ANALYSIS OF E-TRUST, PERCEIVED RISK, AND INFORMATION QUALITY INFLUENCES TOWARD CUSTOMER PURCHASING DECISIONS OF SHOPEE

ANALISIS PENGARUH KEPERCAYAAN, PERSEPSI RESIKO, DAN KUALITAS INFORMASI TERHADAP KEPUTUSAN PEMBELIAN PELANGGAN SHOPEE

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Abstract: Research regarding the influences of trust, information quality and also perceived risk toward purchasing decision needed to be conducted in order to get better understanding about how people in the current era think about something practical, which is by using the e-business platform especially among students who are the objects of the research. Shopee as one of the major powers and also has a big market in Manado now also face the same problem, regarding trust, information quality and also risk. The purpose of this study is to find out the effect of E-Trust, Perceived Risk and Information Quality toward Customer Purchasing Decisions of Shopee, particularly the students who use the platform. This study uses quantitative method and multiple linear regression as data analysis method. The finding of this study shows that independent variables which are Trust, Perceived Risk and Information Quality simultaneously affect the Customer Purchasing Decision. Based on the result, the researcher provided several recommendations which are: the company can provide statistics regarding the customer satisfaction. Next is to provide the customers with guarantee when purchasing goods, such as giving warrantee or special prices when miscommunication happens during the shipping process. The last is company need to make rules for vendors that do cooperation with the platform, the rule is regarding exposure of information.

Keywords: e-trust, perceived risk, information quality, customer purchasing decision

Kata Kunci: e-trust, perceived risk, information quality, customer purchasing decision
INTRODUCTION

Research Background

The development of e-commerce in the world or commonly referred to electronic commerce is the distribution, buying, selling, and marketing of goods and services via the internet or computer networks. E-Commerce itself is a process of buying and selling products electronically by consumers and from company to company with a computer as an intermediary for business transactions. Because the internet is a computerized network that is very global in nature, which can be accessed in all parts of the world at unlimited times or in other words online 24 hours a day without limits. All information can be accessed anytime, anywhere and at any time, so that with the sophistication of a computer network called the internet, it is created by entrepreneurs and internet providers to use this land as a means of commercialization, namely to get the maximum profit. Although in this case it can be said to be a cliché, entrepreneurs and providers alike are very creative namely shopping or making transactions in cyberspace, known as internet shopping. Shopping in cyberspace or the internet what is called E-commerce.

Shopee as one of the major powers and also have a big market in Manado now also face the same problem, regarding trust, information quality and also risk. In term of trusts it mostly related with the customers itself, trust of a certain brand or products can only be built only if the provider can achieve sense of satisfaction for the buyers. Information quality also a major force because it can determine the probability of a person to finally purchase goods, while risk talking about the willingness of the specific buyers. It is regarding whether the buyers will still purchase the product regardless of the risks that it may bring within as well. The most important thing in online shopping is the trust between the buyer and the seller. It can be concluded that buyers will be a little hesitant in making transactions online. Buyers require not only trust when transacting online, but also whether the information is relevant or not. Website for online shopping the good news is that it includes guidance on how to conduct business electronically, how to begin using the payment system, and how to fill out the order form. The last thing that buyers need to consider when in the state of having purchasing decision is the risk, perceived risk is inevitable because in the end every product has its flaws sooner or later. The risk of having damaged goods, goods that not according to the advertisement, or have different set of quality are some of the risks that need to be consider by the buyers. The idea of E-commerce does bring sense of ease for people to obtain goods, however because the buyers cannot see or touch the actual goods bring another issue in form of perceived risk within the goods.

Research Objectives

1. To identify the influence of E-trust, Perceived Risk and Information Quality toward customer purchase decision on E-commerce simultaneously.
2. To identify the influence of E-trust toward customer purchase decision on E-commerce partially.
3. To identify the influence of Perceived Risk toward customer purchase decision on E-commerce partially.
4. To identify the influence of Information Quality toward customer purchase decision on E-commerce partially.

THEORETICAL FRAMEWORK

Marketing

According to Twin (2021), marketing refers to activities a company undertakes to promote the buying or selling of a product, service, or good. It is one of the primary components of business management and commerce.

Customer Purchasing Decisions

According to Kotler and Armstrong (2008), the purchasing decision is the stage of the decision process where consumers actually make a product purchase.

E-Trust

According to Mowen (2002), the notion of consumer trust is all knowledge possessed by consumers and all conclusions made by consumers regarding their attributes, objects and benefits.
Information Quality

According to Engel, Blackwell, and Miniard (1995), Search can be defined as the motivated activation of knowledge stored in memory or the acquisition of information from the environment.

