The Influence of Promotions and Prices on Purchase Decisions at Shopee  
(Case Study in Tanjung Piayu Community, Batam City)  

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The aim of this study is to determine the partial or simultaneous effects of promotions and prices on purchasing decisions at Shopee. The research method employed is quantitative, using probability sampling with the simple random side method. Questionnaire distribution in this study utilized the simple random sampling technique, and data were analyzed using the SPSS version 25 statistical program. The findings of this study revealed that promotions on Shopee significantly influence purchasing decision-making with a significance of 0.000 <0.05 and a t count of 5.426 > 1.984. Similarly, with a significance result of 0.000 <0.05 and a t count of 4.378 > t table 1.984, prices also have a significant effect on purchasing decisions at Shopee. In conclusion, promotions and prices have a significant impact on purchasing decisions at Shopee. Based on the coefficient of determination for R Square of 0.579, the percentage effect of promotion and price on purchasing decisions at Shopee in the Tanjung Piayu community in Batam City is 57.9%, and the influence of other variables not included in this study is 42.1%.

Keywords: Price, Purchase Decision, Promotion, Community, Shopee

Introduction

Currently, technology and the internet are developing rapidly, so that the internet has influenced the development of the business world. With its rapid development, many changes have occurred in today's business processes. One of the most changing developments in the business world is that some business activities are carried out offline, have limited space and time, and can now be carried out on an online system on the internet or better known as e-commerce. The existence of e-commerce has brought a shift from offline shopping behavior to consumer shopping behavior, and consumers now have the opportunity to shop online. As a result, a lot of entrepreneurs use the chance to participate in the online business community as a means of expanding their product marketing reach beyond geographic and temporal constraints. This is evident from the numerous websites that have emerged using diverse marketing techniques, including Shopee (Wijaya & Warnadi, 2019).

Through the promotions held, the company aims to motivate consumers to buy and generate profits as expected (Devi, 2019). According to (Tulangow et al., 2019) in (Kotler dan Armstrong 2014) that promotion refers to activities to communicate the benefits of the product and persuade customers to buy the product. Promotion is a tool that can indirectly influence consumer purchases. Like Shopee holding promotions on special days every month, on certain dates that can attract people's buying interest.

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Price, which may indicate the brand quality of a product, is another factor that influences people's buying decisions besides promotion. Customers claim that expensive products are usually of higher quality. In general, quality and price are positively correlated; the higher the price, the higher the quality. Customers compare products because they believe there is a direct correlation between price and product quality, and then consumers decide which product to buy (Tarigan, 2020). The consumer exchanges the cost of a good or service for the benefits of using or owning it. This exchange is known as price. Each product offered is very influential on the concept of pricing, but it is necessary to consider several product mix pricing issues (Korowa et al., 2018). According to (Purnama & Fadillah, 2018) in (Kotler and Armstrong 2016) argues, the purchase decision is a phase in the decision-making process carried out by an individual, and finally he decides to make a purchase. Making a purchase decision on a consumer product requires a process in which a purchase decision is influenced by the desire and also the influence of the environment (Utami & Ellyawati, 2021).

**Literature Review**

**Framework**

The framework of thought in this study is based on the theoretical basis and the context of the issues raised in this study, which are as follows:

![Figure 1. Framework](image)

The hypothesis is a temporary answer to the formulation of research writing. The following hypotheses are part of the theory and research framework:

1. It is suspected that at Shopee, promotions have a big impact on what people decide to buy.
2. It is suspected that at Shopee, pricing play a big role in influencing judgments about what to buy.
3. It is suspected that at Shopee, pricing and promotions play a big role in influencing customers' decisions to buy.

**Promotion**

According to (Minarti, 2020) Promotion is a business activity that aims to introduce, communicate, publish details, persuade and educate consumers who have never known before to know and are interested in buying and using products.

Meanwhile according to (Daud, 2018) Advertising is one type of communication promotion that persuades customers to buy products, both goods and services. Advertising is a basic step in
promoting, advising and validating the benefits of a product that can encourage buyers to purchase the products they produce.

**Price**

According to (Febriyani Melisa, 2020) Prices are described as the range of amounts charged to consumers to benefit from various commodities obtained through interaction between sellers and buyers. Meanwhile according to (Sitompul & Mastono, 2017) Price is one of the most influencing characteristics of customers because it has a significant impact on purchasing decisions. The company will determine the price for each product because price is an important component in marketing.

**Buying decision**

According to (Andika, 2019) Purchasing decisions are processes made by individuals, groups, or organizations before making purchasing decisions.

