The Influence Of Product Quality, And Brand Images On Purchasing Decisions Through The Role Of Purchase Intention As An Intervening Variable As An Intervening Variable
(Case Study On Purchasing An Iphone Brand Smartphone In Yogyakarta)

Ambar Lukitaningsih 1), Agus Dwi Cahya 2), Iskandar Mizan 3*)
1,2,3 Universitas Sarjanawiyata Tamansiswa Yogyakarta
Email: 1) iskandarmizannn@gmail.com, 2) agusdc@ustjogja.ac.id, 3 ambaryudono@yahoo.com
*) Corresponding Author

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ABSTRACT
This research is quantitative research, which was conducted to test the influence of product quality, brand image, and purchase intention as intervening variables on purchasing decisions. The data in this research was collected through a questionnaire using Google Form with respondents who were owners, users, or who had purchased an iPhone brand smartphone in Yogyakarta, with a total of 115 respondents. Testing in this research uses multiple linear regression analysis tests. The results of this research show that product quality has a significant effect on purchasing decisions, brand image has no effect on purchasing decisions, purchase intention has an effect on purchasing decisions. Simultaneously, the variables product quality, brand image, and purchase intention influence purchasing decisions.

INTRODUCTION
In today's sophisticated modern era, advances in communication technology are growing rapidly in Indonesia. The need for technology in the field of communication is very important for every member of society. These communication tools can help humans to do things quickly and effectively. One of the communication tools with sophisticated technology today is a smartphone. The use of smartphones is of course as a tool to help in every learning and working activity.
In Indonesia today there are many smartphone brands, one of which is the Iphone brand, which was made by the Apple.inc company from California, United States. The Apple.inc company was founded by Steve Jobs, and the Iphone product was officially launched on January 9, 2007. The number of smartphone brands on the Indonesian market today shows that smartphone company competition is very tight. This intense competition between smartphone companies has a positive impact, namely companies compete with each other by trying to create products with the best possible quality in order to win the competition and their products are chosen by consumers. With good and reliable product quality, consumers will remember the product and consider when buying a smartphone. One way for smartphone companies to win the competition is by creating more sophisticated features and services. Smartphone features that are favored by consumers include large battery capacity with fast charging, clear camera quality, and elegant smartphone design.

One of the smartphone brands that is currently trending is the Iphone brand. Iphone is one of the smartphone brands used and used by the world community, especially in Indonesia. The brand is favored by young people and adults because of its undoubted features and quality. But in 2020, smartphones with the Iphone brand experienced a very sharp decline in revenue. The graph table below shows that this Iphone brand smartphone experienced a decline in revenue from 2020 to 2021.

![Figure 1 Sumber Pendapatan](image)

The data shows that smartphone revenue from the Iphone brand experienced a decline in revenue in mid-2020. At the beginning of 2021, Iphone smartphone revenue rose again by 65 US Dollars, but in the middle to the end of 2021 Iphone again experienced a decline in revenue. Then in 2022, Iphone revenue began to increase again by 71 US Dollars. From this phenomenon, the author wants to find out more about what factors make the Iphone smartphone company experience ups and downs in revenue. But until now the Iphone brand smartphone is still in demand in the market and is favored by young people to adults. One of the advantages of this Iphone brand is the quality of its products and the advanced features inside. The Apple.inc company will continue to release its latest features in line with today's rapidly developing technology.

The Iphone brand itself is well known for its good product quality and in accordance with the selling price in the market. In addition, Iphone is also superior for product quality when compared to other smartphone products. Product quality is one of the considerations when consumers will buy a product, because consumers are more interested in products that have superior quality. Like previous research by Noor & Nurlinda, (2021) in their research which states that product quality has a positive and significant effect on purchasing decisions for Iphone. In
contrast to research conducted by Fetrizn & Aziz, (2019) that his research shows product quality has no positive and significant effect on purchasing decisions. Apart from product quality, there are also aspects of brand image that are a reference when buying a product. Brand image is the consumer's perception of a brand as a reflection of the associations in the consumer's mind (Effendi et al., 2022). Consumers will choose a product if these consumers have a good perception of a brand. Therefore, the smartphone company Apple inc must maintain and maintain the brand image of this Iphone brand.

