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## Mediating Effect of Attitude in Internet Shopping Behavior of Consumer in Indonesia

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### ABSTRACT

The paper aimed to analyze the influence of perceived risk and intention to purchase online by consideration the mediating effect of attitude among Indonesian consumers. The questionnaire was distributed to 200 respondents who consumed on the online shopping platform before through online survey. This study use structural equation modelling to test the model analyzed with partial least square. The results indicated a direct influence between perceived risk and intention to purchase online. Along with the direct influence between consumer attitude and intention to purchase online. However, there is no influence between perceived risk with intention to purchase online with consumer attitude as a mediating variable.

*Keywords:* Digitalization, Top Management Teams, Public Listed Companies, Baltic States

### Introduction

According to Macquarie Research (2017), the development of e-commerce market in Indonesia has had an impressive growth of 60-70 percent over the last five years with the increase number from US\$ 60 billion in 2016 to US\$ 80 billion in 2020. It is likely to create the latest opportunities for e-commerce sites and business for the online shopping because Indonesian consumers get used to have internet shopping. Even though over the past few years the direction to online shopping is quite complicated for Indonesian consumers to make internet purchasing.

In spite of this, Indonesia is a potential market for online shopping with the population 268,2 M and also with some numbers of shop online stores operating in Indonesia such as Tokopedia, Shopee, Bukalapak, Lazada, Blibli, Orami, JD.id, Bhineka, Sociolla, and Zalora (Asean Up, 2019). It shows the rapid growth of e-commerce especially for consumer products has an impact to digital economy in Indonesia thus make competition between e-commerce in Indonesia getting more aggressive and attracts more consumers.

Relevant studies have explored online purchase intention from many perspective, however recent studies did not explored perceived risk from attitude to online purchase intention, such as intention to trust and purchase product online (Kaur et al. ,2015), perceived risk affects online buying (Martin and Camarero, 2008), consumer attitude and purchase intention (Han and Lee, 2008) and perceived web quality with attitude towards purchase intention (Al-Debei et al., 2015).

On the other hand, online purchasing has higher perceived risk than conventional purchasing, accordingly previous research that risk perception of online shopping dissimilar between each cultures and countries. This study will showing Indonesian consumer's behaviour related to consumer attitude and online perceived risk. To establish the online perceived risk of consumers is important for Indonesian online retailers. Previous reviews confirmed that perceived risk has an influence on online buying intention (Almousa, 2011; Li and Zhang, 2002; Liebermann and Stashevsky, 2002; Meskaran et al., 2013; Suresh and Shashikala, 2011; Zhang, et al., 2012). Furthermore, the attitude towards online purchasing have an impact on online purchasing behaviour Kim and Karpova, 2010; Al-Debei et al., 2013). But this study will examine how the perceived risk influence Indonesian consumers intention to purchase online with the mediating of attitude.

The study aimed to assess the influence of perceived risk on intention to purchase with consumer attitude as mediating variable in Indonesian internet shopping behaviour.

Therefore, research purpose will be focus to answer to the research questions:

- 1) What the effect of perceived risk on internet intention to purchase online?
- 2) What the effect of consumer attitude on intention to purchase online?
- 3) What the effect of perceived risk on intention to purchase online through consumer attitude.

## **Literature Review and Conceptual Framework**

### *Internet Shopping Intention*

Since the development of electronic commerce, online shopping become the most common activity in the internet following send email or instant message and web browsing (Jamali et al., 2014). As said by Close and Kukar-Kinney (2010), the antecedent of online shopping behaviour was proceed from the willingness of customer to buy a certain products, meanwhile Meskaran et al. (2013) explain what is meant by online shopping intention is where the buyer is willing to make online purchasing. In addition, online purchase intention defined as an act or instance of determining of online consumers within internet or electronic shopping cart making a purchase of good and services (Salisbury et al., 2001; Li and Zhang, 2002; Close and Kukar- Kinney, 2010; Ariffin et al., 2018). Intention to buying is normally seen as determine to expect the actual purchases of customers' behaviour. Past research disclose factors that have an impact to consumers' purchase intention.

