European Journal of Business and Innovation Research

Vol.7, No.4, pp.59-69, June 2019

Published by European Centre for Research Training and Development UK (www.eajournals.org)

DETERMINANTS ASSESSMENT OF CONSUMERS' INTENTION TO USE OF TOKOPEDIA FOR SHOPPING AGRIBUSINESS SMES PRODUCTS (CASE STUDY: TOKO LAURIKE)

Lufebrina Dorma Uli Manalu[1], Irman Hermadi[2], Joko Ratono[3]

[1, 2, 3]School of Business, Bogor Agricultural University, Indones

ABSTRACT: *Indonesian economics are dominated by the Small Medium Enterprises (SMEs) group. However, only 5% of them have been utilizing online platform s to sell their products. Toko Laurike where is located in Bogor Regency is a member of SMEs group. It produces coconut oil or Virgin Coconut Oil (VCO) and sells its products through several e-marketplaces, namely Tokopedia, Bukalapak and Elevenia. Among these e-marketplaces, Tokopedia sells its more than Bukalapak or Elevenia. This might be suggested by design, security, perceived ease of use or perceived usefulness among these factors. Therefore, we examined the factor of consumers' intention to use of Tokopedia, specifically for SMEs food agribusiness products in the form of liquid and gel. We also analyzed the correlation of its design and its security to the consumers' intention to use. We examined the 71 respondents' data using structural equation modeling - partial least squares (SEM-PLS) and used technology acceptance model (TAM). The results showed that Perceived Ease of Use increases as Design and Security increases. But, Security insignificantly correlated to Perceived Usefulness and consumers' intention to use. In addition, the result can be used to enhance Laurike's e-commerce performance.*

KEYWORDS*: e-commerce, small medium enterprises (SMEs), structural equation modeling - partial least squares (SEM-PLS), technology acceptance model, Tokopedia*

INTRODUCTION

Small and medium enterprises (SMEs) are part of national businesses that play an important role in realizing national development goals. UKM can also be considered as a locomotive for national and regional (regional) economic growth because it has the potential to empower all existing resources and encourage the growth of entrepreneurship development (Sari 2016).

Toko Laurike or Laurike Home Industry is one of the VCO producers and is a member of the Bogor district government (Pemkab) Bogor. Laurike Home Industri works with other members of the Bogor Regency Government in marketing agribusiness products.

Laurike Home Industry sells their products through several e-marketplaces, https: //www.bukalapak.com/ or Bukalapak, https://www.tokopedia.com/ (Tokopedia), http://www.elevenia.co .id / (Elevenia) and social media. The sales level of each of these e-marketplaces varies. Based on sales data of 2017, the number of sales through Bukalapak, are only 7 invoices, and Elevenia only 1 invoice and through Tokopedia are 348 invoices and success. This is worth checking out, why more VCO Laurike Home Industri products are sold through Tokopedia than other e-marketplaces. This review begins with examining the determinants (determinants) of users so that they intend to use and shop agribusiness products such as VCO and their characteristics through

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

Tokopedia. So the basis of this research is why people want to shop for agribusiness SME products in liquid form and gel through Tokopedia. What factors need to be known in influencing shopping users through Tokopedia. Is it possible because the Tokopedia application perceived ease to use and perceived usefulness? Or other reasons in terms of design or design of the system that is considered attractive. It is possible that the Tokopedia security system is considered the best. The search factor of the user intention of Tokopedia refers to the technology acceptance model (Technology Acquisition Model or abbreviated as TAM).

The theory of acceptance of information technology has been widely researched and modeled. Many studies have found that TAM is a model that consistently explains the most variance in using goals and behavior, among a variety of technologies (Widiatmika & Sensuse, 2008). TAM was first developed by Davis (1986). TAM theorizes that one's intention to use a system or technology is determined by two factors, namely perceived ease of use and perceived usefulness. Perceived usefulness is the level of individual trust that the use of technology will improve its performance, and perceived ease of use (Devi and Suartana 2014).

TAM was developed by many researchers, one of which was the development of the TAM2 model by Davis and Venkatesh (2000). The TAM 2 model consists of the original constructs of the TAM model and adds intention usage and sees the effect of perceived usefulness on usage intention by adding user experience (users experience) (Lai 2017). Davis and Venkatesh provide a more detailed explanation for the reasons users find the usefulness of the system divided into 3-times, namely pre-implementation, one-month post-implementation and three months post-implementation (Lai 2017).

