# CUSTOMER LOYALTY MODEL: CUSTOMER SATISFACTION AS INTERVENING VARIABLE

#### Echo Perdana KUSUMAH

University of Bangka Belitung, Indonesia echo\_perdana@ubb.ac.id

#### **Abstract**

This study aims to test the research model of Brand Image and Product Quality on Customer Loyalty through Customer Satisfaction. The population of this study is the customers who have Xiaomi smartphone product in Pangkalpinang City, Indonesia. The quota sampling method of 120 respondents is taken in this study. The method of analysis used in this study is path analysis. The results of this study indicate that Product Quality and Brand Image directly influence Customer Loyalty and also influence indirectly through Customer Satisfaction.

**Key words:** Brand Image; Product Quality; Customer Satisfaction; Customer Loyalty

**JEL Classification:** *M310* 

#### I. INTRODUCTION

Today, business competition is becoming sharply increasing both in the domestic and international markets. Development a vibrant and competitive business world demands the company to make orientation changes to the way they creating the product, maintains its products, attract customers, and handle competitors (Keller, K. L., & Kotler, P., 2016). One of the important things that every company needs to do and pay attention to is to attract customers and keep those customers. Nowadays many companies or organizations that have recognized the importance of customer-oriented in all marketing activities (Wang, Y., & Pizam, A. (Eds.)., 2011). Customers are considered important because they determine survival of a company. The customer is the life blood every company, and without customers no one company capable maintaining its existence. Customers will stick with a product if the customer is satisfied with the product (Wilson, R. M., & Gilligan, C., 2012).

Quality is the most fundamental of customer's satisfaction and success in competing (Evans, J. R., & Lindsay, W. M., 2002). The reality is quality is a must for all company and for the purpose of developing quality practices as well as showing to customers that they are able to find hope for high quality (Bergman, B., & Klefsjö, B., 2010) . Product quality is the overall feature as well of a product or service to the ability to satisfy needs expressed or implied (Goetsch, D. L., & Davis, S. B., 2014). Customers will feel satisfied when their evaluation results show that the products they use have quality. Customer satisfaction or dissatisfaction is the result of the difference between customer expectations and perceived performance by such customers (Deng, Z., et al., 2010). Customer satisfaction is a response of customer behavior in the form of evaluation after-sale of a good or service that he felt compared to customer expectations. Customer satisfaction is very depending on the perception and expectations of the customer itself.

Customer satisfaction is also based on the product brand. Brand is a symbol or a sign that helps for customers to identify products, companies that have products with brand the image that is beneficial to the society must be obtained by the position which is better (Hollensen, S., 2015). In addition, the brand is an identity for differentiate the identity of the company's products with the resulting product by competitors. The stronger the Brand image in the minds of customers the stronger also the customer's confidence to remain loyal, against the product he bought so that it can deliver a companies to keep profits from time to time (Chernatony, L., 2010). Competition is increasing among the brands that operate in the market. Only products that have a strong brand image remain able to compete and able to dominate the market.

The relationship between product quality and customer satisfaction has a very close relationship (Jahanshahi, A. A., et al., 2011). Usually, if the product offered a good quality product and the product exceed customer expectations, then it can be said they are satisfied with the product. Conversely even so, if during consumption they tend to be disappointed, they will switch to another product (Ryu, K., Lee, H. R., & Gon Kim, W., 2012). Customer satisfaction itself aroused from the quality provided by the company, increasingly good quality more and more customers are owned, the company must maintain the quality already in possession or add better quality so that customers are not affected by the other competitors and remain loyal to the brand. Brand image usually has influence which is positive towards customer satisfaction. Brand image is an image or something inherent in the customer's mind. The better the perception on the minds of customers towards corporate brand image then customer satisfaction will also be higher (Bian, X., & Moutinho, L., 2011).

Conversely, if the customer's perception of a bad brand image then customer satisfaction will also be lower. From the statement, the appropriate strategy is needed in popularizing a brand. The strategy can start with building a positive brand image in the customer mind. Brand image which is positive then the brand will be known and popular as a brand with guaranteed quality (Shukla, P., 2011). The positive brand image will be customer consideration in determining the product to be purchased. Someone who came back to buy a product, will tell others about his good experience with the product and can be said that the customer is satisfied.

