Effect Of Ease of Use and Trust on Purchase Decisions Through Online Shopping Sites

Suhendar Janamarta[1]*, Hendra[2], Donny Yana[3]

[1][2][3]University Buddhi Dharma
Jl. Imam Bonjol No. 41 Karawaci Ilir, Tangerang, Indonesia
[1]suhendar.janamarta@ubd.ac.id
[2]hendra.hendra@ubd.ac.id
[3]donny.yana@ubd.ac.id

Abstract

This study aims to determine: (1) the effect of ease of use on purchasing decisions through online shopping sites (2) trust in purchasing decisions through online shopping sites (3) the effect of ease of use and trust on purchasing decisions through online shopping sites in the people of Tangerang City. The samples taken were 100 respondents. The data collection technique uses a questionnaire that has been tested for validity and reliability. The data analysis technique used is multiple regression. The results of this study indicate that: (1) there is a positive influence of ease of use on purchasing decisions through online shopping sites, as evidenced by the t valuecount of 9,170 a significance value of 0.000 <0.05; and a regression coefficient of 0.687, (2) there is a positive influence of trust on purchasing decisions through online shopping sites, as evidenced by the t valuecount of 3,539 a significance value of 0.001 <0.05; and a regression coefficient of 0.267, (3) there is a positive influence of ease of use and trust on purchasing decisions through online shopping sites, as evidenced by the f valuecount of 131,000 with a significance value of 0.000 <0.05.

I. INTRODUCTION

With the development and technological innovations in the form of sophisticated electronic media such as smart phones and computers, there is a potential for the creation of electronic commerce or better known as online shopping. For now, in Indonesia itself, there are many online shopping sites.

Online shopping itself is the distribution, purchase, sale, marketing of goods and services through electronic systems such as the internet or television, www, or other computer networks (wikipedia.com). With online shopping, it will certainly make it easier for people to get a product or service because it will save time and energy.

In many cases, there are various determinants of the success of online sales, including online sales service management companies or online sites that must be able to maintain their existence in the field of online sales, by not only focusing on product sales but also paying attention to reliable and professional company management, accuracy delivery, excellent service, and ease of use starting from the initial opening of the site, registration to the transaction.

Technological advances that are increasingly developing rapidly have an impact on all aspects of human life, including the development of the internet which is currently growing and giving rise to various modern innovations. In this particular case, it is in the aspect of electronic commerce or better known as online shopping. In online shopping, of course, there are various factors that support and support transactions. Because as is known, in online shopping, of course, there is no direct meeting between the seller and the buyer. Therefore, researchers are interested in conducting research on "The Influence of Trust and Ease of Use on Purchase Decisions Through Online Shopping Sites with case studies on people in Tangerang City".

---

* Corresponding author

II. Related Works/Literature Review (Optional)

EASE OF USE

Basically, this convenience factor is related to how operational transactions are done online. Perception of convenience in online shopping itself can be interpreted as the extent to which a person believes that using a technology will be free of effort. Indicators of the ease of use variable include:

1. Easy to learn (easy to learn): It is easy to learn a site with its features, especially for new users.
2. Controllable: Every administrative data and order data can be changed by the user (customer) according to their wishes and needs with an agreement that has been agreed upon by the buyer and the seller (online shopping site) beforehand.
3. The quality of information that is clear and understandable: It is the customer's perception of the quality of information about products or services provided by a website
4. Flexible (flexyble): It is the desire to develop and adopt new technologies that will be added value and then embed it into the site.
5. Time efficiency: Time spent in carrying out an activity, especially activities in using the site.
6. Easy to become skilled (easy to become skillful): Proficient according to the Big Indonesian Dictionary is defined as being highly trained in doing something. In other words easy to become proficient meant one's ability in running a site.
7. Easy to operate as desired: Ease of use according to what the user or users want.
8. Easy to use: Ease of use that does not require much effort in running a system.
9. Ease of payment transaction system: It is a system that includes a set of rules, institutions, and mechanisms used to carry out the transfer of funds to fulfill an obligation arising from an economic activity.
10. Ease of interaction with sellers: There are features that facilitate communication between buyers and sellers, for example to buyers when there are complaints about products.