**Methods**

This kind of study employs a straightforward random sideways procedure and probability sampling in quantitative fashion. The statistical software SPSS version 25 was used to evaluate the data from the distribution of questionnaires in this study, which employed a straightforward random sample approach. This study's approach to data analysis was:

1. Descriptive analysis is a statistical method of data analysis that describes the acquired data in its original form without attempting to draw broad inferences or generalizations.
2. Examine the data quality, which includes confirming the data's authenticity and dependability.
3. The tests for heteroscedasticity, multicollinearity, and normality make up the traditional assumption test.
4. For the effect test, the analysis of the coefficient of determination and multiple linear regression are used.
5. The F and T tests comprise the hypothesis test.

1. **Technique of Determining Sample Size**

The entire population is represented by the sample (Triasih, 2018) The sample size findings in this study were computed using the Slovin formula. allows for tolerance of 10% sampling error (sampling error). When evaluating hypotheses, the judgment is based on this error rate. Due to the sample size, the researcher's level of significance in this study was set at 10% due to the sample size. The respondents in this study are Shopee e-commerce users, namely the 19,997 residents of Tanjung Piayu, Batam City. (BPS Kota Batam).

The following is the calculation formula used in this study:

\[
    n = \frac{N}{1 + Ne^2}
\]

**Source:** (Sugiyono, 2019)

Details:

- \(n\): quantity of samples
- \(N\): the whole populace
- \(e\): 10% error rate After computation, the result is:
\[ n = \frac{19.997}{1 + (19.997)(0.10)^2} \]

\[ n = \frac{19.997}{200.97} \]

\[ n = 99.50 \]

The number of samples obtained, 99.502, is rounded up to 100 respondents based on the computation above.

2. Methods of Data Collection

In this research, data were gathered through the use of a questionnaire distribution system, and the Likert scale was employed as a measurement variable.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Statement</th>
</tr>
</thead>
</table>
| Promotion | I decide buy products after watched Big Sale advertisement  
I believe Shopee have quality  
Shopee often stage promotional periodically  
Promotion that given shopee like shopping discounts, free fare always send interesting and exactly right with wishes as well need consumer  
I remember the tagline advertising is used Shopee at television, or social media other  
After seeing advertising visualization My Shopee interested in shop online at Shopee |
| Price | Price Products that sold at shopee affordable by all circles  
Price Product in accordance with Quality product  
Price product varies from several seller who It is in Shopee with types product which the same  
The price given in accordance with benefit product which needed consumer |
| Buying decision | I decide buy via Shop because driven by desire to buy products the  
I buy product because it's suitable with the product the  
I will buy products on Shopee because of free shipping  
I buy products on Shopee choose by brand famous  
I buy products on Shopee if there is a brand that latest  
I decide buy products at that shop offer price cheaper  
I decide buy a lot different products in one shop  
I feel the site Shopee is easy accessed anytime  
Shopee in certain time provide discounts  
Every month I shop online at Shopee  
I feel safe and easy with there is payment Cash On place Delivery when I have the goods accept.  
Shopee has payment system instant (installments, Shopee balance, card credit, transfer ATM, mobile banking) makes it easier for me while shopping |

Data Analysis Technique

To establish the validity of this study, the researchers calculated the correlation between each statement using the product moment correlation approach formula. The study's r test criteria states that a statement is considered valid if its count exceeds the value of r table, and unvalid if the count is smaller than the R table's value.

Reliability measurements are based on Cronbach alpha which is used to view reliability tests, where measurements are said to be reliable if the Cronbach alpha value is > 0.6.
If the significance of the normality test is greater than 0.05, it is deemed normal; if it is less than 0.05, it indicates that the distribution of the data is not uniform.

Multicollinearity test, So tolerance In this study, the multicollinearity test was used, namely 10%. Multicollinearity doesn't exist if VIF < 10, but it does if VIF < 10.

Heteroscedasticity test, if the probability value If the results are more than 0.05 then the research can be said to have not occurred heteroscedasticity.

