# ANALYZING THE EFFECT OF PRODUCT QUALITY ON CUSTOMER SATISFACTION AND CUSTOMER LOYALTY IN INDONESIAN SMEs (Case Study on the Customer of Batik Bojonegoro Marely Jaya)

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#### Abstrak

Analisis Pengaruh Kualitas Produk Terhadap Kepuasan Pelanggan Dan Loyalitas Pelanggan Pada Indoonesian Ukm (Studi Kasus pada pelanggan Batik Bojonegoro Marely Jaya). Marely Jaya adalah salah satu Kecil Menengah yang memproduksi dan menjual Batik Bojoengoro. Penelitian ini bertujuan untuk menganalisis pengaruh kualitas produk terhadap kepuasan dan loyalitas pelanggan Marely Jaya. Penelitian ini menjelaskan tentang bagaimana berpengaruh kualitas produk terhadap kepuasan pelanggan dan loyalitas pelanggan. Metode penelitian yang digunakan dalam penelitian ini adalah menggunakan penjelasan dengan metode kuantitatif. Metode ini berguna untuk memahami bagaimana berpengaruh item dalam kualitas produk terhadap kepuasan pelanggan dan loyalitas pelanggan. Kuesioner digunakan untuk data yang dikumpulkan langsung dari pelanggan. Metode analisis yang digunakan Generalized Structured Component Analysis (GSCA). Hasil penelitian, menunjukkan bahwa kualitas produk mempengaruhi perasaan kepuasan pelanggan, dan perilaku loyalitas pelanggan, dan juga menunjukkan bahwa kepuasan pelanggan mempengaruhi perilaku loyalitas pelanggan

#### Kata Kunci: Kualitas Produk, Kepuasan Pelanggan, Kesetiaan Pelanggan, SMEs

#### Abstract

Analyzing The Effect Of Product Quality On Customer Satisfaction And Customer Loyalty In Indoonesian SMEs (Case Study on the Customer of Batik Bojonegoro Marely Jaya). Marely Jaya is one of the Small Medium Enterprises which produces and sale Batik Bojoengoro. This research aims to analyze the effect of product quality on the satisfaction and loyalty of the Marely Jaya's customers. This study explain about how influential the quality of product to the customer satisfaction and customer loyalty. The research method used in this research is an explanatory with quantitative method. This method is usefull to understand how influential the items within the product quality on the customer satisfaction and customer loyalty. Questionnaires is used to gathered data directly from the customers. Analysis method is used Generalized Structured Component Analysis (GSCA). The result of the study is shows that product quality is affecting the customer satisfaction fellings, and customer loyalty behaviour, and also shows that the customer satisfaction is affecting the customer loyalty behaviour.

Keywords: Product Quality, Customer Satisfaction, Customer Loyalty, SMEs.

#### INTRODUCTION

SMEs (Small Medium Enterprises) today has evolved significantly as an impact of a trend an easyness to start a new business. Development of markets and the increasing purchasing power make SMEs more and more popular among the public and at the same time attract people to start their own SMEs.. In spite of it all Indonesian SMEs will face a new challenges in the future. Free trade market in ASEAN Economic Community (AEC) will be a new challenges for Indonesian SMEs. Along with many kind of products overhelming the Indonesian market, local SMEs need to compete against imported products. Therefore, innovation is important for the SMEs to keep their market. The role of government to encourage those SME's to be more competitive is also a crucial thing in order to face a free trade market. The increasing competition and the growing expectations of customers prompt companies to focus on efforts to retain the existing customers. Maintaining the existing markets through development of customer loyalty is a strategic goal of the company to maintain their business and profit (Rully, 2006:65). In terms of product quality, it reflects the ability of products to carry out their duties which include durability, reliability, progress, strength, ease of packaging, and product repair and other characteristics (Kotler and Armstrong, 1999).