TRUST

Trust is the first factor that becomes a consideration in buying a product. This is because before the product is purchased by the customer, the producer must be able to create customer trust in the product being offered, the goal is to attract attention and generate customer interest and confidence in the product being marketed. If consumers trust the online site provided by the company, then it allows them to increase their desire to make purchases online.

In addition, consumer confidence in deciding to purchase is also found in the popularity of the online site. The more popular an online shopping site is, the more consumer confidence in the online site will increase. Until the next stage is consumer confidence in the security and privacy of consumers towards online shopping sites and sales partners who sell on these online sites.

BUYING DECISION

Decision is a problem solving activity which will result from solving the problem in the form of actions or opinions based on several alternative solutions (Yanti et al., 2022).

According to Kotler & Keller (2012: 188), the purchase decision is one of the stages of evaluation carried out by a consumer on the product to be purchased.

Purchase decision is an action taken by consumers with certain backgrounds in determining the purchase of a product based on existing alternatives.

III. Methods

Research Results Based on Respondent Data

Table 1. By gender

Gender	Number of Respondents	Percentage
Man	48	48%
Woman	52	52%
Amount	**100**	**100%**

Source: Primary data (questionnaire), 2017

Based on the data above, it can be seen that there are two gender characteristics, namely male and female. Where the number of female respondents dominates, as many as 52 people with a percentage of 52%, while respondents with male sex are 48 respondents with a percentage of 48%.

Table2. By Age

Age	Number of Respondents	Percentage
<20 years	13	13%
21-30 years old	61	61%
31- 40 years old	19	19%
> 41 years old	7	7%
Amount	**100**	**100%**

Source: Primary data (questionnaire), 2017

Based on the data above, the characteristics of the respondents are classified into four groups. As for the 100 respondents, the age group under 20 years is 13 people with a percentage of 13%, the age group with an age range of 21 to 30 years is 61 people with a percentage of 61%, the age group with an age range of 31 to 40 years is 19 people with a percentage of 19%, and the age group above 40 years there are 7 people with a percentage of 7%.

Table 3 Based on the length of internet usage per day

Duration of Use	Number of Respondents	Percentage
< 2 hours	18	18%
2-3 hours	35	35%
> 3 hours	47	47%
Amount	**100**	**100%**

Source: Primary data (questionnaire), 2017

Based on data on the length of internet use per day, there are three groups of characteristics. Of the 100 respondents, the longest duration of internet use per day was in the group of more than 3 hours of use, namely 47 respondents (47%). While the group with the lowest number was in the group with duration of use under 2 hours, namely 18 respondents (18%).

IV. RESULTS

Ease of Validity and Reliability Test Results (X1)

Table 4 **Case Processing Summary**

		N	%
	Valid	100	100.0
Cases	Excluded	0	.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Source: Results of SPSS 21.0

From table *case processing summary* it can be seen that the overall data derived from the results of the questionnaire regarding the convenience with the number of respondents as many as 100 respondents, none of them were excluded from the analysis (excluded).

Table 5 **Reliability Statistics**

Cronbach's Alpha	N of Items
.765	10

Source: Results of SPSS 21.0

The results of the reliability test indicate that the convenience variable has Crombach's alpha above 0.60 so it can be said that the items measuring the convenience variable from the questionnaire are reliable.

