

# The Factors That Affecting the Product Purchasing Decision Through Online Shopping By Students of Surabaya State University

Muhammad Edwar<sup>1</sup>, Rizki Ayu Agustin Diansari<sup>2</sup>, Nur Fahmi Winawati<sup>3</sup>

## ARTICLE INFO

### Article History:

Received 15.04.2018

Received in revised form 08.06.2018

Accepted

Available online 01.10.2018

## ABSTRACT

The internet technology made information can be obtained from all over the world regardless of time and geographical limits for its connected by a global computer system, it can encourage people to make product purchasing decisions through online shopping. This study aims to determine the factors that influence product purchasing decisions through online shopping. This research method is confirmator factor analysis. Data were collected through observation, interviews, questionnaires and documentation. Questionnaire included 125 respondents who have made a purchasing products through online by the marketplace with a minimum of twice purchases. The results showed that the factors that influence the product purchasing decisions through online there are trust, price, and time.

© 2018 IJERE. All rights reserved

### Keywords:<sup>1</sup>

Factor analysis, online purchase, availability of products, Confidence, Easiness

## INTRODUCTION

The development of information technology has been developing very fast in this era of globalization that has brought changes in many aspects of today's life. The development of computer technology and network infrastructure have led to a new phenomenon with the Internet, among other things the development of business through the internet or called with e-business and electronic transactions or called by electronic commerce. By doing e-commerce, local companies will be able to act globally. Through e-commerce, companies can conduct business activities electronically including business transactions, the company's operational functions, a variety of information to consumers, as well as useful to maintain a relationship before, during and after the purchasing process. In addition, e-commerce has to be adopted as the important expenditure media for being able to offer a wide range of products with the availability of 24 hours and covers a wide area. The existence of e-commerce also had an impact in Indonesia with the development of online shopping store to meet the community's needs such as Zalora, Lazada, bukalapak, Tokopedia, and the others.

The using of information technology in business applications is not only able to change the nature of the services that provided by the company but has also been able to make changes to the process of providing services. Prabandari (2015) explains that with the increasing intensity of competition increasingly requires companies to innovate in service to customers and to acquire new customers, by maximizing their services electronically with Internet, known as electronic service quality (e-service quality). E-service quality can be defined as the overall customer evaluation and research on the excellence and quality of service delivery in virtual market. Natsir (2016) explained that implementing process of e-service quality to be the first consideration by consumer is security or privacy because it should be able to explain that transaction process was secured or trusted from the negative matters like deception.

This shows that the transactions which were conducted by online have inherent uncertainties and the information obtained by the parties to a transaction may be skewed or may not be true. Therefore the mutual trust between the buyer and the seller is very necessary (Thananuraksakul 2007; Jadhav, 2016).

Some other factors that may affect the online shopping are described by Dhanapal, et al (2015) there are convenience, time saving, easiness of use, product's characteristics, competitive prices, and confidence in the

<sup>1</sup> Corresponding e-mail: muhammedwar@unesa.ac.id

<sup>2</sup> agustindiansari@mhs.unesa.ac.id, orcid.org/0000-0003-0898-705X

<sup>3</sup> nurwinawatui@mhs.unesa.ac.id, orcid.org/0000-0002-6597-9403

Edwar,M., Diansari,R.A.A. , Winawati,N.F. (2018).The factors that affecting the product purchasing decision through online shopping by students of Surabaya State University. *International Journal of Educational Research Review*,3(4),54-64.

purchasing, nor explained by Jadhav (2016) there are product availability, low prices, promotions, comparison, convenience, customer service, perceived easiness of use, attitudes, sense of time, and trust.

Price according Tjiptono (1997) used by consumers as an indicator of how the pricing value associated with the benefits of a product. Swastha (2001) defines the price as a sum of money (plus a few products) that are required to obtain a combination of products and services. Price according to Kotler and Armstrong (2012) is the amount of money charged on the benefits for having or using the product. Meanwhile, according to Broekhuizen and Huizingh (2009 in Nuseir et al, 2010; and Jadhav (2016) low prices will be able to motivate consumers in the matter of shopping or buying products through online shopping.

