



EFFECT OF USEFULNESS, EASE OF USE, RISK, PRODUCT INVOLVEMENT, AND
SUBJECTIVE NORMS TO A PERSON'S ATTITUDES AND INTENTIONS OF USING
ONLINE SHOPPING AMONG STUDENTS IN YOGYAKARTA

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Abstract

This study aims to examine the effect of usability, ease of use, risk, product involvement, and subjective norms on attitudes and intentions to use online shopping. Respondents in this study were 158 students in Yogyakarta who had used online shopping. This research used survey model and purposive sampling method as sampling technique. This research used Structural Equation Modeling (SEM) analysis techniques with AMOS as an analysis tool. Based on the results of data testing in this study, the results show that 1) perceived usefulness and involvement of products have an influence on attitudes to use online shopping, 2) subjective norms and attitudes towards online shopping have a positive effect on the intention of using online shopping and, 3) ease of use and risk do not affect the attitude and intention to use online shopping.

Keywords: Usefulness, Ease of Use, Risk, Product Involvement, Subjective Norms, Attitude, and Intention to Use.

I. INTRODUCTION

The development of information and communication technology has provided a change in all aspects of life. Technological advancements, particularly the internet, provide conveniences for many people. Today, many startups start their business with e-commerce. The existence of e-commerce makes the activity of buying and selling transactions easily done. The growing



number of e-commerce that emerges today makes the change in terms of community spending which initially was conventional has now shifted to online shopping.

Doherty, et al. (2010) considers online shopping as a marketing tool for goods and services and view online shopping as a form of direct marketing that requires effective and direct communication between marketers and consumers. It shows that effective and direct communication is essential that there is no need for intermediaries between buyers and sellers. Online shopping is currently popular among the people of Indonesia. Only by tapping, online shoppers can find information about the product, compare it with other products to make a purchase. This phenomenon is influenced by various factors that encourage the formation of a positive attitude that encourages consumer intention in doing online shopping. Factors referred to in this regard are related to perceived usefulness, ease of use, perceived risk and product involvement, as well as subjective norms.

The above statement has been disclosed in previous studies relevant to this research. Davis, et al. (1996) state that perceived usefulness affects the attitude and intentions of consumers shopping online. Taylor, et al. (1995) confirm that ease of use as a direct determinant of attitudes. Jarvenpaa, et al. (1999) indicate that the perceived risk affects customer trust and intent to buy online. Keisidou, et al. (2011), argue that high product involvement positively affects user attitudes toward online shopping. Foucault, et al. (2002) found a significant relationship between the invitation of friends to use online shopping and the intention to shop. Aldhmour (2016) was found that attitude had a positive direct impact on consumers' intention to use online shopping.

The purpose of this study is to analyze some factors that affect a person's intentions to use online shopping. These factors are perceived usefulness, ease of use, risk, product involvement toward attitudes, and the effect of attitudes and subjective norms toward the intention to use online shopping.

II. THEORETICAL BASIS

Perceived Usefulness

According to Davis. (1989), Perceived Usefulness can be defined as the degree to which a person believes that using a particular system would enhance his or her job performance. This follows from the definition of the word, "useful", which is defined as "capable of being used advantageously" based on consumer expectations of how the technology can improve their lives and the extent to which an innovation is perceived as offering a clear advantage.

Ease of Use

Ease of use tells that how simple it is to use the internet as a shopping channel (Monzuwe, et al., 2004). Ease of use or perceived ease of use is a key determinant that affects how certain technologies will be embraced and accepted. According to Davis. (1989), Perceived Ease of Use refers the degree to which the system require very less or minimal effort to use, the effort is meant to contains both intellectual and physical effort, and how simple it is.



Perceived Risk

According to Hsu, et al. (2004), Perceived of Risk or perceived risk is defined as the consumer's perception of the uncertainty and consequences that will be faced after performing certain activities. The risk consumers perceive in online shopping is greater than shopping at traditional retail stores, because the distribution of electronic commerce is unfriendly (Zhou, et al., 2007).

