



An Analysis of Perceived Trust, Risk, Usefulness and Website Quality Affecting on Indonesian Consumer's Online Buying Decision for Smartphones

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Abstract

The purpose of this present research was aimed to find out the factors that affect Indonesian consumers on making a decision to purchase smartphones online. The variables tested on this study were included perceived trust, perceived risk, perceived usefulness and perceived website quality toward online buying decision for smartphone in Indonesia. The process of data collection was done by using a questionnaire as the instrument of the survey. The researcher succeeded in collecting 330 of Indonesians who had experience of purchasing the smartphones via online channels. From the total of respondents who participated in this research, female respondents took a big portion of 66.1% or equivalent to 218 people aged from 18 - 30 years old of 46.4%. Most of respondents have completed a bachelor's degree (42.4%), worked as employees (47.6%) and earned a monthly income below Rp. 3,000,000 (37%). Based on the period of online shopping use, 31.8 % of respondents have been using online shopping for 1-2 years. In addition, 153 respondents of this study stated not sure whether they do online shopping or not per month. According to the findings of the study, it revealed that perceived usefulness was the most influential factor on Indonesian consumer's online buying decision for smartphone, followed by perceived website quality and perceived trust. On the contrary, the perception of risk affected Indonesian consumers negatively on the deciding to purchase smartphones online.

Keywords: *Online Shopping, Perceived Trust, Perceived Risk, Perceived Usefulness, Perceived Website Quality, Buying Decision*

1. Introduction

Currently, the Indonesian government is focusing on digital economic growth. Since 2015, the government of Indonesia has launched the project of Go Digital Vision 2020 to boost digital-based economy of the country. The main target was to make Indonesia as the leading digital economy in Southeast Asia region in 2020 by creating 1000 digital-based startups with a total value of US\$10 billion (Jakarta Post, 2017). The rapid development of online shopping in Indonesia could not be separated from the penetration of internet users. In terms of its population, Indonesia is a huge digital society. With the population reached 262 million, more than half of Indonesians have been connected to the technology of internet in 2017. Currently, Indonesia is one of the global countries which have the youngest demographic as well as the most digital literacy country (APJII, 2018).

Referring to the number of population, Indonesia is a huge market for the smartphone. In general, the penetration of smartphone users in Indonesia has increased by 8 percent in 2018 from the previous year, which is equivalent to 143.26 million of smartphone users. As well as the countries with large population such as China, India and USA, the growth of smartphone users has made Indonesia become one of the biggest countries in the world in terms of smartphone users (APJII, 2018). In addition, more than 56% of Indonesians would buy a new smartphone within a certain period to get the latest model and better features (eMarketer, 2017). The growth of smartphone users in Indonesia has changed the smartphone market itself. Many smartphone distributors who had established a physical store began to explore online business by creating their own e-commerce sites.

1.1 Background of the Research.

For most of Indonesian consumers, the smartphone was considered as an expensive item to be purchased online. The personal touch was still needed before they decide to purchase the smartphone (Kompas, 2016). Although, the online sale of smartphones in Indonesia was not as big as fashion products,

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however the sale of smartphones has experienced an increase every year (Kompas, 2017). There were several interesting reasons why Indonesians decided to purchase the smartphone via online channels, including the guarantee of quality of the smartphone and the official warranty, affordable postage and good packaging, trusted marketplaces with good reputation, and the number of promotions and discounts provided on online stores (Liputan6, 2015). In summary, Indonesians has purchased smartphones via online channels due to the trust factor on online shopping system, also the convenience and number of promotions that consumers gained while purchasing smartphones via online channels.

The system of online shopping allows people to search for an item they want with a price which is relatively cheap compared to the prices at the store. According to Sultan and Wong (2013), electronic commerce was the process of buying, selling and marketing goods and services through an electronic system. Nowadays, the system of online shopping has been adopted in many countries and became very popular way for the consumers to purchase goods and services (Bourlakis et al, 2008). However, according to Sonja and Ewald (2003) stated that online shopping has its own uniqueness compared to conventional shopping which were the uncertainty, anonym, lack of control, and decision-making potential.

Pavlou and Geffen (2004) explained that one factor that could affect buying decision on online shopping system was perceived trust. Only consumers who had trust in the product or service demonstrated on the website would decide to purchase one via online channels. Trust was the foundation on online shopping system, due to the transactions between buyers and sellers did not require the meeting of each other (Rousseau et al, 1998). Previous research revealed that trust was a very significant factor to influence consumers on online buying decisions (Doney, Cannon & Mullen, 2003). Furthermore, Rachmawati, Wahyudi, and Hariri (2016), Hardiawan (2013), Mahkota et al, (2014) and Naomi (2015) found that perceived trust had a positive and significant effect towards the online purchase decision.