Security of transactions and customer data is a major concern that must be faced by customers who purchasing products and services through online shopping. It shows that the internet is not an environment for secure online shopping, so security should be utilized and considered as something serious by online sites to protect customer's data (Lee & Joshi & Bae, 2009 in Nuseir et al, 2010; Chang and Chen, 2008 in Meskaran et al, 2013)

The easiness of use is one of the things to be considered for online shoppers. Davis (1989) argues that the perceived easiness is the perception of someone who is not bothered by a variety of other activities in the transaction. Easy online transactions refer to individual perceptions on the easiness of online shopping transactions they made. In the transaction, potential consumers doing a little effort, not too complicated to allow potential customers on making purchasing decisions of products through the internet.

Convenience is a factor that chosen by the consumer in deciding on online shopping, therefore it is very important for the convenience factor to be the highlight in purchase transactions through online. Convenience emphasis on the ability to obtain the necessary services to get a product without leaving home, fast acquisition of the information related to the desired product, and consumers do not need to travel just to find and acquire desired products through online, they can also looking for products based on many categories or online stores that available on the internet (Boubonienne et al., 2015; Jadhav et al., 2015).

Time is a major concern for the community when they are doing the online shopping. For all and everyone's desire to save time while shopping. Most people who have a sense of time, they will compare how the amount of time that spent in shopping, both of physical and online shopping. Some people believe that a lot of time can be saved by online shopping because it is a fact that when we are doing the online shopping, we do not need to leave our place, thus time saving or not wasting time were available (Javed et al., 2012; Ganapathi 2015).

Customer perceptions about the quality of a website based on features inside the websites that meet customer needs and were impressed by overall excellence of the sites. Some dimensions of quality sites can be categorized as the quality of information, and easiness of use. An interesting effect on e-commerce sites (web) can motivate consumers towards online shopping activities. Website's features have an important influence on online shopping intention, as well as an informative site allows customers to compare and evaluate the alternative product, so it can increasing customer's satisfaction and contribute to intentions to buy products through online shopping. The quality of information offered by the brand in the online shopping site is also an important factor.

Based on the description and explanation above, it can be concluded that e-service quality, time, price, easiness, security, trust, convenience, and quality of the websites are all factors that can affect consumers in the decision to purchase a product through online shopping.

## **THEORITICAL REVIEW**

### **Online Shopping**

In recent years, online purchasing or online shopping has entered a global scale with the growing Internet in popularity, which led to more and more users become familiar with it and adopt it as a media for gaining information and use it for online shopping (Lassitsa et al., 2016; Keisidou et al., 2011).

Purchases through online or online shopping will have many advantages if it compared to physical purchases at store. Online shopping can save the time and no longer need to leave the house and wait in long queues at the cashier when making a payment. Online shopping marketplace can be available anytime

and anywhere. This marketplace offers the consumers with various information about products and services free of charge (Nourbakhsh et al., 2012; Adnan Shad et al., 2016).

#### E-service Quality

Electronic Service Quality (e-service quality) is defined as an extension of a website to facilitate shopping, purchasing, and distribution effectively and efficiently. (Sanayei et al, 2011) in Prabandari (2015). E-service quality or the quality of electronic services related to consumer perception on the results of the services which provided by the company following their perceptions of the repair service in case of problems, which consumers are not only concerned about the interaction with the site but also how companies provide services in accordance with customer wants. The quality of service that provided by the online site includes experiences on during and after the interaction process and purchasing through online store (Zeithaml, 2002 in Peramita and Nugroho (2014). Indicators of e-service quality measurement, including the Information Quality, Website Functionally, Customer Relationship, Responsiveness and Fulfillment.