LITERATURE REVIEW and HYPHOTHESIS

TAM (*Technology Acceptance Model*)

The success of information systems is not only determined by processing inputs to produce good information but also determined by their suitability with the work environment. Information systems cannot be said to be successful if information system users cannot accept them or are even reluctant to use them (Jogiyanto 2007).

The technology acceptance model (TAM) was first developed by Davis in 1986. Davis found 2 important components in technology acceptance, namely perceived usefulness (PU) and perceived ease of use (PEOU). Both of these components, when associated with TRA, are part of belief. PU is defined as the degree to which someone believes that using the system will improve its performance. PEOU is defined as the degree to which someone believes that using the system is easy.

In the new technology acceptance model, namely single platform E-payment system (MySIM), Lai (2016) found that there were 2 variables that became stimulus in the TAM2 model, namely design and security. Design definition in Lai (2016) research is the design and function of the system technically. Szymanski and Hise (2000) found that the ease of design of sites for online navigation would lead to the purchase and use of E-payments, the higher the attractiveness of consumers towards the use of online site designs. Belanger, Janine, and Wanda (2000) and McKnight, Vivek, and Charles (2002) in Lai (2016) concluded that the impact of site design will affect the intention to use online shopping. The design is designed in 2 parts, namely the first part of the appearance of MySIM and the second

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

part of the consumer perspective is clear information for the process of using E-payment and allowing users to control their choices.

The second variable added to the TAM2 model is Security (Lai 2016). Security is a very important thing in consumer decisions in the use of MySIM E-payment Solution. The hypothesis formed by Lai (2016) in this study is eight. The hypothesis is how Design and Security have a positive effect on perceived usefulness and perceived ease of use. There is also a hypothesis in the form of proof of the influence of Security on the consumers' intention to use. The other hypothesis is the same as the TAM2 model, perceived usefulness and perceived ease of use have a positive effect on the consumers' intention to use and perceived ease of use has an effect on the perceived usefulness.

Tokopedia

Tokopedia is Tokopedia is one of the online shopping centers in Indonesia that carries the marketplace business model. Tokopedia was established on February 6, 2009, with its website address https://www.tokopedia.com/ on August 17, 2009. Since its launch until the end of 2015, Tokopedia basic services can be used by everyone for free. With the vision of "Building a Better Indonesia through the Internet", Tokopedia has a program to support micro, small and medium enterprises (MSMEs) and individuals to develop their businesses by marketing products online (on the network).

Hyphothesis

This study used the underlining variables shown in Figure 1 to determine the consumers' intention to use Tokopedia. For the purpose of the study, the following hypotheses were posited:

H1a: Design of Tokopedia is positively associated with perceived usefulness.

H1b: Design of Tokopedia is positively associated with perceived ease of use.

H2a: Security of Tokopedia is positively associated with perceived usefulness.

H2b: Security of Tokopedia is positively associated with perceived ease of use.

H2c: Security of Tokopedia is positively associated with consumers' intention to use

H3: Perceived ease of use of Tokopedia is positively associated with perceived usefulness.

H4: Perceived usefulness of Tokopedia is positively associated with consumers' intention to use

H5: Perceived ease of use of Tokopedia is positively associated with consumers' intention to use

RESEARCH METHOD

Data is obtained by distributing questionnaires online by using Google Form. Respondents were buyers of Toko Laurike on Tokopedia in 2017 and people who had been shopping for food agribusiness products in the form of liquid and gel through Tokopedia. Links are spread through the Whatsapp short message application and social media twitter. The sampling technique is done by judgment sampling or often called purposive sampling. Purposive sampling is sampling taken based on expertise regarding

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

the subject under study. The sample size in this study was determined by multivariate analysis, the sample size was recommended 10 times or more the number of research variables.