Turban et al, (2004) said that nowadays online shopping became a new trend of the way of shopping because of its efficiency, easiness and cheapness. However, online shopping also has huge potential risks. Forsythe et al, (2006) explained that consumers highly felt the risk when purchase goods or service on online shopping compared to at the conventional store. The risk of purchasing online was considered higher than shopping conventionally due to the limited physical contact of consumers with the product, therefore consumers could not monitor product performance before deciding to purchase (Harris & Goode, 2004). Ariwibowo and Nugroho (2013) said that the higher of the perceived risk would cause the consumers to be afraid to make decisions of purchasing goods and service via online channels. Turban et al, (2004) said at least there were five risks on online shopping system: (1) the mismatch of the product ordered with the displayed image; (2) damaged goods due to the delivery process as well due to defects in production; (3) errors in packing that brought out the wrong order either in the form of color, number or type of goods; (4) goods not sent to the consumers due to goods lost or late delivery; and (5) scams or fraud through the internet. Previous studies conducted by Adnan (2014) and Masoud (2013) found that the perception of risk influenced consumers negatively on online buying decision.

Shopping convenience was the other reason why people are willing to shop online (Irmadhani, 2012). According to Kim, Fiore, and Lee (2007), perceived usefulness was customer expectation to get better, easier and more practical by making a purchase via online channels on a particular website. Karayanni (2003) explained that if the consumers believe that he or she would get greater benefit when deciding to do online shopping than buying through a conventional store, then he/she certainly preferred this shopping option t his/her needs. The perceived usefulness was the effectiveness and efficiency in shopping such as finding the information, comparing reasonable prices, ordering products, easiness of payments, saving time, convenience and reducing costs (Zhou, Dai & Zhang, 2007). Previous research by Forsythe et al, (2006) stated that perceived usefulness had a positive and significant relationship towards online buying decision. The other research conducted by Farag et al, (2007) proved that the perception of usefulness affected consumers positively on online buying decision.

Additionally, perceived website quality is the other factors that could influence the process of online buying decision. Based on the explanation of Harris and Goode (2010), some website designers observed that the use of typography as website background was a significant factor for the overall look and



originality of pages and sites that eventually triggered consumers to purchase online. Website quality was important stimulation to create a positive online experience for consumers. Hausman and Siekpe (2009) said that additional features such as an attractive graphic and design could attract consumers and encourage them to make online purchases. Consumers would purchase goods or services via online channels if the company has a good website quality (Bavarsad, Rahimi & Mennatyan, 2013). While according to Shim, Shin, and Nottingham (2002) explained that the availability of information, the attractiveness of website and easiness of use stimulated consumers in the process of online buying decision. Iqbal and Hunjra (2012) found that the quality of website had significant and positive contribution toward online buying decision. Similar to the study conducted by Bai, Law, and Wen (2008) stated there was a positive and significant relationship between the perception of website quality and online purchasing decision. Adnan (2014) pointed that the attractiveness of website design had a positive relationship with online purchasing decision.

1.2 Conceptual Framework.

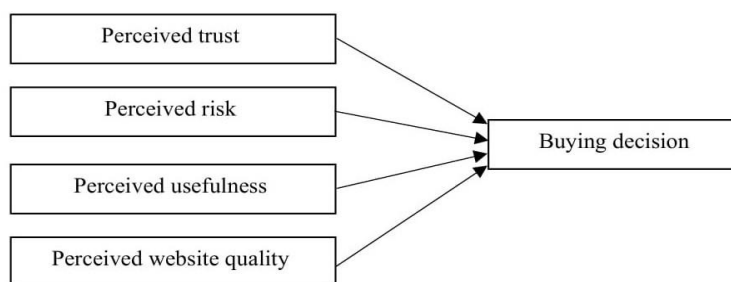


Figure 1 The conceptual framework

1.3 Hypothesis of the Research.

Based on the background and conceptual framework, the hypothesis of this study as follows:

Hypothesis 1: The perceived trust had a positive effect on Indonesian consumer's online buying decision for smartphones.

Hypothesis 2: The perceived risk had a negative effect on Indonesian consumer's online buying decision for smartphones.

Hypothesis 3: The perceived usefulness had a positive effect on Indonesian consumer's online buying decision for smartphones.

