# THE EFFECT OF SMISHING FRAUD, PERCEIVED RISK, AND TRUST USING E-MARKETPLACE TOWARDS ONLINE SHOPPING IN SHOPEE

#### Revita Dewi Arviani

Accounting, Yogyakarta State University revitadarviani@email.com

#### Diana Rahmawati

Lecture in Accounting Education Departement, Yogyakarta State University rahmawati\_diana@uny.ac.id

**Abstrak:** This study aims to determine the effect of SMishing fraud, perceived, and trust towards online shopping satisfaction at Shopee. This research is a quantitative research and using purposeive sampling techniques. There are 100 respondents was obtained by using the Rao Purba formula and data collection using a questionnaire distributed through social media. The instrument was tested using validity test and reliability test, normality test, linearity test, multicolinearity test, heteroscedasticity test, then analysis techniques using simple linear regression and multiple linear regression. The results showed that SMishing fraud and perceived risk had a negative and significant effect on online shopping satisfaction. In addition, trust has a positive and significant effect on online shopping satisfaction.

**Key word**: Online Shopping Satisfaction, SMishing Fraud, Perceived Risk, Trust Usimg E-Marketplace

Abstrak: Penelitian ini bertujuan untuk mengetahui pengaruh SMishing fraud, persepsi risiko, dan kepercayaan terhadap kepuasan belanja online di Shopee. Penelitian ini adalah penelitian kuantitatif dan menggunakan teknik pengambilan sampel betujuan (purposeive sampling). Sampel penilitian sebanyak 100 responden diperoleh dengan rumus Rao Purba dan pengumpulan data menggunakan kuesioner yang disebar melalui media sosial.instrumen diuji menggunakan uji validitas dan uji reliabilitas, uji normalitas, uji linieritas, uji mutlikolinieritas, uji heteroskedasitas, serta teknik analisis regresi linier sederhana dan regresi linier berganda. Hasil penelitian menunjukkan bahwa SMishing fraud dan persepsi risiko berpengaruh negatif dan signifikan terhadap kepuasan belanja online. Selain itu kepercayaan berpengruh positif dan signifikan terhadap kepuasan belanja online.

**Kata kunci**: Kepuasan Belanja Online, SMishing Fraud, Persepsi Risiko, Kepercayaan Menggunakan E-Marketplace

#### INTRODUCTION

Modern society now is no longer afraid to carry out trading activities online. In Indonesia, the term online shopping has been known to villages. With the development of the online shopping system, Indonesians are now spoiled for convenience, both in terms of buying and selling to delivery services. Currently, Indonesia's population is ranked

4th in the world for a country with the largest population of 264.16 million (2018) and based on a survey conducted by *Asosiasi Penyelenggaraan Jasa Internet Indonesia* (APJII, 2018), it is known that 171.17 million people have been active in using the internet. It can be concluded that there are more than 64.8% of Indonesia's population who have and actively use the internet.

The growth of internet users in Indonesia is due to the development of 4G technology, including LTE, Fiber To The Home (FTTH), and additional 3G spectrum for operators. Development of internet access will provide opportunities for businesses to run a business online, one of which is by using the e-Marketplace. E-Marketplace (electronic marketplace) is an online shopping system model using a website that not only helps to promote merchandise, but also facilitates online money transactions. E-marketplace is an online digital marketplace using a website that brings together sellers and buyers. The emarketplace is very convenient online shopping system. This convenience is in terms of a broad market reach, companies can apply the Just In Time (JIT) inventory method, can reduce company operating costs, and can easily respond to customers more quickly (Zamzami, 2016). The convenience provided by the presence of this online shopping system is in demand by many people. According to eMarketer's statistical data, the value of e-commerce transactions in Indonesia in 2018 reached IDR 144.1 trillion and will continue to rise. In Indonesia, there are 3 e-marketplaces that contribute the largest transaction value, namely Tokopedia, Bukalapak and Shopee. Shopee managed to be the biggest contributor. Shopee recorded the Gross Merchandise Value in 2018 of around US \$ 4.1 billion or Rp59 trillion quoted from (www.cnnindonesia.com).