Empirically theories showed two of factor such as consumer attitude and perceived risk are significantly influence purchase intention. Perceived risk has an influence on attitudes to purchase for online shopping behaviour (Almoussa, 2011; Li and Zhang, 2002; Liebermann and Stashevsky, 2002; Meskaran et al., 2013; Suresh and Shashikala, 2011; Zhang, et al., 2012). Moreover, the greater the awareness of online perceived risk between shoppers will increase the influence on intention of online purchasing. Previous study show attitude on online purchasing considerable as factor that significant impact on online purchase behaviour (Pavlou, 2003). The attitude toward online purchasing has direct positive significant influences on purchase intention and behaviour, in other words, attitudes is defined as consumers' pleasant and unpleasant feeling about purchasing decision (Chiu, Li and Tang, 2005).

#### *Perceived Risk in online shopping*

According to (Ko et al., 2004) the concept risk of perceived defines consumer perceptions about outcomes that change and conflict with purchasing a product or service from seller. This concept compromises the consequences of uncertainty. Uncertainty is the chance of an undesirable result, and consequence is defined as the result of failure to make good use (Laroche et al., 2010). Meanwhile , perceived risk can occur due to uncertainty about product capabilities and products may not have the promised attributes (Wang and Chen, 2016). Risk take part in an important role in consumer behavior and make valuable influence to explain information seeking behavior and buyer decision (Mayer et al., 1995; Corbitt et al., 2003; Barnes et al., 2007).

Conceptual research show consumers' perceived risk in online shopping effect to consumers' motivation to purchase products in online store (Barnes et al., 2007). Intentional interaction with uncertainty defined as risk is a decision element that indicates the variance in the outcome that is possible which include unfavourable significance of a purchase that unpredictable (Gefen et al., 2002; Cunningham et al., 2005). Moreover, there are two conceptions of perceived risk towards the centre on the unpredictable outcome of the decision and the centre on the costs or consequences of that outcome (Gefen et al., 2002; Cunningham, et al., 2005; Barnes et al., 2007). There are different types of risk will influence consumers feel when purchasing a products as: (1) functional risk is the type of risk to consumer might be worry if the product may not be as expected; (2) physical risk is the type of risk to a consumer if the product will threat to the physical safety of the user; (3) financial risk is the type of risk if the product not worthy with the price; (4) social risk is type of risk pertain to a consumer's social status; (5) psychological risk is type of risk will affect to mental state of consumers and (6) time risk is type of risk which make consumers lost opportunity cost to find another better products.

#### *Attitudes Towards Online Shopping*

Davis et al (1989) illustrate the information system of the technology acceptance model (TAM) by an adjustment of theory of reasoned action by Ajzen and Fishbein (1980), which focused on innovative knowledge use technology. Basically, this theory give exceptional about the acceptance of individual's intention to perform the behaviour (Davis et al., 1989). There are two categories

such as perceived usefulness and perceived ease of use in the Technology Acceptance Model by Davis which determines individual's believe to using particular system that influence the acceptance to use technology like computer to affect behaviour intention to make online purchasing.

According to Chung and Tan (2004) the acceptance of consumers of the internet as shopping distribution refers that consumers attitude think that online shopping is pleasing meanwhile in contrast consumers have a negative attitude for the uncertainty of customer for purchase decision. On the other hand, attitude can reducing the perceived risk of online shopping. Beside the attitude such as enjoyment shown crucial influence of consumer online shopping attitude for purchasing intention (Koufaris et al. 2002; Cho et al. 2001). Moreover Davis et al (1993) suggested that good emotion such as perceived playfulness effect on attitude and intention.

Attitudes towards behaviour refer to the extent to which a person has an evaluation or judgement that is a favourable or unfavourable of the behaviour that must be followed up (Taylor and Todd, 1995). That is to say the attitude towards behaviour is a relevant of positive or negative evaluation of individual's beliefs as a consequence of behaviour ( Kim and Karpova, 2010; Al Debei et al., 2015).