Through the product, the company can provide satisfaction to the consumer. Therefore, it is very important to maintain product quality in order to achieve customer satisfaction. Kotler (1996) in Wang (2006) defined customer satisfaction as "the level of a person felt state resulting from comparing a product's perceived performane or outcome in violation to his/her own expectations. In this context, customer satisfaction can be considered of a comparative behaviour between inputs beforehand and post acquisition performances. SME's has several advantage compared to large companies which help the SME's to keep innovative in their product development factors. Partomo (2004) stated that some advantage of SME's compared to large companies (1) Innovations in technology have easily happened in product development. (2) Familiar human relationships in small firms.(3) ability creates enough employment The opportunities for labor or absorption.(4) Flexibility and ability to quickly adapt to changing market conditions compared with large-scale enterprises in general bureaucratic.

One of the small enterprises that thrive today are enterprises in producing and sell Batik. Since patented by the indonesian government, Batik become more popular, and everyone start wearing it even the youth. Astuti (2013) stated that todays phenomena in batik is batik transformation. This means that Batik has develop into a new transformation, the design and colouring process used in batik is way far from it was in the earlier stages of its development. The modification of Batik tend to be free as a results of the designer's creativity. Temporary motifs and colors used are quite independent and different from its original. Many Batik producers use this transformation to make the price become cheaper in the market, means sacrificing the quality itself. Batik Jonegoroan is a kind of Indonesian Batik which currently receive a positive consideration from the Derived market. from Bojonegoro. Batik Jonegoroan begin to attract customers attention. Since it use an original design from local potential, the producers take a very concern in the aspect of product quality. It is very crucial to produce a good product in order to obtain existing and attract new customer for small enterprises. By having a good product, these small enterprises will gain a loyal customers through their satisfaction. A good product will show the commitment of the company to their customer. Satisfaction and loyalty of the customer can't be separated from quality of products. That important part play an important role in customer's mind. Relationship which occured between that part determined the customer reaction and acts. That's why the researchers interested in studying the effects of the quality of the goods to the customer satisfaction and loyalty and this research is entitled as "Analyzing The Effect of Product Quality On Customer Satifaction and Customer Loyalty In Indonesian SMEs (Case Study at Batik Bojonegoro SMEs)".

#### LITERATURE STUDY

# 1. Indonesian Small Medium Entreprises (SMEs)

According to Hubeis (2009), SME's are defined by a variety of different ways depending on the state and other aspects. Therefore, it is necessary to review specific to these definitions in order to obtain an appropriate understanding of the SME, which is adopted in accordance with the quantitative measure of economic progress. Various definitions of SMEs in Hubeis (2009) :

- a. Central Statistics Agency (BPS): SMEs are companies or industries with workers about 5-19 people.
- b. Bank Indonesia (BI): SMEs are companies or industries with characteristics such as: (a) capital is less than IDR 20 million; (b) for a new round of its only cost Rp 5 juts; (c) has a maximum of IDR 600 million of assets, excluding land and building, and (d) an annual turnover ≤ IDR 1 billion.
- c. Ministry of Cooperatives and Small and Medium Enterprises (Law no. 9 of 1995): SMEs are the economic activities of the people and has a traditional character, with a net worth IDR 50 million – IDR 200 million (excluding land and buildings) and annual turnover  $\leq$  Rp 1 billion, with a net worth of USD 50 million - USD 500 million and annual net sales of USD 300 million - USD 2.5 billion.
- d. Presidential Decree. 16/1994: SME is a company that has a net worth of at least IDR 400 million.
- e. Ministry of Industries and Trades
  - 1) The Company has assets up to IDR 600 million, excluding land and buildings
  - 2) Company which has working capital below IDR 25 million
- f. Ministry of Finance: SME is a company that has a turnover of up to IDR 600 million per year and a maximum or assets of USD 600 million, excluding land and buildings.

# 2. Product Quality

Product is all that can be offered in the market to get attention, demand, usage or consumption that can satisfy the needs of consumers. According to, Kotler (1999) people satisfy their needs and wants with products. A product is anything that can be offered to a market to satisfy a need or want. Before quality can be measured, meaning of quality itself should be the understandable. Quality could be defined as a value or conformance to the specifications which can lead the organization to focus on efficiency. Also quality is the expectations of consumers towards a goods wihch rapidly changing by time and force the management to keep fulfill what the customer wants (Reeves and Bednar, 1994).