Table 1 List of e-Marketplace Rankings in Indonesia Q2 2019

No	Online Shop	AppStore Rank	PlayStore Rank
1	Tokopedia	2	3
2	Shopee	1	1
3	Bukalapak	4	4
4	Jakmall	n/a	19
5	Pasarwarga	26	13
6	Tees	n/a	n/a
7	Muslimarket	n/a	n/a

Source:

https://iprice.co.id/insights/mapofecommerce/

Shopee is first ranks for the most downloaded online shopping application category by AppStore and PlayStore. This is supporting a survey conducted by the Katadata Insight Center (KIC) which states that 92.72% of Indonesians use smartphones to access e-commerce. The high number of smartphone users to make transactions online proves that the Indonesian people are comfortable and open to technological developments. People prefer to shop online with smartphones because they can easily make transactions anywhere and anytime. Shopee has provided facilities to increase customer satisfaction in online shopping. Shopee facilities that have succeeded in increasing customer satisfaction, such as free shipping, Shopee Guarentee, flash sales every month, up to 24-hour Customer Service access.

Customer satisfaction is influenced by customer service, because it is a place that can identify problems that occur during online shopping. Customers expect a lot of satisfaction with e-marketplace companies in their online shopping. Customer dissatisfaction in online shopping is caused unfulfilled customer expectations. Generally, customers have a certain level of expectation related to the products and services offered which will affect online shopping satisfaction (Daylage & Kulathanga, 2019). E-marketplace companies are competing to achieve customer satisfaction because if the customer is not satisfied, the customer will not return to making transactions at the same store (Kloppers, 2014).

Behind the convenience of shopping online via e-marketplace cannot be denied, the potential for crimes that can occur in online transactions such as fraud, credit card hijacking (carding), and illegal fund transfers from certain accounts is very large if the e-marketplace security system is weak. Crimes that occur in online shopping activities with e-marketplace services are included in the cybercrime category. Generally, the form of cybercrime that attacks online shopping activities is fraud.



Figure 1 Example of SMishing Fraud Source: Private Document

Figure 1 shows one example of fraud that often occurs in Indonesia. This message implies an invitation to visit an unknown site with the lure of a prize of IDR 175 million. In the language of this fraud technology is called SMishing fraud. According to Na'am (2015) states that SMishing Fraud is SMS Spam where the message is annoying and can harm the recipient.

Yeboah-Boateng and Amanor (2014) stated that smishing is a phishing scam that is sent as a text message or SMS. Meanwhile, the Spam SMS which is received more often creates the impression that the victim feels like he/she is really doing the activity properly, without any doubt. This does not deny that no matter how sophisticated the available security systems are, users must continue to play an active role in protecting themselves. Customers who are not observant about receiving and processing the information received have the opportunity to become victims of fraud.

According to Survani (2008: 114) consumers always consider the risks that will occur to form perceptions. This perception is based on the uncertainty of (Djojosoedarso, 1992). Perceived risk interpreted as a potential loss for consumers shopping online (Karami & Wismiarsi, 2016). Suhir, M et al (2014) states that risk perception is defined as a subjective assessment by a person of the likelihood of an accident and how worried the individual is

about the consequences or impacts of the incident. The way of disclosing perceived risk of online shopping satisfaction is different for each customer because of different views.

Customers who shop online do not know their physical appearance, so they rely on product details and pictures (Khan et al, 2015). Some buyers who will make online shopping transactions generally seek the truth from the product provider through the other comments column or buyer's assessment. About 63% of buyers are more likely to shop online at the same seller (sumber: www.tirto.id). Unfortunately, the survey results show that 57% of e-marketplce customers are suspicious of sellers who only display positive comments. Customers are suspicious of a seller who has a few negative because it indicates false ratings assessment. As a new marketing transaction channel, e-marketplace contains uncertainty and risk compared to traditional transactions.

