Analysis of Vivo Smartphone Customer Satisfaction With Product Quality And Price In Parepare City

Pandi Putra\textsuperscript{a}, Ulyana Muslimin\textsuperscript{b}

\textsuperscript{a} Fakultas Bisnis Institut Ilmu Sosial dan Bisnis, Institut Ilmu Sosial dan Bisnis Andi Sapada, Parepare, Indonesia

email: \texttt{fandyamsir89@gmail.com}, \texttt{ulymuslimin25@gmail.com}

\begin{abstract}

The purpose of this study was to find out how much influence product quality and price had on customer satisfaction on Vivo Smartphones using the SPSS 23 analysis method. The method of analysis used in this research is the method of observation, interviews, documentation, and questionnaires. The method of determining the sample is determining the Roscoe formula as many as 45 respondents. The analytical method used is multiple linear analysis. The results showed that: 1. Product Quality (X1) The test results showed the value of t = (0.988) with a significant value of 0.329 > 0.05. With this value, it proves that Product Quality (X1) has an insignificant effect on customer satisfaction. 2. Price (X2) The test results show the value of t = (5.349) with a significant value of 0.000 < 0.05. With this value, it proves that Price (X2) has a significant influence on customer satisfaction. 3. Product Quality (X1) and Price (X2) have a positive (53,530) and significant (0,000 < 0.05) effect on the Customer Satisfaction variable (Y) in Parepare City.

\end{abstract}

\begin{IEEEkeywords}

Product Quality, Price, Customer Satisfaction.
\end{IEEEkeywords}

1. Introduction

In the era of increasingly modern globalization, Indonesia’s smartphone industry is experiencing a significant increase. Various kinds of smartphones circulating in the market make consumers more careful when choosing a smartphone. Product quality and price are the things that consumers pay the most attention to when choosing smartphone products [1].

Product quality is the ability of a product to perform its functions. These capabilities include durability, reliability, precision produced, then operated and repaired and other attributes valuable to the product. Companies must produce high-quality products to provide benefits compared to low-quality ones. This is because product quality is one of the factors that influence the success and progress of a business [2].

Good quality and reliability of the product will permanently be embedded in the minds of consumers because consumers are willing to pay a certain amount of money to buy a quality product. In addition to product quality, price reflection is also increasingly crucial because each price set by the
company will result in a different level of demand for the product. In most cases, demand and price are inversely related; that is, the higher the price, the lower the demand for the product [3].

Price is everything that is given by consumers to get the advantages offered by the company's marketing mix. Rice is an essential factor in customer satisfaction because the price can be the main reason customers choose a product or service [4]. Price is the only element that is flexible. Therefore prices can change at any time. Price can also determine the success of a company because the price can determine how much profit is obtained from the sale of products or services [5]. The growth in smartphone products has been extraordinary, supported by data on international product growth, including in Indonesia. Along with technological developments, Indonesian people, especially those living in urban areas, are starting to experience lifestyle changes [6].

Competition as it is today, companies are required to offer quality products and have added value so that they appear different from competitors' products. Quality is one of the factors that consumers consider before buying a product. Quality is determined by a set of uses and functions, including durability, independence from other products or components, exclusivity, convenience, and external appearance (colour, shape, packaging, etc.) [3].

A smartphone (smartphone) is a mobile phone that has high-level capabilities, sometimes with computer-like functions. No factory standard determines the definition of a smartphone. For some people, a smartphone is a phone that works with all operating system software that provides standard and fundamental relationships for application development. For others, a smartphone is just a phone that provides advanced features such as e-mail, internet and e-book reading capabilities or has a keyboard (both built-in and external) and a VGA connector. In other words, a smartphone is a mini-computer with the capabilities of a telephone.

One of the phenomena occurring at this time is that many people in Parepare City use Android Smartphones. There are many Android smartphone brands in Parepare City, one of which is the Vivo brand. Vivo brand smartphones are now launched Android types, namely Vivo Yo2 Pro, Vivo V25e, Vivo Y16, Vivo Y22, Vivo 25 Pro, Vivo X80 Pro, Vivo X80, etc. The advantages of the Vivo smartphone compared to other smartphone brands are Ram 8 to 12 GB, 128 GB internal memory, blocking numbers that you don't know automatically, activating Quit Time mode if you want to be disturbed, Double exposure makes the shots even better, timelapse feature on the front camera, has face Unlock, long battery life, comprehensive and responsive screen, attractive design.