Customers buy a product not because of the physical product solely but because of the benefits arising from that product purchased. Oliver (2014) revealed that satisfaction is an emotional state, a person's post-purchase reaction, can be anger, dissatisfaction, aggravation, neutrality, joy, or enjoyment. Xiaomi is a mobile internet company dedicated to creating user experience in all aspects. Established in 2010, the company has quickly become one of the leading tech companies in China. The company currently has valuations of more than 10 billion USD and has more than 3000 employees (Permadi, G., 2014, February 19). Xiaomi is known to have a different approach in marketing its products. First, Xiaomi launches advanced products at affordable prices. Secondly, Xiaomi only sells its products online to cut marketing and sales costs rather than having to jour-rod in advertising expenditure and sell it in a conventional way. Thanks to that strategy, Xiaomi managed to break the record sales in Indonesia where in September of 2014: 5,000 Xiaomi Redmi 1s successfully sold within 7 minutes; then, November 2014: 10,000 Xiaomi Redmi Note successfully sold within 40 seconds and last April of 2015: 40,000 Xiaomi sold out in a day at the event Mi Fans Sale (Wijaya, K. K. (2015, May 27). Based on the above description shows that brand image and product quality is an important factor in determining loyalty customers and customer satisfaction. Therefore there is interest to examine these variables on the Xiaomi smartphone in Pangkalpinang City, Indonesia.

#### II. RESEARCH MODEL AND HYPOTHESIS

This research model describes the influence of two independent variables namely product quality and brand image in building the dependent variable that is customer loyalty through intervening variable namely customer satisfaction in using Xiaomi smartphone products. Based on an overview of the theoretical foundations previously described, the research model is prepared as follows:

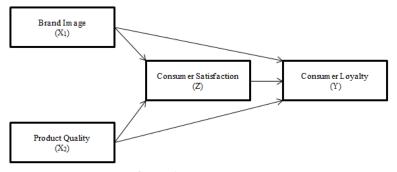


Figure 1 – Research model

Hypothesis is a temporary answer to the problem of research until proven through the data collected. The hypothesis proposed is:

- H1: Brand image positively and significantly influence customer satisfaction.
- H2: Product quality has a positive influence customer satisfaction.
- H3: Customer satisfaction positively influence customer loyalty.
- H4: Brand image positively influence customer loyalty.
- H5: Product quality positively influence customer loyalty.
- H6: Brand image positively influence customer loyalty through customer satisfaction as intervening variable.
- H7: Product quality positively influence customer loyalty through customer satisfaction as intervening variable.

### III. RESEARCH METHODS

This research was conducted with the aim to test the research model of product quality and brand image to customer loyalty with customer satisfaction as intervening variable in Pangkalpinang City, Indonesia. Form of observation conducted in the research is a survey form. Surveys are conducted to obtain the facts from the existing symptoms and find information factually. In the study, data were collected from respondents by using questionnaires. Data used in this study is the primary data. The sampling technique in this research is using the Sampling quota technique. Quota samples taken by researchers as much as 120 respondents and methods of

measurement on this questionnaire using likert scale. The data analysis uses path analysis, where the path analysis is used to estimate the causality relationship between predefined causal variables.

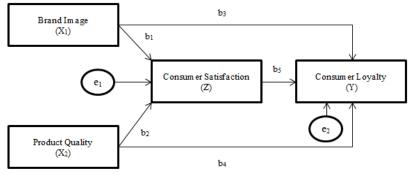


Figure 2 – Path diagram

The structural equation is as follows:

 $Z = b_1 X_1 + b_2 X_2 + e_1$ 

 $Y = b_3 X_1 + b_4 X_1 + b_5 Z + e_2$ 

Information: X1 = Brand Image (Independent variable)

X2 = Product quality (Independent

variable)

Z = Customer satisfaction

Y = Customer loyalty (Dependent variable)

b1 = Path coefficient X1 to Z

b2 = Path coefficient X2 to Z b3 = Path coefficient X1 to Y

b4 = Path coefficient X2 to Y

b5 = Path coefficient Z to Y

e1 = Structure error 1

e2 = Structure error 2

## IV. RESULTS

In this section will describe the results of data processing that has been done by using AMOS program. Hypothesis testing in this study begins by testing the suitability of the model which is continued by estimating results of data processing, either directly or indirectly toward customer loyalty. Based on the image path diagram above, can be derived in the form of relationship among variables as below:

**Table 1 - Relationship between variables** 

Variables			Relationship
Brand image	$\rightarrow$	Customer	Direct
		satisfaction	
Product	$\rightarrow$	Customer	Direct
quality		satisfaction	
Brand image	$\rightarrow$	Customer	Direct
		loyalty	
Product	$\rightarrow$	Customer	Direct
quality		loyalty	
Customer	$\rightarrow$	Customer	Direct
satisfaction		loyalty	
Brand image	$\rightarrow$	Customer	Indirect
		loyalty	
Product	$\rightarrow$	Customer	Indirect
quality		loyalty	

From the relationship between the variables above, obtained a model consisting of 7 lines. The line is composed of 5 direct link paths and 2 lines of indirect relationship. Direct relationship means that there is no intermediate variable that connects one variable with another variable, whereas indirect relationship means there is an intervening variable that connects one variable with another variable.