Data analysis in this research is using SEM (Structural Equation Model). The reason for using SEM is because it can measure latent variables (variables that cannot be measured directly). To measure latent variables an approach is needed through measurement of other factors that influence and can be measured or what are called indicator variables. Indicator variables in the form of a list of questions that must be answered by respondents with the Likert scale answer type. The scale used is five. So by using SEM, descriptive analysis, a correlation between variables can be obtained. According to Hair et al. (2006), evaluation of the level of data compatibility with the model is carried out several stages, namely the compatibility of the entire model, both measurement and structural models. The variables used in the study were 5 latent variables (2 exogenous variables and 3 endogenous latent variables). The number of indicators of all variables is 21 variables. The variables and indicators are linked to being used as a path diagram model that shows the flow of relationships between endogenous variables and exogenous variables (Figure 1).

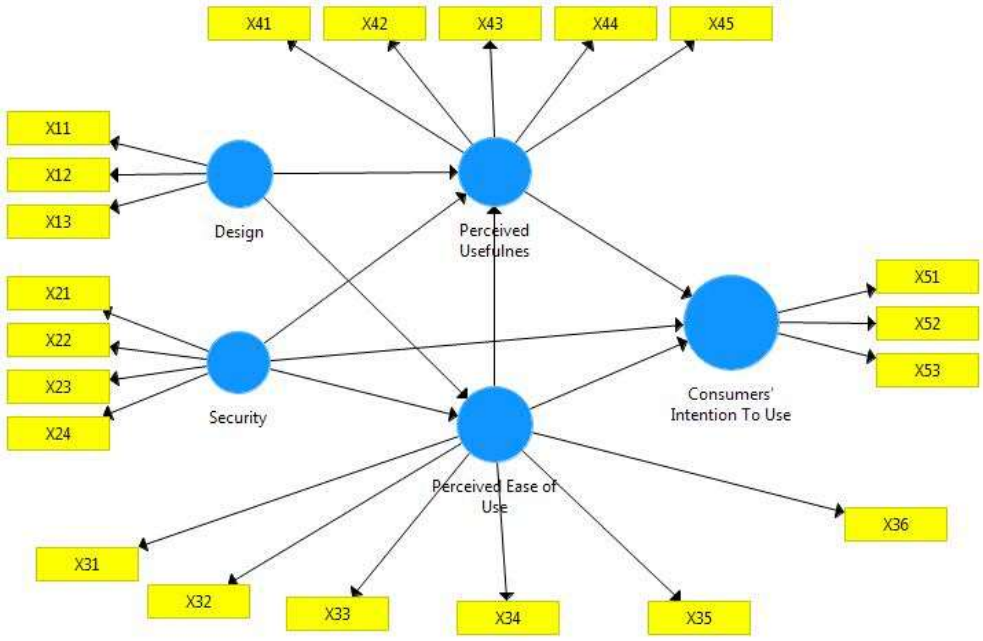

Figure 1. The research model - the determinants of consumers' intention to use of Tokopedia**RESULT**

The questionnaires were successfully collected in this study was 108 respondents. Respondents who were screened were not only Toko Laurike customers but Tokopedia users who had already shop for food agribusiness SME products whose characteristics were the same as Toko Laurike' products on Tokopedia. The questionnaire distributed online is via Twitter to get diverse respondents. For Toko Laurike customers, the questionnaire is sent via short message (WhatsApp), by sending a questionnaire link and making it easier for respondents to ask directly about questionnaires.

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

Of the 108 questionnaires, 7 respondents claimed to have never used Tokopedia. As many as 101 respondents who have used Tokopedia, there are 30 respondents who have never shop for food SME products in the form of liquid and gel. They use Tokopedia to shop for other goods. A data used in this study only 71 respondents. The profile of respondents was described based on demographic characteristics, namely gender, age, place of residence, level of education, job position and the frequency of shopping for food agribusiness products in the form of liquid and gel through Tokopedia presented in Table 1. In Table 1, the frequency of shopping for food agribusiness products in the form of liquid and gel dominated by respondents who made purchases more than once. But from these respondents, more than half did not know Toko Laurike.

71 Respondent data were analyzed by SEM-PLS. The SEM-PLS software used is SmartPLS3. How to use SmartPLS3 software using a guide from Ringle et al. (2014). Analysis using SEM-PLS has two evaluation stages, namely, outer model and inner model. Evaluation of the outer model or measurement model is intended to assess the validity and reliability of the indicator towards its latent variables. Evaluation of the inner model or structural model is used to predict the causality relationship between latent variables through the bootstrapping process.