Vivo products ideally have attributes such as quality, features, and designs that are less attractive to consumers, and Vivo smartphones have high selling prices, so the price will not drop too much if the smartphone is resold. This is the main attraction for this Android smartphone brand Vivo.

2. Method Research

2.1. Marketing Mix

Kotler [7] put forward McCarthy's opinion regarding the marketing mix "explaining the tools into four major groups called the "four p" of marketing, namely product (product), price (price), promotion (promotion), and place (place)". The marketing mix (product, price, promotion and place) is a variable that can influence consumer purchasing decisions [8].

The marketing mix (marketing mix) is a combination of 4 variables or activities which are the core of the company's marketing system, namely products, prices, promotional activities and distribution systems [9].

According to Kotler (1984) in Bakhtiar Tijiang (2018:20), the marketing mix is the control of marketing variables controlled by the company to produce the response the company wants from its target market.

2.2. Product Quality

Qomariah (2016) Products are part of the marketing mix used by producers to achieve goals through satisfying consumer needs and wants. With regard to products, it must be able to determine producers according to the target market where there is a classification of goods, namely the variables
of immediate company satisfaction and long-term consumer welfare and goods based on user goals including consumer goods and industrial goods. Product quality is the most basic mix tool, where consumers have expectations of needs and desires through a product [10], with the following indicators:

a. Performance
b. Feature
c. Conformance to Specification
d. Durability
e. Reliability
f. Serviceability
g. Esthetica
h. Perceived quality.

Meanwhile, the relationship between product quality and buyer's decision is stated by Kotler Keller and Armstrong (2014). The characteristics of a product or service depend on its ability to include stated or implied customer needs. Furthermore, Kotler (2016) states that product quality is the totality of features and characteristics of a product or service in its ability to satisfy stated or implied needs.

Luthfia (2012) Quality can be interpreted as the ability of the product to carry out its functions which include durability, reliability or progress, strength, ease of packaging and product repair and other characteristics. Iswayanti (2010) Products are defined as consumer perceptions that are regulated by producers through their production results. Quality or product quality is influenced by factors that will determine that the quality of goods can fulfill its purpose, namely to increase sales volume [11].

Irawan (2008: 37) in Bakhtiar Tijang (2018: 57, 58) Product quality is a global dimension and there are at least six elements of product quality, namely performance, durability, features, reliability, consistency, and design. As described here:

a. The first dimension is performance.
b. The second dimension is reliability. reliability
c. The third quality dimension is a feature or features.
d. The fourth dimension is durability.
e. The fifth dimension is conformance.
f. The sixth dimension is the design dimension.

2.3. Price

Price is the amount of money exchanged for a product or service, then price is the sum of all values exchanged by consumers for the number of benefits by owning or using goods and services. Price is the value of an item expressed in money [11].

Price is 'the amount (plus some goods if possible) needed to get a number of combinations of goods and services' [4]. Price is the amount of money that must be mastered by consumers to get a product.

Prices are usually dynamic and difficult to set. Price is revealed in response to a number of variables. For example, if the price of one product is higher than the average price of other products, then that difference can hurt demand, whereas a price that is lower than average has good meaning because of the tendency of consumers to have easier prices with the same quality. According to [11] Prices are in the exchange rate of a good or service, in other words, it is a product that can be exchanged in the market. Prices do not always represent money.

Kotler and Armstrong (2012) There are four elements of price indicators, namely:
a. Affordability
b. Price according to ability or competitiveness
c. Conformity of price with quality
d. Price suitability with benefits.

Based on the definition of price according to Kotler and Armstrong (2012) above, it can be concluded that price is one of the determining factors for consumers in determining a buyer’s decision for a product or service where the price paid by consumers must be proportional to the benefits that will be received by consumers.

2.4. Customer Satisfaction

Kotler and Keller (2009: 139) Customer satisfaction is a person’s feeling of pleasure or disappointment that arises because of the product's perceived performance or results against brand expectations. Consuegra et al. (2007) Satisfied customers will have plans to repeat purchases. Sondoh et al. (2007) Customer satisfaction will impact loyalty. Moraga et al. (2008) Customer satisfaction can be created when a company can meet the needs of its customers well. Sulistiyanto and Soliha (2016) consumers will feel they have made the right decision when their satisfaction is met.