Results
Validity Test Results
The validity test is used in this study to verify the validity of the questionnaire. A validity test is employed to assess a questionnaire's validity. If the statements in a questionnaire can express something that the questionnaire is measuring, then the questionnaire is considered legitimate. The study's r test criteria say that a statement is considered valid if r count is more than r table and invalid if r count is less than r table. (Hilda, 2021). The data collected by the researchers in this study were the r table value of 0.1966.
The number of respondents was 100. Namely, N - 2, then 100 - 2 = 98 with a significance of 0.05 (two-way test).
This validation test compares the value of each item with the total value.
If r count > r table = it is said to be valid and if r count < r table = it is said to be invalid.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statement Items</th>
<th>r count</th>
<th>r table</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 (Promotion)</td>
<td>Statement X1_1</td>
<td>0.616</td>
<td>0.1966</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Statement X1_2</td>
<td>0.756</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X1_3</td>
<td>0.668</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X1_4</td>
<td>0.592</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X1_5</td>
<td>0.450</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X1_6</td>
<td>0.633</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X1_7</td>
<td>0.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X1_8</td>
<td>0.831</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2 (Price)</td>
<td>Statement X2_1</td>
<td>0.735</td>
<td>0.1966</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Statement X2_2</td>
<td>0.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X2_3</td>
<td>0.528</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X2_4</td>
<td>0.728</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement X2_5</td>
<td>0.777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y (Buying</td>
<td>Statement Y_1</td>
<td>0.555</td>
<td>0.1966</td>
<td>Valid</td>
</tr>
<tr>
<td>decision)</td>
<td>Statement Y_2</td>
<td>0.599</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_3</td>
<td>0.584</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_4</td>
<td>0.671</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_5</td>
<td>0.653</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_6</td>
<td>0.550</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_7</td>
<td>0.664</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_8</td>
<td>0.535</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_9</td>
<td>0.630</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_10</td>
<td>0.599</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_11</td>
<td>0.513</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement Y_12</td>
<td>0.370</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Results of SPSS data using version 25, 2022

Conclusion: using SPSS version 25, all claims are deemed true if the r count exceeds the r table, as seen in the preceding table.
Reliability Test Results

If the Cronbach alpha value is more than 0.60, the variable is regarded as dependable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Standard Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 (Promotion)</td>
<td>0.815</td>
<td>0.6</td>
</tr>
<tr>
<td>X2 (Price)</td>
<td>0.758</td>
<td>Reliable</td>
</tr>
<tr>
<td>Y (Buying decision)</td>
<td>0.813</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Results of SPSS data using version 25, 2022

Given that the Cronbach alpha value in the preceding table is more than 0.6, it may be said that the value is dependable.

Classical Assumption Test Results

Normality test

Using SPSS version 25, the Kolmogrov-Smirnov test will be performed. If the significance of the normality test is more than 0.05, it is deemed normal; if it is less than 0.05, it indicates that the data is not distributed uniformly. (Sujarweni, 2019).

Figure 2 shows the results of the normality test, in conclusion the residual values are normally distributed, because the residuals are bell-shaped.

Figure 3 shows the results of the normality test, in conclusion the residual values are normally distributed, because the residuals are bell-shaped.

**Source:** Findings from the analysis of SPSS 25
The purchase choice variable is found to have a normal distribution, with the points in between the diagonal lines spreading and migrating in that direction.

**Table 4. Results of the One-Sample Kolmogorov-Smirnov Test**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>0.000</td>
</tr>
<tr>
<td>Deviation</td>
<td>4.278</td>
</tr>
</tbody>
</table>

The asymptotic significance value (2-tailed) of 0.200 is larger than 0.05, the Kolmogorov-Smirnov test results in the preceding table are regularly distributed.

**Multicollinearity Test Results**

In order to ascertain the extent of correlation existing between the independent variables, a multicollinearity test can be used. Using the tests for the tolerance factor and variance inflation factor (VIF). If VIF < 10, multicollinearity does not exist; if VIF > 10, multicollinearity does occur. The following is the result of the multicollinearity test based on data processing.

**Table 5. Results of the One-Sample Kolmogorov-Smirnov Test**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>0.592</td>
</tr>
<tr>
<td>Price</td>
<td>0.592</td>
</tr>
</tbody>
</table>

The conclusion from the multicollinearity test in this study does not occur since the tolerance value for the promotion and price variables is 0.592 more than 0.10 and the VIF value of the promotion and price variables is <10.

**Heteroscedasticity Test Results**

In this study, the heteroscedasticity test was used to evaluate the presence of variance bias or dissimilarity across all observations in the linear regression model. Researchers used the Glejser test to predict whether or not heteroscedasticity occurred (Sujarweni 2019: 226). This research is said to have no heteroscedasticity if the probability value is > 0.05.

**Table 6. Results of the One-Sample Kolmogorov-Smirnov Test**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homoscedasticity</td>
<td>0.200</td>
</tr>
</tbody>
</table>
The conclusion from the results of the heteroscedasticity test above is that there is no heteroscedasticity because the value of the promotion variable is significant 0.297 > 0.005 and the value of the significant price variable is 0.256 > 0.05.