Product Involvement

Zaichkowsky. (1985) defines product involvement as being an individual's perception of the relevance of an object based on inherent needs, values, and interests. Product involvement becomes a consideration to consumer purchase behavior by measuring the level of interest and consumer attention that leads to the buying process.

Subjective Norms

Jogiyanto. (2007) defines subjective norms as social pressures based on the beliefs of others that may affect interest so that the person reconsider whether or not to engage in such behavior.

Attitude towards Online Shopping

Attitude is the most influential factor on the intention to buy a product (Schiffman, et al., 2010). It is important to understand customer attitudes because customers who have a positive attitude toward an object will encourage customers to have an intention to behave towards that object (Schiffman, et al.2010).

Intention to Use Online Shopping

Ajzen. (1991) argues that intention is assumed as a motivating factor that influences behavior. Having a strong intention to engage in behavior, the greater the likelihood that they will do the behavior.

III. RESEARCH HYPOTHESIS

The effect of perceived usefulness toward attitudes on online shopping.

Consumers who believe that online shopping is profitable will develop a positive attitude toward online shopping (Yuliharsi, et al., 2011). This statement is in line with Davis, et al. (1996) where perceived usefulness positively affects consumer attitudes and intentions in online shopping.

H₁: The perceived usefulness has a significantly positive effect on the attitude of online shopping.

The effect of perceived ease of use toward attitudes on online shopping.

Ease of use tells that how simple it is to use the internet as a shopping channel (Monuwe, et al., 2004). As for information systems, some researchers test empirically for ease of use as a direct



determinant of attitudes (Taylor, et al., 1995). According to TAM, perceived ease of use has a direct influence on consumer intentions for online shopping.

H₂: Perceived ease of use has a significant positive effect on attitudes on online shopping.

The effect of perceived risk toward attitudes on online shopping.

The perceived risk found in previous studies may have an effect on customer trust and the intention to buy online (Jarvenpaa, et al., 1999). In a recent study by Ma'ruf, et al. (2005) comparing TAM and TPB predicts intentions and attitudes to make purchases online between internet users. They found that perceived risk is a key determinant of the attitude and intent to use online shopping.

H₃: Perceived risk has a significant negative impact on attitudes towards online shopping.

The influence of product involvement toward attitudes on online shopping.

Product involvement is the level of attention and consumer interest to a product so as to cause the readiness or desire to buy. In a recent study by Keisidou, et al. (2011), it was found that high product involvement positively affects users' attitudes toward online shopping in the context of all products or services used.

H₄: Product involvement has a significant positive effect on attitudes toward online shopping.

The influence of subjective norms toward the intention to use online shopping.

Foucault, et al. (2002) found a significant relationship between the invitation of friends to use online shopping and the intention to shop. According to Howladar, et al. (2012) intentions and continuity depends on consumer attitudes that ultimately affect the confidence to use online shopping. Online customer intentions can be positive for online purchasing behavior if there is social support, a positive media role, family support and variable risk controls that lead to loss of online purchasing motivation.

H₅: Subjective norms has a positive significant effect on the intention to use online shopping.

The influence of the use of online shopping toward the intention to use online shopping.

Davis, et al. (1996) conclude that attitudes toward the use of technology in general, particularly the internet is important. A study by Karahanna, et al. (1999) points out that attitudes dominate one's intention to use information technology.

H₆: Attitudes towards online shopping has a positive significant effect on the intention to use online shoppingng.