Cathy and Brian (2001: 38) in Bakhtiar Tijiang (2018: 51), Satisfaction comes from the Latin “satis”, which means enough and something satisfying will definitely fulfill expectations, needs, or desires and does not cause complaints. Extensive Indonesian Dictionary (1990) satisfaction comes from the word satisfied, which is defined as a pleasant feeling because satisfaction is the heart’s desire, and satisfaction itself is defined as a subject that is satisfied or happy in spirit because it has enough.

Aryani (2010: 144) Customer satisfaction is one of the keys to creating customer service because satisfied customers will tend to be loyal.

Howard and Sheth in Bakhtiar Tijiang (2018: 66) reveal that customer satisfaction is a cognitive situation of the buyer that is pleased with the equivalence or disproportion between the results obtained and the sacrifices made. Customers experience various levels of satisfaction and dissatisfaction after experiencing or experiencing each service according to their expectations being met or exceeded. Lovelock and Wright’s (2007: 93) expectations are internal standards used by customers to assess the quality of a service experience.

The customer indicators (according to Irawan Satisfaction, 2008), namely:

1. Feelings of satisfaction (satisfied with products and services)
2. Always buy products
3. Would recommend to others
4. Fulfillment of customer expectations after purchasing the product

3. Results and Discussion

3.1. Data Description

Characteristic of Respondents

The authors researched to determine the effect of product quality and price on customer satisfaction with Smartphones in Parepare City. The writer used the research instrument to distribute questionnaires to smartphone customers in Parepare City as the sample used as the respondent in this study.
The data used in this study is quantitative data from the questionnaire results from the variable product quality and price and customer satisfaction. The data was obtained from the respondents' answers to the questionnaire distributed to smartphone customers in Parepare City. The number of respondents I used was 45 smartphone customers in Parepare City. The identity of the customer who is the author's respondent in this study is as follows:

Table 1. Characteristics of Respondent's Gender

<table>
<thead>
<tr>
<th>No</th>
<th>Gender</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Woman</td>
<td>30</td>
<td>66,7%</td>
</tr>
<tr>
<td>2</td>
<td>Man</td>
<td>15</td>
<td>33,3%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>45</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data, 2022

Table 2. Respondents' Job Characteristics

<table>
<thead>
<tr>
<th>No</th>
<th>Work</th>
<th>Number of Respondent</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>civil servant</td>
<td>4</td>
<td>8,8%</td>
</tr>
<tr>
<td>2</td>
<td>Honorary</td>
<td>5</td>
<td>11,1%</td>
</tr>
<tr>
<td>3</td>
<td>Self-employed</td>
<td>20</td>
<td>44,4%</td>
</tr>
<tr>
<td>4</td>
<td>Private employees</td>
<td>6</td>
<td>13,3%</td>
</tr>
<tr>
<td>5</td>
<td>Police</td>
<td>2</td>
<td>4,4%</td>
</tr>
<tr>
<td>6</td>
<td>Housewife</td>
<td>4</td>
<td>8,8%</td>
</tr>
<tr>
<td>7</td>
<td>BUMN/BUMD</td>
<td>2</td>
<td>4,4%</td>
</tr>
<tr>
<td>8</td>
<td>Student/Student</td>
<td>2</td>
<td>4,4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>45</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data, 2022

Table 3. Age characteristics of respondents

<table>
<thead>
<tr>
<th>No</th>
<th>Age</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 20 Year</td>
<td>5</td>
<td>11,2%</td>
</tr>
<tr>
<td>2</td>
<td>20 - 50 Year</td>
<td>34</td>
<td>75,5%</td>
</tr>
<tr>
<td>3</td>
<td>&gt; 50 Year</td>
<td>6</td>
<td>13,3%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>45</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data, 2022

Table 4. Respondents' Income Characteristics

<table>
<thead>
<tr>
<th>No</th>
<th>Income (Rp)</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 2.000.000</td>
<td>2</td>
<td>4,4%</td>
</tr>
<tr>
<td>2</td>
<td>2.000.000 – 5.000.000</td>
<td>36</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>&gt; 5.000.000</td>
<td>7</td>
<td>15,6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>45</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data, 2022.
3.2. Hypothesis Testing

Validity Testing

The validity test is done by correlating each statement with the total score of each variable. Validity is the extent to which the accuracy and accuracy of a measuring instrument in performing its function. Therefore, the authors tested the validity level of the questionnaire distributed to the respondents.