Perceived Risk

According to Mitchell (1999), Perceived risk is the uncertainty a consumer has when buying items, mostly those that are particularly expensive, for example, cars, houses, and computers.

Previous Research

Jie Gao, Cheng Zhang, Ke Wang, and Sulin Ba (2012) explored a new solution based on the role of unconscious thought. Integrating information processing theory and the unconscious thought theory, the current study examines the different roles of information quantity, information quality and thought mode in consumers’ decision satisfaction, in the presence of rich information. The results showed that unconscious thought moderates the relationship between information quality and consumer satisfaction towards their decision making when shopping experience products online, and is thus worthy of special attention in the design of e-commerce websites.

Danu Iswara (2016) aimed to determine: (1) the effect of trust on purchasing decisions on Instagram social media users, (2) the influence of convenience on purchasing decisions on Instagram social media users, (3) the influence of information quality on purchasing decisions on Instagram social media users, (4) the effect of risk perception on purchasing decisions on Instagram social media users, and (5) the influence of trust, convenience, information quality, and risk perception on purchasing decisions on Instagram social media users. This research is a survey research. The population in this study were all consumers who had bought products/goods through Instagram in the city of Yogyakarta. The sampling technique used purposive sampling with a total sample of 200 people. Data collection techniques using a questionnaire that has been tested for validity and reliability. The data analysis technique used is multiple regression. The results show that: (1) there is a positive influence of trust on purchasing decisions on social media users; (2) there is a positive effect of convenience on purchasing decisions on social media users; (3) there is a positive influence on the quality of information on purchasing decisions on social media users; (4) there is a negative effect of risk perception on purchasing decisions on social media users; and (5) there is a positive influence of trust, convenience, quality of information, and risk perception on purchasing decisions on social media users.

Siska Purnama Manurung and Karel Pins (2016) investigated how big the influence of trust, information quality, and the perceived ease of use on purchasing decision online is. The respondents are people who used the services of Traveloka, a company that provide services and hotel booking air tickets online with a focus on domestic travel in Indonesia. There are 110 respondents in this research who buy airline tickets through Traveloka during June to July 2015. The data is collected through interview, questionnaire, and documentation study. The data is analyzed using linear regression path analysis. The results showed that trust, information quality, and perceived ease of use simultaneously have significant influence on purchasing decisions. Perceived ease of use is variable that influence most strongly among other independent variables in this study. This shows that the perceived ease of use of reservation, search and transaction is the main driving factor for someone to decide to purchase online in this research.

Conceptual Framework

\[ \text{E-Trust (X1)} \leftarrow \text{Perceived Risk (X2)} \rightarrow \text{Information Quality (X3)} \rightarrow \text{Customer Purchasing Decisions (Y)} \]

Figure 1. Conceptual Framework

Source: Data Processed, 2021

Research Hypothesis:

\[ H_1 \rightarrow \text{There is a significant influence on Customer Purchasing Decisions affected by E-trust, Perceived Risk and Information Quality simultaneously.} \]
H_2 : There is a significant influence on Customer Purchasing Decisions affected by E-trust partially.
H_3 : There is a significant influence on Customer Purchasing Decisions affected by Perceived Risk partially.
H_4 : There is a significant influence on Customer Purchasing Decisions affected by Information Quality partially.

RESEARCH METHOD

Research Approach

According to Sugiyono (2015), research methods can be classified according to their function, namely to understand social and physical phenomena both descriptive. The descriptive research method is used in this study to describe the relationship between E-trust (X1), Perceived Risk (X2) and Information Quality (X3) towards Customer Purchasing Decision (Y) on users of E-commerce. This form of research is classified as quantitative research methods with questionnaires, and survey research. According to Sugiyono (2015), quantitative research methods are research based on the philosophy of positivism to examine specific populations or samples and random sampling by collecting data using instruments, data analysis is statistical.

Population, Sample, Sampling Technique

Sugiyono (2015) states that population is a generalized area consisting of objects/subjects that have certain quantities and characteristics that are determined by researchers to study and then draw conclusions. In this research, the population of this study consisted of students from Sam Ratulangi University's Faculty of Economics and Business in Manado City. The total population are students from 2016-2020 class with total of 1771 students, the number of population obtain through unsrat.ac.id website dashboard in the academic section. Sample is a part of the population, within research sample is divided within the current population in order to find the right entity for the research. A sample is a subset of a frame where elements are selected based on a randomized process with a known probability of selection. For this research the sample will be the students of Faculty of Economic and Business UNSRAT who use Shopee App. Purposive sampling will be used in this research. According to Creswell and Clark (2011), purposive sampling can be defined as identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest.