Hypothesis 4: The perceived website quality had a positive effect on Indonesian consumer's online buying decision for smartphones.

2. Objectives

This research was conducted to examine and investigate the factors that influence Indonesian consumers on deciding to purchase smartphones via online channels. The researcher emphasized on four factors including perceived trust, perceived risk, perceived usefulness and the perception of website quality.

3. Materials and Methods

3.1 Types of Research

The quantitative methodology was implemented in this research to measure the levels of relative contribution of perceived trust, perceived risk, perceived usefulness and perceived website quality toward online buying decision for smartphones in Indonesia. The reliability test of Cronbach's alpha coefficient, mean, standard deviation and multiple regression analysis were applied as an instrument of the statistics to interpret and analyze the data.



3.2 Research Instrument

A closed-type questionnaire was designed and implemented in this study. Likert's scale of 1-5 also applied to construct the research instrument for measuring the statements of each questions (Simamora, 2002). The right measuring instrument aims to achieve the measurement of an instrument that could provide good research results. The validity test in this research has done by using the method of the index of item-objective congruence (IOC) proposed by Rovinelli and Hambleton (1977). The questionnaire of this research is stated its adequacy and validity before distributing by three experts from the field of business administration, where the value of IOC was 0.98 (Rovinelli & Hambleton, 1977). Measurement of instrument reliability was performed by using coefficient value of Cronbach's alpha close to 1, which indicates reliability with high consistency. A variable was reliable if Cronbach's value greater than 0.70 (Nunnally, 1994). A pilot test for this study was done by using 40 qualified people who were not in the group of the sample in this study. The results of reliability test showed that each part of questionnaire have been accepted, where the value of Cronbach's alpha coefficients of each variable was greater than 0.70.

3.3 Samples selection

G*Power version 3.1.9.2 was used in this study to calculate and determine the total of the sample size. Where the result of power ($1 - \beta$) was 0.95, α of 0.05, and the effect size was 0.1251407 from 4 predictors tested. The total sample size of 106 was gained for the field survey. However, for more reliable results of this study, 330 samples were determined for the data collection. The convenience and purposive sampling methodologies were applied in order to select the targeted sample of this study. Medan and Jakarta as the two main cities with the biggest online shopping activities in Indonesia were selected as the research location (Tribun, 2018). The data collection process was done by handing out the questionnaires to the consumers who had experience of purchasing a smartphone via online channels.

4. Results and Discussion

4.1 Results

Table 1 Demographic data

Description	Characteristic	Frequency	Percentage
Gender	Male	112	33.9
	Female	218	66.1
Age	18 – 30 Years old	153	46.4
	30 – 40 Years old	102	30.8
	41 – 50 Years old	56	17
	Over 50 Years old	19	5.8
Education	High school / below	93	28.2
	Diploma	55	16.6
	Bachelor's Degree	140	42.4
	Master Degree / Doctoral	23	7
	Others	19	5.8
Income per month	Under Rp.3.000.000	122	37
	Rp.3.000.000 – 4.000.000	101	30.6
	Rp.4.100.000 – 5.000.000	74	22.4
	Over than Rp.5.000.000	33	10
Occupation	Student	55	16.7
	Employee	157	47.6
	Self-employee	76	23
	Retired	9	2.7
	Housewife	24	7.3
	Others	9	2.7
Period of using online	Less than 3 months	41	12.4



shopping	3 – 6 months	56	17
	7 – 11 months	64	19.4
	1 – 2 years	105	31.8
	3 – 5 years	36	10.9
	More than 5 years	28	8.5

From the total of respondents who participated in this research, female respondents took big portion of 66.1% or equivalent to 218 people aged from 18 - 30 years old of 46.4%. Most of respondents have completed a bachelor's degree (42.4%), worked as employees (47.6%) and earned a monthly income below Rp. 3,000,000 (37%). Based on the period of using online shopping, 31.8 % or equivalent to 105 respondents have been using online shopping for 1-2 years. In addition, 153 respondents of this study stated not sure whether they do online shopping or not per month.