#### Time

Time is a major concern for the community when they are doing online shopping. For all and everyone's desire to save time while shopping. Most people who have a sense of time, they will compare how the amount of time that spent for shopping, both of physical and online shopping. Some people believe that a lot of time was saved when they are doing online shopping because it is a fact that when they were doing online shopping they do not need to leave a place, thus time saving or not wasting time were available (Javed et al., 2012; Ganapathi 2015). Measuring time indicators by Ganapathi (2015) is as follows (1) requires a bit of time in evaluating and selecting the products when doing online shopping, (2) having lot of time to purchasing products through online shopping (unlimited), (3) with online shopping, they don't waste their time.

#### Price

Price becomes the main factor that affecting consumer's choice before making a purchase. Price is the amount of money that charged for a product, or the amount of exchanged value for consumers on the benefits of having or using the product (Kotler and Armstrong, 2012). Where consumers firstly will check the price that listed on the product, because consumers are already thinking about the right-saving systems before doing the purchasing. In addition, consumers can think about the offered price compatibility with products that have been purchased. That kind of thinking is important for consumers as a material consideration when making a purchase decision. Low prices can motivate consumers to do online shopping (Broekhuizen & Huizingh, 2009 in Nuseir et al, 2010; Jadhav, 2016). The indicators that used are (1) low prices become the main option, (2) the product's price can measure the ability of buyer, (3) the product's price in accordance with the product's quality, and (4) the price of providing information to compare similar products (Kotler and Armstrong, 2001; Jadhav, 2016).

#### Easiness

Davis (1989) argues that the perceived easiness is perception of someone who is not bothered by a variety of other activities in the transaction. Easy online transactions refer to individual perceptions about the easiness of online shopping transactions that was carried out. In the transaction, potential consumers are not doing a lot of efforts, not too complicated to allow potential customers on making product's purchasing decisions through the internet. The indicators used by Renny et al (2013) are (1) I can get the product I was looking for easily, (2) I can make a reservation easily, (3) I can doing payment procedure easily.

#### Security

Security is an issue that often associate with the success or failure of online business (Nuseir et al, 2010; Meskaran et al, 2013). Park and Kim (in Permatasari 2015) defines safety or security as an online store's capabilities in controlling and maintaining the security of the transaction data, such as security guarantees. Security guarantees is an important matter in the establishment of trust to reduce consumer's concern about the misuse of personal data and transaction data that can be easily damaged. It is because the security of

Edwar,M., Diansari,R.A.A. , Winawati,N.F. (2018).The factors that affecting the product purchasing decision through online shopping by students of Surabaya State University. *International Journal of Educational Research Review*,3(4),54-64.

transactions and customer's data security is a major concern of online customers in purchasing products and services. When the acceptable level of security assurance and meet consumer's expectations, then a consumer will be willing to open their personal information and will buy with a secure feeling. Emphasizing that the internet is not an environment for secure online shopping, so security should be used and

considered by the online site to protect customer's data (Lee & Joshi & Bae, 2009 in Nuseir et al, 2010; Chang and Chen, 2008 in the Meskaran et al, 2013), The indicators that used in accordance with the research Nuseir et al (2010) are (1) to include a privacy policy, (2) the terms of clear payment.

#### Trust

Consumer's confidence in online shopping is one of the main key factors in the binding of a good relationship between buyers and sellers (Thananuraksakul, 2007; Jadhav, 2016). Trust in connection with online shopping is closely related to consumer's confidence in the intermediary and online stores (Chen and Dhillon, 2003). Gefen and Straub (2004) concluded that the higher the degree of consumer's confidence, the higher the level of consumer's purchasing. It needs to be confidence when prdering products through online shopping and when customers submit financial information and other personal data on financial transactions (Pratminingsih et al, 2013; Jadhav; 2016). Indicators in the trust including, 1) payment transactions reliably, 2) believe the stuff that comes in accordance with the order, and 3) believe that personal privacy will be safe (Pratminingsih et al, 2013; Jadhav, 2016).