Data Collection Techniques

To collect the research data, primary data collection was used through questionnaires. A questionnaire was used to gather information. The questionnaire is a data collection method in which the respondent is given a series of written statements to answer. With closed questionnaire questions, the questionnaire will be used as a study tool.

Operational Definition of Research Variable

Table 1. Operational Definition of Variables

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Definition</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| 1  | E-Trust (X1)      | Trust is the willingness of buyers to accept weaknesses in online transactions that based on the belief that he had against the competencies and behaviors of the online sellers (Mahkota, Suyadi, and Riyadi, 2014). | 1. Trust on site or application  
2. Consistency  
3. Trust on online vendor  
4. Security |
| 2  | Perceived Risk (X2) | The uncertainty a consumer has when buying items, mostly those that are particularly expensive (Mitchell, 1999). | 1. Uncertainty  
2. Consequences  
3. Guarantee  
4. Value |
| 3  | Information Quality (X3) | With regard to the number of quality, accuracy, suitability, relevance and form of information about the products and services offered on a site of trade electronics (Alhasanah, Kertabudi, and Riyadi, 2014). | 1. Accurate  
2. Relevant  
3. Understandable  
4. Current |
Customer Purchasing Decisions (Y)

1. Decision to purchase
2. Re-purchase
3. Re-evaluation
4. Willing to recommend

The results of the process of interaction between someone’s cognitive and affective attitude with environmental factors that manifest in a real action to buy or not to buy (Nitisusastro, 2012).

Validity and Reliability Test

According to Sugiyono (2015), the results of the research are valid if there is a similarity between the data collected and the data that actually occurs on the object under study. Reliability can be defined as how the data is consistent and can be accounted for in measuring something. In this research, the reliability test used Cronbach Alpha. With the Cronbach Alpha method, the measured coefficients will vary from 0 to 1.

Multiple Linear Regression Analysis

Regression analysis is used to determine the effect of the independent variables on the dependent variable. Multiple linear regression analysis is used to estimate how the state (fluctuation) of the dependent variable is, if two or more dependent variables as a predictor factor increase their value decreases (Sugiyono, 2012). The equation form of multiple linear regression is as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \]

Description:
- \( Y \) = Customer Purchasing Decision
- \( \alpha \) = Constant
- \( \beta_1, \beta_2, \beta_3 \) = Regression coefficient \( X_1, X_2, X_3 \)
- \( X_1 \) = E-trust
- \( X_2 \) = Perceived Risk
- \( X_3 \) = Information Quality
- \( e \) = Error

Result and Discussion

Validity and Reliability Test

The purpose of validity test is to know whether the instrument is valid or not. The correlation coefficient between the indicator and the total value of all indicators is equal to and more than 0.3 \( (r \geq 0.3) \) and below the significance level of 5%. From the result the value of correlation index for relationship among indicators within variable independents (Trust, Perceived Risk and Information Quality) with indicators from variable dependent (Customer Purchasing Decision) are greater than 0.3 and below the significant level of 5% \( (0.05) \). Therefore, the data is valid.

Reliability test is used to check the consistency of the measurement instrument. To see whether the data is reliable or not, Alpha Cronbach test is utilized as reliability test in this research. The output of SPSS is the value of Cronbach’s Alpha of 16 items used in this research is 0.775. The data is considered as reliable since the value of Cronbach’s Alpha is above the minimum value which is 0.6.

Multiple Linear Regression Analysis

Table 2. Multiple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>I (Constant)</td>
<td>2.946</td>
<td>1.278</td>
</tr>
<tr>
<td>Trust</td>
<td>.133</td>
<td>.114</td>
</tr>
<tr>
<td>Perceived Risk</td>
<td>.197</td>
<td>.060</td>
</tr>
<tr>
<td>Information Quality</td>
<td>.355</td>
<td>.112</td>
</tr>
</tbody>
</table>

Source: SPSS Output 2021

\[ Y = 2.946 + 0.133 x_1 + 0.197 x_2 + 0.355 x_3 + e \]
The multiple linear regression equation can be interpreted as follows:

1. Constant value of 2.946 means that in a condition of ceteris paribus, if all independent variables equal to zero, then Customer Purchasing Decision (Y) as dependent variable will be 2.946.
2. Trust coefficient value of 0.133 means that if there is one unit increase in Trust (X1) then the Customer Purchasing Decision (Y) will improve and increase by 0.133.
3. Perceived Risk coefficient value of 0.197 means that if there is one unit increase in Perceived Risk (X2) then the Customer Purchasing Decision (Y) will improve and increase by 0.197.
4. Information Quality coefficient value of 0.355 means that if there is one unit increase in Information Quality (X3) then the Customer Purchasing Decision (Y) will improve and increase by 0.355.

