

STUDY OF INFLUENCE OF CUSTOMER RELATIONSHIP MANAGEMENT ON CUSTOMER SATISFACTION IN CV BATIK SEMARANG¹⁶

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ABSTRACT

This study aimed to examine the influence of customer relationship management on customer satisfaction, with product innovation and customer value as mediating variables. The study conducted in Batik Semarang¹⁶.

The samples were customers of Batik Semarang¹⁶, a total of 126 respondents. Structural Equation Modeling (SEM) run by AMOS software was used to analyze the data. The analysis showed that customer relationship management, product innovation and customer value had positive influence on customer satisfaction.

The empirical findings indicated that customer relationship management positively influenced product innovation; customer relationship management positively influenced customer value; product innovation positively influenced customer satisfaction; and customer value influenced customer satisfaction.

Keywords: customer relationship management, product innovation, customer value, customer satisfaction

Introduction

The study conducted an investigation of the influence of customer relationship management on customer satisfaction with product innovation and customer value as mediating variables in Batik Semarang¹⁶. One of requirements a company can achieve success in the competition is by attempting to reach its goals to create and retain customers. Therefore it is important for every company to be able to understand consumer behavior in the target market, because the company's survival is as an organization trying to meet the needs and desires of consumers.

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The effort of retaining consumers is an important choice for the company; one is due to the cost efficiency. Companies which are able to retain customers will save a lot of costs rather than having to find new customers. Hence, understanding consumer behavior in the target market is required for every company. As an organization trying to meet the needs and desires of consumers, the company is very dependent on consumer behavior.

To meet either the needs or desires of consumers, the company's expectation is achieving the level of consumer satisfaction as high as possible. The ability of a product to provide high satisfaction to its user will strengthen the position of the product in consumer's memory and will become the first choice of product purchasing in the future. So the company must be able to set up an appropriate marketing strategy, in accordance with the needs and desires of consumers to provide high satisfaction to consumers.

There are several strategies that can be conducted by the company in the effort to create consumer satisfaction. Among other is by managing a good relationship with customers in a long term or is so-called customer relationship management. Khoe You Tung (1997) also explained that customer relationship management is a concept generated by companies with various methods. Those methods include attracting attention, maintaining satisfaction, and enhancing as well as strengthening customer relationship. In other words, it is to extend the company's life with customers.

In managing a long term relationship with consumers, companies are expected to be able to increase customer value. Efforts to create customer value can be done by improving service quality provided by the company. Companies which have better service quality can increase customer value of the company.

In addition to increasing customer value, the company must be able to create competitive advantage of products which are innovative and have a good quality to improve the competitiveness with other similar products because it can attract more customers.

National textile industry has developed rapidly. This cannot be apart from the existence of batik industry in Indonesia. Batik is one form of heritage of Indonesian nation in the form of clothing. Batik Indonesia is also a superior product in the country that has brought Indonesia to the international world. It can be seen from UNESCO's stipulation that Batik Indonesia, for the entire technique, technology, related motif and

cultural development, has been established as a Masterpiece of the Oral and Intangible Heritage of Humanity, since October 2nd, 2009. UNESCO's stance is very supportive on the development of batik industry in Indonesia, both domestic and abroad.

Batik Semarang16 is one of batik producers in Semarang chosen to be the object of study for its establishment in 2005 is longer than any other batik industries exist in Semarang.

As a form of customer communication on satisfaction toward the company, the following table shows data recapitulation of critics and suggestions delivered by customers to Galeri Batik Semarang16.

**Table 1.1 Data Recapitulation of Critics and Suggestions
in Galeri Batik Semarang16 in 2011-2015**

Year	Data Entry	Number of Critics and Suggestions	
		Critics	Suggestions
2011	46	30	16
2012	51	28	23
2013	50	24	26
2014	76	44	32
2015	72	41	31
Total	295	167	128

Source: Data Recapitulation of Critics and Suggestions in Galeri Batik Semarang16

Based on Table 1.1, it can be seen that the number of critics is higher than suggestions. It indicates that customer satisfaction is decreasing. Concerning the problem, the company must be able to identify customer expectation since there is a gap of what is expected by consumers and what is provided by the company (consumer point of view) and a gap of what is believed by the company about consumer desires and what is really wanted by consumers (company point of view) (Zeithml, et al, 2003:77).

Literature Review

The research conducted by Ru-Jen Lin, Rong-Huei Chen, and Kevin Kuan-Shin Chiu (2010) is a study focusing on effect of customer relationship management (CRM) on five aspects of innovation capability (product, process, service, marketing, and administration) of 107 computer producers in Taiwan. The results of study show that partnership-based CRM in a long term has significant influence on product innovation and process innovation. Then technology-based CRM has positive effect on five aspects of innovation.

