THE INFLUENCE OF PRODUCT QUALITY, PRODUCT DESIGN AND BRAND IMAGE ON THE PURCHASE DECISION OF HONDA BEAT MOTORCYCLE DEALER NUSANTARA SAKTI WEST JAKARTA

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Abstract:
This study aims to determine the effect of the t test on product quality, product design and brand image variables on purchasing decisions. The sample in this study was 100 respondents who made a decision to purchase a Honda Beat motorcycle dealer Nusantara Sakti. Inferential analysis technique with multiple linear regression and using Statistical Product and Service Solution (SPSS) version 20. From the t test results show that the Product Quality variable (X1) does not have a large influence 0.498 < 1.984 Product Design variable (X2) does not have a significant effect 0.828 < 1.984 and Brand Image (X3) has an influence of 8.098 > 1.984 on purchasing decisions. It can be concluded that product quality and product design have no effect on purchasing decisions and brand image variables affect purchasing decisions.

Keywords: Product Quality, Product Design, Brand Image and Purchase Decision

INTRODUCTION
The automotive industry is competing with each other to attract consumer interest by releasing new products. Each automotive company makes a type of production with a new product design, different types, and competitive costs (Wongso, 2012). According to previous research, the success of an automotive industry will not be achieved if consumers have not made their choice of the product and made a decision to buy the product (Sopiah & Etta, 2016). Purchasing beliefs that refer to consumers are usually carried out on consumer consistency in a product seen from all consumers in buying a kind of production due to the absence of brands or other productions that are the choice of consumers themselves (Mawey, 2013).

The rapid growth of the motorcycle industry in Indonesia is also influenced by the entry of a number of motorcycle manufacturers from outside which on average come from Japan and China. Manufacturers are competing to create quality products and create new innovations to attract consumers.

PT Astra Honda Motor is a company engaged in automotive in the production of motorcycles. Pt Astra Honda motor produces several types of picking motorcycle products including Honda Vario 125, Vario 110 CW, Beat, Spacy, Scoopy, ADV, and PCX. Honda Beat is a motorcycle produced by PT Astra Honda Motor that has fuel economy, power, acceleration...
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consistency. In its competition, Honda Beat has the main competitors from Yamaha and Suzuki companies, the following will be displayed top brand index Honda Beat motorcycles and competitors for 2017-2020.

Table 1. Honda Beat Dealer Nusantara Sakti Motorcycle Sales Data 2018 - 2020

<table>
<thead>
<tr>
<th>Month/year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>140</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>February</td>
<td>59</td>
<td>41</td>
<td>51</td>
</tr>
<tr>
<td>Maret</td>
<td>90</td>
<td>45</td>
<td>61</td>
</tr>
<tr>
<td>April</td>
<td>93</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>From</td>
<td>95</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>June</td>
<td>85</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>July</td>
<td>194</td>
<td>60</td>
<td>73</td>
</tr>
<tr>
<td>Augustus</td>
<td>117</td>
<td>72</td>
<td>78</td>
</tr>
<tr>
<td>September</td>
<td>80</td>
<td>75</td>
<td>150</td>
</tr>
<tr>
<td>October</td>
<td>85</td>
<td>70</td>
<td>123</td>
</tr>
<tr>
<td>November</td>
<td>103</td>
<td>62</td>
<td>142</td>
</tr>
<tr>
<td>December</td>
<td>89</td>
<td>30</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>1230</td>
<td>620</td>
<td>932</td>
</tr>
</tbody>
</table>

In Table 1 above, Dealer Nusantara Sakti sales of Honda Beat motorcycles in 2018 had a total of 1230 units, while in 2019 Dealer Nusantara Sakti sales of Honda Beat motorcycles dropped to 620 units and in 2020 Dealer Nusantara Sakti sales of Honda Beat motorcycles increased by 932 units. This can illustrate a problem with purchasing decisions. Purchasing decision issues can be influenced by product quality, product design, and brand image in purchasing decisions.

Purchasing decision is a process that starts from consumers in recognizing the problem, looking for information about the product or brand image and can evaluate the product or brand how well each alternative can solve the problem which then a series of processes lead to purchasing decisions (Husein, 2016).

