The Influence of Trust, Security and Service Quality on Purchasing Decisions
(Study on Zalora Indonesia Online Shop Application Consumers in Tangerang)

Rina Ayu Vildayanti
Fakultas Ekonomi dan Bisnis, Universitas Budi Luhur Jakarta
Email: rina.ayuvildayanti@budiluhur.ac.id

Imanuel Rahul
Fakultas Ekonomi dan Bisnis, Universitas Budi Luhur Jakarta
Email: 1831511413@student.budiluhur.ac.id

Abstract. The purpose of this study aims to determine the effect of Trust, Security, and Quality of service on consumer Purchasing Decisions in Application online shop Zalora Indonesia in Tangerang. This type of research is quantitative method. The sample used was 100 respondents with a sampling method using non-probability sampling with accidental technique. The data collection technique was through a questionnaire with a likert scale which had been processed using SPSS software version 26. The result of this study indicate that the security and quality of service variables each have a significant effect on purchasing decision, while the trust variable has no significant effect on purchasing decisions.

Keyword: Trust, Security, Quality of Service and Purchase Decision

INTRODUCTION
In today's digital age, online shopping has become one of the most dominant forms of commercial transactions. Technological advancements and easy access to the internet have enabled individuals to live a more efficient lifestyle by shopping online. Amidst the rapid growth of e-commerce, many people choose to shop online due to the convenience, ease of access, and wide selection of products available. Some common factors considered are trust, security and service quality. Consumers are more likely to trust e-commerce that has good service quality, can protect the personal data of each consumer and ensure security in shopping online.

Problem Restriction
This study focuses on the impact of Trust, Security, and Service Quality on Purchasing Decisions as the dependent variable. The independent variables in this study are Trust, Security, and Service Quality. The main objective of this study is to determine whether Trust, Security, and Service Quality influence Purchasing Decisions. There are three research questions which are formulated as follows:

1. Does Trust have a significant influence on Purchasing Decisions?
2. Does Security have a significant influence on Purchasing Decisions?
3. Does Service Quality have a significant effect on Purchasing Decision?

Therefore, this study aims to determine the effect of each independent variable on the dependent variable, namely the Purchase Decision.

THEORETICAL FOUNDATION

Definition of Trust

The main thing that a buyer pays attention to is when making transactions online, whether the buyer will trust the site or application that provides online shop service facilities and online sellers on the site. Trust is a driver of belief in the specific attributes of a product (Mahendra et al., 2018). It also refers to the readiness to rely on individuals or entities that are considered trustworthy. This trust is the basis for undergoing transactions or relationships with the belief that the trusted party will fulfill its obligations in accordance with expectations. Trust is influenced by several factors, namely: experienced, quality of work, and intelligence (Mahendra et al., 2018).

Definition of Security

Security is a major concern for consumers when using the Internet and making online purchases through social networks because most transactions are made via the web (Harahap, 2018). Furthermore, according to (E. Chin et al., 2012) security is defined as the level of security that users feel when making purchasing decisions through the website.

Definition of Service Quality

According to (Tjiptono, 2014) service quality is the level of excellence expected and controlling this level of excellence involves meeting customer expectations. Services have several characteristics that will help and better fulfill the meaning of service, specifically: cannot be stored (supplies cannot be taken), cannot be touched (invisible), production and consumption together, easier to get there.

Definition of Purchasing Decisions

According to (Vildayanti and Yassin, 2023) purchasing decisions are a process of making consumer decisions for buyers who combine knowledge to choose several alternative products available influenced by several factors, including quality, price, location, promotion, convenience, service. According to (Kotler and Armstrong, 2012) Purchasing decisions are a process where consumers go through five stages, namely problem recognition, information search, evaluation of alternative purchasing decisions, and post-purchase. Behavior occurs long before the actual purchase and has a long-term impact afterwards. Purchasing decisions refer
to consumers who have made physical purchases of products, which will be a consideration for those who make purchases online.

After synthesis or temporary conclusions can be formulated, a framework is then prepared. The framework or framework of thought is the rationale for research that is synthesized from facts, observations and literature review. The resulting framework can be an associative / relationship or comparative or comparative framework (Sugiyono, 2022). In this study the framework is as follows:

HYPOTHESIS

**The Effect of Trust on Purchasing Decisions**

Trust is the initial capital for every consumer to decide to shop online, in the research of Nuning Lisdiana (2021) the results of this study concluded that trust plays an important role in determining consumers' purchasing decisions for online shopping. Trust can be the initial foundation so that consumers dare to decide to buy. Therefore the hypothesis in this study reads Trust has a significant influence on purchasing decisions.