### Table 3. R and R Square

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.640*</td>
<td>.410</td>
<td>.376</td>
<td>.815</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Trust, Perceived Risk, Information Quality

*Source: SPSS Output (2021)*

Table 3 shows the coefficient correlation (R) is 0.640; it means there is a strong relationship between independent variables with dependent variable.

### Classical Assumption Test

#### Normality

Normality test can be identified by using graph of P-P Plot. The data will distribute normally if the value of P-P Plot is near diagonal line of the graph.

*Figure 2. Normality Test

*Source: SPSS Output 2021*

It shows that the dots are spreading near to the diagonal line and follow the direction of the diagonal line. Therefore, the normality test is accepted which means the data of this research is normally distributed.

#### Heteroscedasticity

Heteroscedasticity test is the assumption of regression model where models in which error terms do not all have the same variance.

*Figure 3. Heteroscedasticity Test

*Source: SPSS Output (2021)*
It shows that the dots are spreading above and below the number zero (0) in the Y axis. This proves that there is no heteroscedasticity in this regression.

**Multicollinearity**

This test is done by determine the tolerance and VIF value. This value is computed by SPSS software.

**Table 4. Multicollinearity Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>Trust</td>
<td>0.478</td>
<td>1.227</td>
</tr>
<tr>
<td>Perceived Risk</td>
<td>0.501</td>
<td>1.526</td>
</tr>
<tr>
<td>Information Quality</td>
<td>0.655</td>
<td>1.994</td>
</tr>
</tbody>
</table>

*Source: SPSS Output (2021)*

If the tolerance value is >0.100 and VIF value <10, then there is no multicollinearity.

**Hypothesis Testing**

**F-test**

This test is done by comparing the $F_{count}$ with $F_{table}$. If $F_{count} > F_{table}$ as confidence level of 95% ($\alpha = 0.05$), it means that the independent variables significantly affect the dependent variable.

**Table 5. F-test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>32.227</td>
<td>2</td>
<td>8.057</td>
<td>12.144</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>46.440</td>
<td>97</td>
<td>.663</td>
<td>1.669</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78.667</td>
<td>99</td>
<td></td>
<td>12.144</td>
<td>.000b</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer Purchase Decision  
b. Predictors: (Constant), Trust, Perceived Risk, Information Quality  

*Source: SPSS Output 2021*

Table 5 shows the value of $F_{count}$ is 12.144. The value of $F_{table}$ is found on the F Distribution Table by determining the degree of freedom 1 (numerator) is 4 and degree of freedom 2 (denominator) is 71 with level of significance is 0.05 ($\alpha = 0.05$) and the level of confidence is 95% then $F_{table}$ is 2.53. The result is $F_{count} (12.144) > F_{table} (2.53)$. Therefore, since $F_{count}$ is greater than $F_{table}$, Hypothesis 1 is accepted which means the independent variables simultaneously influence the dependent variable significantly.

**T-Test**

This test is done by comparing $t_{count}$ and $t_{table}$ at the level of significance 95% ($\alpha = 0.05$). The criteria of this test is if $t_{count} \geq t_{table} (0.05)$ then $H_a$ is accepted, otherwise if $t_{count} < t_{table} (0.05)$ then $H_a$ is rejected.

**Table 6. T-Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t_{count}$</th>
<th>$t_{table}$</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust (x1)</td>
<td>3.116</td>
<td>1.669</td>
<td>Accepted</td>
</tr>
<tr>
<td>Perceived Risk (x2)</td>
<td>3.187</td>
<td>1.669</td>
<td>Accepted</td>
</tr>
<tr>
<td>Information Quality (x3)</td>
<td>3.308</td>
<td>1.669</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

*Source: Data Processed (2021)*

1. The value of $t$-count of X1 is 3.116 with the level significant of 0.003. Since the value of $t_{count} = 3.116 > t_{table} = 1.669$ meaning that $H_a$ is accepted.
2. The value of $t$-count of X2 is 3.187 with the level significant of 0.001. Since the value of $t_{count} = 3.187 > t_{table} = 1.669$ meaning that $H_a$ is accepted.
3. The value of $t$-count of X3 is 3.308 with the level significant of 0.002. Since the value of $t_{count} = 3.308 > t_{table} = 1.669$ meaning that $H_a$ is accepted.
Discussion