Product quality has an influence on purchasing decisions (Asriani &; Muhajirin, 2021), stating that product quality is a product or service characteristic that is in accordance with its ability to meet stated or implied customer needs. Product quality is one of the main positioning tools of a marketer. According to (Phillip Kotler &; Kevin, 2016) said quality is the totality of features and characteristics of a product or service that is able to satisfy consumer needs.

Product design has an influence on purchasing decisions (Rian Pramono, 2012) in research (Asriani &; Muhajirin, 2021). Product design is the value contained in a product and in the form of a distinctive and attractive product appearance and a differentiator from competing products, where product design can produce its own attractive allure. Product design is also a management tool to translate the results of research and development activities carried out before into real designs that will be produced and sold for profit. (PK Kotler &; Keller, 2012) in research (Asriani &; Muhajirin, 2021) identified "design is the totality of features that affect how a product looks, feels and functions to a consumer". It is that design represents the totality of features that affect how a product looks, feels and functions for consumers.
Brand image has an influence on purchasing decisions (Ihda, Waluyo, & Widayanto, 2014) brand image is a product that is marketed and offered by companies that have more selling value that is not owned by competing companies. (Tjiptono & Fandy, 2011) Brand image is a name, term, sign, symbol or symbol, design, color, movement or combination of other product attributes that are expected to provide identity and differentiation to competitors' products.

Nusantara Sakti motorcycle dealers include a fairly large dealer center, especially in the West Jakarta area. Nusantara Sakti dealer is located at Jalan Brigjen Katamso No 5, RT 08, RW 2, Palmerah District, West Jakarta. Nusantara Sakti motorcycle dealer has many customers who serve purchases and service motorcycles.

This study aims to investigate the influence of product quality, brand image, and product design on the purchase decision of Honda Beat motorcycles at Nusantara Sakti Dealership West Jakarta. With a focus on analyzing the impact of product quality on purchasing decisions, evaluating brand image, and research into the influence of product design, the aim of this study is to gain a deeper understanding of the extent to which these factors influence consumer preferences. The benefits involve contributing to the company by providing valuable insights for marketing decision-making and product development, while for researchers, the research is an opportunity to apply the knowledge gained during the study and broaden horizons in the field of marketing. Implications include contributing to marketing and management literature, providing a basis for further research, and may assist other companies in optimizing their marketing strategies in the context of consumer purchasing decisions.

RESEARCH METHODS

This study uses a quantitative approach with the object of research focusing on the purchase decision of Honda Beat motorcycles at Nusantara Sakti Dealer West Jakarta, with independent variables involving product quality, product design, and brand image. The source of data used is quantitative, obtained through the distribution of questionnaires with a Likert scale to 100 respondents who are buyers or users of Honda Beat motorcycles at the dealership. The sampling method uses non-probability purposive sampling, with the criteria of respondents who have used Honda Beat motorcycles for at least one year. Data collection was carried out by distributing questionnaires through Google Forms in the period December 2, 2021 to December 27, 2021.

The collected data will be analyzed descriptively to provide a general idea, while inferential analysis uses multiple linear regression to test hypotheses. Previously, validity and reliability tests were carried out on research instruments, as well as classical assumption tests such as normality, multicollinearity, heteroscedasticity, and autocorrelation. The F test will be used to assess the significance of the influence together of the independent variable on the dependent variable, and the t test will be used to evaluate the partial influence of the independent variable on the dependent variable.

RESULTS AND DISCUSSION

Normality Test

One Sample Kolmogorov-Smirnov Test or Normality Test is used to determine the distribution of the population, whether it follows the distribution theoretically (normal, poisson or uniform). Aims to test whether in the regression model, the dependent variable and the independent variable both have a normal distribution. The distribution data is said to
be normal if the significance value level is > 0.05 and if the opposite is < 0.05 then it is said to be abnormal. Below is presented a table of results from the Normality Test in this study.