Table 1. Respondents profile

Characteristic	Respondents	Total	%
Gender	Male	37	52.1
	Female	34	47.9
Age	< 20	3	4.23
	21-30	42	59.15
	31-40	14	19.72
	41-50	9	12.68
	> 50	3	4.23
Education	High School	7	9.86
	Diploma	7	9.86
	Bachelor	50	70.42
	Master	6	8.45
	Doctoral	1	1.41
Job Position	Student	7	9.86
	Civil Servant	19	26.76
	Private employees	25	35.21

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

	Entrepreneur	14	19.72
	Housewife	3	4.23
	Others	3	4.23
The frequency of shopping for food agribusiness products in the form of liquid and gel through Tokopedia	Once	23	32.39
	More then once	48	67.61
Have you ever shop at Toko Laurike via Tokopedia?	Yes	25	35.21
	No	46	64.79

All indicators in Table 1 are tested for validity and reliability. Convergent validity test seen from the loading factor value must be> 0.6, and AVE value> 0.5. Test discriminant validity (discriminant validity) seen from the value of cross loading. To test the reliability seen from the composite reliability (ρ_c) and Cronbach's Alpha values greater than 0.7 and have an average variance extracted value (AVE) and commonality greater than 0.5. The AVE value, loading factor and cross loading are shown in Figure 2. The composite reliability (ρ_c) and Cronbach's Alpha values are shown in Table 2. The overall value fulfills the requirements for the research is explanatory. This means that all indicators are valid and reliable reflecting their latent variables.

The value of the loading factor of each indicator of a latent variable> 0.7. In Figure 2, the loading factor value of X45 is 0.691, if rounded to 0.7, it meets the convergent validity test requirements.