Table 2 Behavior of Indonesian consumers on online shopping

Description	Characteristic	Frequency	Percentage
Product to buy	Clothes and accessories	231 / 330	21.4
	Book / Magazine	76 / 330	7.1
	Food and groceries	102 / 330	9.5
	Smartphone	120 / 330	11.1
	Electronic devices	184 / 330	17.1
	Health and beauty product	136 / 330	12.6
	Household	101 / 330	9.4
	Ticket and hotel	128 / 330	11.8
Website for online shopping	Bukalapak	190 / 330	13.8
	Lazada	209 / 330	15.2
	Zalora	89 / 330	6.5
	OLX	152 / 330	11.1
	Traveloka	152 / 330	11.1
	Blibli	118 / 330	8.6
	Tokopedia	127 / 330	9.2
	Elevenia	64 / 330	4.7
	Berniaga	70 / 330	5.1
	Kaskus	57 / 330	4.2
	Matahari mall	65 / 330	4.7
	Others	80 / 330	5.8
Method of payment	COD (Cash on Delivery)	189 / 330	23.2
	Transfer via ATM	208 / 330	25.6
	Credit card	115 / 330	14.1
	Third payment	70 / 330	8.6
	Bank	150 / 330	18.5
	SMS banking	25 / 330	3.1
	Debit card	36 / 330	4.4
Others	20 / 330	2.5	

Table 2 showed the behavior of Indonesian consumers toward online shopping. From the data presented, it could be concluded that clothes and accessories were the most frequently purchased product via online channels in Indonesia. It was indicated that the number of smartphone sale via online channels in Indonesia was slightly small compared to other products. According to table 2, only 11.1% or equivalent to 120 of the total respondents said the smartphone was the product that they often purchased online. Where, Lazada was chosen as the most visited online shop for Indonesian consumers to do online shopping (15.2%). In terms of payment methods, 228 respondents preferred to transfer the money via ATM.

Table 3 Multiple regression analysis

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Variables	B	β	T	Sig.	Tolerance	VIF
Constant	7.430	-	5.204	.000*	-	-
Perceived Trust	.210	.161	3.754	.000*	.830	1.205
Perceived Risk	-.135	-.095	-2.398	.017*	.971	1.030
Perceived Usefulness	.594	.485	10.775	.000*	.752	1.330
Perceived Website Quality	.326	.246	5.381	.000*	.732	1.366

R-square = .504, AR-square = .498, F = 82.669, *P < .05

According to the data presented on the table 3, the regression results of each independent variable including perceived trust, perceived risk, perceived usefulness and perceived website quality affected Indonesian consumer's online buying decision for smartphones at a significance level of .05. It revealed that perceived usefulness was the most influential factor on Indonesian consumer's online buying decision for smartphones with the value of $\beta = .485$ and the coefficient value was .594 at .05 level of statistical significance. Hence, it could be interpreted that perceived usefulness increased the level of making online buying decision for smartphones of 59.4% (Miles & Shevlin, 2001). Followed by the perceived website quality who accounted big contribution on online buying decision for smartphones in Indonesia, whereas the value of $\beta = .246$ and the coefficient was .326. It could be interpreted that perceived website quality affected positively Indonesian consumer's online buying decision for smartphones of 32.6% (Miles & Shevlin, 2001). Meanwhile, the perceived trust had a positive effect of 21% on online buying decision for smartphones in Indonesia where the value $\beta = .161$ and the coefficient was .210 (Miles & Shevlin, 2001). These three variables had a positive influence on deciding to purchase smartphones via online channels in Indonesian. On the contrary, perceived risk had a negative effect on Indonesian consumer's online buying decision for smartphones at .05 level of statistical significance. Based on the result of this study, the coefficient value of perceived risk was -.135 and $\beta = -.095$. In conclusion, perceived risk affected Indonesian consumer not to purchase smartphones via online channels by 13.5% (Miles & Shevlin, 2001). The finding of this study also revealed that the R-squared test results obtained a value of .504, it could be concluded that Indonesian consumer's online buying decisions were influenced by perceived trust, perceived risk, perceived usefulness and the perception of quality of 50.4%. While the other 49.6% influenced by other factors not covered in this study.

4.1 Discussion

Hypothesis 1: The perceived trust had a positive effect on Indonesian consumer's online buying decision for smartphones. Based on the research results, it found that there was a positive influence of perceived trust on Indonesian consumer's online buying decision for smartphones with a significant level at .05. In other word, Indonesian consumers agreed that trust was one of the factors needed to be considered before purchasing smartphones via online channels. However, perceived trust was not the most determined factor on Indonesian consumer's online buying decision for smartphones. It was indicated that most of Indonesian consumers already had confidence and believed that online shops which sell smartphones were trustworthy. Therefore, perceived trust only contributed 21% on online buying decision for smartphones in Indonesia. Moreover, since past 10 years, the Indonesian government has been applying the regulation of online shopping system under the law of electronic information and transaction (UU ITE) to facilitate and guarantee the right between sellers and consumers (Hermawanto, 2014). The finding of this study was a direct proportion with the previous studies including Zulfa (2018), Hardiawan (2013) and Mohmed et al, (2013) found that perceived trust affected positively the online buying decision. Therefore, the hypothesis of the study was supported.