Test the validity of the instrument item for each variable in a study conducted using SPSS 23 for windows. The validity test is said to be valid if all the indicators in the study have an r-count (Corrected Item-Total Correlation) above the r-table value. With a total sample (N) of 45 people, based on DF = N-2 (DF = 43), it is known that the value is 0.2940 in the r-table with a significant level of two-way test of 0.05 or a probability of 5%, the overall validity test results can be seen in the following table:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicator items</th>
<th>Corrected Item-Total Correlation</th>
<th>r-table</th>
<th>Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>Product quality 1</td>
<td>0.649</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 2</td>
<td>0.646</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 3</td>
<td>0.483</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 4</td>
<td>0.636</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 5</td>
<td>0.682</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 6</td>
<td>0.651</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 7</td>
<td>0.659</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Product quality 8</td>
<td>0.609</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td>X2</td>
<td>Price 1</td>
<td>0.649</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Price 2</td>
<td>0.646</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Price 3</td>
<td>0.483</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Price 4</td>
<td>0.636</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td>Y</td>
<td>Satisfaction 1</td>
<td>0.682</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Satisfaction 2</td>
<td>0.652</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Satisfaction 3</td>
<td>0.659</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Satisfaction 4</td>
<td>0.609</td>
<td>0.2940</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Reliability Test

The Reliability Test is intended to measure a questionnaire that is an indicator of a variable. A questionnaire is said to be reliable or reliable if a person's answer to a question is a questionnaire or stable over time. One shot or one-time measurement is here the measurement is only or measuring the correlation or answer to the question. Reliability is measured by statistical tests of Cronbach's Alpha by comparing Alpha values with its standards. The reliability of a variable is said to be good if:

- Cronbach's Alpha > 0.60 = Reliable
- Cronbach's Alpha < 0.60 = not Reliable

Alpha coefficient technique to test the reliability of measuring instruments calculated with the help of the SPSS version 23 for windows program. The results of the tester's reliability can be seen in the table below:

<table>
<thead>
<tr>
<th>Table 6. Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>0.892</td>
</tr>
</tbody>
</table>

The data processing results in Table 4.6 show that Cronbach's Alpha is 0.892. This value is more significant than >0.60. This means that it can mean that the instrument indicators for the independent variable product quality and price, as well as the dependent variable for customer satisfaction in this
study, are reliable or trustworthy because the measurement results are relatively consistent even though the question is given two or more times to different respondents so that this questionnaire can be used for research. next.

**Multiple Linear Analysis**

Multiple linear regression analysis was used in this study to prove the hypothesis regarding the influence of the independent variables, namely Product Quality ($X_1$) and Price ($X_2$), on customer satisfaction ($Y$). Statistical calculations in the multiple linear regression analysis used in this study using SPSS 23 for windows software. The confidence level used to calculate multiple linear correlations is 95% or with a significant level of 5% (0.05). The results can be seen in the following table:

<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>(Constant)</td>
<td>2.606</td>
<td>2.88</td>
<td>.905</td>
<td>.371</td>
</tr>
<tr>
<td>Product quality</td>
<td>.138</td>
<td>.139</td>
<td>.136</td>
<td>.988</td>
</tr>
<tr>
<td>Price</td>
<td>.755</td>
<td>.141</td>
<td>.738</td>
<td>5.34</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer satisfaction

Source: Primary data processed through SPSS V.23 for windows (2022)

Based on table 4.7 above, the results of the multiple linear regression equation are obtained as follows:

$$Y = 2.606 + 0.138(X_1) + 0.755(X_2) + e$$

Based on the regression agreement, it can be explained as follows:

1. Coefficient of constant ($a = 2.606$)

The constant value of 2.606 indicates that customer satisfaction will be constant by 2.606 points if there is no (does not affect) product quality variable ($X_1$) and price ($X_2$) or ($X_1$ and $X_2 = 0$). So, it can be interpreted that if the two variables are increased, then the customer satisfaction variable is positive.

