

# The Relation of Price, Product Quality And Brand Image To Customer Loyalty In Manufacturing Companies

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## Abstract

*The purpose of writing this thesis is to determine the extent to which Price (X1), Product Quality (X2) and Brand Image (X3) can affect Customer Loyalty (Y) of human resources. The author conducted research using multiple linear analysis, correlation coefficient analysis, calculating the coefficient of determination, and testing the hypothesis by looking for the t-count value, then comparing t-count with t-table, and testing the hypothesis by finding the f-count, then comparing f-count with f table. The results of the analysis obtained with the following details: From the results of multiple linear analysis obtained the equation  $Y = 4.361 + 0.403 X1 + 0.516 X2$ , and from the results of the price coefficient has a positive and very strong correlation to customer loyalty that is equal to 0.689, Product Quality has a positive and very strong correlation to customer loyalty 0.758. From the results of the coefficient of determination (KD) brand image affects customer loyalty by 47.5%, and the remaining 52.5%, influenced by other factors. Based on the results of hypothesis testing, it is obtained that the t-count for the price is 3.309, the t-count for product quality is 4.463, with a t-table of 1.6722 obtained from the t-table distribution for  $df = 50 - 2$  and the level of significance is 0.05. In other words,  $H_a$  is accepted and  $H_o$  is rejected, because  $t \text{ count} > t \text{ table}$ . Based on the hypothesis test for model 1, the  $f$  arithmetic result is 43,387, for model 2, the  $f$  arithmetic result is 31.664, with  $f$  table 1.45 with a significant level of 0.000, the number  $0.000 < 0.05$ , thus  $H_o$  is rejected and  $H_a$  is accepted, because  $f \text{ count} > f \text{ table}$ . Based on the results of this study, it can be concluded that there is a relationship between product quality and customer loyalty and so on.*

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## I. INTRODUCTION

Marketing management is a benchmark by which a company can be judged to achieve its success and goals or not. Good marketing management can make a company better and at least if well-organized marketing management will hinder the level of progress of the company.

At this time a lot of emerging companies - companies with various forms of business, this indicates that the business world is increasingly advanced. However, in developing its business, companies need to maintain a positive image so that customers are interested in buying or using the company's services.

Every company that carries out its business activities, especially for marketing activities, has a goal to increase sales for the company, one of which is by maintaining a brand image in the eyes of consumers more in the eyes of customers who place their loyalty to the company.

Price becomes very important for customers because it will be a guideline to measure the suitability between the benefits of the product received and the sacrifices that have been given in the form of money or certain sacrifices. Customers will also make the price as one of the standards of the level of perceived satisfaction (Edy et al., 2021).

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Product quality for consumers can relate to consumer loyalty. Consumers will be loyal to products with good quality. For this reason, companies must continue to maintain consumer trust by paying attention to the quality of their products so that consumers survive with the products produced by the company.

Brand image can be judged as good or bad from the quality of the products produced, therefore product quality also plays an important role in increasing sales. From this quality, it can reflect the brand image in the field of production.

In increasing consumer loyalty, the company must implement a good strategy and neatly arranged. The strategy is very decisive for the company in increasing customer loyalty.

In this study, the discussion of the analysis focuses on the comparison of product quality and brand image related to customer loyalty.

Companies that really want to pay attention to consumers must pay attention to the basic needs of buyers who are selected as targets, companies can produce quality products and competitive prices so that consumers feel satisfied and support the success of a company so as to create a brand image that is well known by consumers.

## II. RELATED WORKS/LITERATURE REVIEW (OPTIONAL)

### Price

According to S. Assauri (2013: 233) in his book entitled Production and Operations Management states that:  
*"Price is a marketing element that generates sales revenue, while other elements only generate costs. Because it generates sales revenue, the price relates to the level of sales, the level of profit, and the market share obtained by the company."*

According to Kotler and Keller (2012: 519) in their book entitled Marketing Management states that:  
*"Price is also one of the most flexible elements of the marketing mix. Prices can be changed quickly, unlike product characteristics and distribution agreements"*.

According to Basu Swastha (2014:45) in his book entitled Sales Management said that:

*"Price is the amount of money (plus some goods if possible) needed to get a number of combinations of goods and services"*.