E-Trust and Customer Purchasing Decision

The notion of consumer trust is all knowledge possessed by consumers and all conclusions made by consumers regarding their attributes, objects and benefits. This variable has a strong impact on the effectiveness and efficiency of relationship marketing. The hypothesis about Trust shows that it has a positive effect on the Customer Purchasing Decision, therefore hypothesis 2 is accepted. This is in-line with the findings from Iswara (2016) that stated that Trust can positively affect the users of online media, which also include e-commerce. The effect is in form of purchasing decision, the higher the trust means the chance of purchasing will increase too. This happen also to the users of Shopee app as part of e-commerce right now, e-trust is essential because trust issue within e-commerce always become a major issue for all the users. By seeing the explanation, it can be concluded that when customers have high trust toward a certain product or in this case platform, the customer purchasing decision will eventually run well. It is because customers can only trust the e-commerce platform during the transaction, when the platform in this case Shopee manage to meet the expectation, it will create increase in trust from the people.

Perceived Risk and Customer Purchasing Decision

Perceived risk is the uncertainty a consumer has when buying items, mostly those that are particularly expensive, for example, cars, houses, and computers. The hypothesis about Perceived Risk shows that it has a positive effect on the Customer Purchasing Decision, therefore hypothesis 3 is accepted. This is in-line with the findings from Zhang and Yu (2020) that stated that Perceived Risk within e-platform can determine the outcome of people who want to purchase goods through e-commerce platform. Meaning that people who understand the risk of doing transaction through e-commerce platform have better understanding regarding the risk that might happen, thus can increase the chance of purchasing goods itself. This happens also to the users of Shopee as part of e-commerce right now, risk will eventually implement when the users of e-commerce do transaction. Risk of having the wrong products, risks of scamming, risk of purchasing goods from new vendor and more. Customer purchasing decision directly influenced by perceived risks, because in the end customer that does not have the knowledge of risks that might happen will have tendency of not doing the purchase.

Information Quality and Customer Purchasing Decision

When a customer sees that a need can be met by consuming and eating a product, they begin their quest for information. The more quality the information provided to online buyers, the higher the desire of online buyers to buy the product. With updated information, customers will find it easier to make decisions, make transactions and be easy to understand. The hypothesis about Information Quality shows that it has a positive effect on the Customer Purchasing Decision, therefore hypothesis 4 is accepted. This is in-line with the findings from Manurung and Pins (2016) that stated that information quality have significant effect toward purchasing decision, it is regarding the information which can act as measurement of users to do purchasing process. This happens also to the users of Shopee app as part of e-commerce right now, users of e-commerce need to have full information regarding the goods before doing transaction. That is why the quality of information within e-commerce can positively effects the customer purchasing decision, it is because customer will have higher tendency to purchase when the product specification met with their expectations.

CONCLUSION AND RECOMMENDATION

Conclusion

The conclusions based on this research can be formulated as follows:
1. The independent variables which are E-Trust, Perceived Risk and Information Quality simultaneously affect the Customer Purchasing Decision.
2. E-Trust as one of independent variables partially has positive effect on Customer Purchasing Decision as dependent variable.
3. Perceived Risk as one of independent variables partially has positive effect on Customer Purchasing Decision as dependent variable positively.
4. Information Quality as one of independent variable have positive effect on Customer Purchasing Decision as dependent variable partially.
Recommendation

The suggestions that can be given by the researcher after doing this research are as follows:

1. It shows that trust act as one of the major aspect that need to be consider; meanings that improvement toward this will eventually give a great impact toward the customer purchasing decision of e-commerce users. On business perspective; the company that provide statistics regarding the customer satisfaction, in which can make the people trust the platform even more and make them want to do transaction with Shopee App.

2. It shows that perceived risk act as one of the major aspect that need to be consider; meanings that improvement toward this will eventually give a great impact toward the customer purchasing decision of e-commerce users. The company can provide the customers with guarantee when purchasing goods, such as giving warrantee or special prices when miscommunication happen during the shipping process. This can be done in order to minimize the perceived risk that currently exist within the users of e-commerce.

3. It shows that information quality act as one of the major aspect that need to be consider; meanings that improvement toward this will eventually give a great impact toward the customer purchasing decision of e-commerce users. The company need to make rules for vendors that do cooperation with the platform, the rule is regarding exposure of information. The vendors of the product need to expose the information regarding the products as much as possible in order to attract customers even more.

REFERENCES