Hypothesis 2: The perceived risk had a negative effect on Indonesian consumer's online buying decisions for smartphones. The research results showed that there was a negative relationship between perceived risk and online buying decision for smartphones in Indonesia. It could be interpreted that some of Indonesian consumers were still afraid to purchase smartphones online. The Indonesian consumers still felt the negative consequences of buying smartphones via online channels, including losing of money, the damage of a smartphone during delivery process and the qualification of a smartphone is not as expected. In



other word, if the perceived risk is high, the consumers will feel reluctant, hesitant and tend not to purchase smartphones via online channels (Schiffman & Kanuk, 2004). The finding of this study was consistent with the previous research conducted by Gunawan, Sompie, and Andreani (2017), Daryadi, Puspitasari, and Saputra (2017), and Sukma (2012) revealed that there was a negative influence of perceived risk towards online buying decision. Therefore, this hypothesis stated supported.

Hypothesis 3: The perceived usefulness had a positive effect on Indonesian consumer's online buying decision for smartphones. The hypothesis of this study was supported. Referring to the research findings, it showed that there was a significant positive effect of perceived usefulness on Indonesian consumer's buying decision for smartphones via online channels. In addition, perceived usefulness had the strongest weight of relative contribution among the other independent variables tested toward online buying decision. The implication of perceived usefulness on online shopping system is obviously related to the benefits that consumers gain by purchasing smartphones online which they did not get by shopping conventionally. The results of this study indicated that most of Indonesian consumers believed that they gained so many benefits by purchasing smartphones via online channels instead of going to the shopping mall to find the smartphone they want, including saving time of shopping around, shopping convenience, complete product options, price comparison, the easiness of payment process and clear product information. The finding of the research was similar to the previous studies by Wen et al, (2011), Trisnawati et al, (2012), Athcharyachanvanich et al, (2006), Wahyuningtyas and Widiastuti (2015) and Nassuora (2013) found that perceived usefulness had a positive effect towards buying decision. Moreover, the study conducted by Hanafizadeh et al, (2014) stated the perceived usefulness had the most influential effect toward online buying decision.

Hypothesis 4: The perceived website quality had a positive effect on Indonesian consumer's online buying decision for smartphones. Based on the research results, online buying decision for the smartphones in Indonesia was influenced by perceived website quality positively. In conclusion, the attractive and dynamic interface of the website affected the Indonesian consumers on online buying for smartphones by 32.6%. Moreover, Sam and Tahir (2009) stated that the complex and unstructured of the website would make the consumers leave the website without any transactions. It proved that the website quality was one of the key factors on online shopping system. The research finding was similar to the previous researches conducted by Hasanah et al, (2015), Marsela (2017), Sidauruk (2018), Nazirah and Utami (2017) and Ghafiki (2017) explained that the quality of website affected consumers on purchasing online positively. Therefore, the hypothesis of this study was supported.

5. Conclusion

The results of this study showed that perceived usefulness was the most significant factor to determine online buying decision for smartphones in Indonesia. The business strategy that could be applied for the company to boost the sale of smartphones via online channels is to emphasize and be more proactive on the service offering. It is necessary for the company to pamper the consumers by providing the complete product options. The more product choices offered to the consumers, it would be easier for them to make online buying decision (Widodo, 2016). In addition, updating the information of prices and promotions are important things to be taken into account. In some cases, consumers decided to purchase goods or services online due to the easiness in comparing price and promotion information (Hatta, 2016). Hence, updating the price and promotion information regularly is obligation for the company to increase the online sale of smartphones in Indonesia. Considering that some of Indonesian consumers still do not have a bank account and credit card, COD (Cash on Delivery) and third payment party are the best way to reach all the levels of Indonesian consumers (Julianto, 2017). Therefore, by facilitating the shopping convenience on all level of society, it would affect online buying decision for smartphones in Indonesia (Forsythe et al, 2006). The other strategy needed to be considered by the company to increase the smartphone sale on online market is focusing and emphasizing to build the responsive website. The responsive website means being easy and fast to be operated in both computer and smartphone platforms. Moreover, nowadays people more often to use smartphones instead of computers for the online shopping purpose (iPrice, 2017).