**The Effect of Security on Purchasing Decisions**

Security in online shopping is crucial or very important because the security of each consumer's data if it is well maintained without any leakage of each consumer's data, then consumers are brave and confident to decide to purchase in e-commerce according to research by Amelia Eva Chrisanta and Nur Rokhman (2022) the results of this study show that security has a significant influence on purchasing decisions. Therefore the hypothesis in this study reads that security influences purchasing decisions.

**Effect of Service Quality on Purchasing Decisions**

Service quality is a factor that can influence consumers to decide on a purchase because good service will give a positive impression to consumers, according to research by Tedy Setiawan
and Rahmat Hidayat (2022) the results in this study that service quality has a significant effect on purchasing decisions because good service can give a good response to consumers. It can be concluded that the hypothesis reads that service quality can influence purchasing decisions.

RESEARCH METHODS

Population

The population in this study were Zalora Indonesia E-commerce consumers in Tangerang.

Sample

In research, drawing or making samples from the population is done to represent the population and draw conclusions that can be applied to the population as a whole. Since the population size is unknown, the Lemeshow (1997) formula is used to determine the appropriate sample size. This formula was used as follows:

\[
n = \frac{Z^2 (1 - \frac{0.5}{2})}{d^2}
\]

Description :

n = number of samples
z = the z scores of trust 95% = 1.96
p = maximum estimation = 0.5
d = alpha (0.10) or sampling error = 10%

Through the above formula, the number of samples to be taken is:

\[
n = \frac{1.96^2 \cdot 0.5 (1 - 0.5)}{0.1^2}
\]

\[
n = \frac{3,8416 \cdot 0.25}{0.01}
\]

\[
n = 96,04 = 96
\]

From the calculation of the formula above, it can be obtained that the minimum sample size needed is 96 respondents, but the researcher added respondents to 100 in case of errors in filling out the questionnaire.

Research Model

The research model is an abstract representation of the phenomenon under study. In accordance with the title of the proposal submitted by the author, this research model will explore and analyze the desired phenomenon, namely:
The Effect of Trust, Security and Service Quality on Purchasing Decisions.
The model used to test the hypothesis is related to Trust (X1), Security (X2), Service Quality (X3) with the trained variable Purchasing Decision (Y).
The Multiple Linear Regression Equation is as follows: \[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e \]
Description:
- \( Y \) : Prediction value of the dependent variable (Purchase Decision)
- \( a \) : Constant, which is the value of \( Y \) if \( X_1, X_2, X_3 = 0 \)
- \( b_1X_1 \) : Regression Coefficient of Trust
- \( b_2X_2 \) : Regression Coefficient of Security
- \( b_3X_3 \) : Regression Coefficient of Service Quality
- \( X_1 \) : Trust
- \( X_2 \) : Security
- \( X_3 \) : Service Quality
- \( e \) : Error (mistake)

To test the effect of Trust, Security, and Service Quality on Purchasing Decisions, multiple linear regression analysis techniques are used. This technique is a statistical tool to measure the relationship between several variables, and is used to test research hypotheses. The independent variable affects the dependent variable, while the dependent variable is the focus of research and is measured in the study.

**Analysis Tool**
This research processes data using the software IBM Statistical Package for the Social Sciences (SPSS) versi 26. The analysis methods used include the test of classical assumptions, coefficient of correlation, coefficient of determination, multiple linear regression, and hypothesis testing.

**DISCUSSION**

**Classical Assumption Test**

**Normality Test**

![Normal P-P Plot of Regression Standardized Residual](image)
In the P-P Plot graph, it can be seen that the data is normally distributed because the data points spread around the diagonal line and the distribution of the data points is in line with the diagonal line.

**One Sample Kolmogorov Smirnov Test**

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Sample Kolmogorov-Smirnov Test</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized Residual</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Absolute</td>
<td>.0000000</td>
<td>1.62425433</td>
</tr>
<tr>
<td>Positive</td>
<td>.055</td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>-.038</td>
<td></td>
</tr>
<tr>
<td>Test Statistic</td>
<td>.055</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.200&lt;sup&gt;c,d&lt;/sup&gt;</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a. Test distribution is Normal.</sup>
<sup>b. Calculated from data.</sup>
<sup>c. Lilliefors Significance Correction.</sup>

In this test, the data can be said to be normally distributed because the significance value is greater than 0.05, which is 0.200. If the significance value is smaller than 0.05, it is certain that the data is not normally distributed.