According to Buchari Alma (2014:169) in his book entitled Marketing Management and Service Marketing, he states the notion of price, namely:

*"An attribute attached to an item that allows the item to fulfill needs, wants and satisfy consumers expressed in money"*.

Based on the understanding of price according to the experts above, it can be concluded that price is a globally determined value of money that must be issued by someone to get a desired product or service.

### Product quality

The product is the first and most important element in the marketing mix. Marketing mix planning begins with formulating an offer that can meet the needs or desires of consumers. According to Kotler and Keller (2012:448) in their book entitled Marketing Management explains that:

*"A product is anything that can be offered to a market for attention, acquisition, use, or marketing, including physical goods, experiences, events, people, places, properties, organizations, ideas"*.

According to Fandy Tjiptono (2013: 95) in his book entitled Service Marketing states that:

*"Product is anything that a producer can offer to be noticed, requested, sought, purchased, used or consumed by the market to fulfill the needs or desires of the relevant market. The products offered include physical goods, services, people/personal, places, organizations, and ideas."*

From this opinion, it can be concluded that the product is a form of offering to potential customers regarding goods and services that can meet their needs.

### Brand Image

According to Rosadi Ruslan (2013: 80) in his book entitled Management of public relations and Media Communication states that:

*" Definition of Image isa person's set of beliefs, ideas, and impressions of a particular object. A person's attitudes and actions towards an object will be determined by the image of the object that displays its best condition."*

According to Jamiluddin Ritonga (2014: 128) in his book, Public Relations Research, defining brand image is:

*"the character of the company itself and the way the company seeks to relate people's impressions of the company"*

### Customer loyalty

According to Fandy Tjiptono (2013: 105) in his book entitled Service Marketing provides the following understanding:

*“Customer Loyalty It is well known that the purpose of a business is to make its customers feel satisfied. creation Satisfaction can provide several benefits, including the relationship between the company and its customers to be harmonious so as to provide a good basis for repeat purchases and the creation of brand loyalty and make a word of mouth recommendation that is profitable for the company.*

Consumer loyalty is a customer's commitment to a brand, store or supplier based on a very positive nature in long-term purchases. From this understanding it can be interpreted that brand loyalty is obtained because of a combination of satisfaction and complaints. Meanwhile, customer satisfaction comes from how much the company's performance is to generate satisfaction by minimizing complaints so that long-term purchases are made by consumers.

Customer loyalty is very important for companies that maintain their business continuity and the continuity of their business activities. Loyal customers are those who are very satisfied with certain products and services, so they have the enthusiasm to introduce them to anyone they know. Then at the next stage, these loyal customers will expand their "loyalty" to other products made by the same manufacturer. And in the end they are consumers who are loyal to a particular manufacturer or company forever.

According to Kotler and Keller (2012:78) in their book entitled Marketing Management states that high loyalty is:

*“Customers who make purchases with an increasing percentage of certain companies than other companies”.*

In an effort to retain customers should get a greater priority than to get new customers. Therefore, customer loyalty based on pure and continuous satisfaction is one of the greatest assets a company can acquire.

### III. METHODS

Data analysis is the process of simplifying data into a form that is easier to read and interpret after the data is analyzed. In writing this thesis, the author conducts research using quantitative analysis with the frequency table method, namely analyzing data by describing or describing 100 data that have been collected and presenting them in the form of numbers without intending to make generally accepted conclusions. In this study, there are four variables from the title that the author has determined, namely Service Quality, Promotion, Price and Decision Making. Where there are three independent variables (independent variables) that are related to one dependent variable (dependent variable). The operationalization stage is the concept translation stage which is still a variable, indicator, and operationalization definition. In this study it can be explained as follows:

1. Product Quality is the first independent variable (X1)
2. Price is the second independent variable (X2)
3. Brand image is the third independent variable (X3)
4. Decision Making is the dependent variable (Y)

### IV. RESULTS

The author analyzes the relationship between product quality, product prices and brand image on customer loyalty in manufacturing companies using research conducted by distributing 10 statements for each variable to 100 respondents who were used as research samples.

#### Validity and Reliability Test

##### Product Quality Variable Validity and Reliability Test (X1)

That the respondents who were examined on the results of the questionnaire regarding the product quality variable amounted to 100 respondents and all data were not excluded from the analysis. That the value of Cronbach's Alpha is 0.782 with a total of 10 statements.