Sfrenrianto *et al* (2018) revealed that trust in online shopping has a positive effect on customer satisfaction. Trust according to Schurr dan Ozane (in Sari, 2017) is another party's belief that can be relied on to fulfill obligations. For increase customer satisfaction, Shopee must hold the trust of its customers, in accordance with the statement of Pavlou and Gefen (2002) which is trust have very important factor in influencing the

interest in online purchases. The level of trust arises because of information, influence and control. Trust increases when the information received is considered accurate, relevant and complete. Customer trust in using e-marketplaces can be influenced by innovation and the age of the e-marketplace. Customers tend to have more confidence in e-marketplaces that have a longer business life because they can be sure that the business can survive various conditions over the years.

Based on this background, the researcher are interest in researching does there any Effect of SMishing Fraud, Perceived Risk, and Trust Using E-Marketplace Towards Online Shopping Satisfaction in Shopee.

### THEORITICAL FRAMEWORK

According to Kloppers (2014) customer satisfaction is the return of a customer after making an online purchase at an online store. Jahwari, et al (2018) stated that online shopping is using a catalog book where customers cannot check, smell or taste goods. Customer satisfaction in online shopping is a feeling of pleasure or disappointment when purchasing goods or services thru internet that connects a state of fulfilling needs, wants and expectations with what happens to the customer.

SMishing Fraud is a new fraud mode in tricking victims by using persuasive sentences through a short message service (SMS) sent by fraudsters on behalf of certain companies. SMishing Fraud is an SMS that the sender manipulates as if it came from a company or certain party with the aim of tricking the SMS recipient, (Na'am, 2015). Every customer who trades online using the e-marketplace is likely to be a victim of SMishing Fraud (Yeboah-Boateng, 2014). However, this method is very effective for the perpetrators to launch the action. The SMS contains persuasive words such as "Shopee", "Klik", "Pemenang", "Hadiah", and attach a website link. If the potential victim is consumed by the SMS, then the fraudster will use the opportunity to take advantage such as stealing personal data to robbery of money. Fraud mode always follows technological sophistication. Customers feel annoyed and caused fear to do online shopping on the Shopee emarketplace. Therefore, first hypothesis of this research is SMishing fraud affect negative and significant towards online shopping satisfaction in Shopee.

Conceptually, perceived risk means the uncertainty felt by customers when customers cannot predict the results of their purchasing decisions (Dash, 2014). In online buying and selling transactions there are certain risks, customers of Shopee realize that by shopping online through Shopee there is the possibility of accepting and disturbing certain risks. Having experienced a loss, Shopee customers realized that by shopping online through Shoppe it was possible to

accept the risk of loss in the form of financial risk with the possibility of losing money. The notion that it is risky, is related to customers' perceptions of online shopping activities at Shopee that pose a risk. Then, second hypothesis is perceived risk affect negative and significant towards online shopping satisfaction.

According to Afwa et al (2014) trust is a person's willingness to take sides with others who trust. Rofiq (2007: 35) states that trust is a foundation of business because online buying and selling transactions occur when the seller and the buyer trust each other. To gain trust from customers, a company must be able to create this trust, especially in emarketplace transactions where there is no physical interaction between sellers and buyers (Ling et al, 2011). Customers who have carried out buying and selling transactions online using the e-marketplace will have a value of trust in the emarketplace. Customers have more confidence in e-marketplaces that have a longer life. The seller in the e-marketplace as well as the e-marketplace must comply with customer satisfaction so that they can maintain long-term relationships with their customers. Therefore third hypothesis of this research is Trust Using E-marketplace affect positive and significant towards online shopping satisfaction in Shopee.

SMishing Fraud is a new fraud mode in tricking victims by using persuasive

sentences through a short message service (SMS) sent by fraudsters on behalf of certain companies. Perceived risk is a customer's direct response to the negative thoughts experienced by the uncertainty information for customers to use in online shopping. If Shopee customers have a high risk perception, online shopping satisfaction at Shopee decreases. Trust in using emarketplace is customer knowledge about the belief that other parties, namely emaketplace, can be relied on to fulfill their obligations. If Shopee customers have high trust in using Shopee e-marketplce, online shopping satisfaction increases. Thus it can be concluded that someone who accepts SMishing fraud then has a perception of risk, and has confidence in using e-marketplce which is thought to have an influence on online shopping satisfaction. Then the fourth hypothesis of this research is SMishing fraud, perceived risk, and trust using e-marketplace simultanously affect significant towards online shopping satisfaction in Shopee.