Since the title of this study covered online buying decision of smartphones in Indonesia, the researcher highly recommends for the future research to disperse the locations of the data collection instead of just two main cities in Indonesia, Jakarta and Medan. Therefore, the finding of the research would be more representative to describe the actual situation of online buying decision for smartphones in Indonesia. Considering that the independent variables tested of this study only had 50.4% of contributions towards buying decision, the researcher realized there was another 49.6% that still have huge influences on smartphone online buying decision in Indonesia. Therefore, the researcher encourages for the future researchers to study more the other factors that could determine Indonesian consumers on deciding to purchase smartphones online, including the price and promotion effect, brand effect, perceived service quality and the effect of consumer's reviews. In addition, the researcher also recommends to study from the psychological perspective, for instance, lifestyle and environmental effect, to find out the extent to which psychology could affect Indonesian consumers toward online buying decision for smartphones.

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7. References

- Adnan, H. (2014). An Analysis of the Factors Affecting Online Purchasing Behavior of Pakistani Consumers. *International Journal of Marketing Studies*, 6 (5), 134-137.
- APJII. (2018, July 12). *The result of survey of the penetration and behavior of internet user in Indonesia 2017*. Retrieved from APJII: https://web.kominfo.go.id/sites/default/files/Laporan%20Survei%20APJII_2017_v1.3.pdf
- Ariwibowo, D. P., & Nugroho, M. A. (2013). The influence of Perception of Trust And Perceived Risk on Purchasing Intentions through E-Commerce. *Jurnal Nominal 1*, 1-18.
- Atcharyachanvanich, K., Okada, H., & Sonehara, N. (2006). What Keeps Online Customers Repurchasing Throught the Internet. *ACM SIGecom Exchanges.*, 6 (2). Pp. 47-57.
- Bai, B., Law, R., & Wen, I. (2008). The impact of website quality on customer satisfaction and purchase intentions: evidence from Chinese online visitors. *Int J Hosp Manag*, 391-402.
- Bavarsad, B., Rahimi, F., & Mennatyan, M. A. (2013). A Study of the Effects of Website's Perceived Features on the Intention to Use E-shopping. *World Applied Programming, Vol (3), Issue (6)*, 252-263.
- Bourlakis, M., Papagiannidis, S., & Fox, H. (2008). "E-consumer behaviour: Past, present and future trajectories of an evolving retail revolution. *International Journal of E-Business Research*, 64-67.
- Daryadi, Puspitasari, I., & Saputra, M. H. (2015). The Effect of Perceived Turst, Easy of Use and Usefulness toward Online Buying Decision. (Research conducted on Users of Olx Website in Purworejo). *Jurnal Fakultas Ekonomi Universitas Muhammadiyah Purworejo*, 6-8.
- Doney, P. M., Cannon, J. P., & Mullen, M. P. (2003). Understanding the Influence of National Culture on the Development of Trust. *Academy of Management Review*, 601-620.
- eMarketer. (2017, July 13). *Smartphone Activities of Smartphone Users in Indonesia, by Age, July 2016 (% of respondents)*. Retrieved from eMarketer: <https://www.emarketer.com/Chart/Smartphone-Activities-of-Smartphone-Users-Indonesia-by-Age-July-2016-of-respondents/194074>.
- Farag, S., Schwanen, T., Dijst, M., & Faber, J. (2007). Shopping online and/or in-store? A structural equation model of the relationships between e-shopping and in-store shopping. *Transportation Research Part A: Policy and Practice*, 125-141.
- Forsythe, S., Liu, C., Shannon, D., & Gradner, L. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Interactive Marketing*, 55-75.