Table 6 Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1P1	35.27	16.583	.335	.756
X1P2	35.70	14,152	.492	.736
X1P3	35.63	14,821	.425	.746
X1P4	35.69	14,701	.459	.741
X1P5	35.37	16,235	.326	.758
X1P6	35.65	13,947	.597	.719
X1P7	35.63	14,862	.567	.727
X1P8	35.56	16.006	.423	.747
X1P9	35.69	15,812	.386	.750
X1P10	35.85	15,907	.295	.764

Source: Results of SPSS 21.0

From the table above, it can be explained that the item-total statistics table is the result of calculations from the validity test for 10 statement items, with the explanation that:
1. The magnitude of the rtable value with the provision of a degree of freedom is 98 (number of respondents minus 2) with a significance level of 5% or 0.05 so that the rtable value is 0.1966.
2. Comparing rtable with rcount by comparing rtable (0,1966) with the output correlated item total correlation.
3. If you compare rtable with rcount in the correct item total correlation column, the value of rcount regarding confidence is greater than the value of rtable, meaning that all statements are declared valid.

Test Results of Validity and Reliability of Trust (X2)

Table 7 Case Processing Summary

		N	%
Cases	Valid	100	100.0
	Excluded	0	.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Source: Results of SPSS 21.0

From the case processing summary table, it can be seen that the overall data derived from the results of the questionnaire regarding trust with the number of respondents as many as 100 respondents, none were excluded from the analysis (excluded).

Table 8 Reliability Statistics

Cronbach's Alpha	N of Items
.765	10

Source: Results of SPSS 21.0

The results of the reliability test indicate that the use of trust variable has Crombach's alpha above 0.60 so it can be said that the items measuring the confidence variable of the questionnaire are reliable.

Table 9 Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X2P1	35.52	16,616	.272	.761
X2P2	35.71	15,562	.367	.751
X2P3	35.91	14,830	.459	.739
X2P4	35.82	16,634	.230	.765
X2P5	35.81	15,610	.315	.759
X2P6	36.07	14,591	.439	.742
X2P7	35.86	13,677	.579	.719
X2P8	35.61	14,483	.506	.732
X2P9	36.16	14,419	.513	.730
X2P10	35.82	14,513	.544	.727

Source: Results of SPSS 21.0

From the table above, it can be explained that the item-total statistics table is the result of calculations from the validity test for 10 statement items, with the explanation that:
1. The magnitude of the rtable value with the provision of a degree of freedom is 98 (number of respondents minus 2) with a significance level of 5% or 0.05 so that the rtable value is 0.1966.
2. Comparing rtable with rcount by comparing rtable (0,1966) with the output correlated item total correlation.
3. If you compare rtable with rcount in the correct item total correlation column, the value of rcount regarding confidence is greater than the value of rtable, meaning that all statements are declared valid.

Purchasing Decision Validity and Reliability Test Results (Y)

Table 10 Case Processing Summary

		N	%
	Valid	100	100.0
Cases	Excluded	0	.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Source: Results of SPSS 21.0

From the case processing summary table, it can be seen that the overall data derived from the results of the questionnaire regarding convenience with the number of respondents as many as 100 respondents, none of them were excluded from the analysis (excluded).

Table 11 Reliability Statistics

Cronbach's Alpha	N of Items
.775	10

Source: Results of SPSS 21.0

The results of the reliability test indicate that the purchasing decision variable has Crombach's alpha above 0.60 so it can be said that the items measuring the convenience variable from the questionnaire are reliable.

Table 12 Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
YP1	35.90	16,879	.449	.756
YP2	36.35	16,634	.401	.762
YP3	36.32	18,280	.146	.794
YP4	36.26	15,952	.628	.734
YP5	36.02	15,434	.565	.738
YP6	36.17	15,395	.562	.739
YP7	36.14	15.576	.583	.736
YP8	36.31	16,620	.373	.766
YP9	36.19	16,115	.529	.745
YP10	36.05	18,775	.194	.780

Source: Results of SPSS 21.0

From the table above, it can be explained that the item-total statistics table is the result of calculations from the validity test for 10 statement items, with the explanation that:
1. The magnitude of the rtable value with the provisions of the level of convenience (level of convenience) is 98 (number of respondents minus 2) with a significance level of 5% or 0.05 so that the rtable value is 0.1966.
2. Comparing rtable with rcount by comparing rtable (0,1966) with the output correlated item total correlation.
3. If comparing rtable with rcount in the correct item total correlation column, the value of rcount regarding purchasing decisions is greater than the value of rtable, meaning that all statements are declared valid.