## RESEARCH METHODOLOGY

Type of the research is quantitative research. on customers of Shopee Indonesia who have made purchases of goods or services through the Shopee e-marketplace. The research was carried out in March-April 2020. The survey was conducted using the google form by sending a questionnaire to customers of Shopee Indonesia thru social

media (Twitter, What's App, and Instagram). The population in this study were all of Shopee Indonesia's e-marketplace customers. Sample is chose by purposive technique sampling, the requirement to be sample in this study is: (1) have Shopee account; (2) have shopping in Shopee within the last six months; and (3) ever received SMishing (SMS Phising) through the number registered as a Shopee Account. Data used in this study is primay data. The amount of sample is 100 respondent.

The data collection method for this research was collected by distributing questionnaires online.The through questionnaire used in this study is an online questionnaire using google form, meaning that the questionnaire is directly given to respondents using the help of google form and respondents can choose one of the alternative The available answers. questionnaire was distributed via social media, namely Twitter, Instagram, WhatsApp, Line, and Telegram. questionnaire was created using closed questions. Measurement of the variables used in this study is to use a Likert scale.

**Table 2 Research Instruments** 

Variable	Indicator
X1	1. Shopee
	2. Klik
	3. Pemenang
	4. Hadiah
	5. Link website
X2	1. Ada risiko tertentu
	2. Mengalami kerugia

Variable		Indicator
	3.	Pemikiran bahwa berisiko
X3	1.	e-Marketplace reputation
	2.	e-Marketplace safety and
_		comfort
	3.	Benefits obtained from e-
		Marketplace
Y	1.	Method of transaction
_		from e-Marketplace
	2.	Services received from e-
_		marketplace
	3.	Recommending e-
_		marketplace to others
	4.	Recent decition to do
_		online shopping
	5.	Enjoy online shopping
	6.	After-sale services from
		e-marketplace

**Table 3 Validity Test Result** 

No	Vari abel	Numb er of Origin Items	Numb er of Valid	Item Numb er of invalid
1.	Y	11	11	-
2.	X1	14	11	1, 2, 13
3.	X2	9	8	6
4.	X3	6	6	-

Source: Primary Data, process in 2020

Based on the table above, test result of all items in the variable of SMishing Fraud, Percived Risk, Trust Using e-marketplace, and Online Shopping Satisfaction shows that r<sub>test</sub> is greater than the r<sub>table</sub> except for the SMising Fraud (question items 1, 2, and 13) and Pereived Risk (question item 6). Invalid questions because they have a r<sub>test</sub> less than 0.312, while other questions are declared valid because they have a r<sub>test</sub> greater than 0.312 and can be used for further research.

**Table 4 Reliability Test Result** 

Variable	Alpha	Criteria	Information
	Cronbach		
X1	0,881	0,6	Reliable
<b>X2</b>	0,857	0,6	Reliable
X3	0,912	0,6	Reliable
Y	0,917	0,6	Reliable

Source: Primary Data, process in 2020

The Cronbach Alpha value of all research variables is greater than 0.6. Thus the respondent's answers to the research variables are reliable, so that the questionnaire from these variables can be used for further research.

#### RESULT AND DISCUSSIONS

Prerequisite test in this research are normality test and linearity test.

**Table 5 Normality Test Result** 

Asymp. Sig.	Information
0,500	Normally Distributed
Source: (Primary	Data, process in 2020)

Based on the results of the normality test above, Asymp. Sig. > 0.05 it can be concluded that the data is normally distributed.