**Table 2. One-Sample Kolmogorov-Smirnov Test**

<table>
<thead>
<tr>
<th></th>
<th>standardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>100</td>
</tr>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt; Mean</td>
<td>1.83812308</td>
</tr>
<tr>
<td></td>
<td>.100</td>
</tr>
<tr>
<td></td>
<td>.100</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>-.100</td>
</tr>
<tr>
<td></td>
<td>1.003</td>
</tr>
<tr>
<td></td>
<td>.267</td>
</tr>
</tbody>
</table>

Kolmogorov-Smirnov Z
Asymp. Sig. (2-tailed)

a. Test distribution is Normal.
b. Calculated from data.

Source: Classical Assumption Test Output Data Processed 2021.

From Table 2 above can be seen in the column Asymp.Sig (2-tailed) is 0.267 above 0.05 or (0.267>0.05). So it can be said that the distribution of purchasing decision results derived from product quality, product design and brand image is normally distributed.

In Figure 1 above that it can be known that the points spread around the line and follow the diagonal line then the residual value is normal.

**Multicollinearity Test**

Multicollinearity is a state in which between two or more independent variables in a regression model a perfect or near-perfect linear relationship occurs. The Multicollinearity
Test aims to test whether the regression model found a correlation between independent variables.

A good regression model should be free of multicollinearity or there should be no correlation between independent variables. The impact carried out with multicollinearity is that the standard error for each coefficient becomes high so that the t-count becomes low, the standard error of estimate will be higher with the increase of the independent variable and the influence of each independent variable is difficult to detect. To find out that multicollinearity occurs can be seen from the magnitude of the VIF number as shown in the table below.

### Table 3. Multicollinearity Test Output

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>BRIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality</td>
<td>.542</td>
<td>1.844</td>
<td></td>
</tr>
<tr>
<td>Product Design</td>
<td>.432</td>
<td>2.317</td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td>.451</td>
<td>2.218</td>
<td></td>
</tr>
</tbody>
</table>

c. Dependent Variable: Purchasing Decision  
Source: Multicollinearity Output Data. Processed 2021

Based on Table 3 it can be seen that the tolerant of the variable above is more than 0.1 and the VIF of the variable is below 10. The multicollinearity test is seen from the VIF and Tolerance values, the standard used is if Tolerance> 0.1 and VIF<10 then multicollinearity does not occur.

**Heteroscedasticity Test**

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another fixed observation, then it is called heteroscedasticity or heteroscedasticity occurs. In this study, researchers used a graph method or pattern of dots on the basic regression graph criteria in decision making, namely:

a. If there is a certain pattern, such as the dots forming a certain regular pattern (wavy, widening then narrowing), it indicates that heteroscedasticity has occurred.

b. If there is no clear pattern, and the dots spread above and below the number 0 on the Y-axis, then heteroscedasticity does not occur.

The following is the output result of the graph method heteroscedasticity test.
Based on the results of the scatterplot, it appears that the plot formed spread does not have a certain pattern or spreads above and below the zero on the Y axis and on the right and left on the X axis.

**Autocorrelation Test**

Autocorrelation test is performed to see whether or not there is autocorrelation in a regression with Durbin-Watson as follows:

**Table 4. Autocorrelation Test results**

<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>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.808a</td>
<td>.652</td>
<td>.6421.867</td>
<td></td>
<td>2.169</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Brand Image, Product Quality, Product Design  
b. Dependent Variable: Purchasing Decision  
Source: SPSS output. Processed 2021

Table 4 shows a Durbin-Watson (DW) value of 2.169. The dU value can be seen from the Durbin-Watson table, \( n = 100, k = 3 \), then the dU value can be obtained at 1.7364, dL at 1.6131, then the 4-dU value at 2.264. If included in the criteria so that the results of \( dU < DW < 4-dU \) \( (1.7364 < 2.169 < 2.264) \) which means that the regression model obtained does not occur autocorrelation.