According to Guiltinan et al (1997) as cited by Tjiptono (1999) there are 8 (eight) dimensions within the product quality :

- a) Performance
- b) Feature

- c) Reliability
- d) Conformance
- e) Durability
- f) Service Ability
- g) Aesthetics
- h) Perceived Quality

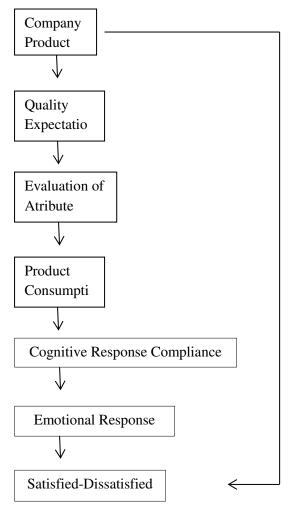
### 3. Customer Satisfaction

Fully satisfied customers are more likely to become loyal customers, or even advocates for the firm and its products. Satisfied customers are less likely to explore alternative suppliers and they are less price sensitive. Therefore, satisfied customers are less likely to switch to competitors. Satisfied customers are also more likely to spread positive word of mouth about the firm and its products. However, the way that customers think about satisfaction creates some interesting challenges for marketers. It is one thing to strive for the best in terms of quality and value (Ferrel and Hartline , 2010).

View of the customer satisfaction is very varied, as quoted by Hasan (2009:56-57) as follows:

- a. According to Engel (1990) customer satisfaction is an evaluation of after-purchase where the chosen alternative at least equal or exceed customer expectations, while dissatisfaction arises when the results are not satisfactory.
- b. Walker (1995) stated that customer satisfaction is a comparison between the prediction of perceived product before purchased or consumed. If that is felt more than expected, consumers will be satisfied, otherwise if the perceived lower than expectations, consumers will be dissatisfied.
- c. Satisfaction is a customer feeling as a response towards product or services which they have bought (Park 1997).

From different concept above, satisfaction could be understood as an emotional response towards the products, especially when customers make a comparison between their expectations with the performances of the products. Customer satisfaction could be visualize through underneath diagram



**Figure 1 Satisfaction-Dissatisfaction Model** Source: Hasan (2009)

#### 4. Customer Loyalty

One of the purpose of marketing strategy implementation is to achieve customer loyalty. Musanto (2004) stated that loyalty is a behaviour of customer who buy a product continously and to establish a customer loyaltiness to a certain company. According to Sheth and Mittal (2004) loyalty is a customer commitment in a certain brand, store, or supplier based on their positive behaviour and reflects through out their repeat purchase.

According to Zeithaml and Bitner (2000) the final successful purpose of the company in creating a relationship with their customers is to build or create a strong loyalty behaviour. A strong loyalty indicators are :

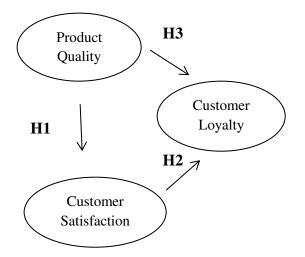
- a. Customers will say a positive things about the product they used.
- b. Customer will recommend the others
- c. Customer will continously purchasing the products.

d. Customer will remember the brand in the future.

According to Griffin (2005: 31), the customer loyalty characteristics are :

- a. Repeat Buyer Customer re-purchase the same product
  - which is offered by the company
- b. Purchase Accross Products and Service Lines Customer purchase acrross product or service lines which offered by the company
- c. Reference Customer conduct a word of mouth information about the products
- d. Demonstrates Immunity Towards Competitor's Product Customer will not interest with the other product from competitor.