**Multicollinearity Test**

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collinearity Statistics</td>
</tr>
<tr>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Kepercayaan</td>
</tr>
<tr>
<td>Keamanan</td>
</tr>
<tr>
<td>Kualitas Pelayanan</td>
</tr>
</tbody>
</table>

Based on the test results in the table above, it can be said as follows:

1. The Trust variable (X1) has a Tolerance value of 0.974 > 0.1 and VIF 1.027 < 10. So, it can be concluded that for the Trust variable there is no multicollinearity.
2. The Security variable (X2) has a Tolerance value of 0.553 > 0.1 and VIF 1.809 < 10. So, it can be concluded that for the Security variable there is no multicollinearity.
3. The Service Quality variable (X3) has a Tolerance value of 0.561 > 0.1 and VIF 1.782 < 10. So, it can be concluded that for the Service Quality variable there is no Multicollinearity.
Heteroscedasticity Test

Based on the figure above, it shows the distribution of data points as follows:
1. The data points spread above and below or around the number 0.
2. The data points do not collect only above or below.
3. The distribution of data points should not form a wavy pattern widening then narrowing and widening again.
4. The distribution of data points should not be patterned.

So it can be concluded that the independent variables are free from assumptions.

Multiple Linear Regression Analysis Test

Table 4

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.168</td>
<td>.087</td>
</tr>
<tr>
<td>Kepercayaan</td>
<td>.168</td>
<td>.087</td>
<td>.134</td>
<td>1.425</td>
</tr>
<tr>
<td>Keamanan</td>
<td>.517</td>
<td>.202</td>
<td>.236</td>
<td>2.559</td>
</tr>
<tr>
<td>Kualitas</td>
<td>.440</td>
<td>.075</td>
<td>.536</td>
<td>5.858</td>
</tr>
<tr>
<td>Pelayanan</td>
<td>.440</td>
<td>.075</td>
<td>.536</td>
<td>5.858</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Keputusan Pembelian

Based on the table above, the regression equation is known as:

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

\[ Y = 6,299 + 0,168 X_1 + 0,514 X_2 + 0,440 X_3 \]

Description:

Y = Purchasing Decisions
\( \alpha \) = Konstanta
\( X_1 \) = Trust
\( X_2 \) = Security
X3 = Quality of Service  
e = Error  
\( \beta_1 \) = First Regression Coefficient Number  
\( \beta_2 \) = Second Regression Coefficient Number  
\( \beta_3 \) = Third Regression Coefficient Number

The regression equation above can be interpreted as follows:

1. The constant value of 6.299 means that if, Trust, Security and Service Quality are 0 (no addition), then the Purchasing Decision is 6.299.

2. The regression coefficient (\( \beta_1 \)) Trust has a value of 0.168, which means that an increase in Trust by 1 unit will result in an increase in Purchasing Decisions by 0.168.

3. The regression coefficient (\( \beta_2 \)) Security has a value of 0.517, which means that an increase in Security by 1 unit will result in an increase in Purchasing Decisions by 0.517.

4. The regression coefficient (\( \beta_3 \)) Service Quality has a value of 0.440, which means that an increase in Service Quality by 1 unit will result in an increase in Purchasing Decisions by 0.440.

**Coefficient of Determination \( (R^2) \)**

<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>.744*a</td>
<td>.554</td>
<td>.540</td>
<td>1.64970</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Kualitas Pelayanan, Kepercayaan, Keamanan

b. Dependent Variable: Keputusan Pembelian

Based on the table above, it can be seen that the Adjusted R Square value is 0.540 or 54.0%. This shows that the independent variables of Trust, Security, and Service Quality affect the dependent variable, namely the purchase decision by 54%, while the remaining 46% is influenced by other variable factors not examined in this study.
Model Feasibility Test (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>320.628</td>
<td>3</td>
<td>106.876</td>
<td>39.271</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>258.544</td>
<td>95</td>
<td>2.722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>579.172</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Keputusan Pembelian  
b. Predictors: (Constant), Kualitas Pelayanan, Kepercayaan, Keamanan

Based on the formula above, the calculation results obtained df (N1) 4-1 = 3 and df (N2) So 100-4 = 96. So that the results of the df obtained F table of 2.70. Based on the table above, it can be seen that the calculated F value is 39.271 > Ftable 2.70 with a significance of 0.000 < 0.05. So it can be concluded that the model is feasible to use to explain the effect of trust, security, and service quality on purchasing decisions.