**Table 6 Linearity Test Result** 

Variable	F	F	Information
	test	table	
$\mathbf{X}_{1}$	1,074	3,9371	Linear
$\mathbf{X}_2$	1,302	3,9371	Linear
<b>X</b> 3	1,701	3,9371	Linear
<b>A</b> 3	,	- ,	

Source: (Primary Data, process in 2020)

The results of the linearity test above show that the independent variable has value of F test is smaller than F table. So it can be concluded that the model is linear and can be used for linear regression tests.

## **Hypothesis Test**

This research using two techniques hypothesis analysis, there are simple linear regression and multiple linear regression. The first to third hypothesis testing uses simple regression analysis techniques in order to explain the influence between independent variable and dependent variable. While the fourth hypothesis uses multiple linear regression analysis in order to explain the effect of three independent variables simultaneously with one dependent variable.

Table 7 Simple Linear Regression Analysis Result of X1 to Y

Infor-	Regression	t	Sig.
mation	Coefficient		
Constanta	44,618	37,234	0,000
$X_1$	-0,342	-5,891	0,000
r	= 0,511		
r square	= 0,262		

Source: (Primary Data, process in 2020)

Based on the hypothesis test, value of the regression coefficient = -0.342, the coefficient of determination = 0.262 and t count> t table (-5.891 > -1.985). It can be concluded that the first hypothesis (H1) which states "There is a negative effect of SMishing Fraud toward Online Shopping Satisfaction in Shopee customers" is **supported**.

The test results reinforce the research of Najma Imtiaz Ali, Suhaila Samsuri, Muhamad Sadry, Imtiaz Ali Brohi and Asadullah Shah (2016) which state that cybercrime has a negative effect on online shopping satisfaction. Meanwhile in

Rahmah's research (2018: 19), SMishing Fraud is included in the category of activity. cybercrime The activity of SMishing is to lure internet users or customers with the hope that they voluntarily provide customer information data such as OTP (One-Time Password), username or password on damaged websites. In this study, the characteristics of SMishing Fraud that often occur in Indonesia were found. When viewed from the characteristics of SMishing Fraud such as messages containing the words "Shopee", "Klik", "Pemenang", "Hadiah", and there is a website link, it can be ascertained that the SMS is a SMishing Fraud.

Table 8 Simple Linear Regression Analysis Result of X2 to Y

Infor-	Regression	t	Sig.
mation	Coefficient		
Constanta	48,615	27,409	0,000
$\mathbf{X}_2$	-0,582	-6,167	0,000
r	= 0,529		
r square	=0,280		

Source: (Primary Data, process in 2020)

Based on the hypothesis test value of the regression coefficient = -0.582, the coefficient of determination = 0.280 and t count> t table (-6.167> -1.985), it can be concluded that the second hypothesis (H2) which states "There is a negative effect of Perceived Risk toward Online Shopping Satisfaction among Shopee customers" is **supported**.

The higher the uncertainty and consequences that arise when shopping

online through Shopee, the higher the Perceived Risk. If the Perceived Risk is low, it can attract customers to shop online through Shopee. For this reason, Perceived Risk can affect Shopee customer online shopping satisfaction. The test results support the research of Shahzad Ahmad Khan, Yan Liang and Sumaira Shahzad (2015) which states that e-marketplaces must reduce risk to increase customer satisfaction. The main thing to provide customer satisfaction is to provide more benefits and less sense of risk in shopping online. Research conducted by Emad Y. Massoud (2013) and Urvashi Tandon, Ravi Kiran and Ash N. Sah (2017) states that risk perception can be analyzed with 6 dimensions of risk namely, financial perceived risk, perceived product risk, perceived delivery risk, perceived information risk, perceived time risk, and perceived social risk. However, four of them are perceived financial risk, perceived product risk, perceived delivery risk, and perceived information risk which have a negative impact on online shopping satisfaction. These perceptions of risk are formed because of anxiety about uncertainty and the possibility of something bad happening during online shopping.