LITERATURE REVIEW

1. Effect of Quality Product on Purchasing Decisions
   Product quality according to Nurfauzi et al., (2023) actions taken by a company to compete with its competitors in the market by establishing various significant differences between the products or services it offers and its competitors. By offering good product quality to consumers, it will generate interest in consumers to make purchases. Research conducted by Ilham et al., 2020 which states that product quality has a positive and significant effect on purchasing decisions. Other research by (Astuti et al., 2019) also states that product quality has a significant effect on purchasing decisions for shoe products.
   • H1 : Product Quality affects Purchasing Decisions

2. Influence of Brand Image on Purchasing Decisions
   Brand image according to Mahaputra, (2022) is the consumer's perception of a brand as a reflection of the associations that exist in the consumer's mind. Brand image plays a very important role in contributing to influencing consumers to make purchasing decisions. This is supported by research from (Hapsoro & Hafidh, 2018) which states that brand image has a positive and significant effect on purchasing decisions. Other research conducted by (Wolff et al., 2021) also states that brand image has a positive and significant effect on purchasing decisions for iPhone brand smartphones.
   • H2: Brand Image influences Purchasing Decisions

3. Influence of Product Quality on Purchase Intention
   Product quality is one of the key parameters for building a company's competitive advantage in market competition (Das Guru & Paulssen, 2020). Product quality is one of the determining factors regarding consumer buying interest. Like research conducted by (Sumaa et al., 2021), this research shows that product quality has a positive and significant effect on consumer buying interest in Shopee e-commerce. Another research conducted by (Santi & Supriyanto, 2018) stated that product quality partially influences interest in buying Taichan Sate.
   • H3: Product quality influences purchase intention

4. Influence of Brand Images on Purchase Intention
   A good and strong brand image will be able to convince a consumer that the products offered by a company are of good and positive quality (Rokhmawati et al., 2022). If a brand is good and popular, then consumers will buy products from that brand. Research conducted by (Kristanto & Pudjoprastyno, 2021) states that brand image has a positive and significant effect on purchase intention. The results of other research conducted by (Susanti, 2021) also stated that the brand image variable influences purchasing interest.
   • H4: Brand Images influence Purchase Intention

5. Influence of Purchase Intention on Purchase Decisions
   Purchasing interest according to Kotler & Keller in (Hartati, 2021) is the behavior of a consumer, namely when a consumer chooses and will buy a product based on the consumer's
experience in choosing, using, consuming, or wanting a product. After consumers consider a product, and feel that the product is suitable and are sure that they want to own it, then consumers will definitely make a purchase of that product. The results of research conducted by (Tangka et al., 2022) state that purchase interest has a positive and significant effect on purchasing decisions for Ventela shoe products. Other research conducted by (Luthfiyatillah et al., 2020) also states that the consumer purchasing interest variable has a positive influence on consumer purchasing decisions.

- **H5: Purchase Intention influences Purchase Decisions**

### 6. Influence of Product Quality on Purchasing Decisions through Purchase Intention

Products with good quality and in accordance with what consumers want can influence purchasing decisions indirectly through purchasing interest in consumers’ minds. Research conducted by (Hilmawan, 2019) states that there is a significant influence between product quality on purchasing decisions through purchase interest as an intervening variable. The results of other research from (Dewi, 2019) also state that product quality influences smartphone purchasing decisions through purchase interest as an intervening variable.

- **H6: Product Quality influences Purchasing Decisions through Purchase Intention**

### 7. Influence of Brand Images on Purchasing Decisions through Purchase Intention

A strong brand image can provide superiority and interest to a product, so that consumers can make purchasing decisions about that product. Research from (Muhtarom et al., 2022) states that the brand image variable has a positive and significant effect on purchasing decisions through purchase intention. The results of other research conducted by (Chaniago et al., 2023) show that the brand image variable has a positive and significant influence on purchasing decisions through purchase intention.

- **H7: Brand Images influence Purchase Decisions through Purchase Intention**

#### Figure 2 Framework

![Framework Image](image)

**METHODS**

The population in this study are owners and users of Iphone brand smartphones in Yogyakarta, whose numbers are unknown. So that using Hair's formula to determine the sample. The sample in this study were 115 respondents. The sampling technique used nonprobability sampling with purposive sampling technique. The data source used in this study is primary data, or data obtained directly.