Multiple linear regression

Table 13 Descriptive Statistics

	mean	Std. Deviation	N
Buying decision	40.1900	4.46693	100
Ease of use	39,5600	4.29075	100
Trust	39.8100	4.26092	100

Source: Results of SPSS 21.0

From the data above, it can be seen that:
1. *mean* (mean) of the ease of use variable (X1) is 39.56 with a standard deviation of 4.290
2. *mean* (mean) of the confidence variable (X2) is 39.81 with a standard deviation of 4.260
3. *mean* (average) of the purchasing decision variable (Y) is 40,190 with a standard deviation of 4,466.

Table 14 Correlations

		Buying decision	Trust	Ease of Use
Pearson Correlation	Buying decision	1,000	.834	.705
	Ease of use	.834	1,000	.681
	Trust	.705	.681	1,000
Sig. (1-tailed)	Buying decision	.	.000	.000
	Ease of use	.000	.	.000
	Trust	.000	.000	.
N	Buying decision	100	100	100
	Ease of use	100	100	100
	Trust	100	100	100

Source: Results of SPSS 21.0

From the data above, it can be seen that:
1. The magnitude of the relationship between the ease of use variable (X1) is indicated by the correlation coefficient value of 0.834, and the magnitude of the relationship between the trust variable (X2) is indicated by

the correlation coefficient value of 0.705, so it can be concluded that the ease of use (X1) and trust (X2) variables have a strong relationship. positive.

2. The relationship between the occurrence of variables of ease of use (X1) and trust (X2) which is significant or not with purchasing decisions (Y) can be seen from the probability number which is <0.05, so there is a significant relationship between the three variables. A significant value of 0.000 indicates that the results of the correlation of the three variables are significant, meaning that H0 rejected, and Ha received.

Table 15 Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Ease of use	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Celebration	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Purchase Decision
Source: Results of SPSS 21.0

From the table above, it can be seen that trust and ease of use are input variables because the probability of trust and ease of use meets the probability criteria, where the value of the probability is below 0.05.

Table 16 The results of the calculation of multiple linear regression analysis
Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,357	2,397		.984	.328
	Ease of use	.687	.075	.660	9.170	.000
	Trust	.267	.075	.255	3.539	.001

a. Dependent Variable: Purchase Decision
Source: Results of SPSS 21.0

From the table above, it can be seen that the multiple regression equation obtained is as follows:
$$Y = 2.357 + 0.687\ X1 + 0.267\ X2$$

Then the regression equation is as follows:
1. Constant = 2.357
   If the ease of use and trust variables are equal to zero, then the purchase decision variable is 2,357
2. Coefficient X1= 0.687
   If the ease of use variable increases while the ease of use is considered constant, it will cause an increase in purchasing decisions

3. X2 coefficient = 0.267
   If the trust variable increases while trust is considered constant, it will cause an increase in purchasing decisions of 0.267.

Hypothesis test
F Uji test
The results of the f test were obtained using the ANOVA (Analysis of Variance) table with the aim of testing whether there was an effect of X1 (ease of use), X2 (trust) on Y (purchase decision).

1. Hypothesis Formulation
   H0 : i = 0
   This means that the independent variables, namely ease of use and trust, do not simultaneously have a significant effect on purchasing decisions through online shopping sites.
    H0 : i 0
   This means that the independent variables of ease of use and trust have a significant simultaneous effect on purchasing decisions through online shopping sites.
2. Determine the magnitude of significance (α) = 5% or 95% confidence level and determine the degree of freedom (df = V1, V2) where V1 = (k-1) and V2 = (nk) to determine Ftable. So the value of Ftable with a significance level of 5% or 0.05 is 3.09 (df1 = 3-1 = 2; df2 = 100-3 = 97).

