

# Chapter 43

## The Effect of Product Quality and Service Quality Towards Customer Satisfaction and Customer Loyalty in Traditional Restaurants in East Java

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**Abstract** This study aimed at investigating the effect of product quality and service quality on customer loyalty through customer satisfaction. This research found that product quality and service quality has significant effect on customer satisfaction. Customer satisfaction has a significant effect on brand loyalty. And customer satisfaction act as a mediator between exogenous variables to consumer loyalty. These results indicate that exogenous variables significantly influencing on brand loyalty are product quality and service quality. These results suggest that company should improve product quality and service quality that affect customer satisfaction and customer loyalty.

### 43.1 Introduction

Traditional restaurant becomes a very popular product among Indonesian. The traditional restaurants are in competition so they should increase quality of product. In the restaurant industry, the quality of products is a factor to consider. Even so it is with traditional restaurant that is required to produce the products according to international standards, particularly in terms of product quality. Traditional restaurant is always trying to sell a quality product and has more value compared to competitors' products. It has been proved that traditional restaurant has the best product quality in comparison with others. In addition to product quality is other factors that also can influence the brand loyalty, the quality of service. Associated with both of these, the product quality and service quality in the implementation of two things will greatly affect brand loyalty to the product.

Based on the background above, the formulations of the problems are: 1. Does product quality affect customer satisfaction at traditional restaurant in East Java? 2. Does service quality affect customer satisfaction at traditional restaurant in East Java? 3. Does customer satisfaction affect brand loyalty in traditional restaurant in East Java?

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## **43.2 Literature Review**

### ***43.2.1 Product Quality***

Garvin (1987) has revealed the presence of eight dimensions of product quality that can be played by marketers. They are: performance, features, reliability, conformance, durability, serviceability, aesthetics and perceived quality. In this study will be used three indicators that characterize confident (Kotler 1995): 1) It tastes good, 2) Product Features, and 3) Packaging.

### ***43.2.2 Service Quality***

Zeithaml (1990, p. 19) said that the service quality is a mismatch between the expectations or desires of consumers with consumer perception. Another opinion was also expressed by Reid and Bojanic (2001, p. 39). From the above notions, it can be concluded that service quality is the difference between consumer expectations with the services received.

According to Zeithaml et al. (1985), service quality is divided into five factors, namely: Reliability, Responsiveness, Assurance, Empathy, Tangible.

### ***43.2.3 Customer Satisfaction***

Oliver (1981) suggests that customer satisfaction is an evaluation of the surprise inherent in or attached to the acquisition of products and consumption experiences. Churchill and Suprenant (1982) formulate customer satisfaction as a result of the purchase and use of that obtained from comparison between reward and cost of purchasing unanticipated consequences. Westbrook and Reilly (1983) argue that customer satisfaction is an emotional response to experiences related to specific products or services purchased. Day (1984) defines customer satisfaction as post purchase evaluative judgments regarding specific purchase option. Cadotte et al. (1987) conceptualize customer satisfaction as the feelings that arise as a result of evaluation of the use of product or service experience. Tse and Wilton (1988) define customer satisfaction as the customer response to evaluation of perceived discrepancy between initial expectations before purchase and perceived actual performance of product after use or consumption of the product concerned. Mowen (1995) formulates satisfaction customer as the overall attitude towards a product or service after the acquisition (acquisition) and its use (Tjiptono 2005, p. 349).

### ***43.2.4 Customer Loyalty***

Customer loyalty is a measure of customer connection to a brand. This measure may be able to give us an idea of whether or not a customer to switch to another product

brands, especially if the brand is good there is a change regarding price and other attributes. Brand loyalty is a core indicator of brand equity that is clearly associated with sales opportunities.

The functions of customer loyalty are: Reduce marketing costs, Increase trade, Attract new customers, Giving time to respond to the threat of competition.

### ***43.2.5 Effect of Service Quality on Customer Satisfaction***

Oliver (2004) argues that “Satisfaction or dissatisfaction (satisfaction formation) can impact on repurchase intention, recommendations, word of mouth and loyalty (Consequences)”. Formation of satisfaction can affect the intensity to buy again, recommend, word of mouth communication and loyalty. Bitta (2004) said that “the level of global satisfaction linkages with word of mouth communication, other behavioral responses and repeat purchase behavior” (global satisfaction level regarding with mouth-to-mouth communications and other behavioral responses repurchase behavior).

### ***43.2.6 Effect of Product Quality to Customer Satisfaction***

Merli (1990, p. 6–7) states that “customer must be a organization’s top priority. The organization’s survival depends on the customers. Reliable customers are the most important customers. A reliable customers is one who buys repeatedly from the same organization. Customer who are satisfied with the quality of their purchases from an organization become reliable customers. Therefore, customers satisfaction is essential. Customer satisfaction is ensured by producing a high quality of product. It must be renewed with every new purchase. This cannot be accomplished if quality, even though it’s high satisfaction implies continual improvement. Continual improvement is the only way to keep customers satisfied and loyal. ”

According to Kotler (1996, p. 583), “customer satisfaction and company profitability are closely linked to product and service quality. Higher levels of quality result in greater customer satisfaction, while at the same supporting higher price and lower cost.”