**Table 1. Case Processing Summary**

|       |          | N   | %     |
|-------|----------|-----|-------|
| Cases | Valid    | 100 | 100.0 |
|       | Excluded | 0   | .0    |
|       | Total    | 100 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Table 2. Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| ,782             | 10         |

When compared with the Alpha value according to Duwi Priyatno (2013:30) in his book entitled Mandiri Learning Data Analysis With SPSS For Beginners, the Cronbach's Alpha value of the product quality variable is greater than the value of = 0.70. So it can be concluded that all questionnaires regarding product quality variables are proven to be reliable and respondents show stability and have high consistency in answering questionnaires.

Table 3. Item-Total Statistics

|       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| X1P1  | 35.83                      | 14,244                         | .216                             | .788                             |
| X1P2  | 36.03                      | 14,050                         | .260                             | .784                             |
| X1P3  | 36.56                      | 12.875                         | .466                             | .762                             |
| X1P4  | 36.21                      | 12.753                         | .565                             | .751                             |
| X1P5  | 36.41                      | 11,497                         | .674                             | .731                             |
| X1P6  | 36.07                      | 13,743                         | .305                             | .780                             |
| X1P7  | 36.73                      | 11,916                         | .587                             | .744                             |
| X1P8  | 36.19                      | 13,529                         | .361                             | .774                             |
| X1P9  | 36.32                      | 12,159                         | .533                             | .752                             |
| X1P10 | 36.71                      | 11.986                         | .500                             | .758                             |

Source: SPSS Version 21.00

- The Item-Total Statistics table shows the results of the validity calculations for 10 statements.
- Determining the value of the  $r_{table}$  with the provision of the level of confidence (degree of freedom = df) the number of respondents is reduced by 2 or  $100 - 2 = 98$  with a significance level of 5%, the  $r_{table}$  value is 0.195.
- Comparing the  $r_{table}$  with each statement item by comparing the Output Corrected Item-Total Correlation with 0.195 ( $r_{table}$ ).
- If the  $r_{table}$  is compared with the  $r_{count}$  value in the Corrected Item-Total Correlation column, then the  $r_{count}$  value of all statements regarding product quality is greater than  $r_{table}$ , meaning that all statements are valid.

**Validity and Reliability Test of Promotion Variables (X2)**

In this study, the authors made 10 statements about product prices to determine whether all of these statements were reliable or not, then a reliability test was carried out. That the respondents who were examined in the results of the questionnaire regarding the product price variable were 100 respondents and all data were not excluded from the analysis. that the value of Cronbach's Alpha is 0.818 with a total of 10 statements.

Table 4. Case Processing Summary

|       |          | N   | %     |
|-------|----------|-----|-------|
| Cases | Valid    | 100 | 100.0 |
|       | Excluded | 0   | ,0    |
|       | Total    | 100 | 100.0 |

- Listwise deletion based on all variables in the procedure.

Source: SPSS Version 21.00

**Table 5. Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .818             | 10         |

Source: SPSS Version 21.00

When compared with the Alpha value according to Duwi Priyatno (2013:30) in his book entitled *Mandiri Learning Data Analysis With SPSS For Beginners*, the Cronbach's Alpha value of the product price variable is greater than the value of = 0.70. So it can be concluded that all questionnaires regarding product price variables are proven to be reliable and respondents show stability and have high consistency in answering questionnaires.

**Table 6. Item-Total Statistics**

|      | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| X2P1 | 36.81                      | 13,509                         | .742                             | .770                             |
| X2P2 | 36.62                      | 17,329                         | .309                             | .819                             |
| X2P3 | 36.60                      | 16,848                         | .418                             | .809                             |
| X2P4 | 36.60                      | 16,929                         | .417                             | .809                             |
| X2P5 | 37.09                      | 15,073                         | .580                             | .792                             |
| X2P6 | 36.91                      | 15,578                         | .545                             | .796                             |
| X2P7 | 37.05                      | 15,240                         | .477                             | .806                             |
| X2P8 | 36.78                      | 16,052                         | .594                             | .794                             |
| X2P9 | 36.86                      | 15,920                         | .486                             | .803                             |
| X2P1 | 36.42                      | 16,630                         | .423                             | .809                             |