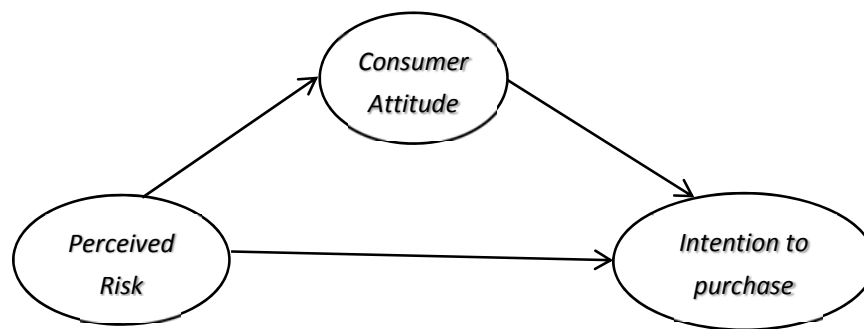


Figure 1. Research framework

The hypotheses of the study are:

H1: There is relationship between perceived risk and intention to purchase online.

H2: There is relationship between consumer attitude and intention to purchase online.

H3: There is relationship between perceived risk and intention to purchase online through consumer attitude.

## Methodology

### *Sample and data Collection*

This study investigated the correlation between online perceived risk and intention to purchase with consumers attitude as mediating variable would affect consumers' behaviour to have internet buying intention. The uncertainty of online shopping caused perceived risk and would influence on internet shopping behaviour. Moreover, perceived risk and purchase intention were the consequence of consumers' attitude.

The respondents of this study were those who consumed on the online shopping platform before. The questionnaire design based on previous literature review with Likert 5 point scale and data collected by 200 respondents. It is the primary source of data and also called quantitative techniques.

Survey delivered by social media and applied purposive sampling to obtain the samples of online shopping consumers. Cochran formula is used to define number of sample.

### Analysis and Result

The structural equation modelling is fit to test the model. The use of PLS SEM support beneficial for analysing data like survey measures which are developed from measurement theory. PLS SEM can be found to identify relationship in this study because the method can be useful for confirmatory research. Accordingly this approach then PLS SEM can be used to analyse the path coefficient in this study (Hair et al., 2019).

A total of 200 respondents are filled the questionnaires in this study. Based on online experience the percentage of shoppers with more than 10 times shopping experience per year was the most (36%) , followed by between 3- 5 times per year (25.5%), then 6-10 times per year (19.5%) and less than 3 times per year (19%). Respondents comprised 60% female and 40% male. The percentage of age between 19-25 years old was 34%, followed by 26-35 years old was 33.5%, furthermore age more than 40 years old was 22% and age between 36-40 years old was 10.5%. The percentage of college and university degree was 55%, followed by postgraduates was 26.5% and high school was 18.5%.

**Table 1.** Results of the Measurement Model

Variables	loading factor	composite reliability	AVE
<b>Perceived risk</b>		0.866	0.519
Shopping online is a waste of money	0.687		
Online companies cannot be trusted	0.745		
Buying product online is a waste of time	0.696		
It's hard to find suitable website	0.753		
It's difficult to find the right product through online shopping	0.747		
<b>Attitude</b>		0.895	0.682
Online shopping is easy	0.828		
I prefer online shopping when sale program than offline shopping	0.771		
I like the idea of sale program for online shopping	0.887		
Buying at online shopping with sale program is better	0.814		
<b>Purchase intention</b>		0.936	0.709
I will not make purchase through online store	0.836		
I will not have intention to purchase online in the future	0.912		
I do not expect to use online store	0.863		
I would not recommend others for online shop stores	0.826		
I will not transact for online shop store anytime in the future	0.844		
I will try not to always purchase online for everyday	0.765		

As shown in table 1 the results derived from variables that have a value of AVE > 0.05 means the indicator has met the discriminant validity requirements. An approved instrument has discriminant validity, which supports the assessment of indicators of its construct, greater than the evaluation value of the indicator with other constructs. To prove the discriminant validity with reflexive indicators, it can be done by comparing cross-loading values, therefore the discriminant validity test of this study is declared valid (Hair et al., 2010).

