

Influence of Perceived Usefulness, Ease of Use, Risk on Attitude and Intention to Shop Online

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Abstract

Recently, online shopping is growing rapidly around the world. The purpose of this research is to explore the factors that influence students' intention to shop online. This research was done in Pontianak, West Kalimantan. The respondent is 200 university's active students who did not have online shopping experience before. The factors consist of perceived usefulness, perceived ease of use and perceived risk as independent variables; attitude to shop online as intervening variable; and intention to shop online as exogenous variable. The data was processed and analyzed with Structural Equation Modeling (SEM). The theory based on TAM. The result shows that perceived usefulness, ease of use and risk have significant influence on attitude toward online shopping. Perceived usefulness and ease of use have not significant influence toward intention to shop online. While perceived risk and attitude have significant influence toward intention to shop online. It is recommended for the next researcher to develop related research, with acceptance and use of technology that are elaborated with culture and other specific personality characteristics from consumer such as culture, religion, ethnicity and others.

Keywords: Perceived Usefulness, Perceived Ease of Use, Perceived Risk, Attitude, Intention to Shop Online

1. Introduction

Today is said to be online business booming era since the use of internet as new media in business has developed fast either domestically or globally. Moreover, several studies show that the 21 century is an electronic era because almost all activities can be done using technology devices. For instance e-Commerce, e-Business, e-Supply Chain, e-Market Place, e-Payment, e-Entertainment, e-Ticketing, e-Learning, e-Citizen and e-Government (Ma'ruf and Hasrati, 2000; Kim et al., 2005). Internet has opened up for more business opportunities. This is because of its ability to give more business chances in cyber market or to connect people in this world borderless. Customers can order goods and services wherever and whenever they want, 24 hours a day, 7 days a week without have to worry about the shop service time, time zone and even traffic jam. This become a chance for businessman to enter online businesses. The fact about development of online market shows changes in customer behavior in online shopping as another alternative to fulfill their daily needs.

The increasing of internet users in Indonesia in 2012 has reached 63 million or approximately equal to 24.23% from the total population of citizen (243.581.940 people). In 2013 internet users is predicted increase about 30% into 82 million people and keep increasing into 107 million in 2014, and in 2015 will become 134 million or 50% from total population (*Asosiasi Penyelenggara Jasa Internet Indonesia*, downloaded in 23 March 2013).

The total value of online shopping transaction in 2013 is predicted by US \$ 478 million (about 4.5 trillion Rupiah) and US \$ 736 million (about 7.2 trillion Rupiah) in 2014. The number of transaction was from about 6% of 50 million internet users in Indonesia who are online shoppers. According to General Manager of *Asosiasi Kartu Kredit Indonesia* (Steve Marta) there are only about 5% from total of credit card users (until December 2011) that use credit card in payment system, others use debit card / Automatic Teller Machine (ATM) to transfer between banks (Kontan February, 2012).

2. Literature Review

As online market using technology, this study used Technology Acceptance Model (TAM) to predict consumer behavior in making purchase decision of online shopping. TAM was first developed by Davis (1989) in order to explain technology acceptance. To formulate TAM, Davis adopted Theory Reasoned Action (TRA) by Fishbein and Ajzen, 1975 as reference. Another researcher said that TAM has been used to explain online shopping behavior (Limayem, 2003). TAM has been widely used by many researchers to predict intention to use information technology (Ortega et al., 2008; Lee and Chen, 2010; Lee and Chang, 2011). While according to Chuttur, 2009 TAM is not good and flexible enough in predicting technology acceptance that cause this theory still not establish.