#### Convenience

Convenience is a factor chosen by the consumer in deciding to doing online shopping, therefore it is very important for the convenience factor to be the highlight in the sale and purchase of online transaction. Leisure emphasis on the ability to obtain the necessary services to get a product without leaving home, fast acquisition of the information related to the desired products and the consumer does not need to travel to find and acquire products through online, they can also search for products based on many categories or online stores that available on the internet. (Bouboniene et al., 2015; Jadhav et al., 2015).

Convenience can be felt by consumers with a given or by providing conveniences such as could open the web and buy the product at any time within 24 hours of the day, it can perform a product search, make payments and up to the final stage where consumers will really feel comfortable if the goods or the desired product can be purchased through online and come on time, not damaged or defective and the product received as it is in the picture (Kim et al., 2012; Ganapathi 2015). Measurement convenience indicators by Ganapathi (2015) are as follows (1) unlimited times, (2) the completeness of information, (3) the easiness of comparing, (4) timeliness.

#### Website Quality

Customer perceptions about the quality of a website based on website's features that meet customer needs and were impressed by overall excellence of the site. Some dimensions of quality sites can be categorized as the quality of information, and easiness of use. An interesting effect on e-commerce sites (web) can motivate consumers to doing online shopping activities. Website's features (web) have an important influence on online shopping intention, as well as an informative site allows customers to compare and evaluate the alternative product, so it can increasing customer's satisfaction and contribute to intentions of buying products through online. The quality of information that offered by the brand in the online shopping site is also an important factor. One particular study revealed that the quality of information has the highest influence on customer's satisfaction among all dimensions of website quality (Hasanov et al., 2015; Ganapathi 2015). Indicators measuring the quality of a website by Praveen Kumar (2014) and Hasanov et al., (2015) are as follows (1) the quality of information (2) easiness of use.

### RESEARCH METHODS

#### Research design

This research is quantitative research. Using factor analysis method that is confirmatoring which establish or strengthen (Malhotra, 2009: 288).

### Population and Sample

Criteria for the population in this research were students of the Economic Faculty, State University of Surabaya who use the internet and ever make an online purchasing at least twice in the marketplace sites. This research is using factor analysis, to determine the number of samples in this study refers to the number of 5 times the statement which adopted by Malhotra (2009:289). As for the number of indicators in this study 26 were statements, so the total sample is 130 respondents.

### Research Instruments

The scale of measurement used is a Likert scale. The scale in this study is a scale with five options (Strongly Disagree = 1, Disagree = 2, Neutral = 3 Agree = 4 and Strongly Agree = 5).

## ANALYSIS

### Factor Analysis Techniques

The first step in the analysis is to formulate the problem factor. The variables involved in the analysis should be specified based on past research, theory and personal assessment researchers. Factor analysis in this study using eight variables: the e-service quality, time, price, easiness, security, trust, convenience, and quality of the web. The eighth variables were consisting of 26 indicators of statements that influence online shopping decisions.

The second step makes correlation matrix by using KMO (Kaiser-Meyer-Olkin) / Bartlett's Test of Sphericity (BTO) to measure the adequacy of sampling, by comparing the observed large correlation coefficient with the coefficient of partial. Regarding the results of the KMO calculation will be listed in Table 1 below:

Table 1  
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.676
Bartlett's Test of Sphericity	Approx. Chi-Square	178.872
	Df	28
	Sig.	.000

Source: Research Questionnaire

Based on Table 1, it is known that the test results of Bartlett's Test of Sphericity is large and significant, with Approximate Chi-Square is 178.872 and its Significance values for 0.000. Meanwhile, if viewed from the KMO test of Sampling Adequacy is equal to 0.676 which means the accuracy of the use of this factors analysis can be justified, because the value of KMO was already above 0.5 and a significance far below 0.05 ( $0.000 < 0.05$ ) showed that the analysis the exact factor and can be forwarded.

In addition to the value of KMO, Anti Image Correlation value results also showed that the variables used in the factor analysis was fit for use. The following will be listed on Anti Image Correlation results in Table 2.

