability, convergence validity and discriminant validity.

The structural model can be evaluated in three ways, R-square, Q-square and Goodness of Fit. The number of criteria with the specified value indicates that the model in this research is good. The test results show that the R-square value ranges from 0.39 to 0.57 with this value it can be said that this model belong to moderate category. According to Chin in Imam (2008: 81) states that the criterion of boundary value of R-square is divided into three qualifications namely R-square value 0.67, 0.33, and 0.19 as high, low and small. However, according Jogiyanto and Abdillah (2014: 165) say that, the value of R-square variant described in the dependent variable should be above 0.10.

Q-square for this research model was 0.429, so it can be explained that the latent variables used in the model are latent variables that have good prediction relevance. The Q-square value > 0 indicates the model has predictive relevance, otherwise if the Q-square value ≤ 0 shows the model lacking predictive relevance (Chin, 1998 in Anuraga et al., 2017).

Table 2 R-Square

Item	R-Square
Consumer attitude	0.385219
Online Purchase Intention	0.574347
Perceived Ease of Use	
Perceived Risk	

Source: Primary Data 2018 (processed)

Goodness of Fit (GoF) of the model can be measured using the formula of Tannenhaus (2005): 159):

$$GOF = \sqrt{AVE} \times \sqrt{R^2}$$

According to Haryono (2017), GoF 0.1 is small, 0.25 medium, 0.36 large. Based on the calculation of GoF values for this model is 0.36 which is categorized as large. Overall, this model produces good predictions. Therefore, we can proceed to test the path coefficients and hypotheses of the structural model.

**Results and Discussion**

The significance of the variable provides very useful information about the relationship between research variables. The basis use in testing the hypothesis is the value found in Path Coefficients. Here is the output of structural model testing exemption:

Table 3 Output of path coefficient

Item	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ( O/STERR )
Perceived Risk → Consumer attitude	0.024984	-0.007196	0.098048	0.098048	0.254814
Perceived Ease of Use → Consumer attitude	0.626328	0.640551	0.076741	0.076741	8.161620
Consumer attitude → Online Purchase intention	0.757857	0.762796	0.051577	0.051577	14,693558

Source: Primary Data 2018 (processed)

The results are obtained from the model equation modeling show that there is one unsupported hypothesis. Perceived risk has an insignificant effect on consumer attitudes. These findings suggest that perceived risk has not effect on consumer attitudes in online shopping. However, perceived risk affects consumer attitudes positively. This indicates that consumers do not really feel a risk on activity

of buying and selling online and still will be interested to buy products or services through online shopping sites to meet their needs. **Thus, H<sub>1</sub> in this study was rejected.**

This finding differs from that of Oentario et al. (2017). This is because, Culture online shopping with a value that is increasingly marked shift consumer to the problem of convenience, practicality, and also the price is cheaper than offline shopping. (Source: [www.sumbarprov.go.id](http://www.sumbarprov.go.id) Accessed April 22, 2018).

Hypothesis testing also shows that perceived ease of use has a positive and significant influence on consumer attitudes in online shopping. **As a result, H<sub>2</sub> in this study was accepted.** That is, if consumers feel the ease in conducting transactions online it will cause a positive attitude towards online shopping. However, if consumers feel the difficulty in conducting transactions online will cause a negative attitude towards online shopping. The results of this study in line with research conducted Rahmiati (2017).

As well with hypothesis testing on online shopping interest have a positive and significant impact on consumer attitudes. **Thus, H<sub>3</sub> in the study is accepted.** That is, If the attitude of a positive consumer to online shopping then will increase the interest in shopping online. However, on the contrary if negative consumer attitudes toward online shopping then will reduce consumer interest to online shopping. The results of this study are in line with research conducted Hsu and Bayarsaikhan (2012).

## Conclusions

Buying interest online is basically strongly influenced by consumer attitudes, if consumers show a positive attitude towards online shopping it will increase consumer desire to be interested in shopping online. One of TAM two beliefs, perceived ease of use is proving to influence consumer's attitude in online shopping. A positive attitude in the online shopping activities arises because consumers feel the ease in doing shopping online. Furthermore, consumer's attitude toward online buying interest scored highest among all latent variables tested in this study. This shows that to increase consumer interest in online shopping needs to grow a positive attitude towards online shopping and change the usual shopping way from offline shopping to online shopping to make it easier for consumers to make more practical transactions.

There are still some inconsistent answer of the questioner with the observations of researchers. Because the respondents tend to be less thorough to the existing question so that there is inconsistency to answer the questionnaire. This, can be anticipated by the researchers by accompanying and supervising the respondents in choosing answers so that respondents focus in answering the existing questions and this study only took a sample of 100 respondents. For researchers who want to do research similar or even the same. Instead, use more samples to find better results.

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