**Tabel 1 Indikator Variabel**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Indikator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Performance (kinerja)</td>
</tr>
<tr>
<td></td>
<td>2. Durability (daya tahan)</td>
</tr>
<tr>
<td></td>
<td>3. Conformance to specifications</td>
</tr>
</tbody>
</table>

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### RESULTS

**Validity Test and Reliability Test**

The validity test can be said to be valid if the data in the study has a value of \( r \) count > \( r \) table. It is known that the \( r \) table in this study with the formula \( df = N-2 \) by looking at the \( r \) table is stated with a value of 0.183. In the validity test, the variable quality product (X1) value of \( r \) count (0.286 s.d. 0.694), the variable brand images (X2) value of \( r \) count (0.590 s.d. 0.698), the variable purchase intention (Z) value of \( r \) count (0.554 s.d. 0.809), and the variable purchase decision (Y) value of \( r \) count (0.513 s.d. 0.758). So it can be concluded that all question items are valid.

The reliability test is said to be reliable if it has a Cronbach’s alpha value of more than 0.6. This study resulted in a Cronbach’s alpha value of (0.841, 0.719, 0.854, 0.833). So it can be concluded that all indicator items are reliable.

**Respondent Characteristics**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Number</th>
<th>Presentase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
<td>49</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>66</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>18-23 years old</td>
<td>101</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td>24 - 30 yrs</td>
<td>10</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>&gt; 30 yrs</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td>Student</td>
<td>94</td>
<td>82%</td>
</tr>
<tr>
<td></td>
<td>Employee</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>ASN/CIVIL SERVANT</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Self-employed</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Domicile</strong></td>
<td>Sleman</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>Bantul</td>
<td>57</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Gunung Kidul</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Kulon Progo</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Yogyakarta City</td>
<td>29</td>
<td>25%</td>
</tr>
</tbody>
</table>
### Uji Normalitas

**Tabel 3 Uji Normalitas**

<table>
<thead>
<tr>
<th>Monthly Income</th>
<th>N</th>
<th>Normal Parameters</th>
<th>Most Extreme Differences</th>
<th>Test Statistic</th>
<th>Asymp. Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2.500.000</td>
<td>87</td>
<td>Mean</td>
<td>Absolute</td>
<td></td>
<td>0.066</td>
</tr>
<tr>
<td>2.500.000 – 3.500.000</td>
<td>16</td>
<td>Std. Deviation</td>
<td>Positive</td>
<td></td>
<td>0.047</td>
</tr>
<tr>
<td>3.500.000 – 4.500.000</td>
<td>4</td>
<td></td>
<td>Negative</td>
<td></td>
<td>-0.066</td>
</tr>
<tr>
<td>&gt; 4.500.000</td>
<td>8</td>
<td></td>
<td></td>
<td>0.200</td>
<td></td>
</tr>
</tbody>
</table>

The normality test has criteria if the Asymp. Sig residual value > 0.05 then the data is normal. Based on the table above, the Asymp. Sig (2-tailed) value is 0.200 > 0.05. So that the research data can be said to be normal.

### Multicollinearity Test

**Table 4 Multicollinearity Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Product (X1)</td>
<td>0.333</td>
<td>3.001</td>
</tr>
<tr>
<td>Brand Images (X2)</td>
<td>0.569</td>
<td>1.756</td>
</tr>
<tr>
<td>Purchase Intention (Z)</td>
<td>0.387</td>
<td>2.582</td>
</tr>
</tbody>
</table>

Dependent variable: Purchase Decision

The multicollinearity test has criteria if the tolerance value > 0.1 and the VIF value < 10.00. From this data, the quality product variable tolerance value is 0.333 > 0.1 and VIF value is 3.001 < 10.00, the brand images variable tolerance value is 0.569 > 0.1 and VIF value is 1.756 < 10.00 variable purchase intention tolerance value is 0.387 > 0.1 and VIF value is 2.582 < 10.00. So it can be concluded that the research data does not occur multicollinearity.

### Heteroscedasticity Test

**Figure 3 Heteroscedasticity Test**

[Scatterplot image]

Dependent Variable: KEPUTUSAN PEMBELIAN

Regression Standardized Residual vs. Standardized Predicted Value
The heteroscedasticity test can use scatterplot, if the dots on the scatterplot spread and do not form a pattern then the data does not occur heteroscedasticity. From the picture above, it shows that the scatterplot points also spread and do not form a pattern, so it can be concluded that the research data does not occur heteroscedasticity.