- Ghafiki, R., & Setyorini, R. (2017). The Impact of Perception of Website Quality Towards Purchasing Decision on Bukalapak.Com. *Jurnal of Business*, 678–686.
- Gunawan, M., Sompie, E. A., & Andreani, F. (2017). Analysis of The Effect of Perceived Risk Towards Buying Decision on Airbnb. *Jurnal Hospitality dan Manajemen Jasa*, 212-223.
- Hanafizadeh, P., Behboudi, M., Koshksaray, A. A., & Tabar, M. S. (2014). “Mobile-banking adoption by Iranian bank clients. *Telematics and Informatics 31 (1)*, 62-78.
- Hardiawan, A. C. (2013). The Influence of Perception of Trust, Usefulness & the Quality of Information Toward Purchasing Decisions Online (studies of users of Tokobagus.com sites). *Unpublished Bachelor Thesis*, Diponegoro University.
- Harris, L. C., & Goode, M. H. (2004). The Four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing*, 80, 139–158.
- Harris, L. C., & Goode, M. H. (2010). ‘Online servicescapes, trust, and purchase intentions. *Journal of Services Marketing*, 230–243.
- Hasanah, N., Hayashi, Y., & Hirashima, T. (2015). Analysis of problem-posing process of arithmetical word problems as sentence integration: viewpoint of first selected sentence. In G. Chen, V. Kumar, R. Hong, & S. C. Kong (Eds.). *Emerging Issues in Smart Learning*, 85–88.
- Hatta, H. (2016). Purchasing Decision: The Effect of Information Quality and Virtual Community of Samsung Galaxy Tab on E-commerce. *The Journal of Economy and Business 21*, 12- 16.
- Hausman, A. V., & Siekpe, J. S. (2009). The Effect of Web Interface Features on Consumer Online Purchase Intentions. *Journal of Business Research*, 5-13.
- Hermawanto, S. (2014). Kajian Regulasi Dan Hukum Transaksi Jual Beli Online. *Thesis of Mercubuana University*, Unpublished journal.
- iPrice. (2017, July 11). *State of e-commerce in South-east Asia, 2017*. Retrieved from iPrice: <https://iprice.co.id/insights/stateofecommerce2017/#state-of-ecommerce>
- Iqbal, S., & Hunjra, A. I. (2012). Consumer Intention to Shop Online: B2C E-Commerce in Developing Countries. *Middle East Journal of Scientific Research*, 424-432.
- Irmadhani. (2012). The Influence of Perception of usefulness, Ease to Use and Computer Self Efficacy Toward the Use of Online Banking On Bachelor Students of the Faculty of Economics, Yogyakarta State University. *The Journal of acutancy of UNY*, Vol.1.No.3.
- Jakarta Post. (2017, August 7). *Unleashing Indonesia's digital economy potential*. Retrieved from The Jakarta Pos: <https://www.thejakartapost.com/academia/2017/08/07/unleashing-indonesias-digital-economy-potential.html>
- Julianto, P. A. (2017, 09 27). *Indonesians Love to Online Shopping, However not everyone has Bank Account*. Retrieved from Kompas.com: <https://money.kompas.com/read/2017/09/27/202105426/masyarakat-gemar-belanja-online-tapi-tak-semua-punya-rekening-bank>.
- Karayanni, D. A. (2003). Web site characteristics and business performance: some evidence from international business-to-business organizations. *Marketing Intelligence and Planning*, 105-114.
- Kim, J., Fiore, A., & Lee, H. (2007). Influences of online store perception, shopping enjoyment, and shopping involvement on consumer patronage behavior towards an online retailer. *Journal Of Retailing & Consumer Services*, 95-107.
- Kompas. (2016, 08 12). *Kompas.com*. Retrieved from Jenis barang aja saja yang sebaiknya tidak di beli secara online?: <https://money.kompas.com/read/2016/08/12/210000926/jenis.barang.apa.saja.yang.sebaiknya.tidak.dibeli.secara.online.?page=all#source=clicktitle>
- Kompas. (2017, February 22). *How much the Internet Users in Indonesia*. Retrieved from Kompas.com: <https://tekno.kompas.com/read/2018/02/22/16453177/berapa-jumlah-pengguna-internet-indonesia>.
- Liputan6. (2015, December 03). *5 Reasons make Indonesians not Reluctant to Purchase Smartphone Online*. Retrieved from Liputan6: <https://www.liputan6.com/news/read/2381037/5-alasan-bikin-kamu-enggak-ragu-beli-hape-secara-online>