Table 17 F Anova test results

ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1442,539	2	721,270	131,300	.000b
Residual	532.851	97	5.493		
Total	1975,390	99			

a. Dependent Variable: Purchase Decision
b. Predictors: (Constant), Ease of Use, Trust
Source: Results of SPSS 21.0

From the ANOVA results obtained Fcount for model 1 is 131.300 with a significance level of 0.000 which is 0.000 <0.05 and Fcount > Ftable or with data 131,000 > 3.09 then H0 is rejected and Ha is accepted, meaning that the ease of use and trust variables have a significant effect simultaneously on the purchasing decision variable (Y).

Coefficient of Determination

Table 18 Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.855a	.730	.725	2.34378	.730	131,300	2	97	.000

a. Predictors: (Constant), Ease of Use, Trust
b. Dependent Variable: Purchase Decision
Source: Results of SPSS 21.0

From the table above it can be seen that:
1. Column R for model 1 shows a correlation coefficient of 0.855. This means that the effect of ease of use and trust in use on purchasing decisions is quite strong and positive.
2. The R Square column for model 1 shows an R Square number of 0.730. R Square is also called the coefficient of determination. This means that the effect of ease of use and trust in use on purchasing decisions is 0.730 or equal to 73%, while the rest is influenced by other factors. R Square ranges from 0 to 1, the larger the R Square number, the stronger the relationship between the effect of ease of use and trust on purchasing decisions or vice versa.
3. The Adjusted R Square column shows the coefficient of determination, which is 0.725.
4. Std column. Error of the Estimate for model 1 is 2,343
5. In Table 4.50 (Descriptive Statistics) above, there is a standard deviation of the purchasing decision value of 4.669 which is much larger than that of Std. Error of the Estimate 2.2343. Therefore, this regression model is good to use.

T Uji test

Statistical t-test was used to test the effect of the independent variables, namely ease of use (X1) and trust (X2) on the dependent variable, namely purchasing decisions (Y) by assuming that other variables were considered constant and appropriate.

Hypothesis formulation

H0 : 1 : 2 = 0

it means that the independent variable ease of use (X1), or trust (X2) has no partial effect on purchasing decisions (Y).

H0 : 1 : 2 0

meaning that the independent variable ease of use (X1), or trust (X2) has a partial effect on purchasing decisions (Y).

Table 19 Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,357	2,397		.984	.328
	Ease of use	.687	.075	.660	9.170	.000
	trust	.267	.075	.255	3.539	.001

a. Dependent Variable: Purchase Decision

1. The results of the t-test of the confidence variable on purchasing decisions
   The ease of use variable obtained tcount of 9.170 with a significance of 0.000 <0.05 with a df value (degree of freedom) 97 then the t-value is obtainedtableof 1.98472. where tcount > ttable (9,170 > 1,984).
2. The results of the t-test of the confidence variable on the purchasing decision variable
   Table 4.46 shows that the ease of use variable obtained tcount of 3.539 with a significance of 0.001 <0.05 with a value of df (degree of freedom) 97 then the t-value is obtained.tableof 1.98472. where tcount > ttable (3.539 > 1.984).

V. CONCLUSIONS

Based on the results of research and discussions that have been carried out on the people of Tangerang City regarding "The Effect of Ease of Use and Trust on Purchase Decisions Through Online Shopping Sites" the conclusions are as follows.