Based on the path diagram results of data processing can form the equation and estimation. After the estimation and equation is formed and then testing goodness of fit model. The test is based on the table below:

Table 2 – Goodness of fit model

Goodness of Fit parameter	Acceptance limit Goodness of Fit	Result
Chi Square	Smaller the better	23,105
RMSEA	≤ 0,08	0,003
GFI	0-1	0,719
AGFI	> 0,9	2,112
TLI	0,95 < TLI < 1	0,981
CFI	0-1	0,778

Based on the results of data processing and acceptance criteria testing goodness of fit test model based on absolute match that determines the degree of prediction of the overall model of correlation and covariance matrix is very good. Hypothesis testing is done by analyzing the significance of regression weight. This analysis is performed to show the magnitude of the overall influences, the direct effects and the indirect effects of one variable on the other. As for the basis of decision-making test significance of regression weight is:

H0: the independent variable partially has no effect on dependent variable

H1: independent variables partially affect the variable dependent

- If p-value < alpha 0,05 then the initial hypothesis is rejected, meaning there is influence between two variables statistically.
- If p-value > alpha 0.05 then the initial hypothesis is accepted, meaning there is no influence between two variables statistically.

The following table summarizes the path analysis:

Table 3 – Path analysis

	Path		Standardized Beta	p-value	Decision
Customer satisfaction	<b>←</b>	Brand image	0,885	0,000	Significant
Customer satisfaction	<b>←</b>	Product quality	0,573	0,000	Significant
Customer loyalty	<b>←</b>	Brand image	0,817	0,000	Significant
Customer loyalty	<b>←</b>	Product quality	0,511	0,000	Significant
Customer loyalty	<b>←</b>	Customer satisfaction	0,704	0,000	Significant
Customer loyalty	<b>←</b>	Brand image	0,921	0,000	Significant
Customer loyalty	<del>-</del>	Product quality	0,605	0,000	Significant

Based on the results of data processing obtained regression weight value as in table 3. From the results of data processing can be seen that all variables have a positively and significantly influences. Thus the hypothesis test can be explained as follows:

- **H**<sub>1</sub>: Brand image positively and significantly influence customer satisfaction.
  - Based on the above hypothesis, after tested it was proven that the coefficient of variable brand image has a positive effect at 0.885 and significant at 0.000. Then  $H_1$  accepted which means brand image has a positive and significant impact on customer satisfaction.
- H<sub>2</sub>: Product quality positively and significantly influence customer satisfaction.
  - Based on the above hypothesis, after tested it was proven that the coefficient of variable product quality has a positive effect at 0.573 and significant at 0.000. Then  $H_2$  accepted which means product quality has a positive and significant impact on customer satisfaction.
- H<sub>3</sub>: Customer satisfaction positively and significantly influence loyalty customer.
  - Based on the above hypothesis, after tested it was proven that the coefficient of variable customer satisfaction has a positive effect at 0.704 and significant at 0.000. Then H<sub>3</sub> accepted which means customer

- satisfaction has a positive and significant impact on customer loyalty.
- **H4:** Brand image positively and significantly influence customer loyalty.

  Based on the above hypothesis, after tested it was proven that the coefficient of variable brand image has a positive effect at 0.817 and significant at 0.000. Then H<sub>4</sub> accepted which means brand image has a positive and significant impact on loyalty customer.
- **Hs:** Product quality positively and significantly influence customer loyalty.

  Based on the above hypothesis, after tested it was proven that the coefficient of variable product quality has a positive effect at 0.511 and significant at 0.000. Then H<sub>5</sub> accepted which means product quality has a positive and significant impact on customer loyalty.
- **H<sub>6</sub>:** Brand image positively influence customer loyalty through customer satisfaction as intervening variable. Based on the above hypothesis, after tested it was proven that the coefficient of variable brand image has a positive effect at 0.921 and significant at 0.000. Then H<sub>6</sub> accepted which means brand image has a positive and significant impact on customer loyalty through customer satisfaction.
- **H7:** Product quality positively influence customer loyalty through customer satisfaction as intervening variable. Based on the above hypothesis, after tested it was proven that the coefficient of variable brand image has a positive effect at 0.605 and significant at 0.000. Then H<sub>7</sub> accepted which means product quality has a positive and significant impact on customer loyalty through customer Satisfaction.