**Table 2.** Validity and Reliability

No		<i>Perceived Risk</i>	<i>Consumer's Attitude</i>	<i>Online Purchased Intention</i>
1.	<i>Consumer's Attitude (Att)</i>	<b>0.826</b>		
2.	<i>Perceived Risk (PR)</i>	0.176	<b>0.720</b>	
3.	<i>Purchase Intention (PI)</i>	0.384	0.674	<b>0.842</b>

Based on the results in table 2 show the data appears that the composite reliability and Cronbach's alpha values are each construct exceeds 0.7. If referring to the rule of thumb the composite reliability and Cronbach's alpha values must be greater than 0.7, then the data above already reliable (Hair et al., 2010).

**Table 3.** The outcomes of path analysis

Path	Description	Path Coefficient	T-Statistic	P Values	Results
Att --> PI	Attitude -> Purchased Intention_	0.274	5.313	0.000	Supported
PR --> PI	Perceived Risk -> Purchased Intention_	0.626	13.152	0.000	Supported
PR --> Att --> PI	Perceived Risk -> Attitude -> Purchased Intention_	0.048	1.763	0.079	Not Supported

Table 3 results shows that two hypotheses are accepted with significance level 0.05 and one hypothesis is rejected . H<sub>1</sub> was found to be supported ( $\sigma = 0.626$ , t-value = 13.152, p-value = 0.000), also H<sub>2</sub> was found to be supported ( $\sigma = 0.274$ , t-value = 5.313, p-value = 0.000) and as was H<sub>3</sub> found not to be supported ( $\sigma = 0.048$ , t-value = 1.763, p-value = 0.079). These suggests that attitudes significantly influence online purchase intention is significant at the 0.05 level . The findings of perceived risk show related results from past researchers that influence online purchase intention. The result of study empirically confirms that consumer attitude not affect the perceived risk towards online purchase intention.

### Discussion and Implications

The results shows that consumer attitude and perceived risk significantly affect consumer behavior to purchase online shopping but perceived risk does not affect internet buying intention with consumer attitude as a mediating variable.

The intention of consumers to shop online is positively related to attitudes towards internet purchases and influence the decision making and online consumer behaviour means that when

attitude is high consumers are more willing to purchase at the website. This may be important for consumers because they tend to buy online even there is no discount or sale program in online shopping. This is can explained that consumer by the fact that online shopping cheaper and easier than offline shopping.

Regarding internet purchasing intention, consumer affected purchase intention through attitudes towards online shopping platforms. Meanwhile perceived risk significant effect to purchase intention explain that consumers give more consideration to accomplished the act of things done that will lessen the risk to the facts attain in such risks. This maybe essential for consumers since risk such as financial, psychological and time loss is greater than offline stores. Consumers possibly will not feel or touch the items being sold thus make perceived risk become important factor for internet purchasing intention.

Furthermore, the greater online perceived risk the more it would affected consumers purchasing intention. This study found that financial risk such as waste of money, psychological risk that they are not able to trust the online shopping company and time risk for wasting time to find the suitable product for their need effect to purchase intention. Related to the attitude as mediating variable show that consumer attitude has no role to intervening perceived risk and online purchase intention. It explain that consumers are undoubtedly not influenced by attitude of other consumer to online perceived risk towards purchase intention.

Overall, the outcomes of the study shows the perceived risk influence directly toward buying intention beside that the consumer attitudes influence on buying intention. Meanwhile consumer attitude unable to indirect effects among perceived risk and buying intention. For this reason, shoppers might not think through consumer attitude before, during and after the purchase intention but increasing of perceived risk will result to intention for purchasing online shopping.

This study contributed to the knowledge about Indonesian online consumer behaviour related to attitude and perceived risk in the online stores. It was found also in this study that Indonesian e-commerce consumers in the below 30's are majority for internet purchasing compare to middle age correspondents because young consumers prefer internet shopping for the reason that its convenience and lower price. The internet shopping platform sellers have to recognize aspects that cause of unsecure concern in Indonesian online shoppers and be responsible for details that can encourage consumers to diminished it.

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