Mihaela Toma, Larisa Nihoreanu, and Alexandru Lonescu (2014) study the relationship of customer relationship management (CRM) on innovation capability (innovation of product, service, process, administration, and marketing) on consumers of computer industries in Rumania. The result is that CRM significantly influences innovation capability.

Dissertation of Michael Aubry (2011) studies the influence of customer relationship management (CRM) on product innovation and the influence of product innovation on customer culture of 300 consumers of golf industries in San Diego. The results of the study indicate significant influence between customer relationship management (CRM) and product innovation, and significant influence between product innovation and customer culture.

Based on the elaborated description, it can be concluded that research hypothesis as follows:

H1 : Customer Relationship Management (CRM) has positive influence on Product Innovation

Customer value is an emotional bond formed by consumers and producers after products and services of a company have been used. It needs to use a system to deliver customer value to the company to get optimal result.

The result of the research by Maryam Eskafi, Sayyed Hossein Hosseini, Atefe Mohammadzadeh Yazd (2013) state that CRM significantly influenced customer value through variable customer satisfaction and brand loyalty.

Silvia Martelo Landroquez, Carmen Barroso Castro and Gabriel Cepeda-Carrion (2011) argue that the company must focus on maintaining a long term relationship with customers to reach superior customer value. The research proves that market

orientation, knowledge management, and customer relationship management have positive and significant influence on customer value.

From the elaboration above, it can be drawn a hypothesis as follows:

H2 : Customer Relationship Management (CRM) has positive influence on Customer Value

The company can maintain its existence if it can increase customer satisfaction through unique product innovation compared to its competitors.

Fooroz Pishgar, Samira Dezhkam, Farzaneh Ghanbarpoor, Nazanin Shabani, Mahboobeh, Ashoori (2013) study the influence of product innovation on customer satisfaction and customer loyalty. The result is product innovation has significant influence on customer satisfaction and customer loyalty.

From the elaboration above, it can be drawn a hypothesis as follows:

H3 : Product Innovation has positive influence on Customer Satisfaction

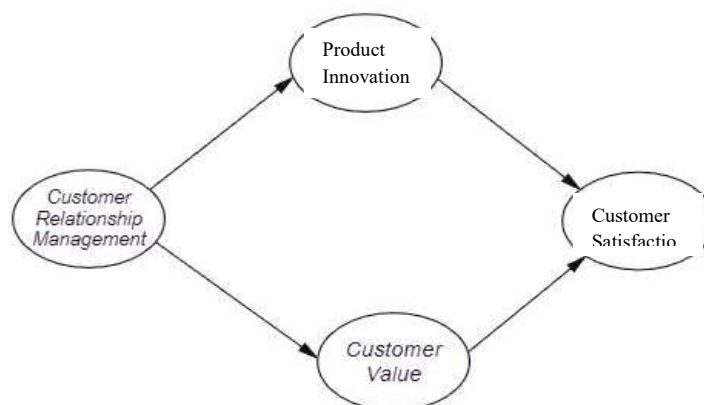
The research conducted by Jason Flores, Arturo Z., Vesques Parraga (2014) is a research on customer value in increasing customer satisfaction of users of online financial service. The result shows that design selection has influence on customer value, and customer value has influence on customer satisfaction.

Ming-Horng Weng, Jih-Lian Ha, Yi-Chou Wang, Chung-Lin Tsai (2012) study the influence of service innovation and customer value on customer satisfaction of 433 hotel consumers in Taiwan. The result is service innovation has positive influence on customer satisfaction, customer value has positive influence on customer satisfaction, and service innovation and customer value simultaneously influence customer satisfaction.

From the elaboration above, it can be drawn a hypothesis as follows:

H4 : Customer Value has positive influence on Customer Satisfaction

Theoretical Framework



Source: Ru-Jen Lin, Rong-Huei Chen, Kevin Kuan-Shin Chiu (2010), Maryam Eskafi, Sayyed Hossein Hosseini, Atefe Mohammadzadeh Yazd (2013), Forooz Pishgar, Samira Dezhkam, Farzaneh Ghanbarpoor, Nazanin Shabani, Mahboobeh, Ashoori (2013), Ming-Horng Weng, Jih-Lian Ha, Yi-Chou Wang, Chung-Lin Tsai (2012)

Research Methods

Research Design

This research is causal associative by quantitative approach. A causal associative research is a research aims to examine the influence of two or more variables, seek for cause and effect between independent and dependent variables. The purpose of the research is to test the influence of customer relationship management on customer satisfaction with product innovation and customer value as mediating variables conducted in Batik Semarang¹⁶. The sampling technique of data was by questionnaire given to the respondents to be filled in accordance with the real circumstances.