Table 9 Simple Linear Regression Analysis Result of X3 to Y

Infor-	Regression	t	Sig.
mation	Coefficient		
Constanta	20,089	9,422	0,000
<b>X</b> 3	0,895	8,475	0,000
r	=0,650		
r square	= 0,423		

Source: (Primary Data, process in 2020)

Based on the hypothesis test value of the regression coefficient = 0.895, the coefficient of determination = 0.423 and t count> t table (8.745> 1.985), it can be concluded that the third hypothesis (H3) which states "There is a positive effect of Trust Using e-Marketplace toward Online Shopping Satisfaction in Shopee customers" is supported.

The test results support the research of Sfenrianto Sfentianto, Tendi Wijaya and Gunawan Wang (2018) who state that trust in online purchases through e-marketplaces has a positive effect on buyer satisfaction, meaning that there is an increase in customer awareness in online shopping. If customers believe in using the Shopee e-marketplace as medium for online shopping, satisfaction level of online shopping will increase. The results of this study are also in line with the research of Awliya Afwa, Samsir and Lilis Sulistyowati (2014) where the trust variable has a positive effect on online shopping satisfaction as evidenced by the t test of 4.417. This means the importance of the level of customer trust using the emarketplace to increase online shopping satisfaction.

Infor- mation	Regression Coefficient	t	Sig.
Constanta	35,224	10,885	0,000
X <sub>1</sub>	-0,183	-0,274	0,000
<b>X</b> <sub>2</sub>	-0,309	-0,281	0,000
<b>X</b> 3	0,600	0,436	0,000
r	= 0,757		
r square	= 0,572		
Adjusted	= 0,559		
r Square			
F test	= 42,828		
Sig. F	= 0,000		

Source: (Primary Data, process in 2020)

Based on the results of data analysis, the calculated F test of 42.828 is greater than the F table of 2.70 and a significance value of 0.000 < 0.05, then the fourth hypothesis (H4) states that "There is an effect of SMishing Fraud, Perceived Risk, and Trust Using e-Marketplace together with online shopping satisfaction on Shopee's e-Marketplace customers is **supported** in this research.

Based on the results of multiple linear regression testing, the results are obtained to determine the amount of relative contribution and effective contribution of each variable. SMishing Fraud gave a relative contribution of 24.5% and an effective contribution of 14.01%. Perceived Risk gave a relative contribution of 26% and an effective contribution of 14.87%. Trust Using e-Marketplace gave a relative contribution of 49.5% and an effective contribution of 28.34%. So it can be concluded that the variable Trust Using e-Marketplace gives the

most dominant contribution. Furthermore, simultaneously the variables of SMishing fraud Perceived Risk, and Trust Using e-Marketplace gave an effective contribution of 57.22% to Online Shopping Satisfaction and 42.78% given by variables outside of this study. The results of this study indicate that the increase in SMishing Fraud, Perceived Risk and Trust Using e-marketplace simultaneously has a positive and significant effect on Online Shopping Satisfaction. Thus, the results of this study support the results of the study of Najma Imtiaz Ali, Suhila Samsuri, Muhammad Sadry, Imtiaz Ali Brohi and Asadullah Shah (2016).

### CONCLUSION AND SUGGESTION

Based on the results of statistical calculation and data analysis that has been done, it can be concluded that: (1) there is a negative and significant effect of SMishing Fraud toward Online Shopping Satisfaction of Shopee customers. This is show that the increasing SMishing Fraud makes a decrease in Online Shopping Satisfaction, otherwise a decrease in SMishing Fraud makes Online Shopping Satisfaction increases; (2) there is a negative and significant effect of Perceived Risk towards Online Shopping Satisfaction of Shopee customers. This is show that the increasing Perceived Risk makes a decrease Online Shopping Satisfaction, otherwise a decrease in Perceived Risk makes Online Shopping Satisfaction increase; (3) there is a positive and significant effect of Trust in using e-Marketplace on Online Shopping Authority. This is show that the increasing Trust Using e-Marketplace makes increase Online Shopping Satisfaction, as well as a decrease in Trust Using e-Online Marketplace makes Shopping Satisfaction decreases; and (4) there is a significant effect of SMishing Fraud, Perceived Risk, and Trust Using e-Marketplace simultaneously towards Online Shopping Satisfaction. This is show that Online Shopping Satisfaction at Shopee is influenced by the SMishing Fraud, Perceived Risk, and Trust Using e-Marketplace.