# 5. Hypothesis Framework and Hypothesis



#### Figure 2 Hypothesis Framework

- H1 : Quality of product affects customer satisfaction in Indonesian SMEs
- H2 : Customer satisfaction affects the customer loyalty in Indonesian SMEs.
- H3: Quality of product affects customer loyalty in Indonesian SMEs

# **RESEARCH AND ANALYSIS METHOD**

## 1. Types of Research

Types of research which used in this research was *Explanatory* research with quantitative method. This research is to analyze the effect of *product quality* on *customer satisfaction* and *customer loyalty*. Explanatory definition according to Warwick and Lininger (1975) as quoted by Singarimbun and Effendi (1995) is a research which give a prime importance to the causals relationship within the research variables through hyphotesis testing. The research conduct to figure out the relationship and effect of independent variable towards some of dependent variables. Technique of data collection in this study is using questionnaires. Measurement scale in this research is using Semantic Differential scale. According to Nazir (2011), Semantic Differential used to see how one's perspective on a concept or object. Semantic Differential using seven-or five-point intervals to measure



**Figure 3** Source: Nazir 2011

#### 2. Population and Sample

Population in this research are taken from the average amount of customers who purchased the product within past three months, the average customer within three months period of purchased is 42 customers. All 42 customers already bought the batik product more than once. Determination of the number of samples taken in this study is using Yamane formula,

$$n = \frac{N}{N(d)^2 + 1}$$
$$n = \frac{42}{42(0.05)^2 + 1} = 38,009$$

rounded to (38)

Source: Riduwan (2007) n = number of samples sought N = Total Population d = Precision value (5% or 0.05)

## 3. Analysis Method

Analysis method used in this research was Generalized Structured Component Analysis (GSCA). According to Hwang (2008) Generalized structured component analysis represents a component-based approach to structural equation modeling. Thus, this approach defines latent variables as components or weighted composites of observed variables. Generalized structured component analysis estimates model parameters consistently minimizing bv the global optimization criterion. This enables the provision of measures of overall model fit. Specifically, generalized structured component analysis offers an overall measure of fit, called FIT, which is the proportion of the total variance of all endogenous

variables explained by a given particular model specification. It is given by : FIT = 1- $[\sum_{i=1}^{N} (Vzi - AWzi)'(Vzi - AWzi)(/\sum_{i=1}^{N} z iV'Vzi]$ 

Thus, another index of fit was developed which takes this contingency into account. It is referred to as Adjusted FIT or AFIT (Hwang et al. 2008), given by

 $AFIT = 1 - (1-FIT) \frac{do}{d1}$ 

where d0 = NJ is the degrees of freedom for the null model (**W** = **0** and **A** = **0**) and d1 = NJ - G is the degrees of freedom for the model being tested, where *J* is the number of observed variables and *G* is the number of free parameters. The model that maximizes AFIT is regarded as the most appropriate among competing models.

#### RESULT AND ANALYSIS 1. Model FIT

Table 1(GSCA Output)

Model Fit		
FIT	0.557	
AFIT	0.530	
NPAR	33	

Source: Processed Primary Data

FIT in the model above shows 0.557 as its result. FIT shows the total variance of all the variables that can described by a specific model. FIT values range from 0 to 1. So the established models can explain all the variables that exist for 0.523. Quality of product, customer satisfaction and customer loyalty which can be explained by the model is equal to 55.7% and the rest which is 47.7% then explain by other variables, seen from the FIT value obtained, the model can be said to be good model.

The second is AFIT, AFIT is an adjustment of the FIT. As more variables that affect the value of the FIT, it will make the FIT value become even greater because the proportion of diversity will also increase so as to conform with existing variables can use Afit. When viewed from AFIT value, quality of product, customer satisfaction and customer loyalty can be explained by the model is equal to 53% and the rest (47%) can be explained by other variables. From the model above, can be seen that the value obtained formed a good model.

NPAR is the number of free parameters estimated, including weights, loadings and path coefficients. Estimated loading is a parameter that estimates the linking between latent variables to indicators. Estimated weights is component weights which estimated latent variable scores, and estimated path coefficients is an estimate of the path coefficient linking the relationship between all latent variables.