**Double Linier Regression Analysis**

Multiple linear regression analysis is a form of analysis that discusses the influence of the independent variable (X) consisting of Product Quality, Product Design and Brand Image on the dependent variable (Y), namely Purchase Decision. The calculation of the regression
coefficient in this study uses the SPSS application, which has the following results:

![Table 5. Multiple Linear Regression Analysis](image)

Based on Table 5, it can be explained that the multiple linear regression equation known in the Standardized Coefficients column is as follows:

\[ Y = 0.041X_1 + 0.076X_2 + 0.726X_3 \]

Information:
Y= Purchase Decision X1= Product Quality X2= Product Design X3= Brand Image

1. From the multiple linear regression test above, it can be explained that if the free variable Product Quality (X1) is 0.041. This means that if Product Quality increases, Purchasing Decisions also increase.
2. From the multiple linear regression test above, it can be explained that if the free variable Product Design (X2) is 0.076. This means that if Product Design increases, Purchasing Decisions also increase.
3. From the multiple linear regression test above, it can be explained that if the free variable Brand Image (X3) is 0.726. This means that the Brand Image has increased, then the Purchase Decision has also increased.

**Test F**

To test the significance of the influence of independent variables, namely Packaging, Product Variation and Brand Image on the dependent variable, namely Purchasing Decision, the ANOVA test (Test F) was used. The test results using a significance level of 0.05 are as follows:

![Table 6. Test F](image)

Based on Table 6 above, it is found that F is calculated at 60.074 with a sig of 0.000,
The Influence of Product Quality, Product Design and Brand Image on the Purchase Decision of Honda Beat Motorcycle Nusantara Sakti Dealer West Jakarta

then the value of sig (0.000) is smaller than alpha or the error limit rate obtained is 5% (\( \alpha = 0.05 \)). The meaning of the Sig value in the Anova table, the model is said to be significant because it is below the specified alpha value limit of 0.000 < 0.05. It states that Product Quality, Product Design and Brand Image influence the Purchasing Decision.

**Coefficient of Determination (R2)**

Coefficient of Determination (R2) analysis is used to give an understanding of how much the percentage of influence between independent variables on the dependent variable:

**Table 7. Coefficient of Determination (R2)**

<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>.808a</td>
<td>.652</td>
<td>.642</td>
<td>1.867</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Brand Image, Product Quality, Product Design  
b. Dependent Variable: Purchasing Decision  
Source: Output Data Coefficient of Determination (R²)

Based on Table 7 above, the correlation coefficient (R) of 0.808 from the Adjusted R square of 0.642 = 64.2% of the value of the coefficient of determination (R2) of 64.2% means that 64.2% of the dependent variables of the Purchase Decision can be explained by the independent variables of Product Quality, Product Design and Brand Image while the remaining 35.8% is explained by other variables that are not included in this study.

**Test t**

This test is used to determine the significance of the effect of the independent variable partially or individually on the dependent variable. The effect can be estimated by the cynical value and t count obtained. To find out whether Product Quality (X1), Product Design (X2) and Brand Image (X3) have a significant effect on Purchasing Decisions (Y). The test uses a significance level of 0.05 with the following criteria:

a) If t count and sig > \( \alpha = 0.05 \) then Ho is rejected and Ha is accepted product quality, product design, and brand image have a positive and significant effect on the Purchase Decision.  
b) If t count and sig < \( \alpha = 0.05 \) then Ho is accepted and Ha is rejected product quality, product design, and brand image have no positive and significant effect on the Purchase Decision. The t test using coefficients analysis with SPSS processing obtained the following data:

**Table 8 Test t Coefficientsa**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Say.</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>-.756</td>
<td>1.419</td>
<td>-.533</td>
<td>.595</td>
</tr>
<tr>
<td>Product Quality</td>
<td>.052</td>
<td>.104</td>
<td>.041</td>
<td>.498</td>
</tr>
<tr>
<td>1</td>
<td>Product Design</td>
<td>.169</td>
<td>.204</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.828</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.410</td>
</tr>
</tbody>
</table>
Based on Table 8 it can be concluded that the results of this study are:

1. Based on Table 4.35 it can be explained that the t-count value is 0.498 < 1.984 t-table and significant 0.619 (0.619 > 0.05) then H0 is accepted and Ha is rejected, it can be concluded that Product Quality does not have a positive and significant effect on the Purchase Decision.