### **IMPLICATION**

SMishing Fraud is defined as a mode of fraud in tricking victims by using persuasive sentences through a short message service (SMS) sent by fraudsters on behalf of certain companies. SMishing is one of the various crimes in cyberspace that can attack anyone, anytime. The results of this study indicate that SMishing Fraud has a negative and significant effect on Online Shopping Satisfaction. This implies that in the future the e-Marketplace will be able to advise its all forms customers that of prize announcements are made on the official website. This research is expected to increase customer awareness and skepticism.

Perceived Risk is defined as the customer's response to the negative picture

they experience because of the uncertainty of information. The results of this study indicate that Perceived Risk has a negative and significant effect on Online Shopping Satisfaction. This has implications so that in the future customers will not hesitate to continue shopping online at Shopee. Shopee as a service provider that brings together sellers and buyers on the marketplace platform must provide credible information and must provide a system of security and customer confidentiality.

Trust using e-Marketplace is a customer's knowledge of the belief that other parties, namely the e-maketplace, can be relied on to fulfill their obligations. The results of this study indicate that trust using e-marketplace has a positive and significant effect on online shopping satisfaction. This implies that in the future Shopee must prioritize customer safety and comfort, so as to increase the level of customer confidence in using Shopee's e-marketplace in every online shopping.

## **SUGGESTION**

According to research conclusion above, suggestions that are expected to be useful for e-marketplace companies, customers and society can be proposed, as well as further research related to the factors that affect online shopping satisfaction, as follows:

- 1. E-marketplace companies: the emarketplace should increase its appeal to its customers that all forms of prize winner announcements are made on the official website or on verified official Shopee social media such as Instagram with @shopee\_id complete with account verification in the form of a blue check. Moreover the e-marketplace can improve financial security system and guarantee the confidentiality of Shopee customers' personal data, so as not to cause a perception of loss.
- 2. Customer and society: This study information provides that Shopee customers must pay attention to the risks that can arise from online shopping activities. It is hoped that with this research customers and the public will be more alert and recognize the characteristics of SMishing fraud as a prevention effort.

### **REFERENCES**

- Afwa. Awliya., Samsir.. & Lilis Sulistyowati. 2014. Analisis Pengaruh Pesepsi Teknologi, Perspsi Risiko *Terhadap* Kepercayaan dan Dampaknya *Terhadap* Kepuasan Online Mahasiswa Belanja Pekanbaru. Jurnal Ekonomi, Vol. 22, No. 3, 1-15.
- APJII.2018. *Buletin APJII Edisi 22 Juni 2018*. Diakses melalui https://apjii.or.id/content/read/104/34 8/BULETIN-APJII-EDISI-22---

- Maret-2018, diakses pada tanggal 04 Februari 2019.
- Dash, A. 2014. Perceived Risk and Consumer Behavior Towards Online Shopping: An Empirical Investigation. Parikalpana KIIT Journal of Management. Vol. 10, No. 1, p79-85.
- Deyalage, P. A & Dushyantha Kulathuga.

  2019. Factors Affecting Online
  Customer Satisfaction: The Sri Lanka
  Perspective. International Journal of
  Business and Management, Vol. 14,
  No. 2, pp. 99-114.
  doi:10.5539/ijbm.v14n2p99
- Djojosoedarso, S. 1999. *Prinsip-prinsip Manajemen Risiko dan Asuransi*. Jakarta: Salemba Empat.
- Jahwari,, N. S. et al. 2018. Factors Influencing Customer Satisfaction of Online Shopping in Oman – Youth Perspective. Humanities & Social Science Reviews, Vo. 6, No. 2, p64-73. https://doi.org/10.18510/hssr.2018.628
- Karami, K. A & Tri Wismiarsi. 2016.

  Pengaruh Risiko pada Keputusan

  Belanja On-line. Prosiding Seminar

  Nasional INDOCOMPAC.