2. Product Quality Variables ($b_1 = 0.138$)

The product quality variable has a positive regression coefficient value of 0.138. The positive coefficient value indicates that the product quality variable positively affects customer satisfaction. This illustrates that the value of customer satisfaction has increased by 0.138 points if the product quality variable is increased by 1 point. Assuming other independent variables are considered constant ($X_2 = 0$).

3. Variable Price ($b_2 = 0.755$)

The price variable has a positive regression coefficient value of 0.755. The positive coefficient value indicates that the price variable positively affects customer satisfaction. This illustrates that the value of customer satisfaction has increased by 0.755 points if the price variable is increased by 1 point. Assuming other independent variables are considered constant ($X_1 = 0$).
Hypothesis Test

1. T-Test

The t-test was conducted to determine the effect of each or partially the independent variables (product quality and price) against the dependent variable (customer satisfaction).

The conditions of the t Test (partial) are:
- H0 is accepted if tcount < ttable at α = 5%
- H1 is accepted if tcount > ttable at α = 5%
The partial influence of these two variables on customer satisfaction is shown in Table 4.8 as shown below.

<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>I (Constant)</td>
<td>2.606</td>
<td>2.880</td>
<td>.905</td>
<td>.371</td>
</tr>
<tr>
<td>Product quality</td>
<td>.138</td>
<td>.139</td>
<td>.136</td>
<td>.988</td>
</tr>
<tr>
<td>Price</td>
<td>.755</td>
<td>.141</td>
<td>.738</td>
<td>5.34</td>
</tr>
</tbody>
</table>
| a. Dependent Variable: Customer satisfaction

Source: Primary data is processed through SPSS V.23 for windows (2022)

To be able to find out whether partially the independent variables consisting of product quality (X1) and price (X2) affect customer satisfaction, this can be seen by comparing the tcount which can be seen in the Coefficient table with the ttable in the distribution table t.

The formula for finding ttable values is:

\[ t_{table} = \text{Probability} = \alpha/2; \text{ (df} = n - k) \]

Information:
- \( \alpha \) = Two-way test probability (0.05 (5%))
- n = Number of regression-forming samples (45 people)
- k = number of variables (free + bound = 3 variables)

So, \( t_{table} = (0.05/2); (45-3) \)

\[ = 0.025; 42 \]

Then searched for the distribution of ttable values then found the ttable value of 2.01808 or 2.018. From the results of the SPSS analysis, the results of each variable are obtained, so it can be known that the variables that affect customer satisfaction, as for the explanation of the post-graduate research results are as follows:

Variable Product Quality (X1)

Product Quality Variable (X1) has a positive but not significant effect on customer satisfaction (Y) with a calculated value = 0.988 and a significance level of 0.329

By comparing the calculated statistics with the table statistics based on the results of the t test, it is known that the calculation (0.988) < ttable (2.018) and the significant probability of (0.329) > (0.05)
then it can be said that there is no partially significant influence between the product quality variables on customer satisfaction (H1 rejected and H0 accepted).

Variable Price (X2)

The Price Variable (X2) has a positive and significant effect on customer satisfaction (Y) with a calculated value = 5.349 and a significance level of 0.000. By comparing the calculated statistics with the Information Information statistics table based on the results of the t test, it is known that the calculation (5.349) > ttable (2,018) and the significant probability of (0.000) < (0.05) then it can be said that there is a partially significant influence between the price variable on customer satisfaction (H2 is accepted and H0 is rejected).

2. F-Test

Simultaneous test or F test is a test jointly to test the significant effect of product quality and price free variables together on customer satisfaction variables, as for the conditions of Test F (simultaneous) are;

- H0 accepted if F count < Ftable on α = 5 %
- H1 is accepted if F count > Ftable on α = 5 %

The test results using the SPSS 23 for windows program can be seen in the table with a significance level of 5% (0.05).