Hypothesis Test Coefficient (t Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>6.299</td>
<td>1.748</td>
<td>3.604</td>
<td>.001</td>
</tr>
<tr>
<td>Kepercayaan</td>
<td>.168</td>
<td>.087</td>
<td>.134</td>
<td>.057</td>
</tr>
<tr>
<td>Keamanan</td>
<td>.517</td>
<td>.202</td>
<td>.236</td>
<td>.012</td>
</tr>
<tr>
<td>Kualitas Pelayanan</td>
<td>.440</td>
<td>.075</td>
<td>.536</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on the table above, the t count for Trust is 1.425, Security is 2.559, and Service Quality is 5.858. To determine the t table, the t table statistical appendix is used, using $\alpha = 5\%$ with $df = n-k-1$ where n (amount of data), k (number of independent variables). Or the degree of freedom is 100-3-1 = 96. Then the t table value is 1.661.

The t test (Partial Test) of the Trust variable on Purchasing Decisions, it can be seen that the t count for the Trust coefficient is $1.425 < t$ table 1.661 and sig 0.057 < 0.05, so that the hypothesis that there is no effect of Trust on Purchasing Decisions is accepted. $H_0$ accepted or $H_1$ rejected so that Trust has no significant effect on the Purchasing Decision variable.
The t test (Partial Test) of the Security variable on the Purchasing Decision variable, it can be seen that the t count for the Security coefficient is 2.559 > t table 1.661 and sig 0.012 < 0.05, so the hypothesis that there is an effect of Security on Purchasing Decisions is accepted. **(H0 rejected) or (H2 accepted)** so that the Decision has an effect on the Purchasing Decision variable.

The t test (Partial Test) of the Service Quality variable on the Purchasing Decision variable, it can be seen that the t count for the Service Quality coefficient is 5.858 > t table 1.661 and sig 0.000 < 0.05, so the hypothesis that there is an effect of Service Quality on Purchasing Decisions is accepted. **(H0 rejected) or (H3 accepted)** so that Service Quality has an effect on the Purchasing Decision variable.

**Intepretation of Research Results**

The results of testing the first hypothesis, in this study indicate that Trust has a significant influence on Purchasing Decisions. It can be seen that the t-count, for the trust coefficient is 1.425 < t table 1.661. So that the hypothesis that there is a significant influence between trust on purchasing decisions is accepted (H0 is accepted and H1 is rejected) and significance 0.05 (sig 0.057 > 0.05), meaning that partially the trust variable has no significant effect on the purchasing decision variable.

**The Effect of Security on Purchasing Decisions**

The results of testing the second hypothesis, in this study indicate that Security has a significant influence on Purchasing Decisions. It can be seen that the t-count, for the security coefficient is 2.559 > t table 1.661. So that the hypothesis that there is a significant influence between security on purchasing decisions is accepted (H0 is rejected and H2 is accepted) and significance 0.05 (sig 0.012 < 0.05), meaning that partially the trust variable has a significant effect on the purchasing decision variable.

**The Effect of Service Quality on Decisions**

The results of testing the third hypothesis, in this study indicate that Service Quality has a significant influence on Purchasing Decisions. It can be seen that the t-count, for the service quality coefficient is 5.858 > t table 1.661. So that the hypothesis that there is a significant influence between service quality on purchasing decisions is accepted (H0 is rejected and H2 is accepted) and significance 0.05 (sig 0.000 < 0.05), meaning that partially the service quality variable has a significant effect on the purchasing decision variable.

**CONCLUSION**

This study aims to determine the effect of Trust (X1), Security (X2), and Service Quality (X3) variables on Purchasing Decisions (Y) on Zalora Indonesia application consumers, in Tangerang. From the
formulation of the research problem posed, the data analysis that has been carried out and the discussion that has been stated in the previous chapter, the conclusions of this study can be drawn as follows:

1. Trust cannot influence the Purchase Decision of Online Shop Zalora Indonesia in Tangerang.
2. Security can influence the Purchase Decision of Online Shop Zalora Indonesia in Tangerang.
3. Service quality can influence the Purchase Decision of Online Shop Zalora Indonesia in Tangerang.

Managerial Implications
The research that has been conducted is the effect of Trust, Security and Service Quality on Purchasing Decisions at E-commerce Zalora Indonesia, in Tangerang. In this study it is recommended to E-commerce management to pay more attention to factors that can make purchasing decisions, increase consumer confidence so that consumers dare to decide to buy online and maintain consistency in shopping security and service quality to be more friendly to consumers.

LITERATURE


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