From the picture above it can also be concluded that there is no heteroscedasticity with randomly distributed dots not congregating at just one point.

**Influence Test**

**Multiple Linear Regression Analysis Test Results**

According to the above table, multiple linear regression is calculated by the following equation:

\[ Y = 12,297 + 0,609X_1 + 0,850X_2 + e \]

Conclusion of the equation:

a) The constant, which is 12.297, states the purchase decision, which is 12.297.

b) Promotion, namely 0.609, shows how much influence promotion has on purchasing decisions, meaning that purchasing decisions increase along with the number of promotions.
c) The price, which is 0.850, shows how much influence the price has on the purchase decision, meaning that the purchase decision will also increase along with the affordability of the price offered.

**Test Results for the Coefficient of Determination (R²)**

Table 8. Test Results for the Coefficient of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.761</td>
<td>.579</td>
<td>.570</td>
<td>4.32268</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), PROMOTION PRICE

Source: Findings from the analysis of SPSS 25

Based on R Square analysis of the preceding data, it can be concluded that the price and promotion variables have a 57.9% effect on the purchase decision variable.

**Testing of hypotheses**

**T Test Results (Partial)**

The decision-making criteria in this study are if:

a) As a result of tcount > ttable and significant value <0.05, Ha is approved and H0 is denied.

b) If tcount is less than ttable and the significant value is more than 0.05, then H0 is accepted and Ha is rejected.

This study's significance level was 0.05 significant in both directions.

With df = n-k-1 or df = 100-2-1 = 97

Then the value of t is obtained 1.984

Table 9. Test Results t

<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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>12.297</td>
<td>3.213</td>
<td>3.827</td>
</tr>
<tr>
<td></td>
<td>PROMOTION</td>
<td>.609</td>
<td>.112</td>
<td>.465</td>
</tr>
<tr>
<td></td>
<td>PRICE</td>
<td>.850</td>
<td>.194</td>
<td>.375</td>
</tr>
</tbody>
</table>

a. Dependent Variable: BUYING DECISION

Source: Findings from the analysis of SPSS 25

Based on the results of the t test via SPSS Version 25 in the table above it can be explained below, namely:

1. With a significance level of 0.000 <0.05 and t count 5.426 > t table 1.984, the results of the t-test promotion had a substantial impact on shopping decisions at Shopee. Therefore H0 is turned down while H1 is approved. According to the first theory, there is a considerable impact.

2. The price t test results, with a price significance of 0.000 <0.05 and a t-count of 4.378 > t-table 1.984, have a substantial impact on shoppers' decisions at Shopee. Therefore H0 is turned down while H1 is approved. According to the second theory, there is a considerable impact.

3. Consumer purchase decisions are significantly impacted by the price and promotion t-test results; the t-count is 5.426 > and the promotion significance is 0.000 <0.05. Table t = 1.984. H1 is approved whereas H0 is refused.
The count is 4.378, the t count is 4.378 > t table 1.984, and the price's significance is 0.000 <0.05. H1 is approved whereas H0 is refused. According to the third theory, there is a considerable influence.

**F Test Results (Simultaneous)**

The f test criteria used in this investigation are as follows:

a) As a result of Tcount > Ttable and significance level <0.05, Ha is approved and H0 is denied.

b) As a result of Tcount < Ttable and a significance threshold > 0.05, Ha is rejected and H0 is approved.

In determining the f table in this study determine:

\[ df_1 = k - 1 \text{ dan } df_2 = n - k. \]

With, variable (k) = 3, n=100

calculation:

\[ df_1 = 3-1 = 2 \text{ and } df_2 = 100-3 = 97 \]

with a significant level of 0.05

as seen in the following table:

<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>2493,691</td>
<td>2</td>
<td>1246,845</td>
<td>66,728</td>
<td>.0000</td>
</tr>
<tr>
<td>Residual</td>
<td>1812,499</td>
<td>97</td>
<td>18,686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4306,190</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: BUYING DECISION  
b. Predictors: (Constant) PRICE, PROMOTION

Source: Findings from the analysis of SPSS 25

The f test above concludes that pricing and promotions have a simultaneous effect on consumers' decisions to buy since the f count is 66.728 > f table 3.09 with a probability of 0.000 <0.05.

**Conclusion**

Partially, promotion has an effect on purchasing decisions at Shopee for the people of Tanjung Piayu, Batam City. Partially, the price influences purchasing decisions at Shopee for the people of Tanjung Piayu, Batam City. Tanjung Piayu, Batam City residents' selections about what to buy at Shopee are influenced by prices and promotions.
References