Table 2  
Anti value Image Correlation

o.	variables	MSA
	E Service Quality	0718
	Time	0727
	Price	0510
	easiness	0635
	Security	0727
	Trust	0649
	Comfort	0643
	Quality web	0648

Source: Research Questionnaire

Table 2 shows the results of anti Image Matrices which can be seen that all variables have a value of 1 to 8 Measure of Sampling Adequacy (MSA)> 0,5, so it can be concluded that the eight variables can be proceed to the next analysis.

Table 3  
Total Variance Explained

Component	Initial Eigenvalues	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings								
			Total	% Of Variance	Cumulative%	Total	% Of Variance	Cumulative%	Total	% Of Variance	Cumulative%
1	2,490	31,131	31,131	2,490	31,131	31,131	2,230	27,876	27,876		
2	1,244	15,551	46,682	1,244	15,551	46,682	1,367	17,091	44,967		
3	1,137	14,209	60,891	1,137	14,209	60,891	1,274	15,924	60,891		
4	.861	10,763	71,654								
5	.844	10,555	82,209								
6	.641	8,07	90,216								
7	.472	5,906	96,122								
8	.310	3,878	100,000								

Extraction Method: Principal Component Analysis.  
Source: Research Questionnaire

The third step in the factor analysis is to determine the number of factors. According to Table 3 above shows the Total Variance Explained indicating that a factor of 1 to 8 contained in this research there are only 3 core factors that represent eigenvalue > 1. Based on Eigenvalues above, it can be interpreted that the 8 factors included in this study using the method of Principal Component Analysis (PCA) that can be grouped into three core factors that represent a total of variables tested.

The fourth step in the analysis is the rotation factor. Results of the factor determination often still difficult to determine a pattern or grouping of factors that can interpreting it. By using the rotation matrix is expected to summarize the data, so it can identify new factors that are easier to interpret by selecting the value of the loading factor of greater value (>) or equal to 0.5. To determine the loading factor using the method of rotation (Rotation Method) with Varimax rotation (Varimax with Keizer Normalization) through convergent rotation (Rotation Covergen) resulting in 3 core factors that make it easier for interpreting it. With the results in Table 4 as follows:

Table 4  
Rotated Component Matrixa

	Component		
	1	2	3
E-Service Quality	<b>.761</b>	-	-.240
Time	.302	.174	<b>.611</b>
Price easiness	.172	<b>.618</b>	-.531
How	.480	.239	<b>.565</b>
Security	<b>.789</b>	.195	.108
Trust	<b>.830</b>	-	-.301
Comfort	<b>.167</b>	.074	-.050
Quality web	-	<b>.540</b>	.018
	.470		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Source: Research Questionnaire

The next step in the analysis is to interpreting the factors by identifying variables that large charged on the same factors, Ghozali (2006: 273), stated that the results of the rotation of these factors can then be interpreted, expressed in variables that have a high loading. In this research the factors that have the highest loading values are usually used to represent variables. Grouping and naming factors can be seen in Table 5 as follows:

Table 5  
Grouping and Naming Factor

FACT OR	variables	Loa ding	PCT of variance	Commult ive%
1	Trust	.830	31 131	31 131
	Security	.789		
	E-Service Quality	.761		
	Comfort	.167		
		7		

2	Price	.618	15 551	46 682
	Quality web	.540		
3	Time	.611	14 209	60 891
	easiness	.565		

Source: Research Questionnaire

In table 5 it can be seen that the eight variables have been extracted and rotated obtained 3 new core factors group formed from: a) Factor Group I, named belief factor, which consists of a factor of trust, security, e-service quality, and convenience; b) Factor Group II, named the price factor which comprises the price factor and the web quality; and c) Group factor III, named factor of time consisting of time and easiness factors.