2. The Influence of Product Design on Purchasing Decisions
   Based on Table 4.35 it can be explained that the t-count value is 0.828 < 1.984 t-table and significant 0.410 (0.410 > 0.05) then H0 is accepted and Ha is rejected, it can be concluded that Product Design does not have a positive and significant effect on the Purchase Decision.

3. The influence of brand image on purchasing decisions
   Based on Table 4.35 it can be explained that the t-count value of 8.098 > 1.984 t-table and significant 0.619 (0.000 < 0.05) then H0 is rejected and Ha is accepted, it can be concluded that Brand Image has a positive and significant effect on the Purchase Decision.

Discussion

The Influence of Product Quality on Purchasing Decisions
Based on the results of research that has been conducted using SPSS version 20 obtained from performance indicators, features, reliability and durability of product quality results do not have a positive and significant effect on Purchasing Decisions. Based on the results of the t-test showing that t-count 0.498 < 1.984 t-table and significant 0.619 (0.619 > 0.05) then H0 is accepted and Ha is rejected, it can be concluded that Product Quality does not have a positive and significant effect on the Purchase Decision.

This could be because Beat motorcycles provide prices that are considered competitive so they do not see product quality anymore because of the increasingly fierce competition with many motorcycle models made by other competitors, so consumers only stick to the price offered by the company in accordance with customer purchasing power (Rawung et al., 2015).

This is in accordance with research conducted by Rawung et al., (2015) entitled Analysis of Product Quality, Brand and Price on Suzuki Motorcycle Purchasing Decisions at Pt. Sinar Galesong Pratama Manadoyang stated the results that product quality does not have a positive and significant effect on purchasing decisions.

The Influence of Product Design on Purchasing Decisions
Based on the results of research that has been conducted using spss version 20, it is obtained from indicators of characteristics and quality of conformity that product design does not have a positive and significant effect on Purchasing Decisions. Based on the results of the t-test showing that t-count 0.828 < 1.984 t-table and significant 0.410 (0.410 > 0.05) then H0 is accepted and Ha is rejected, it can be concluded that Product Design has no significant effect on the Purchase Decision.

This happens because customers no longer pay attention to the design of the product because the products produced have followed the times and consumers involve technology and individual information to decide in purchasing products (Adonis &; Silintowe, 2021).
This is in accordance with the results of research conducted by (Adonis & Silintonwe, 2021) with the title Product Design, Product Quality, Brand Image and Product Price on Generation Y Purchasing Decisions which stated that product design has no effect and is significant on purchasing decisions.

The influence of brand image on purchasing decisions

Based on the results of research that has been conducted using SPSS version 20 obtained from indicators of brand strength, brand excellence and brand uniqueness that there is a positive and significant influence between Brand Image on Purchasing Decisions. Based on the results of the t-test shows that the t-count is 8.098 > 1.984 t-table and significant 0.619 (0.000 < 0.05) then H0 is rejected and Ha is accepted, it can be concluded that Brand Image has a positive and significant effect on the Purchase Decision.

This is mainly indicated by the highest Mean with a score of 4.28. The better the positive brand image given by Honda Beat, the more it will increase purchasing decisions that state that brand image has a significant and positive effect on Purchasing Decisions (Yustiawan & Prijati, 2016).

According to (Tjiptono & Fandy, 2011) Brand image is a description of the association and consumer beliefs about a particular brand. While association is an attribute that exists in the brand and has a level of strength. This is in accordance with the results of research conducted by (Yustiawan & Prijati, 2016) which stated that brand image has an effect and is significant on purchase decision.

CONCLUSION

Based on the results of research on the influence of Product Quality, Product Design and Brand Image on Purchasing Decisions. So several conclusions are obtained as follows:

1. Product Quality does not have a positive and significant effect on the purchase decision of Honda Beat Dealer Nusantara Sakti West Jakarta motorcycle.
2. Product Design does not have a positive and significant effect on the Purchase Decision of Honda Beat motorcycle Dealer Nusantara Sakti West Jakarta.
3. Brand has a positive and significant influence on the Purchase Decision of Honda Beat motorcycle Dealer Nusantara Sakti West Jakarta.

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