Source: SPSS Version 21.00

- Item-Total Statistics* shows the results of the calculation of validity for 10 statements.
- Determining the value of the *r*table with the provision of the level of confidence (degree of freedom = df) the number of respondents is reduced by 2 or  $100 - 2 = 98$  with a significance level of 5%, the *r*table value is 0.195.
- Comparing the *r*table with each statement item by comparing the Output Corrected Item-Total Correlation with 0.195 (*r*table).
- When compared between *r*table and the *r*count value in the Corrected Item-Total Correlation column, then the *r*count value of all statements regarding product prices is greater than *r*table, meaning that all statements are valid.

### Price Variable Validity and Reliability Test (X3)

In this study the authors made 10 statements about brand image to find out whether all of the statements were reliable or not, then a reliability test was carried out. That the respondents who were examined in the questionnaire results regarding the brand image variable amounted to 100 respondents and all data were not excluded from the analysis.

**Table 7. Case Processing Summary**

|       |          | N   | %     |
|-------|----------|-----|-------|
| Cases | Valid    | 100 | 100.0 |
|       | Excluded | 0   | ,0    |
|       | Total    | 100 | 100.0 |

- Listwise deletion based on all variables in the procedure.

Source: SPSS Version 21.00

**Table 8. Reliability Statistics**

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .753             | 10         |

Source: SPSS Version 21.00

In the reliability statistics table above, it can be seen that the value of Cronbach's Alpha is 0.753 with a total of 10 statements. When compared with the Alpha value according to Duwi Priyatno (2013:30) in his book entitled Mandiri Learning Data Analysis With SPSS For Beginners, the Cronbach's Alpha value of the brand image variable is greater than the value of = 0.70. So it can be concluded that all questionnaires regarding brand image variables are proven reliable and respondents show stability and have high consistency in answering questionnaires.

**Table 9. Item-Total Statistics**

|       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| X3P1  | 35.50                      | 10.071                         | .354                             | .742                             |
| X3P2  | 35.84                      | 9,408                          | .485                             | .722                             |
| X3P3  | 35.63                      | 10,074                         | .445                             | .730                             |
| X3P4  | 35.92                      | 9,893                          | .421                             | .732                             |
| X3P5  | 35.74                      | 10,215                         | .422                             | .733                             |
| X3P6  | 35.71                      | 9,885                          | .279                             | .760                             |
| X3P7  | 35.97                      | 9,484                          | .494                             | .721                             |
| X3P8  | 35.74                      | 10,194                         | .429                             | .732                             |
| X3P9  | 35.80                      | 9,899                          | .394                             | .736                             |
| X3P10 | 35.72                      | 9,880                          | .506                             | .722                             |

Source: SPSS Version 21.00

- The Item-Total Statistics table shows the results of the validity calculations for 10 statements.
- Determining the value of the rtable with the provision of the level of confidence (degree of freedom = df) the number of respondents is reduced by 2 or  $100 - 2 = 98$  with a significance level of 5%, the rtable value is 0.195.
- Comparing the rtable with each statement item by comparing the Output Corrected Item-Total Correlation with 0.195 (rtable).
- When compared between rtable and the rcount value in the Corrected Item-Total Correlation column, then the rcount value of all statements regarding brand image is greater than rtable, meaning that all statements are valid.

### Test the Validity and Reality of Decision Making Variables (Y)

In this study, the authors make 10 statements about customer loyalty to determine whether all of these statements are reliable or not, then a reliability test is carried out. that the respondents who were examined on the results of the questionnaire regarding the customer loyalty variable amounted to 100 respondents and all data were not excluded from the analysis.

**Table 10. Case Processing Summary**

|       |          | N   | %     |
|-------|----------|-----|-------|
| Cases | Valid    | 100 | 100.0 |
|       | Excluded | 0   | ,0    |
|       | Total    | 100 | 100.0 |

- Listwise deletion based on all variables in the procedure.

Source: SPSS Version 21.00

**Table 11. Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .746             | 10         |

Source: SPSS Version 21.00

that the value of Cronbach's Alpha is 0.746 with a total of 10 statements. When compared with the Alpha value according to Duwi Priyatno (2013:30) in his book entitled Mandiri Learning Data Analysis With SPSS For Beginners, the Cronbach's Alpha value of the customer loyalty variable is greater than the value of = 0.70. So it can be concluded that all questionnaires regarding customer loyalty variables are proven to be reliable and respondents show stability and have high consistency in answering questionnaires.