Determining accuracy of the Model is the last step of factor analysis. To test the accuracy of the factor analysis model with PCA (Parincipal Component Analysis) can be done by looking at the magnitude of the residual correlation percentage above 5%. The analysis showed as follows:

Table 6  
The accuracy of the model PCA method

Factor	Total	% Of Variance	Cumulative%
1	24,90	31,131	31,131
2	1,244	15,551	46,684
3	1,137	14,209	60,892

Source: Research Questionnaire

In Table 6 it can be seen that the variance value of more than 5% so that the factor analysis model using PCA is right. While the purpose of using the PCA techniques (Parincipal Component Analysis) itself to find out that this technique is able to explain the data at 0.60982, then it means the data is able to be explained by such techniques amounted to 60.982% 39.118% while rest of them are not able to be explained by the PCA technique ( Parincipal Component Analysis) itself. However, with 60 892% deemed value is representative for more than 50%.

## Discussion

From the data processing in this research has been known that there are eight factors that influence the the decision to do an online shopping. However, after the rotation there are 3 groups, each group had the most dominant factors, namely: the trust factor, price factor and time factor. In detailed, these factors are described in the description below.

In the group the confidence factor is the reason for someone taking an online shopping decision, there are four factors there are trust factor, security factor, the factor of e-service quality, and the convenience factor. These factors are very influential to the student's decision on making online shopping decisions. In this group the trust factor has the highest loading value which is equal to 0.830, which means that consumer's trust in online shopping is one of the key factors in the binding of a good relationship between the seller and the buyer (Thananuraksakul 2007; Jadhav, 2016). Trust in accordance to online shopping is closely related to consumer's trust in the intermediary and online stores (Chen and Dhillon, 2003). Trust was necessary when booking online products and when customers submit financial information and other personal data on financial transactions (Pratminingsih et al, 2013; Jadhav; 2016). In addition to the trust factor, security factor is also a part of the value-forming factor loading of 0.789. Security is an issue that often associate with the success or failure of online business (Nuseir et al, 2010; Meskaran et al, 2013). Nuseir et al (2010) suggest that online shopping have included privacy policy and terms of clear payment, then the concerns of consumers to make online shopping will be reduced. It is also supported by the results of a survey in 2016 by APJII that user's opinion against the security of online transactions declared safe with a



value of 69.4 percent. So with the perceived safety, the students did not hesitate to do online shopping. Wolfinberger and Gilly (2003: 191) in Prabandari (2015) So, the quality of electronic services is defined as an extension of the ability of a website to facilitate shopping, purchasing, and distribution effectively and efficiently. The quality of electronic services contribute to a given online service. Convenience has a value of loading in the third that is e 0.761. It is stated that the convenience is a factor which is chosen by respondents in deciding to do online shopping, therefore it is very important for the convenience factor to be the highlight in the sale and purchase of online transactions. Convenience factor emphasis on the ability to obtain the necessary services to obtain a product without leaving home (Bouboniene et al., 2015; Jadhav et al., 2015). Convenience can be felt by consumers with given or by providing conveniences such as could open the web and buy the product at any time within 24 hours of the day, it can perform a product search, make payments and up to the final stage where consumers will really feel comfortable if the goods or the desired product and purchased through online (Kim et al., 2012; Ganapathi 2015). So that students will feel convenience when doing online shopping.

In the second group of factors that was named with the price factor, has a loading value that is 0.618. Price stated that the price is one of the most dominant cue in marketing, because the prices are always available at all buying situations. Price also is one of the gestures that used by consumers in the process of perception, where prices will affect consumer 's judgments about a product. In the marketplace has listed different prices that are offered, so it can help the students to measure the capabilities and provide information to compare similar products (Kotler and Armstrong, 2012). Low prices can motivate students to buying online shopping produt (Broekhuizen & Huizingh 2009 in Nuseir et al, 2010; Jadhav, 2016). loading website quality has a value of 0.540. This suggests that the effects of interest in e-commerce (web) can motivate consumers to doing some online shopping activities. Website's features (web) has an important influence on online shopping intention. Website's features (web) have an important influence on online shopping intention, as well as an informative site allows customers to compare and evaluate alternative product, thereby increasing customer satisfaction and contribute to intentions of buying online shopping's products. The quality of information offered by the brand in the online shopping site is also an important factor. One particular research revealed that the quality of information has the highest influence on customer's satisfaction among all dimensions of website's quality (Hasanov et al., 2015; Ganapathi 2015).