Population

Population is a generalization area which consists of: objects / subjects that have certain qualities and characteristics determined in the research to be studied and then drawn conclusions (Sugiyono, 2010). The population used in this study was all customers of Batik Semarang¹⁶. Based on customer recapitulation data in Batik Semarang¹⁶ per June 2016, there were 182 customers.

Sample

Samples are parts of the population that have relatively similar characteristics and are considered to represent the population (Singarimbun, 1991). In this study not all members of the population were taken, but only a part of it. The sampling method used in this study was probability sampling that is all elements in the population have equal opportunity to be selected to be sampled (Ferdinand, 2005).

While the sampling technique used was simple random sampling, that is a sampling technique selected randomly in which every element of the population has

equal opportunity to be sampled. From the number of known populations, the entire population was numbered and then randomly sampled, so that it obtained n sample 126 respondents.

Method of collecting data

The data collections used in this study were questionnaires, observations, and personal interviews. According to Kartono (in Basuki, 2006), observation is a deliberate and systematic study of social phenomena and psychic symptoms by way of observation and recording. Banister (in Poerwandari, 2001) states that observation is the most basic and oldest method of social sciences, because in certain ways we are always involved in the process of observing.

Analysis Technique

The data analysis technique used in this research was SEM (Structural Equation Model) method, where SEM was used to test whether the model described is in accordance with actual reality. The advantage of SEM is able to find out how much influence of the indicator on its variables. A study requires data analysis and interpretation with the aim to answer research questions in order to reveal certain social phenomena. Data analysis is the process of simplifying the data into an easier form to read and interpret. The selected method to analyze the data should be in accordance with the research pattern and variables to be studied (Hair et al., 1995).

In this research, the data analysis tool used was Structural Equation Model (SEM) of AMOS package. The SEM causal model shows structural measurements and problems and is used to analyze and test hypothetical models. According to Hair et al. (1995), SEM has features in:

1. Estimating unknown coefficients from structural linear equations
2. Accommodating a model which covers latent variables
3. Accommodating measurement error of dependent and independent variables
4. Accommodating mutual, simultaneous, and interdependent caution

This research used two kinds of analysis technique, namely:

1. Confirmatory Factor Analysis on SEM used to confirm the most dominant factors in one group of variables.
2. Regression Weight on SEM used to study how much influence among variables.

Discussion

After all assumptions can be met, it will be tested hypothesis as proposed in the previous chapter. The five tests of this research hypothesis is based on Critical Ratio (CR) value of a causality relationship from SEM processing result as shown in the following table:

Regression Weight Structural Equation Model

		Estimate	S.E.	C.R.	P	Label
Innovation_Product	<-- Customer_Relationship_Management	.456	.148	3.072	.002	par_10
Customer_Value	<-- Customer_Relationship_Management	.699	.156	4.486	***	par_11
Consumer_Satisfaction	<-- Product_Innovation	1.164	.482	2.412	.016	par_12
Consumer_Satisfaction	<-- Customer_Value	.364	.180	2.027	.043	par_13

Source: *Processed Primary Data, 2016*

From the test results, it obtained four hypotheses with CR value > 1.96. Then there were four hypotheses with probabilities <0.05. Thus the whole hypothesis of this research was accepted.

Conclusion

Research conducted in Batik Semarang16 stems from a finding that indicated the decreased customer satisfaction. It could be seen based on the increase of data complaints received by Batik Semarang16 in 2013-2015.

Therefore, this research is an approach which is attempted to answer the problem. The approach used in this study involved four research variables, namely customer relationship management, product innovation, customer value, and customer satisfaction that allegedly could explain the decrease in customer satisfaction in Batik Semarang¹⁶.

The variables studied in this study were latent variables so that the questionnaire used as a data collection tool. The questionnaires were answered by customer respondents of Batik Semarang¹⁶. The data collected through the questionnaire was analyzed using Structural Equation Modeling (SEM). The results of SEM analysis were presented in four hypotheses that have been tested and have drawn conclusions from the results.

This conclusion will answer four research questions proposed in the study.

1. Managerial implications of influence of customer relationship management on product innovation

Based on hypothesis testing 1 that has been conducted, it is obtained the value of CR of customer relationship management variable on product innovation variable is equal to 3,072 and probability value equals $0,002 < 0,05$ proves that variable of customer relationship management has positive significant influence on product innovation variable. Customer relationship management with long-term customer focus indicator, good communication with customers, developing customer service culture, obtaining and using customer information is proved to have influence on product innovation in Batik Semarang¹⁶.