IV. RESEARCH MODEL

Base on the description above, built the research model as follows:

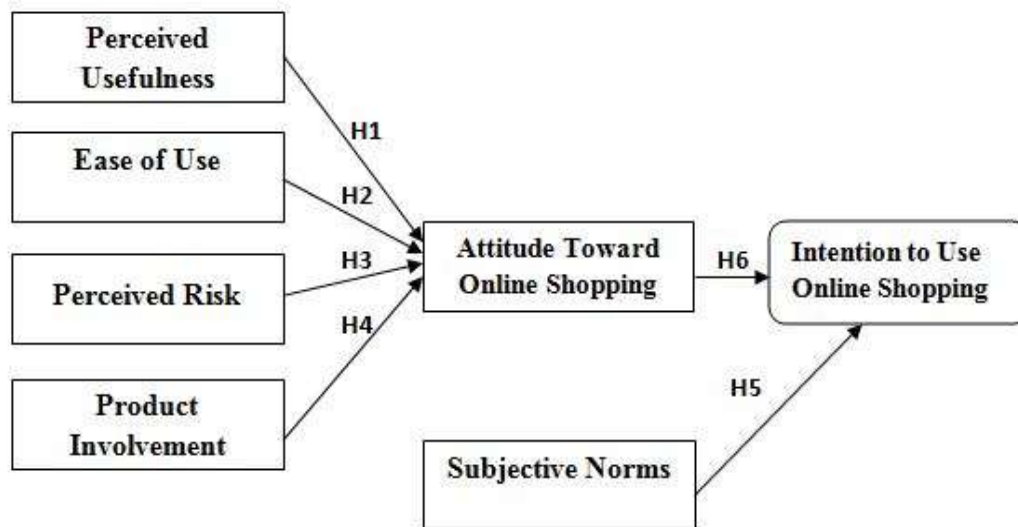


Image 1: Research Model

Source of research model: Aldhmour, F (2016)

Research Method

The sample used in this research is the students in Yogyakarta who have used online shopping. In data collection process, the researcher used survey and purposive sampling as sampling technique. Furthermore, in the data analysis stage used SEM with AMOS method.

V. FINDINGS AND DISCUSSION

Based the structural model Goodness of fit, test results have met the 4 criteria of Good Fit namely CMIN / DF = 1.689, CFI = 0.929, TLI = 0.922, RMSEA = 0.066 and 2 criteria are at marginal fit, ie at GFI = 0.785 and AGFI = 0.751.

Hypothesis test results to test the effect of endogenous variables toward exogenous variables can be seen in Table 1.

Tabel 1
Result of Hypothesis Testing

	Estimate	S.E.	C.R.	P
Attitude Towards Online Shopping <-- Product Involvement	,487	,187	2,597	,009
Attitude Towards Online Shopping <-- Perceived Risk	,400	,322	1,242	,214
Attitude Towards Online Shopping <-- Ease of Use	-,190	,184	-1,034	,301
Attitude Towards Online Shopping <-- Perceived Usefulness	,267	,134	1,987	,047
Intention to Use Online Shopping <-- Subjective Norms	,452	,055	8,172	***



Intention to Use Online Shopping	<--	Attitude Towards Online Shopping	,279	,043	6,447	***
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Source: Processed data 2017.

Based on the Tabel 1, result for the first hypothesis testing the effect of usefulness towards attitude is **accepted**. In the second hypothesis the effect of ease of use towards attitude is **rejected**. Result of the third hypothesis testing the effect of perceived risk towards attitude is **rejected**. The fourth hypothesis the effect of product involvement towards attitude is **accepted**. The fifth hypothesis the effect of subjective norm towards intention to use online shopping is **accepted**. Result to the sixth hypothesis the effect of attitudes towards intention to use is **accepted**.

Based on the results of the study, it can be concluded that the perceived usefulness of a person positively affects the attitude of a person in online shopping. When a person's trust in the use of a system is higher, then it tends to encourage a person's positive attitude toward the system. The positive attitude mentioned will be shown by various behaviors such as the rising intensity of using the system.