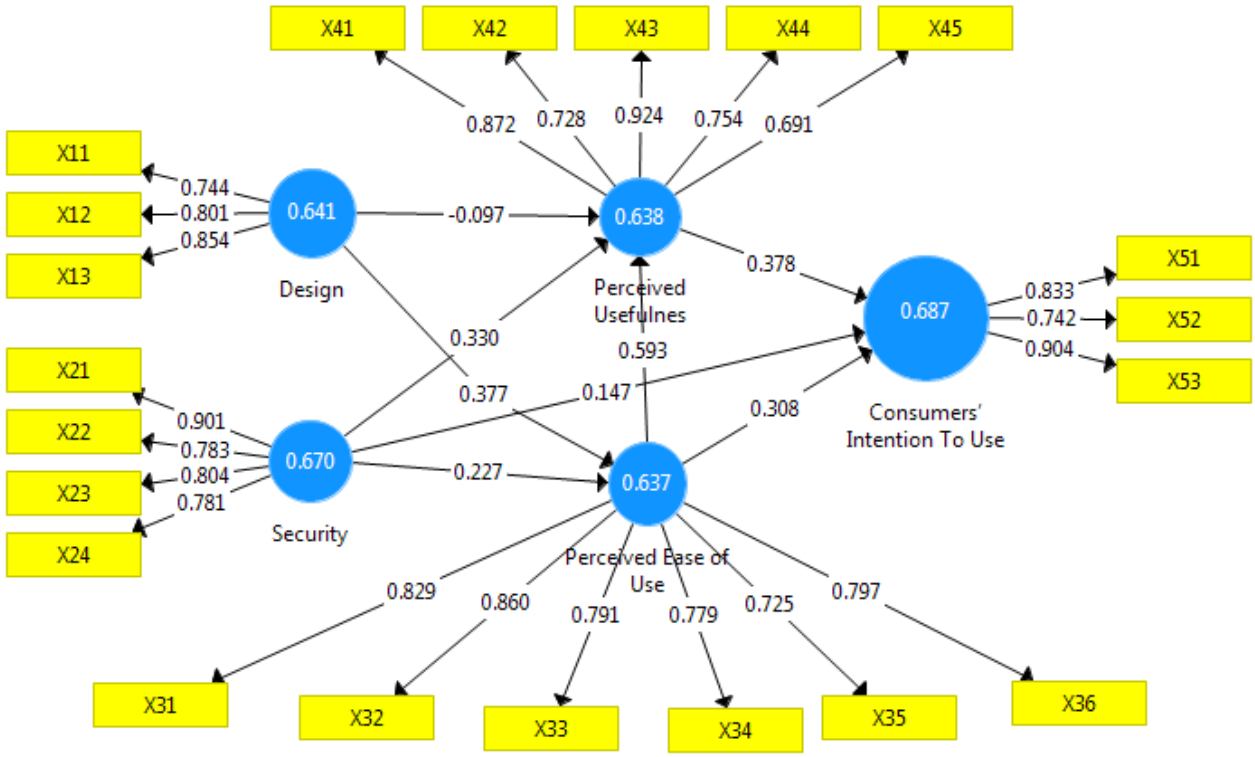

Figure 2. Standarlized loading factor

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

Table 2. AVE, composite reliability and cronbach's alpha

Variabel Laten	**AVE**	***Composite Reliability***	***Cronbach's Alpha***
Consumers' Intention To Use	0.687	0.868	0.769
Design	0.641	0.843	0.721
Security	0.670	0.890	0.835
Perceived Ease of Use	0.637	0.913	0.885
Perceived Usefulness	0.638	0.897	0.855

In Figure 3, there is also the value of path coefficients which value will be used to see the relationship between variables and test the hypothesis that was built. Based on the evaluation of the outer model, it was concluded that all indicators were able to reflect the endogenous latent variables.

After the outer model (measurement model) have been evaluated, an evaluation of the inner model (structural model) is also carried out. Evaluation of structural models is carried out to ensure that structural models are built accurately. The structural model or model shows the relationship between endogenous latent variables (Ghozali 2014). Assessment of structural models with SEM-PLS is to look at the R-square value or R2 for each endogenous variable. Changes in R-square values indicate the magnitude of the influence of exogenous variables on endogenous variables. The R-square value of each endogenous variable in Table 3.

Table 3. R-Square

Variabel Laten	**R-*Square***
Consumers' Intention to Use	0.524
Perceived Ease of Use	0.301
Perceived Usefulness	0.551

In Table 3, the R-square value of perceived usefulness is 0.551, the difference from Design, Security and Perception of Ease of Use variable is 55.1 percent, so the effect can be used as moderate or medium. The Effect of Design and Security to Perception of Ease of Use is very small at 30.1%. The Effect of Perceived Ease of Use, Perceived Usefulness, Design, and Security to Consumers Intention to Use is 52.4%, which is quite dependent on that variable on consumers' intention to use of Tokopedia to buy food products SMEs in the form of liquid food and gel.

Evaluation of structural models on PLS can also be seen from the effect size or f^2 or f-square. If the value of f^2 is 0.02, the effect of the predictor (exogenous latent variable) is small on the endogenous latent variable. Likewise, the value of f^2 is 0.15, the effect is medium or sufficient, and if the value is

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

0.35, the effect is large or strong. The biggest f^2 value is owned by Perceived Ease of Use → Perceived Usefulness, which is 0.548. Then according to the model, the extension of TAM2 (Lai 2016), which facilitates the most powerful use of benefit beliefs. The smallest influence is the Design variable to Perceived Usefulness, the f^2 value is 0.01. It can be concluded that the Design of the Tokopedia application does not significantly affect the perception of benefits for the user. The highest f^2 value is the effect of security on benefit perceptions of 0.141. The second lowest f^2 value is from Security → Consumer Intention for Use at 0.031.

To calculate the value of the Q^2 value. The value of Q^2 has the same meaning as the coefficient of determination (R-Square) in the regression analysis, where the higher the R-Square, the more acceptable the model matches the data. Based on the R-square value in Table 3, the Q^2 value is obtained as follows:

Q^2 = 1 - (1-0,524) x (1-0,301) x (1-0,551) = 0.850

The result showed that the value received by Q^2 is 0.850 which means that the diversity of research data that can be accepted by the structural model is 85%. So it is acceptable that the model has a value of predictive relevance.

Assessment of goodness of fit (GoF) for SEM-PLS is different from CB-SEM. The aim of GoF is to assess both the SEM-PLS pathway model to explain different data sets (Tenenhaus et al. 2004). To calculate the GoF from the SEM-PLS, it is manual, namely the root of the average value (average) AVE multiplied by the average value of R-square.