TAM

TAM is one of theories that most commonly used to explain online shopping behavior (Limayem, 2003). Therefore, theoretical background in this study also use this theory. TAM developed by Davis (1989) was introduced to explain the acceptance of information technology. TAM is based on TRA (Theory of Reasoned Action) which is about intention and attitude to use an information system that depend on two beliefs that are called perceived usefulness (PU) and perceived ease of use (PEoU). According to Davis, the usage behavior of

information technology begins with perceived usefulness and perceived ease of use on information technology. In the next study, Davis et al., 1989 has developed two real constructs for usefulness and ease of use that become the primary motivators of information system acceptance. Usefulness and ease of use are expected to be able to influence individual attitude on technology acceptance, both can also explain intention to use technology.

After prior test of TAM (Davis et al., 1989) removed attitude variable because of the marginal contribution to explain causal relation between PU and PEOU and intention. At first, these two perception and intention to use in an organization was defined as user perception on intention to use technology for its benefit in carrier development although they may not have positive attitude in usage (Venkatesh, 2000). But, in the study of 55 TAM studies (Sun and Zhang, 2006) found that less than half studies maintain attitude variable. Based on empirical result that still contradictive with TAM, the theory which is based on Theory Reasoned Action (TRA) and the consumer behavior in this research, at last, it was decided that attitude still be used as intervening variable that influence intention to shop online.

Perceived Usefulness

According to Davis et al (1989, 1993) perceived usefulness was defined as the degree to which an individual believes that using a particular technology would enhance his job performance in one organizational context. In TAM, perceived usefulness becomes one of two keys to measure attitude influence to the new technology. To implement this definition to research context on acceptance of new technology, perceived usefulness is classified as individual perception that show online shopping performance through internet. Usefulness is individual perception that using internet as shopping media will increase their shopping performance. This perception influence consumer attitude to shop online and their intention to shop using internet.

Perceived Ease of Use

PEoU was defined as the degree to which an individual believes that by using a particular technology would be free of effort (Davis, 1989). PEOU has strong influence on intention to technology acceptance. If one technology perceived ease to use, one will make it as new alternative to use. Based on previous research on TAM, PEOU was found has indirect effect on attitude intention but the effect much more on indirect mediation factor from PU (Igarria *et al.*, 1995; Chau, 1996; Davis *et al.*, 1989).

Perceived Risk

Perceived risk can be defined as consumer prediction about uncertainty potential negative result from online transaction (Kim et al., 2008). Forsythe and Shi, 2003 defined risk on online shopping as certain wish subjectively from purchase disadvantages that is considered in some online purchasing.

In trying to understand the way consumer involved in consumer attitude through internet, it seems that risk is one of primary concern considered by consumer. The result of Graphics, Visualization and Usability Center (GVU, 1998) shows that consumer do not want to shop online because of high risk perception concern with product quality, new payment method, delivery choice and information content. It means that consumer is worry not only about losing amount of money but also losing privacy information that is needed in doing transaction (Szymanski and Hise, 2000). (Bhatnagar et al., 2000) said that internet is considered as risky shopping media. It means that most consumer think that the risk in online shopping is greater than its benefit in purchasing decision.

Consumer Attitude

Kardes, 2002 said that attitude is a concept that has been explored by a lot of attitude research. Attitude is considered as factor that determine someone's behavior. People can determine their attitude to any object or any issue. Attitude can be based on vary information. According to Schiffman and Kanuk (2007; 200), practically, all marketing activities relate with important task that influence consumer attitude.

Attitude understanding mostly reference from Ajzen and Fishbein (1975) concept that theoretically said that attitude as someone disposition to react with good or bad degree to some object, attitude, people, institution or any certain event. Schiffman and Kanuk (2007; 200) defined attitude as someone's inner feeling that shows whether he likes or dislikes something (e.g. brand, service). Furthermore, it is said that attitude is something that push predisposition to act in a good or bad manner to something. The object can be attitude, people, product category, service, organization, ideas, issues, internet and others. One important point from the definition is evaluative dimension so attitude can be defined as evaluation. Second, consumer attitude to some object is the result of repeat learning. Attitude relate with online shopping made from interactivity with internet as communication media.