Based on the value of standardized path coefficients, it can be interpreted the relationship of the path diagram as follows:

- a. The coefficient value of the brand image variable toward the variable of customer satisfaction in using Xiaomi smartphone product is 0.885. This number indicates that brand image variable influence customer satisfaction by 88.5%. The magnitude of the effect can be explained that the higher the brand image owned by the company's smartphone Xiaomi, the higher the level of customer satisfaction using the smartphone product Xiaomi. The good brand image will have an implication on the increase of customer confidence in Xiaomi smartphone product, so that more customers using the product. This can be done with the power of vigorous promotion through print and electronic media and often hold events to attach Xiaomi brand image smartphones to the public mind.
- b. The coefficient value of product quality variable toward the variable of customer satisfaction in using Xiaomi smartphone product is 0.573. This coefficient value indicates that product quality variable able to influence variable of customer satisfaction in using Xiaomi smartphone product by 57.3%. The magnitude of the effect can be explained that the higher the product quality owned by the company's smartphone Xiaomi, the higher the level of customer satisfaction using the smartphone product Xiaomi. So it can be interpreted that the higher quality of products offered to customers will increase the customer satisfaction to buy Xiaomi smartphone products. This can be done by increasing the research and development (R & D) so that one day can find new high-tech products with prices that suit the needs of customers.
- c. The coefficient value of customer satisfaction variable toward customer loyalty variable in using Xiaomi smartphone product is 0.704. This means that customer satisfaction variables affect customer loyalty variables in using Xiaomi's smartphone products by 70.4%. This value shows the variable of customer satisfaction has an influence on customer loyalty. This means that the better customer satisfaction achieved by the company's smartphone Xiaomi, it will further increase the loyalty of customers in using Xiaomi smartphone products. Thus Xiaomi smartphone company need to know the needs of customers of smartphone products based on some market segmentation that matches the circumstances of an existing society in a country. For example in the community of Pangkalpinang City, Indonesia prefers affordable price with the specification of smartphone product that qualified, so to dominate the market need appropriate strategy according to customer needs in that area. At this time Xiaomi smartphone company can attract the interest of the people of Indonesia, because Xiaomi provide smartphone products that suit the tastes of the people of Indonesia is affordable with qualified quality.
- d. The value of the coefficient of the brand image variable path toward customer loyalty variable is 0.817. This means that brand image variable affects customer loyalty variable variable by 81.7%. This value indicates that the brand image variable has an influence on customer loyalty variable in using Xiaomi smartphone product. This means that the higher level of brand image made by the Xiaomi smartphone company will increase customer loyalty in using Xiaomi smartphone products. This is evident from the sales of Xiaomi smartphone products that can break the record of smartphone sales in Indonesia in 2014-2015.
- e. The coefficient value of product quality variable path toward customer loyalty is 0.511. The value of this coefficient indicates that the variable of product quality can influence customer loyalty variable by 51.1%. This means that product quality variables greatly affect the increase of customer loyalty variable in using Xiaomi smartphone product. So with the innovation of Xiaomi smartphone product quality and in accordance with

customer expectations will increase customer loyalty in using Xiaomi smartphone products.

- f. The value of the coefficient of brand image variable path to customer loyalty variable through customer satisfaction variable is 0.921. This coefficient value indicates that brand image variable through customer satisfaction variable able to influence customer loyalty variable by 92.1%. This means that customer satisfaction variable can strengthen the brand image variable to customer loyalty variable in using Xiaomi smartphone product. The more satisfied customers in using Xiaomi smartphone products will increase the brand image's influence on customer loyalty.
- g. The coefficient value of product quality variable path toward customer loyalty variable through customer satisfaction variable is 0.605. This coefficient value indicates that product quality variable through customer satisfaction variable able to influence customer loyalty variable by 60,5%. This means that customer satisfaction variable can strengthen product quality variable to customer loyalty variable in using Xiaomi smartphone product. The more satisfied customers in using Xiaomi smartphone products will increase the effect of product quality on customer loyalty.