**Table 12. Item-Total Statistics**

|      | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| YP1  | 36.46                      | 8.897                          | .401                             | .726                             |
| YP2  | 36.49                      | 9.061                          | .342                             | .734                             |
| YP3  | 36.54                      | 9,281                          | .318                             | .737                             |
| YP4  | 36.98                      | 7.313                          | .566                             | .697                             |
| YP5  | 36.50                      | 9.283                          | .272                             | .742                             |
| YP6  | 36.90                      | 8.232                          | .472                             | .715                             |
| YP7  | 36.48                      | 8,596                          | .474                             | .716                             |
| YP8  | 36.77                      | 7,957                          | .514                             | .707                             |
| YP9  | 36.64                      | 8.819                          | .360                             | .732                             |
| YP10 | 36.45                      | 8,997                          | .324                             | .736                             |

- The Item-Total Statistics table shows the results of the validity calculations for 10 statements.
- Determining the value of the rtable with the provision of the level of confidence (degree of freedom = df) the number of respondents is reduced by 2 or  $100 - 2 = 98$  with a significance level of 5%, the rtable value is 0.195.
- Comparing the rtable with each statement item by comparing the Output Corrected Item-Total Correlation with 0.195 (rtable).

If you compare rtable with the value of rcount in the Corrected Item-Total Correlation column, then the value of rcount

**Analysis of the Relationship between Product Quality, Product Price and Brand Image on Customer Loyalty**

To determine whether or not there is a relationship between variable X1 (product quality), variable X2 (product price) and variable X3 (brand image) to variable Y (customer loyalty) and to measure whether or not the relationship is strong, multiple correlation analysis is used using calculations SPSS (Statistical Package for the Social Sciences)

**Table 13. Descriptive Statistics**

|                  | mean  | Std. Deviation | N   |
|------------------|-------|----------------|-----|
| customer loyalty | 40.69 | 3.221          | 100 |
| product quality  | 40.34 | 3.939          | 100 |
| product price    | 40.86 | 4.388          | 100 |
| brandimage       | 39.73 | 3.449          | 100 |

Source: SPSS Version 21.00

From the table above it can be seen that:

The mean (average) of the Y variable (customer loyalty) with the number of respondents from 100 companies is 40.69 with a standard deviation of 3.221.

The mean (average) of the X1 variable (product quality) with the number of respondents from 100 companies is 40.34 with a standard deviation of 3.939.

The mean (average) of the variable X2 (product price) with the number of respondents 100 companies is 40.86 with a standard deviation of 4.388.

The mean (average) of the X3 variable (brand image) with the number of respondents from 100 companies is 39.73 with a standard deviation of 3,449.

## V. CONCLUSIONS

CORRELATION COEFFICIENT :( Quality of product ) X1 = 0.543,( Price ) X2 = 0,590,( Brand Image ) X3 = 0,572. It means that the relationship between product quality, price, and brand image on customer loyalty in Manufacturing Companies is proven to be STRONG.

From the results of the study obtained the regression equation, namely  
 $Y = 14,772 + 0.189 X1 + 0.228 X2 + 0.226 X3$

Based on the results of the analysis obtained and the conclusions drawn, there are several suggestions given for improvements in managerial policies as follows:

Product quality and brand image variables have a fairly strong and positive influence on customer loyalty. Therefore, the management of the Manufacturing Company should prioritize the development of product quality and brand image in accordance with the existing situation to help increase customer loyalty.

Price variable has a negative effect on customer loyalty. Therefore, the management of the Manufacturing Company should prioritize the price adjustment according to the existing situation to help increase customer loyalty.

Management of Manufacturing Companies is expected to provide greater opportunities in providing product quality and product prices are also expected to provide the right brand image and in accordance with the circumstances of the company and its employees, so that they can show better loyalty which also has an impact on the achievement of the company's vision and mission.

Customer loyalty which is the result of providing product quality, product prices and brand image should be maintained and further improved. This can help the company to achieve its goals and survive in the competition, and become better in the future.

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