Behavior Intention

Behavior intention was defined by Mowen and Minor, 2001, as consumer intention to act in certain way in order to obtain, dispose and use product or service. Ramayah and Jantan, 2003; Ramayah et al., 2003; Legris et al., 2002 defined intention as the extent to which people has formulated a plan to do or not to do some attitude in the future. In information system application, TAM has been used successfully by many researchers to predict

intention to information technology usage.

According to Pavlou (2003), online shopping intention can be defined as a situation which consumer want and intend to do transaction by online. Purchasing intention can also be defined as an intention of consumer to make an online transaction and to relate with web retailer (Zwass, 1998). Online transaction consists of three steps: to get information, to transfer information and to purchase product (Pavlou, 2003).

3. Hypotheses

Perceived usefulness in online purchasing such as to provide many product alternatives, to enable people fulfilling their needs faster, to make shopping be more effective because of more products alternatives, to decrease time for not productive activity. Perceived usefulness will effect positive on consumer attitude, thus, if benefit of online shopping is high perceived, attitude to online shopping will be positive as well.

H1: Perceived usefulness has significant influence on attitude to shop online

The more people perceive technology is easy to use, the positive their attitude to the technology will be. It is the same with online shopping; as people perceive that online shopping is easy like to access the situs, to learn the procedure, to compare products and prices, to find desired product, their attitude to online shopping will be more positive.

H2: Perceived ease of use has significant influence on attitude to shop online

Based on Heijden et al., 2003 and Ma'ruf, 2006 research, perceived risk has negative and significant influence on online shopping attitude. It means that if perceived risk increase, consumer attitude to shop online will decrease. It is different from offline consumer, online consumer has connection with risk in online shopping like the product accepted is not appropriate with it is showed on the web, the product is not delivered after payment, the product quality is different from what it has promised. Therefore if perceived risk on shopping online is high so attitude on online shopping will be negative or can be said that relation between perceived risk and attitude on online shopping is negative.

H3: Perceived risk has significant influence on attitude to shop online

Davis et al., 1989 think that there is strong direct relation between usefulness and intention to use. This explain why consumer intend to use technology, that is because of its benefit. The more people think that technology is usefull the more they intend to use it. In online shopping, if people feel that online shopping is useful; to offer many product alternatives, to enable people to fulfill their needs faster, to decrease time for unproductive activity; so people will use it more frequently. It can be defined that the relation between perceived usefulness and online shopping intention is positive.

H4: Perceived usefulness has significant influence on intention to shop online

Intention to use influence directly by perceived ease of use (Davis et al., 1989) which is explained by the fact that in purchasing decision, consumer attempt to minimize their effort. Consumer try to search the easiest process in shopping. Therefore, the easier technology usage in online shopping process like easy to access the sites, to understand the procedure, to compare products and prices, to find desired products, so consumer will prefer to shop online, with perception that by shopping online will set them free from any difficulties (Pavlou, 2003; Broekhuizen and Huisingsh, 2007).

H5: Perceived ease of use has significant influence on intention to shop online

There is negative influence from perceived risk to intention to use technology. Arkam, 2008 said that perceived risk is the key in e-commerce so it has strong effect on intention to shop online, but the effect is negative. The risk in online shopping is not only about losing money but also losing privacy information that is needed in doing transaction (Szymanski and Hise, 2000). Therefore, if perceived risk on online shopping is high like the product is not appropriate with it is showed in the web, the product is not delivered after payment, the product's quality is not the same with it is promised so the consumer is not intend to shop online. Therefore perceived risk has negative influence on intention to shop online or can be said that the relation between perceived risk and intention to shop online is negative.