**Multiple Linear Regression Analysis**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Unstandarized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>9,008</td>
</tr>
<tr>
<td>Quality Product</td>
<td>0,248</td>
</tr>
<tr>
<td>Brand Images</td>
<td>0,196</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0,665</td>
</tr>
</tbody>
</table>

Dependent variable: Purchase Decision

Multiple linear regression tests can be analyzed as follows:

\[ Y = a + \beta X_1 + \beta X_2 + \beta X_3 \]

1. The Bx1 value of 0.248 indicates that quality product has a positive influence on purchasing decisions, meaning that every 1 increase in the quality product variable will affect purchasing decisions by 0.248.
2. The Bx2 value of 0.196 indicates that brand images have a positive influence on purchasing decisions, meaning that every 1 increase in the brand images variable will affect purchasing decisions by 0.196.
3. The Bx3 value of 0.665 indicates that purchase intention has a positive influence on purchasing decisions, meaning that every 1 increase in the purchase intention variable will affect purchasing decisions by 0.665.

**F test**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>ANOVAa I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality product (X1)</td>
<td>82,940</td>
</tr>
<tr>
<td>Brand Images (X2)</td>
<td>0,00</td>
</tr>
<tr>
<td>Purchase Intention (Z)</td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Purchase Decision (Y)

F test testing with the criteria if the sign value <0.05 and the value of f count> f table (3.08), it can be concluded that the independent variable simultaneously affects the dependent variable. Based on the data table above that the sign value is 0.00 <0.05, and the calculated f value is 82.940> 3.08, then the variable quality product, brand images, and purchase intention simultaneously affect the purchasing decision variable.
T test

<table>
<thead>
<tr>
<th>Variabel</th>
<th>t</th>
<th>sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality product (X1)</td>
<td>9,118</td>
<td>0,00</td>
</tr>
<tr>
<td>Brand Images (X2)</td>
<td>1,484</td>
<td>0,141</td>
</tr>
</tbody>
</table>

Variabel dependent: Purchase Intention (Z)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>t</th>
<th>sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality product (X1)</td>
<td>3,148</td>
<td>0,001</td>
</tr>
<tr>
<td>Brand Images (X2)</td>
<td>-0,967</td>
<td>0,336</td>
</tr>
<tr>
<td>Purchase Intention (Z)</td>
<td>7,168</td>
<td>0,000</td>
</tr>
</tbody>
</table>

Dependent variable: Purchase Decision (Y)

The t test criteria are if the sign value <0.05 and the t value > t table. The t table in this study is 1.658.

1. The variable quality product on purchasing decisions, it can be seen that the sign value is 0,001 <0.05, and the t value is 3.148 > 1.658. So it can be concluded that the quality product variable has a positive and significant effect on purchasing decisions.

2. The brand images variable on purchasing decisions, it can be seen that the sign value is 0.336 > 0.05, and the t value is -0.967 < 1.658. It can be concluded that the brand images variable has no effect on purchasing decisions.

3. The quality product variable on purchase intention, it can be seen that the sign value is 0,00 <0.05, and the t value is 9.118 > 1.658. So it can be concluded that the quality product variable has a positive and significant effect on purchase intention.

4. Brand images variable on purchase intention, it can be seen that the sign value is 0.141 > 0.05, and the t value is 1.484 < 1.658. So it is concluded that the brand images variable has no positive and insignificant effect on purchase intention.

5. Purchase intention variables on purchasing decisions, it is known that the sign value is 0.000 <0.05, and the t value is 7.168 > 1.658. So it is concluded that the purchase intention variable has a positive and significant effect on purchasing decisions.

Test Coefficient Of Determination (R2)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>R square</th>
<th>Std. error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Product (X1)</td>
<td>0.683</td>
<td>2.649</td>
</tr>
<tr>
<td>Brand Images (X2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intention (Z)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Purchase Decision (Y)

The independent variables of product quality, brand images, and purchase intention on the dependent variable of purchasing decisions. Equation 2 has an R square value of 0.683, which means that the three independent variables affect the dependent variable by 68.3% of 100%, and the remaining 31.7% is influenced by other variables outside this study.
1) Quality product on purchasing decisions, through purchase intention.

The value of A is 0.556 and Std.Error A is 0.043, while the value of B is 0.888 and the value of Std.Error B is 0.060. The results of the calculate sobel-test show that the one-tailed probability value is 0.0 < 0.05, and the two-tailed probability value is 0.0 < 0.05. So it can be concluded that the sixth hypothesis, namely the purchase intention variable, is able to mediate the quality product variable on purchasing decisions.

2) Brand Images on purchasing decisions, through purchase intention.