# 2. Hypothesis Analysis

After the data was processed using the generalized structured component analysis, the result shows a significant correlation between the three variables.

Path Coefficients			
	Estimate	SE	CR
Quality->Loyalty	0.477	0.233	2.05*
Quality->Satisfaction	0.843	0.055	15.39*
Satisfaction->Loyalty	0.465	0.227	2.05*

 Table 2 GSCA Hypothesis Structural Model

CR\* = significant at .05 level

Source: Processed Primary Data

First proven correlation (H1) is between the product quality and customer satisfaction. GSCA analysis obtained 84.3% as its result (significant at the level 95%), means that performance (X1.1), feature (X2.1), reliability(X3.1), conformance(X4.1), durablity (X5.1), service ability (X6.1), aesthetics (X7.1) and perceived quality (X8.1) within the quality of product are affecting customer satisfaction in Indonesian SMEs, it also means that 84.3% of satisfaction which feels by the customer when they use the batik product is influenced by its quality. It is possible to say that Batik product which produce by Batik Marely Jaya according to this research has a good quality fabrique, pattern and also color.

Second proven correlation (H2) is between the customer satisfaction and customer loyalty. GSCA analysis obtained 46.5% as its result, (significant at the level 95%), means that Expectation (Y1), Experience (Y2) and Value (Y3) within the Customer satisfaction affect the customer loyalty

in Indonesian SMEs, it is also means that 46.5% of customer loyalty behaviour is created by the satisfaction which feels by the customer after they use the product in certain time. It is possible to say that these customer of Batik Merely Jaya is loyal to the brand.

Third proven correlation (H3) is between the product quality and customer loyalty. GSCA analysis obtained 44.7% as its result (significant at the level 95%), means that performance (X1), feature (X2), reliability(X3), conformance(X4), durablity (X5), service ability (X6), aesthetics (X7) and perceived quality (X8) within the quality of product are affecting customer loyalty in Indonesian SMEs, it also means that 44.7% of customer loyalty behaviour is alco created by a good quality product.

# CONCLUTION AND SUGGESTION Conclusion

The study was conducted to analyze the effect of product quality on customer satisfaction and loyalty in SMEs area. Analysis of the data is using Generalized Structured Component Analysis (GSCA). Based on the research conducted, the following conclusions can be drawn:

- 1. Generalized structured component analysis results indicate that the quality of products consisting of eight items, namely, performance, features, reliability, conformance, durability, service ability, aesthetics and perceived quality are jointly have a significant influence on consumer satisfaction variables that have 3 items consisting of expectation, experience, and value. Results of generalized structured component analysis shows the number of 0843 \*. That is, 84.3% customer satisfaction is influenced by the quality of the product.
- 2. Results of generalized structured component analysis showed that the variables of customer satisfaction that has three items that expectation, experience, and values together have a significant influence on consumer loyalty variable that has four items, namely, recommend other, continue purchasing, say positive thing, and remember the brand. Results of generalized structured component analysis shows the number of 0465 \*. That is, 46.5% of customer loyalty has been influenced by the satisfaction felt by customers.
- 3. Generalized structured component analysis results indicate that the variable quality of the product which consists of eight items, namely, performance, features, reliability, conformance,

durability, service ability, aesthetics and perceived quality has a significant impact on consumer loyalty variable that has four items that recommend other, continue purchasing, say a positive thing, and remember the brand. Results of generalized structured component analysis shows the number 0477 \*. That is, 47.7% customer satisfaction is influenced by the quality of the product.

#### Suggestion

- 1. Quality is an important part in determining the customer satisfaction. It was proven in this research that the product quality affectiong the customer to determine whether they satisfied or not. Result of the research shows that there are three items which has the lowest impact among others, those are feature, durability, and service ability. So, the company need improve their services so that customers feel well served and at once to establish closer relationships with customers and also the company need to make a new design and pattern so that the customer wont get bored.
- 2. For further research is expected to examine the variables beyond the variables that have been studied in order to obtain results that can be more varied effect on satisfaction and loyalty.

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