<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>1 Regression</td>
<td>10598.4</td>
<td>2</td>
<td>5299.23</td>
<td>55.530</td>
<td>.00</td>
</tr>
<tr>
<td>residual</td>
<td>4008.10</td>
<td>42</td>
<td>95.431</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14606.5</td>
<td>78</td>
<td>44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer satisfaction
b. Predictors: (Constant), Price, Product Quality

Source: Primary data processed via SPSS v 23 for windows (2022)

Coefficient of Determines Analysis (R2)

The coefficient of determination determines how much influence the independent variables have on the bond variable. Meanwhile, the value of the coefficient R or 0 and 1, if the results are close to 0, means that the independent variable's ability to explain the dependent variable is minimal. But if the results are close to 1, the independent variables provide almost all the information needed to hold the dependent variable.

According to Santoso, for regression of more than two independent variables, R square is used as the coefficient of determination. (Kaharu & Budiarti, 2016) Then the value of the coefficient of determination for the 2 (two) independent variables can be seen below:
Table 4.10
Coefficient of Determination Results ($R^2$)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>.852</td>
<td>.726</td>
<td>.713</td>
<td>9.76888</td>
<td>55.5</td>
<td>2.026</td>
</tr>
</tbody>
</table>

Change Statistics: $F$ Change $d$ $df$ $df$ $Sig.$ $F$ Change

1. Predictors: (Constant), Price, Product Quality
2. Dependent Variable: Customer satisfaction

Source: Primary data processed via SPSS V.23 for windows (2022)

4. Discussions

This study aims to determine the effect of product quality and price on the customer satisfaction of Vivo Smartphones in Parepare city. The data in this study was obtained by distributing questionnaires and google form links, and reprocessing them by conducting a data analysis tester using the SPSS version 23 program. For windows

1. **Effect of Product Quality ($X_1$) on customer satisfaction ($Y$) Vivo Smartphones in Parepare City.**

The results showed that the Product Quality variable ($X_1$) had no significant effect on Vivo Smartphone customer satisfaction in Parepare City. This is evidenced by the $t$ test statistic (partial) for the Product Quality variable ($X_1$) with a $t$ count of 0.988 with a significance value of 0.329 greater than 0.05 ($0.329 > 0.05$), and the regression coefficient has a positive value of 0.138. This shows that the Product Quality variable ($X_1$) partially does not have a significant influence on the customer satisfaction variables, or in other words, $H_1$ is rejected.

2. **Effect of Price ($X_2$) on Customer Satisfaction ($Y$) Vivo Smartphones in Parepare City.**

The results showed that the price variable ($X_2$) had a significant influence on Vivo customer satisfaction in Parepare City. This is evidenced by the statistics of the $t$ test (partial) for the variable Price ($X_2$) with a calculation of 5.349 with a significance value of 0.000 less than 0.05 ($0.000 < 0.05$), and the regression coefficient has a positive value of 0.755. This suggests the Price variable ($X_2$) partially has a significant influence either on the customer satisfaction variable or in other words, $H_1$ is accepted.

3. **Effect of Product Quality ($X_1$) and Price ($X_2$) on Customer Satisfaction ($Y$) of Vivo Smartphones in Parepare City.**

The study results show a simultaneous effect of Product Quality and Price on Vivo Smartphone customer satisfaction in Parepare City. This is evidenced by the statistical results $F$ count of 55.530 with a significance level of 0.000. Because the significance value is less than 0.05 ($0.000 < 0.05$), this study succeeded in proving the hypothesis which states that "Allegedly Product Quality and Price Simultaneously Affect Vivo Smartphone Customer Satisfaction in Parepare City."

The results of the Adjusted R Square or $R^2$ determinant coefficient test in this study obtained a determinant coefficient value of $R^2$ (Adjusted R Square) of 0.726, which means that the effect of product quality and price on customer satisfaction is 72.6% and the remaining 27.4% is explained by other variables not included in this study.

5. Conclusions

Based on the results of multiple linear regression analysis, it shows that all independent variables, namely product quality (0.138) and price (0.755), all have a positive effect on customer satisfaction,

1. In the $T$-test (partial test) the price variable has a significant effect on customer satisfaction ($Y$) which is shown by the significant value ($0.000 < 0.05$). While the product quality variable has no significant effect on customer satisfaction, as shown by the significant value ($0.329 > 0.05$).
2. In Test F (Simultaneous Test), Product Quality and Price have a significant effect on Vivo customer satisfaction in Parepare City where Fcount (55,530) > Ftable (3.22).

6. References