In the third group factors, with the name of the time factor, the loading time has a value of 0611 which is the presence of more and more easiness or convenience provided in online shopping, respondents will also be able to save their time. Most people who have a sense of time, they will compare how the amount of time that spent in shopping, both of physical and online shopping. Some people believe that a lot of time is saved when doing the online shopping because it is a fact that when doing online shopping, we do not need to leave a place, thus time saving or not wasting time were available (Javed et al., 2012; Ganapathi 2015). In the third group of factors are the easiness with loading value of 0.565 .. This factor is a factor to be considered for a student on making an online shopping. Consumers will be happy for online shopping because they generally find a variety of convenience when doing online transactions such as by the easiness in getting the product they were looking for, the easiness of making a reservation and convenience in making a payment procedure (Renny et al, 2013).

### **Conclusion**

Based on the results of research and discussion on the factors that influence decisions of online shopping, it can be concluded that the decision of online shopping are influenced by three core factors such as a) Group Factor I named trust factor, which comprises the trust factor, security, e-service quality, and the convenience factor. b) Group Factor II named the price factor, which comprises price factor and web quality factors; and c) Group Factor III named time factor which consisting of time and convenience. Furthermore, the most dominant factor affecting decisions of online shopping there is a trust factor (0.830), the price factor (0.618), and the time factor (0611).

### **Suggestion**

Edwar,M., Diansari,R.A.A. , Winawati,N.F. (2018).The factors that affecting the product purchasing decision through online shopping by students of Surabaya State University. *International Journal of Educational Research Review*,3(4),54-64.

Based on the conclusion of the this research above, as for the suggestion to be conveyed researchers to further research is expected to seek or explore the factors that more and more different from this research, so that the results and the factors will also be different and gain more new researches by new factors as well.