Long-term customer focus is an activity that a company can do by understanding customer needs and satisfaction. Companies that are able to understand the needs of customers will always strive to improve innovation on the resulting products so as to provide satisfaction to customers. Establishing good communication with customers is also very important in improving understanding of customer needs. So the company can make it happen through product innovation.

The last indicator is using customer information which refers to an important and exclusive exchange of information between the company and the customer. Such information may include market demand or customer preferences. Intensive interaction between producers and customers encourages customers to provide valuable advice for product development.

2. Managerial implications of customer relationship management on customer value

Based on hypothesis testing 2 that has been conducted, it is obtained the value of CR of customer relationship management variable on customer value is equal to 4.486 and probability value equals $0.000 < 0.05$ proves that variable of customer relationship management has influence on customer value variable. Customer relationship management with long-term customer focus indicator, good communication with customers, developing customer service culture, obtaining and using customer information is proved to have significant positive influence on customer value in Batik Semarang16.

Customer value is an emotional bond formed between consumer and producer after the consumer uses the product or service from the company. To achieve the optimal results, it requires system used to convey the value of customers to the company.

Batik Semarang16 uses CRM (Customer relationship management) strategy as an approach that focuses on customer value. It is realized through activities such as identifying and understanding customer needs, overcoming customer complaints, providing after sales service and so forth. The strategy is done to increase the interest of the customer to either company's superiority or valuation of the benefit obtained by the customer (customer value).

3. Managerial implications of product innovation on customer satisfaction

Based on hypothesis testing 3 that has been conducted, it is obtained the value of CR of product innovation variable on customer satisfaction is equal to 2,412 and with probability value equals $0,016 < 0,05$ proves that variable of product innovation has positive significant influence on customer satisfaction variable in Batik Semarang16. Product innovation with indicators of product uniqueness, product quality, and multifunctional products is proved to have positive and significant influence on customer satisfaction.

The company can maintain its existence if it can increase customer satisfaction through unique product advantages compared to its competitors. Batik Semarang16 has created unique batik products, among others by creating unique motifs such as

batik motifs of Semarang City culinary, motif of legend story in Semarang City and so on. The uniqueness is what makes customers feel satisfaction and not bored with the classic batik motifs that have existed so far. Apart from the unique motifs, Batik Semarang¹⁶ also develops batik products not only in the form of sheets of cloth, but also unique souvenirs and accessories made of batik or a combination of batik with other materials, such as necklaces, bags, ties, shoes, and so on.

Good product quality is a requirement for new products to be accepted by customers. So high quality products can increase customer satisfaction. In addition to product quality, multifunctional products are also proven to increase customer satisfaction. Multifunctional product here is the product that must be able to bridge the wants and needs of consumers well.

4. Managerial implications of customer value on customer satisfaction

Based on hypothesis testing 4 that has been conducted, it is obtained the value of CR of customer value variable on customer satisfaction is equal to 2.027 and probability value of equals 0.043 < 0.05 km proves that customer value variable has significant positive influence on customer satisfaction variable. Customer value is measured using an assessment indicator of excellence, a sense of overall interest in the company, and an assessment of the overall benefits of the company.

Customer value indicates a strong relationship to customer satisfaction where the value illustrates the evaluative consideration of the product offered. The value desired by the customer is formed when they shape the perception of how good or bad a product or company is. Overall customer satisfaction is the customer's feelings in responding (evaluating) the product that has been used.

Batik Semarang¹⁶ has run a program which is able to describe customer value in evaluating the used products. It is realized through a suggestion box and customer satisfaction survey. This strategy is very effective in assessing the products produced by the company.

Policy Implications

This study has proved that customer satisfaction can be explained by customer relationship management (CRM), product innovation, and customer value. Therefore,

managerial implications to improve customer satisfaction are focused on those three variables.

Long-term customer focus is an activity that a company can do by understanding customer needs and satisfaction. Companies that are able to understand the needs of customers will always strive to improve innovation on the resulting products so as to provide satisfaction to customers.

Customer value is an emotional bond formed between consumer and producer after the consumer uses the product or service from the company. To achieve the optimal results, it requires system used to convey the value of customers to the company. Customer value is an emotional bond formed between consumer and producer after the consumer uses the product or service from the company. To achieve the optimal results, it requires system used to convey the value of customers to the company. Batik Semarang¹⁶ uses those strategies through the identification and understanding of customer needs, overcoming customer complaints, and providing after-sales service.

Batik Semarang¹⁶ can run a program that is able to describe customer value in evaluating the product used. It is realized through a suggestion box and customer satisfaction survey. This strategy is very effective in assessing the products produced by the company, bridging the desires and needs of customers, so that the company is able to create optimal customer satisfaction.

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