GoF = $\sqrt{\overline{AVE} * \overline{R^2}}$ ..... (1) Tenenhaus (2004)

GoF = $\sqrt{0.65 * 0.21}$ = 0.54

Based on these results, the structural model in the study has the appropriate kindness. According to Tenenhaus (2004) small GoF = 0.1, medium GoF = 0.25 and large GoF = 0.38. So from the results of R^2, Q^2, and GoF, the model is strong.

After evaluating outer and inner models have been done, so that we must test hypothesis. To test hypothesis needs bootstrap using SmartPLS3 software. Bootstrapping is an estimation technique carried out by doing repeated sampling (Jogiyanto 2007).

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

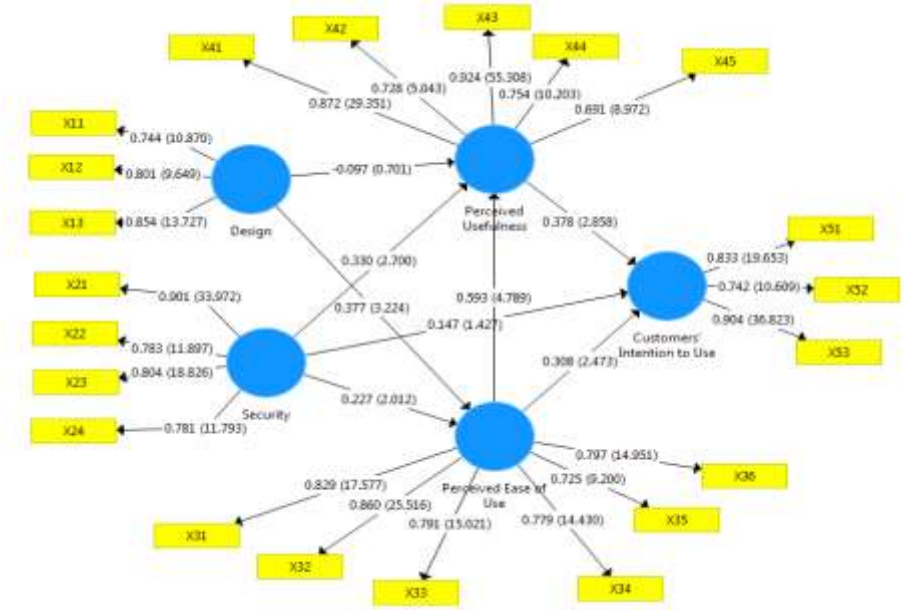

Figure 3. Bootstrapping Test (path coefficient, T-Statistic, factor loading value)

The result of hypothesis testing agrees that the t-statistic value is higher than the Standard Deviation. This study uses a confidence level of 95% (alpha of 5 percent), then the t-table value for the two-tailed hypothesis is> 1.96. The magnitude of the value shows t-statistic> 1.96 which proves 6 hypotheses in this study are significant and 2 hypotheses have no significant effect. The results of hypothesis testing in the SmartPLS3 application study in Table 4.

Table 4. Hypothesis test

Hypothesis	*Path coefficient*	T Statistics > 1.96	Conclusion
H_{1a}: *Design of Tokopedia is positively associated with perceived usefulness*	0.377	3.224	Significant
H_{1b}: *Design of Tokopedia is positively associated with Perceived Usefulness*.	-0.097	0.701	Not Significant
H_{2a}: *Security of Tokopedia is positively associated with Perceived Ease of Use*	0.227	2.012	Significant
H_{2b}: *Security of Tokopedia is positively associated with Perceived Usefulness*.	0.330	2.700	Significant
H_{2c}: *Security of Tokopedia is positively associated with Customers' Intention to Use*.	0.147	1.427	Not Significant
H_3: *Perceived Ease of Use of Tokopedia is positively associated with Perceived Usefulness*.	0.593	4.789	Significant

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

$H_{4:}$ *Perceived Ease of* Use *of Tokopedia is positively associated with Consumers' Intention to Use*.	0.308	2.473	Significant
$H_{5:}$ *Perceived Usefulness of Tokopedia is positively associated with Consumers' Intention to Use*.	0.378	2.858	Significant

Note: t-table or α = 5% (1.96) for hypothesis test with two tailed

Testing of the eight hypotheses proposed in this study there are 6 hypotheses that have a significant effect namely H_{1a} , H_{2a} , H_{2b} ; H_3, H_4 and H_5 and two hypotheses have no significant effect, H_{1b} and H_{2c}. Based on the theoretical results and empirical support that the latent Design and Security variables affect the Perceived Ease of Use and have a significant effect on the Perceived Ease of Use. The Perceived Ease of Use and Perceived Usefulness variables affect Consumers 'Intention to Use and have a significant effect on Consumers' Intention to Use. However, different from the Security construct does not have a significant or significant influence on the intention to use Tokopedia.