The value of A is 0.974 and Std.Error A is 0.132, while the value of B is 0.888 and the value of Std.error B is 0.060. The calculate sobel-test results show that the one-tailed probability value is 0.0 < 0.05, and the two-tailed probability value is 0.0 < 0.5. So it can be concluded that the seventh hypothesis, namely purchase intention, is able to mediate the brand images variable on purchasing decisions.

DISCUSSION
The Effect of Quality Product on Purchasing Decisions

Based on testing the first hypothesis using the t test, the sign value is 0.001 < 0.05, and the t value is 3.148 > 1.658. So it can be concluded that the first hypothesis, namely the quality product variable is accepted, and partially has a positive and significant effect on purchasing decisions for Iphone brand smartphones in Yogyakarta.
The Effect of Brand Images on Purchasing Decisions

Based on testing the second hypothesis using the t test, the sign value is 0.336 > 0.05 and the t value is -0.967 < 1.658. So it can be concluded that the second hypothesis of the brand images variable is rejected, brand images have no influence on purchasing decisions for Iphone brand smartphones in Yogyakarta.

Influence of Product Quality on Purchase Intention

Based on testing the third hypothesis using the t test, it produces a sign value of 0.00 < 0.05 and a t value of 9.118 > 1.658. So it can be concluded that the third hypothesis of product quality variables on purchase intention is accepted. Product quality partially has a positive and significant effect on purchase intention to purchase iPhone brand smartphones in Yogyakarta.

Influence of Brand Images on Purchase Intention

Based on testing the fourth hypothesis using the t test, it produces a sign value of 0.141 > 0.05 and a t value of 1.484 < 1.658. So it can be concluded that the fourth hypothesis of brand image variables on purchase intention is rejected. Brand image has no effect on purchase intention when purchasing an iPhone brand smartphone in Yogyakarta.

Influence of Purchase Intention on Purchase Decisions

Based on testing the fifth hypothesis using the t test which produces a sign value of 0.00 < 0.05 and a t value of 7.168 > 1.658. So it can be concluded that the fifth hypothesis of purchase intention variables partially has a positive and significant effect on purchasing decisions for IPhone brand smartphones in Yogyakarta.

Influence of Product Quality on Purchasing Decisions through Purchase Intention

Based on testing the sixth hypothesis using the Sobel test, it produces a one-tailed probability value of 0.0 < smaller than 0.05, and a two-tailed probability value is also 0.0 < smaller than 0.05. So it can be concluded that the purchase intention variable is able to mediate the product quality variable on the decision to purchase an iPhone brand smartphone in Yogyakarta.

Influence of Brand Images on Purchasing Decisions through Purchase Intention

Based on testing the seventh hypothesis using the Sobel test, it produces a one-tailed probability value of 0.0 < smaller than 0.05, and a two-tailed probability value is also 0.0 < smaller than 0.05. So it can be concluded that the purchase intention variable is able to mediate the brand image variable on the decision to purchase an iPhone brand smartphone in Yogyakarta.

CONCLUSION

Based on the results of data analysis from research that has been conducted on the purchase of iPhone brand smartphones in Yogyakarta with a sample size of 115 respondents, the following conclusions can be drawn:

1. Quality Product has a positive and significant effect on purchasing decisions for iPhone brand smartphones in Yogyakarta.
2. Brand Images has no influence on purchasing decisions for iPhone brand smartphones in Yogyakarta.
3. Quality Product has a positive and significant effect on Purchase Intention on purchasing an iPhone brand smartphone in Yogyakarta.
4. Brand Images has no influence on Purchase Intention on the purchase of iPhone brand smartphones in Yogyakarta.
5. Purchase Intention has a positive and significant effect on purchasing decisions for Iphone brand smartphones in Yogyakarta.
6. Purchase Intention is able to mediate Quality Product on Purchasing Decisions for Iphone brand smartphones in Yogyakarta. This shows that Quality Product affects Purchasing Decisions indirectly through the role of Purchase Intention.
7. Purchase Intention is able to mediate Brand Images on Purchasing Decisions for Iphone brand smartphones in Yogyakarta. This shows that Brand Images affects Purchasing Decisions indirectly through the role of Purchase Intention.

SUGGESTION

Suggestions for further researchers, especially in the field of marketing management, are advised to be able to seek more information related to the company to be studied, and it is also expected to use a larger sample, as well as add new indicators or independent variables to find out broadly whether there is an influence of other variables on purchasing decisions.

REFERENCES