## REFERENCES

- Adnan, H. (2014). An analysis of the factors affecting online purchasing behavior of consumers pakitasni. *International Journal of Marketing Studies*, 6, (5), 133-148.
- APJII. (2016). Penetration and internet user behavior Indonesia - Jakarta, 2016. Survey: APJII.
- Bauboniene, Z., & Guleviciute, G. (2015). E-commerce factors influencing consumers. *Journal of Social Technologies*, 5(1).
- Cabbage, O., & Lassitsa, S. (2016). Generation X vs. Generation Y - A decade of online shopping. *Journal of Retailing and Consumer Services*, 304-312.
- Chen, SC & Dhillon, GS (2003). *Interpreting dimensions of consumer trust in ecommerce, information technology and management*, from 4.303 to 318.
- Chase, RB, Jacobs, FR, & Aquilano, NJ (2006). *Operations management for competitive advantage*, 9th ed. New York: McGraw-Hill.
- Davis, FD (1989). Perceived usefulness, perceived easiness of use, and user acceptance of information technology. *MIS Quarterly*, 13 (2), 318-340.
- Dhanapal, S., Vashu D., & Subramaniam, T. (2015). Perceptions on the challenges of online purchasing: a study from the "baby boomer" generation "X" and generatrion "Y" point of views. *Contaduria y administracion*; 60 (S1), 107-132.
- Dwi Yuniasih Saputri , Rurukayah , Mintasih Indriayu (2018). Need assessment of interactive multimedia based on game in elementary school: A challenge into learning in 21st century. *International Journal of Educational Research Review*, 3(3), 1-8
- Ganapathi, R. (2015). A study on factors affecting online shopping behavior of consumers in chennai. *Internatioanl Journal of Business Management*, 3(2).
- Gefen, D., Karahanna, E. & Straub, DW (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27 (1), 51-90.
- Ghozali, I. (2006). *Applications multivariate analysis with SPSS program*. Semarang: Diponegoro Publisher Agency.
- Hasanov, J., & Khalid, H. (2015). The impact of website quality on online purchase intention of organic food in Malaysia: A model approach webqual. *Procedia Computer Science*, 382-389.
- Jadhav, V., & Khanna, M. (2016). Factors influence online buying behavior of college students: A qualitative analysis. *Journal of The Qualitative Report*, 21(1).
- Javed, I., & Rashid, H.U (2012). How online shopping is affecting consumers buying behavior in Pakistan? *International Journal of Computer Science*, 9(3).
- Keisidou, E., & Maditinos, D. (2011). Consumer characteristics and their effect on accepting online shopping, in the context of different product types. *International Journal of Business Science and Applied Management*, 6(2).
- Kim, J., & Sinha, J. (2012). Factors affecting Indian consumers' online buying behavior. *Journal of Innovative Marketing*, Volume. 8, Issue 2.
- Kotler, P. & Armstrong,G. (2012). *Principles of marketing*. 14th Edition. New Jersey: Pearson - Prentice Hall.
- Kumar, P., & Singh, KK (2014). A model for website quality evaluation - A practical approach. *International Journal of Research in Engineering & Technology*, 2(3).
- Malhotra, Naresh K.(2009). *Marketing research*. Jakarta: PT. Index.
- Meskaran, F., Ismail, Z., & Shanmugam, B. (2013). Online purchase intention: Effects of trust and security perception. *Australian Journal of Basic and Applied Sciences*, 7 (6), 307-315.
- Mulyanto, Heri, Gunarhadi & Mintasih Indriayu. (2018). The effect of problem based learning model on student mathematics learning outcomes viewed from critical thinking skills . *International Journal of Educational Research Review*, 3(2), 37-45.
- Nourbakhsh, M., & Poursaedi, A. (2012). An Analysis of Factors Affecting On Online Shopping Behavior of Consumers. *International Journal of Marketing Studies*, Vol.4, # 5.

- Edwar,M., Diansari,R.A.A. , Winawati,N.F. (2018).The factors that affecting the product purchasing decision through online shopping by students of Surabaya State University. *International Journal of Educational Research Review*,3(4),54-64.
- Nuseir, MT, Arora, N., Al-Masri, MM, & Gharaibeh, M. (2010). Evidence of online shopping: A consumer perspective. *International Review of Business Research Papers*, 6(5), 90-106.
- Park, C-H, & Kim,Y.G. (2006).The effect of information satisfaction and relational benefit on consumers online site commitmennts. *Journal of Electronic Commerce in Organizations*, 4(1), 70-90.
- Permatasari (2015). Effect of belief, security, risk perception and quality of service decision against buying online. dinus ePrint.
- Prasad, C., & Aryasri, A. (2009). Determinants of shopper behavior in E-tailing: An empirical analysis. *Paradigm Publishers*,13(1).
- Pratminingsih, SA, Lipuringtyas, C., & Rimenta, T. (2013). Factors influencing customer loyalty toward online shopping. *International Journal of Trade, Economics and Finance*, 4 (3), 104-110.
- Renny, Guritno, S., & Siringoringo, H. (2013). Perceived usefulness, easiness of use, and attitude toward online shopping usefulness of airlines towards online ticket purchase. *Procedia - Social and Behavioral Sciences*, 81, 212-216.
- Shad, MA, & Main, Z. (2016). Factors affecting online shopping behavior of consumer In Pakistan. *Journal of Marketing and Consumer Research*, 19.
- Thananuraksakul, S. (2007). Factors influencing online shopping behavior intention: A study of Thai consumeers. *AU Journal of Management*, 4 (2), 41-46.
- Wang, CL, & Katawetawaraks, C. (2011). Online shopper behavior: Influences of online shopping decision. *Asian Journal of Business Research*, 1(2).