H6: Perceived risk has significant influence on intention to shop online

Understanding about attitude will assist us on understanding consumer behavior. Thus, attitude variable is essential variable to predict consumer purchasing decision (Lee and Chen, 2010; Lee and Chang, 2011). Consumer attitude on some object is the result from repeat learning. Attitude that relate with online shopping is formed from the interaction with internet as communication media. Attitude can be somebody's response or affection about an object (Mowen and Minor, 2002). Attitude can shows inner feeling that tell somebody's pleasant or unpleasant, like or dislike, agree or disagree about a subject. Attitude to online is positive or negative feeling as evaluation result felt by consumer related with online shopping through e-commerce channel. Therefore if consumer has attitude such as think it positive, like it, please it, consumer will intend to shop online. Consumer intention to shop online is influenced by consumer attitude on online shopping. It can be said that the relation between attitude to shop online and intention to shop online is positive.

H7: Attitude toward online shopping has significant influence on intention to shop online

4. Reserch Method

Population in this research is 200 active university students in Pontianak. Sample obtaining technique is purposively. Data was gathered by distributing questionnaire that has been tested before; validity and reliability tests. Result of validity test using Pearson's Product Moment Correlation shows that all items were valid, the value is greater than 0.30 and significant grade is 0.005. Reliability test using Cronbach Alpha, it is reliable if the value is more than 0.6. The result shows that all research variables were greater than 0.7. Questionnaire was designed in two parts, first is respondents' profile include gender; years of experience with the internet, time using internet per day, activity in internet, reason have not shopped online yet. Second part consists of research variables such as PU, PEOU, Perceived Risk, attitude on online shopping and intention to shop online. Data gathered scale is Likert scale. Data analysis technique is Structural Equation Modelling (SEM).

Research indicators for each variable are as follow:

Perceived Usefulness

This variable is measured using 4 items statement as follow:

1. Online shopping provides many product alternatives
2. Online shopping can be done in any places
3. Online shopping enable to fulfill needs faster
4. Online shopping decrease time for unproductive activity

Perceived Ease of Use

This variable is measured using 5 items statement as follow:

1. Easy to access online shopping sites
2. Online shopping procedure is easy to understand
3. Easy to compare products among online vendors
4. Easy to compare products' prices
5. Easy to find desired products

Perceived Risk

This variable is measured using 3 items statement as follow:

1. The product is not appropriate with it is showed in the web
2. The product is not delivered after payment
3. The product's quality is not appropriate with it is promised

Attitude toward Online Shopping

This variable is measured using 3 items statement as follow:

1. Online shopping has positive value
2. To please with online shopping
3. Online shopping is enjoyable

Intention to Online Shopping

This variable is measured with 5 items statement as follow:

1. To intend to buy something through internet
2. To consider to buy something through online
3. Will be an online shopper in the future
4. To plan to access information about product that are sold online
5. As a place of references when want to buy something

Reserch instrument testing, first is pretest, second is validity and reliability test. Validity test using Pearson's Product Moment Correlation. The result of validity testing using Pearson's Product Moment Correlation showed that all research items were valid with value greater than 0.30 and significant level 0.005. Reliability test was measured with Cronbach Alpha, it is reliable if the value are greater than 0.6. The result of reliability test using Cronbach Alpha showed that all research items were reliable with value greater than 0.7. Data analyzing technique using Structiral Equation Modelling (SEM).

5. Research Result

Table 1
CHARACTERISTICS OF RESPONDENTS

No.	Items / Characteristics	Frequency	Percentage
1.	Male	82	41
	Female	118	59
2.	Years experience with the internet		
	2 years	18	9
	3 years	40	20
	4 years	54	27
	5 years	60	30
	>5 years	28	14
3.	Time spent on internet per day		
	< 1 hour	35	17,5
	1 – 2 hours	78	39
	3 - 4 hours	66	33
	5 – 6 hours	19	9,5
	>6 hours	2	1
4.	Activity on the internet		
	Social Network	74	37
	Browsing	91	45,5
	Game	35	17,5
5.	Reasons for not shopping online		
	Scare of being cheated	62	31
	Price added by delivery charge	16	8
	Do not intend to	60	30
	Bothering	32	16
	The product is not appropriate with it is showed	26	13
	Delivery needs long time	4	2

Based on table 1 above, we can notice that most respondents are female and that they are familiar with internet because most of them have used internet for more than 3 years. If we point out the time spent by respondents per day on the internet, mainly is between 1 – 4 hours for more than 70%. Based on the time spent on internet respondents in this research, it can be divided into two categories; medium and high internet users, because of the average time people using internet for 8 to 32 hours per week. From respondents' activities on internet the most dominant one is to browse material, research journal and do assignments for about 45%. Other activities are social network by 37%. The other is for playing games. It means that respondents use internet for useful activities.