From the seven forms of direct and indirect influence above, the influence of brand image through customer satisfaction on customer loyalty has the greatest influence that is 92.1%. This means that customer loyalty will increase if the smartphone company Xiaomi always make promotions by adding value added to the customer so that will form a satisfaction that exceeds customer expectations. From all the influences that occur between the variables in this study, either directly or indirectly affect the indirectly indicates that all variables have a direct relationship.

#### V. CONCLUSION

Based on the discussion of research results, then the model of research on customer loyalty can be received well, so that can be taken conclusion as follows:

- 1. Brand image has a positive and significant impact on customer satisfaction. This means that the higher the brand image will be able to increase customer satisfaction of Xiaomi smartphone products in Pangkalpinang City, Indonesia.
- 2. The quality of the product has a positive and significant impact on customer satisfaction. This means that the higher the quality of the product will be able to increase customer satisfaction of Xiaomi smartphone products in Pangkalpinang City, Indonesia.
- 3. Customer satisfaction has a positive and significant impact on customer loyalty. This means that the higher customer satisfaction will be able to increase customer loyalty to Xiaomi smartphone products in Pangkalpinang City, Indonesia.
- 4. Brand image has a positive and significant impact on customer loyalty. This means that the higher the brand image will be able to increase customer loyalty to Xiaomi smartphone products in Pangkalpinang City, Indonesia
- 5. Product quality has positive and significant effect to customer loyalty. This means that the higher the quality of the product will be able to increase customer loyalty to Xiaomi smartphone products in Pangkalpinang City, Indonesia.
- 6. Brand image through customer satisfaction has a positive and significant impact on customer loyalty. This means that customer satisfaction can mediate the influence of brand image on customer loyalty to Xiaomi smartphone product in Pangkalpinang City, Indonesia.
- 7. Brand image through customer satisfaction has a positive and significant impact on customer loyalty. This means that customer satisfaction can mediate the influence of brand image on customer loyalty to Xiaomi smartphone product in Pangkalpinang City, Indonesia.

## VI. REFERENCES

- 1. Bergman, B., & Klefsjö, B. (2010). Quality from customer needs to customer satisfaction. Studentlitteratur AB.
- 2. Bian, X., & Moutinho, L. (2011). The role of brand image, product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits: Direct and indirect effects. European Journal of Marketing, 45(1/2), 191-216.
- 3. De Chernatony, L. (2010). Creating powerful brands. Routledge.
- 4. Deng, Z., Lu, Y., Wei, K. K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. International journal of information management, 30(4), 289-300.
- Evans, J. R., & Lindsay, W. M. (2002). The management and control of quality (Vol. 5, pp. 115-128). Cincinnati, OH: South-Western
- 6. Goetsch, D. L., & Davis, S. B. (2014). Quality management for organizational excellence. Upper Saddle River, NJ: Pearson.
- 7. Hollensen, S. (2015). Marketing management: A relationship approach. Pearson Education Limited.

### **ECOFORUM**

## [Volume 7, Issue 2(15), 2018]

- 8. Jahanshahi, A. A., Gashti, M. A. H., Mirdamadi, S. A., Nawaser, K., & Khaksar, S. M. S. (2011). Study the effects of customer service and product quality on customer satisfaction and loyalty. International Journal of Humanities and Social Science, 1(7), 253-260.
- 9. Keller, K. L., & Kotler, P. (2016). Marketing management. Pearson.
- 10. Oliver, R. L. (2014). Satisfaction: A behavioral perspective on the consumer. Routledge.
- 11. Permadi, G. (2014, February 19). Apa itu Xiaomi? Retrieved February 10, 2018, from http://aitinesia.com/apa-itu-xiaomi/
- 12. Ryu, K., Lee, H. R., & Gon Kim, W. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. International Journal of Contemporary Hospitality Management, 24(2), 200-223.
- 13. Shukla, P. (2011). Impact of interpersonal influences, brand origin and brand image on luxury purchase intentions: Measuring interfunctional interactions and a cross-national comparison. Journal of world business, 46(2), 242-252.
- 14. Wang, Y., & Pizam, A. (Eds.). (2011). Destination marketing and management: Theories and applications. Cabi.
- 15. Wijaya, K. K. (2015, May 27). Bagaimana Xiaomi Memenangkan Hati Konsumen Indonesia. Retrieved November 10, 2017, from https://id.techinasia.com/bagaimana-xiaomi-laris-di-indonesia
- 16. Wilson, R. M., & Gilligan, C. (2012). Strategic marketing management. Routledge.