1. Based on the answers to the questionnaire, raw data was obtained which was then processed using the SPSS version 21.00 application so as to produce the regression equation Y = 2.357 + 0.687 X1 + 0.267 X2. Where based on this equation means that every time there is an increase or decrease in trust by one point, the purchase decision through online shopping sites will increase or decrease by 0.687. Meanwhile, if the ease of use increases or decreases by one point, the purchase decision through online shopping sites will increase or decrease by 0.267.
2. Ease of use has a positive effect on purchasing decisions. This is evidenced by a regression coefficient of 0.687 and a significance value of tcount of 0.000 (sig <0.05). t valuecount obtained is greater than ttable ie 9.170 > 1.984.
3. Trust has a positive effect on purchasing decisions. This is evidenced by a regression coefficient of 0.267 and a significance value of tcount of 0.001 (sig <0.05). t valuecount obtained is greater than ttable ie 3.539 > 1.984.
4. Ease of use and trust simultaneously affect purchasing decisions. This is evidenced by the significance value of f of 0.000 (<sig 0.05). f Nilai valuecount obtained is greater than ftable ie 131,000 > 3.09.
5. Based on the magnitude of the simultaneous R2 array in this study, it was 0.730 (73%). This shows that purchasing decisions are strongly influenced by ease of use and trust with a percentage of 73%, and the value of 27% is influenced by other factors not included in this study.

Based on the conclusions obtained from this study, suggestions are proposed as a complement to the research results that can be given as follows:

1. Further researchers can develop this research by conducting research on other factors that can influence purchasing decisions with the aim that the results of the information obtained can be more complete and varied.

2. Online site management companies are expected to be able to maintain trust and ease of use in order to maintain and create consumer purchasing decisions.

REFERENCES

Abdullah, Thamrin and Francis Tantri. 2012. Marketing Management. Depok: PT. King Grafindo Persada.

Ardiawan, Anandya. 2013. Effect of Trust, Ease and Quality of Information on Purchase Decisions; Study on Tokobagus.com Site Users, Undergraduate Thesis, Diponegoro University, Semarang.

Assauri, Sofjan. 2013. Marketing Management. Jakarta: Rajawali Press.

APJII. 2016. Indonesia Internet Users. Report of the Association of Indonesian Internet Service Providers. Retrieved 17 March 2017, fromhttp://www.apjii.or.id/survei2016.

Budiaji, Ainun. 2016. The Influence of Security, Ease, and Performance Risk on Online Purchase Decisions at tokopedia.com, Undergraduate Thesis, Yogyakarta State University.

Hansen, Don R. Maryanne M Mowen. 2012. Management Accounting 7 th. Translated by the Salemba Publishing Translation Team. Management Accounting, Edition 8. Book I. Jakarta: Salemba Empat.

Kotler, Philip and Gerry Armstrong, 2012. Principles of Marketing. Pearson Education Limited: New Jersey.

Kothler, Phil and Kevin Lane Keller. 2012. Marketing Management 13. New Jersey : Pearson Prentice Hall, Inc.

Yanti, L. D., Oktari, Y., & Ardy, A. (2022). Keterkaitan Good Corporate Governance dan Corporate Social Responsibility Terhadap Kinerja Keuangan Perusahaan. *ECo-Buss*, *4*(3 SE-Articles), 582–593. https://doi.org/10.32877/eb.v4i3.355

Oentoro, Deliyanti. 2012. Modern Marketing Management. Yogyakarta: LakBang PRESSindo.

Saladin, Djaslim. 2012. Marketing Management, Planning Analysis, Implementation, Marketing Elements. Bandung : CV. Linda Karya.

Sangadji, Etta and Sopiah. 2013. Consumer Behavior. Yogyakarta : Andi

Sugiyono. 2014. Quantitative Research Methods and R&D. Bandung: Alphabeta.

Sumarwan, Ujang, et al. 2013. Marketing and Consumer Research. Bogor : IPB Press.

SUNYOTO, DANANG. 2012. BASIC CONCEPTS OF MARKETING RESEARCH AND CONSUMER BEHAVIOR. YOGYAKARTA: CAPS.