Ease of use has no effect on one's attitude towards online shopping. The higher or lower level of perceived ease of a system does not change a person's attitude towards online shopping. It can happen because of multiple factors outside of the ease that can affect a person's attitude towards a system. When a system is easy to use but not in accordance with the needs or desires of a user, the convenience is not the main factor that causes the user to continue to use the system, but based the suitability of the system in regards the needs or desires of the user. In addition, such case can also happen because the millennial generation was born in the era of technological development and gained knowledge of technology from an early age so that the use of technology has become part of everyday life and assume that the ease is a common thing. Perceived risks such as inadequate payment methods, overpriced rates, fear if the product is not as expected or described, the anxiety that is felt when buying a product and also the risk that the purchased product is delivered to the wrong address effect on one's attitude towards online shopping. This condition is influenced by many factors outside the risk that determines a person's attitude towards online shopping. Thus risk is no longer a major factor for everyone in doing transactions through e-commerce.

Product involvement has a significant positive effect on the attitude of someone on online shopping. In this case, the involvement of the product refers to the level of attention and consumers interest to a product that raises the intention or desire to buy. The condition is also influenced by the assumption of the importance of the product offered, conformity with the needs and desires and can provide added value for consumers.

The subjective norm has a significant positive effect the intention to use online shopping. This condition occurs because of the influence of rapid technological development that is easily accessed by all individuals in the world. The spread of this technology is certainly influenced by many factors from the environment such as the influence of other people and media. Nowadays, electronic facilities such as multi-function gadgets have been used by massively allowing faster distribution of information. This has a major impact on the use of online



shopping by every individual in which the use of a technology is considered to reflect the person's personality.

Attitudes toward online shopping has a significant positive effect on the intention to use online shopping. Because of the benefits derived from the use of online shopping, it is argued that attitudes on online shopping will affect the intention to use online shopping. It can be seen around us, where people benefited from online shopping will increase their intention to use online shopping. For instance, busy students or those with limited transportation will be greatly benefited by the existence of online shops. With online shopping, students do not have to waste time to go shopping conventionally and they save transportation costs.

VI. CONCLUSION

Based on the results of the discussion in the previous section of this study, it can be concluded that the usefulness of students perceived on the utilization of online shopping affect student attitudes toward online shopping. The higher people trust in the use of a system then it tends encourage a person's positive attitude toward the system.

Perceived ease of use does not affect the attitude of online shopping. The higher or lower the level of ease of use felt by students when using online shopping will not change the attitude of the students towards online shopping. It possibly happens if a system is easy to use but not in accordance with the needs and wants of a user, then the convenience is not a decisive factor to use the system.

The perceived risk does not affect a person's attitude towards online shopping. There are factors that further affect one's attitude towards online shopping, such as the availability of consumer goods that vary and affordable as well as the reputation of the online shopping application provider itself.

Product involvement has a significant positive effect on attitudes towards online shopping. The higher the involvement of the product, the attitude on online shopping will be higher or better. The condition is influenced by the assumption of the importance of the product offered, conformity with the needs and desires and the ability to provide added value for consumers.

The subjective norm has a significant positive effect on the intention to use online shopping. The higher the subjective norm that online shopping provides benefits, the higher the intention to use online shopping. The existence of rapid technological developments provides great influence on the distribution of the use of online shopping and make the condition as a lifestyle that reflects personality.

Attitude towards online shopping has a significant positive effect on the intention to use online shopping. The higher or better the attitude of the students on online shopping, the higher the student's intention to use online shopping. A positive intention to use the internet to fulfill a transaction is formed by the consumer with a positive attitude towards internet usage.



VII. FURTHER RESEARCH

- For further research can be done development of the research model by adding the age and gender variable as a moderation variable on each independent variable to the mediation variable.
- It is expected that the next research is done by interview method so that the researcher can dig deeper of information from the online shopping users. In addition, there are further developments by expanding the scope of research areas and different research samples to obtain more diverse research results compared to the current results.

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