  <a href="https://repository.bakrie.ac.id/82/1/2">https://repository.bakrie.ac.id/82/1/2</a>
  - 3.%20PENGARUH%20RISIKO%2 0PADA%20KEPUTUSAN%20BEL ANJA%20ON%20LINE.pdf
- Khan, S. A., Liang, A., & Shahzad, S. 2015.

  An Empirical Study of Perceived
  Factors Affecting Customer
  Satisfaction to Re-Purchase Intention
  in Online Stores in China. Journal of
  Service Science and Management,
  2015, 8, 291-305.
  <a href="http://dx.doi.org/10.4236/jssm.2015.83">http://dx.doi.org/10.4236/jssm.2015.83</a>
  032
- Kloppers, S.P. 2014. Investigating Factors Influencing Customer Online Buying

- Satisfaction in Gauteng, South Africa. International Business & Economic Research Journal. Vol. 13, No. 5, p1187-1198.
- Ling, K.C., Daud, D.B., Piew, T.H., et al. 2011. Perceived Risk, Perceived Technology, Online Trust for the Online Purchase Intention in Malaysia. International Journal of Business and Management, Vol. 6, No. 6, p167-182.
- Na'am, J. 2015. *Pembobotan Kata SMS SPAM*. Jurnal Ilmiah Media Sisfo, Vol. 9, No. 2, p321-328, <a href="http://ejournal.stikom-db.ac.id/index.php/mediasisfo/article/view/206">http://ejournal.stikom-db.ac.id/index.php/mediasisfo/article/view/206</a>

diakses pada tanggal 4 April 2019.

- Pavlou, P. A., dan Gefen, D. (2002). Building
  Effective Online Marketplaces with
  Institution-based Trust, Proceedings of
  Twenty-Third. International
  Conference on Information Systems,
  pp. 667-675.
- Rahmah, Y. N. 2018. Pengaruh Penggunaan Internet Banking dan Perlindungan Nasabah Pengguna Fasilitas Internet Banking Terhadap Cyber Crime di Daerah Istimewa Yogyakarta. Skripsi Sarjana (tidak dipubliskan). Yogyakarta: Fakultas Ekonomi Universitas Negeri Yogyakarta.
- Rofiq, A. 2012. Impact of Cyber Fraud and
  Trust of E-Commerce System on
  Purchasing Intentions: Analysing
  Planned Behaviour in Indonesian
  Business. Disertasi. Queensland:
  Fakultas Hukum dan Bisnis
  Universitas Southern Queensland.
- \_\_\_\_\_\_, A. 2007. Pengaruh Dimensi Kepercayaan (Trust) Terhadap Partisipasi Pelanggan E-Commerce (Studi pada Pelanggan E-Commerce di

- Indonesia). Thesis. Malang: Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya.
- Sari, P.P. 2017. Faktor yang Mempengaruhi Tingkat Kepercayaan Masyarakat Terhadap E-Commerce. Jurnal Komunikasi, Media dan Informatika, Vol. 6, No. 3, p52-61.
- Suhir, M., Suyadi, I., & Riyadi. 2014.
  Pengaruh Persepsi Risiko, Kemudahan
  dan Manfaat Terhadap Keputusan
  Pembelian Secara Online (Survei
  Terhadap Pengguna Situs Website
  www.Kaskus.co.id). Jurnal
  Administrasi Bisnis (JAB). Vol. 8 No.
  1 Februari 2014.
- Urvashi Tandon & Ravi Kiran & Ash Sah, 2017. "Analyzing customer satisfaction: users perspective towards online shopping," Nankai Business Review International, Emerald Group Publishing, vol. 8(3), pages 266-288, August.
- Yeboah-Boateng, E.O., & Amanor, P.M. 2014. *Phishing, SMishing & Vishing:* An Assessment of Threats against Mobile Devices. Journal of Emerging Trends in Computing and Information Sciences. Vol. 5, No, 4, p297-307.
- Zamzami, F., dkk. 2016. *Sistem Informasi Akuntansi*. Yogyakarta: Gajah Mada University Press.