There are various model were used to asses the research fitness between hypotheses and data. The following are seven common model-fit measures in this study:

Table 2
GOODNESS OF FIT INDEX STRUCTURAL EQUATION MODEL

Fit Statistics	Suggested	Obtained	Explanation
Chi – Square	Expected low	298,421	χ^2 table with df = 276 is 444,458; χ^2 calculated (298,421) > χ^2 table (444,458) = good
Significance Probability	> 0,05	0,169	Good
RMSEA	< 0,08	0,069	Good
GFI	> 0,90	0,929	Good
AGFI	> 0,90	0,911	Good
CMIN/DF	< 2,00	1,081	Good
TLI	> 0,95	0,963	Good
CFI	> 0,95	0,972	Good

Table 2 tells us that the seven criteria that are used to measure a model are good. It means that the model can be accepted and there is adjustment between model and data.

Based on that model we can formulate the moderation equation as follow:

$$Y1 = 0,513 X1 + 0,547 X2 - 0,341 X3$$

$$Y2 = 0,121 X1 + 0,123 X2 - 0,613 X3 + 0,642 Y1$$

$$Y1 = 0,513 X1 + 0,323X4 - 0,293 X1.X4$$

$$Y1 = 0,547 X2 + 0,323X4 - 0,274 X2.X4$$

From the models above, it can be interpreted each path coefficient which are hypotheses in this study. Table 3 below showing path coefficient from the result of hypotheses testing.

Table 3
RESULT OF HYPOTHESES TESTING

Hyp	Influence	Coefficient	C.R.	Probability	Explanation
H1	Perceived usefulness (X1) →attituted toward Online Shopping(Y1)	,513	3,715	0,0002	Significant
H2	Perceived Ease of use (X2) →attituted toward Online Shopping(Y1)	,547	4,091	0,0001	Significant
H3	Perceived Risk (X3) →attituted toward Online Shopping(Y1)	-,341	-3,018	0,0027	Significant
H4	Perceived usefulness (X1) →Intention to Online Shopping (Y2)	,121	1,241	0,2162	Not Significant
H5	Perceived Ease of use (X2) →Intention to Online Shopping (Y2)	,123	1,387	0,1671	Not Significant
H6	Perceived Risk (X3) →Intention to Online Shopping (Y2)	-,613	-3,811	0,0000	Significant
H7	attituted toward Online Shopping(Y1)→Intention to Online Shopping (Y2)	,642	4,145	0,0000	Significant

6. Discussion

Based on result of data analysis, PU and PEOU have positive and significant influence on attitude toward online shopping but have not significant influence on intention to shop online. PU has positive and significant influence on attitude toward online shopping. It also supported by descriptive statement from the university students that shopping online get more products offering, can be done anytime and anywhere, enable to fulfill needs faster, decrease time for unproductive activities (such as have to wait in a queue, looking for parking area, got stuck in a traffic jam) is high perceived. This result supported technology acceptance model (TAM) from Davis 1989 stated that perceived usefulness (PU) has direct influence on technology usage. Some studies about TAM on online context (Gefen and Straub, 2000; Lederer et al.,2000; Childers et al.,2001) confirm that perceived usefulness is predicted key of e-commerce acceptance and adoption. Consistent with prior studies, in this study the benefits perceived by students like offering various products will bring positive attitude on online shopping. This study's result also support research by (Ortega et al., 2008 ; Lee and Chang, 2011 dan Yuliharsi et al., 2011), stated that Perceived Usefulness is an important predictor on online shopping.