CONCLUSION

Managerial Implication

The ease of use of Tokopedia is considered an application that benefits users. The main thing that must be considered by Toko Laurike in building its online store is to build applications as easily as possible and understandable. The easier it is to use the system, the respondent will feel helped and want to use the application.

Conclusion

Testing of acceptance of Tokopedia technology in Indonesia for shopping food Agribusiness SMEs products in the form liquid and gel is dominated by respondents with groups aged 20-30 and 30-40 years. The four variables studied affect the intention to use Tokopedia. Of the eight hypotheses, there are 6 hypotheses that have a significant effect but 2 hypotheses have no significant effect. Where the results of the statistical tests are that the biggest t-statistic value is from the relationship of Perceived Ease of Use to Perceived Usefulness. Then Perceived Ease of Use has a significant (significant) effect on Perceived Usefulness. The proof is also done by looking at the coefficient path. But for the H1b hypothesis, the effect of Design on Perceived Usefulness has no significant effect. The value of the path coefficient is negative and the results of the T-statistic test <T-table α = 5%, with the value of T-statistics (0.701). This is different from the theoretical model developed by the TAM model from Lai (2016), that Design has a significant influence on (Perceived Usefulness). Then the answer to the purpose of this study is that two variables have a significant effect on one's intentions or intentions using Tokopedia in shopping for food agribusiness products in liquid and gel form, namely Perceived Ease of Use and Perceived Usefulness. This must be considered in building an online store.

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)

Future Study

The results showed that respondents who had made purchases more than once through Tokopedia were more than once buyers, so for further research they could add experience variables to see the technology acceptance model.

Reference

Davis, F. D. 1989. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. Dalam MIS Quarterly, September. 13(3):319-340.

Jogiyanto H. M. 2007. Model Kesuksesan Sistem Teknologi Informasi. Yogyakarta (ID): Andi Offset.

Ghozali I. 2014. *Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS) Dilengkapi software Smartpls 3.0 Xlstat 2014 dan WarpPLS 4.0* Ed ke-4. Semarang (ID): Universitas Diponegoro Semarang.

Lai P. C., Ahmad Z.A. 2015.Perceived Enjoyment of Malaysian consumers' intention to use a single platform E-payment. Di dalam:SHS Web of Conferences. editor. Proceedings of International Conference on Liberal Arts & Social Sciences [Internet]. [Waktu dan tempat pertemuan tidak diketahui]. France (FR): EDP Sciences. hlm 1-9; [diunduh 2018 Des 1]. Tersedia pada: https://doi.org/10.1051/shsconf/20151801009

Lai, PC. 2016. Design and security impact on consumers' intention to use single platform e-payment. Interdisciplinary Information Sciences. 22 (1): 111-122. doi: https://doi.org/10.4036/iis.2016.R.05.

Park, S. Y. 2009. An Analysis of the Technology Acceptance Model in Understanding University Students' Behavioral Intention to Use e-Learning. Educational Technology & Society. *International Forum of Educational Technology & Society (IFETS)*. 12 (3):150–162.

Tenenhaus M, Amato S, Esposito V. V. 2004. A global goodness-of-fit index for PLS structural equation modelling. In: Proceedings of the XLII SIS scientific meeting. pp 739–742.

Tseng. 2011. *Factors affecting the use of e-commerce in the global market by small and medium enterprises in Taiwan*. [Doctoral Dissertation]. University of Maryland. College Park (USA).

Venkatesh, V. & Davis, F. D. 2000. A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science. 46:186-204. doi:https://doi.org/10.1287/mnsc.46.2.186.11926.

Print ISSN: 2053-4019(Print), Online ISSN: 2053-4027(Online)