- Mahkota, Putra, A., Suyadi, I., & Riadi. (2014). The Influence of Perception of Trust and Usefulness on Buying Decisions Online to the Customers on the Website of Ride Inc. *Jurnal Administrasi Bisnis (JAB)*, Volume. 8 No.2.
- Marsela, D. (2017). The Influence of Perception of Trust, Perceived Usefulness and Website Quality Towards Consumer Behavior on Purchasing Ticket Online on Traveloka. *Thesis University of Lampung*, Unpublished journal.
- Masoud, E. Y. (2013). The Effect of Perceived Risk on Online Shopping in Jordan. *European Journal of Business and Management*, Vol.5, No.6.
- Miles, J., & Shevlin, M. (2001). *Applying Regression and Correlation*. London: Sage Publications.
- Mohmed, A. S., Nurdiana, B. A., & Jafar, M. Z. (2015). The Impact of Trust and Past Experience on Intention to Purchase in E-Commerce. *International Journal of Engineering Research and Development*, 20-35.
- Naomi, P. E. (2015). The Influence of Perception of Trust, Ease to use, Information Quality and Price on Consumer Purchasing Decisions in Choosing Shopping Online. *Journal of Muhammadiyah University, purworejo*, Unpublished Thesis.
- Nassuora, A. B. (2013). Understanding Factors Affecting the Adoption of M-commerce by Consumers. *Journal of Applied Sciences*, 913-918.
- Nazirah, U., & Utami, S. (2017). The Effect of Website Design Quality Towards Purchasing Intention Mediated by the Perception of Product Quality in Lazada. *The Journal of Economy and Management*, 2- 3.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.)*. New York: McGraw-Hill, Inc.
- Pavlou, P., & Gefen, D. (2004). Building Effective Online Marketplaces with Institution-based Trust. *Information Systems Research (15:1)*, 37-59. .
- Rachmawati, R. M., Wahyudi, H. D., & Hariri, A. A. (2016). The Effect of Trust in Buying Interest Through Risk Perception On Online Shopping Transactions through Social Media. *Business of economy journal*, 218.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not So Different After All: A Cross-discipline View of Trust. *Academy of Management Review*, 393–404.
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Educational Research*, 49-60.
- Sam, M. M., & Tahir, M. H. (2009). Website Quality and Consumer Online Purchase Intention of Air Ticket. *International Journal of Basic & Applied Sciences IJBAS-IJENS Vol:09*, 10.
- Schiffman, L. G., & Kanuk, L. L. (2004). *Consumer behavior (8th ed.)*. Upper Saddle: Pearson: Prentice Hall.
- Shim, J. P., Shin, Y. B., & Nottingham, L. (2002). Retailer web site influence on customer shopping: An exploratory study on key factors of customer satisfaction. *Journal of the Association for Information Systems*, 53-76.
- Sidauruk, S. N. (2018). The Influence of Trust, Price and Website Quality Toward Traveloka Consumers Satisfaction on Students of Bisnis and Economy of University of North Sumatera. *Thesis of University of North Sumatera*, Unpublished journal.
- Simamora, B. (2002). *Research Guide of Consumer Behavior*. Surabaya: Pustaka Utama.
- Sonja, K. G., & Ewald, K. A. (2003). Empirical research in on-line trust: a review and critical assessment. *International Journal of Human-Computer Studies - Special issue: Trust and technology*, 783 - 812 .
- Sukma, A. (2012). The Factor Anaylisis that Affected on Buying Decision Trough Social Networking Website. *Skripsi, Depok: Universitas Gunadarma.*, Unpublished Journal.
- Sultan, P., & Wong, H. Y. (2013). Service quality in higher education – a review and research agenda. *International Journal of Quality and Service Sciences*, 259-272.



- Tribun. (2018, June 21). Medan terkini. *Pengunjung di Plaza Medan Fair Meningkat 15 Persen*, pp. <https://medan.tribunnews.com/2018/06/21/pengunjung-di-plaza-medan-fair-meningkat-15-persen-lenny-sebut-geraimakanan-jadi-idola>.
- Trisnawati, E., Suroso, A., & Kumorohadi, U. (2012). Analysis of key factors from online repurchase intention (case study at fesh shop consumers). *Journal of Bisnis and Economic Vol.19 No. 2, 2*.
- Turban, E., King, D., Lee, J. K., & Viehland, D. (2004). *Electronic Commerce 2004: A Managerial Perspective*. New York: Pearson.
- Wahyuningtyas, Y. F., & Widiastuti, D. A. (2015). Analysis of the effect of Perceived risk, easy of use and perceived usefulness on online purchasing decisions (Study case on consumers of fashion goods on Facebook. *Jurnal Kajian Bisnis, Vol. 23* , 112-120.
- Wen, C., Prybutok, V. R., & Xu, C. (2011). An integrated model for customer online repurchase Intention. *Journal of Computer Information Systems*, 14-23.
- Widodo, T. (2016). Pengaruh Kelengkapan Kualita Produk dan Layanan Terhadap Keputusan Pembelian. *Among Makarti Vol.9*, 17.
- Zhou, L., Dai, L., & Zhang, D. (2007). Online shopping acceptance model - A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8(1), 41-62.
- Zulfa, L. (2018). Analysis of The Effect of the Perceived Risk, Website Quality and Trust towards consumer's Online Buying Decision on Shopee e-commerce in Semarang. *Diponegoro University, Semarang*, Unpublished thesis.