PEOU has positive and significant influence on attitude toward online shopping because most of the students perceived that online shopping websites are easy to access, the procedure is easy to understand, easy to compare products between vendors, easy to compare prices and easy to find desired products, is perceived high. The result of this study supported Technology Acceptance Model (TAM) by Davis 1989 which stated perceived ease of use has direct influence toward attitude on technology usage. Venkatesh (2000) determined that as the increasing of experience with system, individual as target will adjust system usage to show their interaction with system. This shows that if consumer has more experience with internet, they will adjust their perception that internet as shopping media is easy to used. This is supported by research object who are university students as internet active users like can be seen from respondents profiles that most of them have used internet for more than 3 years and spend time on internet for 2 to 4 hours a day. Consistent with prior theory, in this research context stated that PEOU like online shopping make it easier to compare products among vendors, easy to find products will enhance positive attitude on shopping online. This study result also support research by (Chen and Tan, 2004 ; Kleijen et al., 2004; and Yuliharsi et al., 2011), stated that PEOU as important attitude predictor in online shopping.

Perceived risk has negative significant effect on attitude toward online shopping. This is because most of the university students perceived that online shopping is risky such as the product is not the same with it is

showed in the web, the products are not delivered after payment, the quality is not the same as it is promised, was perceived high, this indicate respondents perceived that online shopping is risky. This result supported Heijden *et al.*, 2003 and Ma'ruf 2006 study that risk as attitude antecedent and the effect is negative and significant which means that if perceived risk is increase so consumer attitude will decrease. Another supported study is (Heijden *et al.*, 2003) stated that perceived risk effect attitude toward internet shopping. While (Jarvenpaa *et al.*, 2000) determined that perceived risk has negative effect on attitude to shop online. This result also consistent with (Yuliharsi *et al.*,2011) stated that the primary reason to refuse online shopping is the security concern (risk) related with payment.

PU has not significant influence on students' intention to shop online. It means that online shopping is actually useful but students do not intend to do it. Statistical result was supported by observation to local culture phenomenon in which the citizen also use their shopping time to develop social relationship so they enjoy their shopping experience. The recreation places in Pontianak are limited and the location are far from town. On the other hand, the shopping environment in Pontianak is convenience, the markets are close to people's residences, the shops are in a large number which offering various products with attractive prices. This condition is also supported by some studies; by Hoefstede (1994) which stated that relation between individuals in Indonesia is strong. Usunier (2000) stated that consumer purchase behavior in south east countries are influenced by their families.

From this research we can conclude that the university students thought that online shopping has many benefits but do not have significant effect on their intention to shop online. This finding also supported by looking at the average score of respondents answer on the risk is high. Hence we can conclude that respondents are not intend to shop online not only because of its low benefit but because of culture and environment factors and high perceived risk. This study result also supported by research from (Chwen-Yea Lin *et al.*, 2010) in Taiwan which stated that although usefulness is the primary factor that influence acceptance of particular technology but in this research it is found that usefulness factor has not significant influence on repurchase intention, in this case Taiwanese culture habitually use their shopping time to socialize. This finding also consistent with research by Yuliharsi et al., 2011 that explore study on students in Malaysia which determined that PU do not give significant effect on intention to shop online. This finding do not support TAM (Davis, 1989) stated that PU has significant effect on intention to use technology.

The influence of PEOU on intention to shop online is not significant means that although students perceived that PEOU is high but it does not influence students intention to shop online. The statistical result is supported by respondents characteristic that they do not have online shopping experience before because they do not intend. This result is also supported by the observation of society culture in research area; society in Pontianak usually use their shopping time to have fun and to socialize, moreover shopping environment in Pontianak is still convenience and close to people's residence. Although students perceived that this construct like the sites are easy to access, the procedure is easy to understand, easy to compare products and prices among vendors, and easy to find product that is needed. The PEOU is perceived high but does not make respondents intend to shop online.

In conclusion students do not intend to shop online not because of difficulties in online shopping, like can be noticed in respondent characteristics that they have used internet for more than 3 years and connect to the internet between 2-4 hours, but this is mostly caused by culture and environment circumstances factors also high perceived risk in online shopping. These findings also supported (Chwen-Yea Lin *et al.*, 2010) research held in Taiwan stated that although usefulness factor as primary factor which influence acceptance of technology but it is not has significant influence on repurchase online intention because of the culture in Taiwan.

These findings do not support technology acceptance model by Davis (1989) and Davis et al., (1989) stated that perceived usefulness has indirect influence on intention to use technology. Based on their theories, technology users believe that it is easy to use system like easy to understand, easy to memorize, provide usage guidance will make user intend to use the technology.

Effect of perceived risk on intention to shop online is negative and significant. It means that if perceived risk increase the intention will decrease and so forth. This is most of the respondent still perceived that online shopping is risky like the products is not appropriate as showed in the website, the products do not deliver product after payment, the products' quality is not the same with it has promised, is perceived high. This indicate that respondent perceived risk is high so decrease their intention to shop online, this also supported by respondent characteristics stated that they scare of being cheated. The high of perceived risk on online shopping is caused by the uncertain law in e-commerce that make consumer still not feel safe. In this case the government has to make rule like has been done in Malaysia which has designed law related with internet activity since 1997 and has had law design about computer crime, digital signature, copyright, communication and multimedia. Thus can be said that as people perceived online shopping is risky they will decrease their intention to shop online. This study is consistent with (Bhatnagar *et al.*,2000; Van der Heijden *et al.*,2001) research stated that online consumer has related risk like credit card problem, cheating and do not accept products ordered.

Attitude toward online shopping has positive significant influence on intention to shop online means that positive attitude on online shopping will increase their intention to shop online. Attitude is someone feeling to do something. According to (Azjen dan Fishbein, 1975 ; 216) *an attitude represents a person's general feeling of favorableness or unfavorableness toward some stimulus object*". The next statement " *as a person forms beliefs about an object, he automatically and simultaneously acquires an attitude toward that object*" (Azjen dan Fishbein, 1975). Thus Azjen and Fishben determined that attitude as someone's feeling to accept or to reject some object or attitude and measured by procedure that place people on two sides like good or bad, agree or disagree and so on. So if attitude about behavior is positive so intention to act will be strong. If attitude toward behavior is negative so intention to act will be weak also. Someone's attitude on behavior is influenced by many beliefs about object and with this beliefs he has implisited evaluative response related with those beliefs. This response will increase in time to form overall attitude.

Based on reseach result that proved significant influence between attitude toward online shopping and intention to online shopping so can be said that this research is relevant with Technology Acceptance Model (TAM) that is oriented on Theory Reasoned Action (TRA) that stated attitude is determined by behavioral attitude and intention is determined by individual attitude to that behavior. In this study students' attitude toward online shopping take an important role in explaining their intention to online shopping. Theoretically, TRA has been evaluated and has empiric support from some researches findings like research about consumer behavior on online shopping stated that attitude have important role in explaining intention to online shopping (Shim *et al.*,2001; Chen *et al.*,2002).

This study result also support some e-commerce researches findings like (Gefen *et al.*,2003; Gefen and Straub,2004) that proved the primary factor determined behavioral intention is individual attitude to the behavior. Heijden *et al.*,2003, stated that attitude has strong, positive and significant impact toward intention, this finding also support (Yuliharsi *et al.*, 2011) research stated that attitude has significant influence on intention.

7. Conclusion

The result of this analysis include 7 hypotheses can be concluded that PU and PEOU are significant variables that effect students attitude toward online shopping, but these variables do not have significant influence on online shopping intention. Attitude and perceived risk are the most significant variables that influence students' intention to shop online.

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