### ***43.2.7 The Influence of Customer Satisfaction on Customer Loyalty***

The theory of the influence of customer satisfaction on brand loyalty is supported by Mowen (1995, p. 531). Mowen stated that “Brand loyalty is directly influenced by the consumer’s satisfaction or dissatisfaction with the brand that has accumulated

over time”. The statement explains that brand loyalty is influenced by satisfaction or dissatisfaction with a brand that has been accumulated in a long time. This can be reinforced by a statement Hawkins (1996, p. 699) that state “brand loyal consumer express greater levels of satisfaction than less loyal and non-loyal consumer.” It is clear that if consumers are not satisfied with a product brand, the consumer may be occasionally switch to another brand, “or even to switch to other brands were deemed to meet the criteria of satisfaction so we can say the level of loyalty towards a lower level of satisfaction with their low.”

### ***43.2.8 Hypothesis***

1. There is an influence of product quality to customer satisfaction at traditional restaurant in East Java.
2. There is an influence of service quality to customer satisfaction at traditional restaurant in East Java.
3. There is an influence of customer satisfaction to brand loyalty at traditional restaurant in East Java.

## **43.3 Research Method**

### ***43.3.1 Research Design***

Research design that used in this study is hypothesis research. Design research conducted in this study is a survey to determine the factors that influence brand loyalty.

### ***43.3.2 Identification of Variables***

1. Independent variables (independent) used in this study are: Product quality (X1) and Service quality (X2).
2. Dependent variable (dependent) were used in this study are: Customer satisfaction (Y1), Customer loyalty (Y2).

### ***43.3.3 Operational Definition of Variables***

1. Product quality. Is the ability of a product to perform its functions, includes durability, reliability, ease of operation and improved accuracy, as well as other

valuable attributes. The construct is measured by indicators (Kotler 1995): It tastes good, Product Features, and packaging.

2. Service quality. Is a form of consumers' assessment of the level of service received by the expected level of service. The construct is measured by indicators (Czerniawski & Maloney 1999): tangibles, reliability, empathy, responsiveness, and assurance.
3. Customer satisfaction. Is a situation where expectations, wants and needs of customers are met. The construct is measured by indicators (Spreng, Mackenzie & Olshavsky 1996): suitability expectations, perceptions of performance, and customer assessment.
4. Customer loyalty. A sense of satisfaction for what they want according to what is expected during the use of a particular product. The construct is measured by indicator (Cadogan & Foster 2000): Consumers always prefer a specific brand for products purchased, Consumers are always trying to find your favorite brands, Consumers are very concerned with the purchased brands.

### ***43.3.4 Types and Sources of Data***

Data used in the study is qualitative data. The primary data source used is questionnaires distributed to respondents. Measurement data used in the study by scoring as follows: very good = 5, good = 4, moderate = 3, less good = 2, not good either = 1.

### ***43.3.5 Tools and Data Collection Methods***

The tools used in the study is questionnaires that contains questions that will be investigated. Questions as outlined in the questionnaire include respondents' opinions about the product quality and service quality traditional restaurant in East Java in question and also how loyal consumer attitudes toward the product. Data collection methods used in the study are as follows:

1. Observation. A data collection techniques that have specific characteristics compared with other techniques, interviews and questionnaires.
2. Questionnaires. Is a way to give a set of questions to the respondents to answer.

### ***43.3.6 Population, Sample and Sample Collection Techniques***

Population in this study are all consumers of traditional restaurant in East Java. While the sample in this study is 100 respondents. The number of samples taken 100 people are to meet the requirements to use SEM methods i.e. minimum 100 respondents. The sampling technique used was non-probability sampling in which the sample

is not randomly drawn, so that all people have the same opportunity to become members of the sample. The sampling technique used was purposive sampling, with a minimum age criterion of 17 years because at that age are considered adults and can make decisions, and at least once in a month visit the traditional restaurant in East Java.

### ***43.3.7 Data Analysis Techniques***

Data analysis techniques used in this study is Structural Equation Model (SEM). SEM measurement in testing the model, the model overall and structural models.

## **43.4 Analysis and Discussion**

### ***43.4.1 Validity***

Based on Table 43.1, it seems that a significance value less than 0.05. It shows that the data is valid and worthy for further analysis.

### ***43.4.2 Reliability***

From Table 43.2, all variables visible alpha value greater than 0.6. It shows that the data is in a reliable and decent conditions for further analysis.

### ***43.4.3 Structural Models and Structural Equation Analysis***

Based on the analysis of the data can be determined from the structural equation model of the study as follows:

$$\text{Equation 1: } Y_1 = 0.538 X_1 + 0.302 X_2$$

$$\text{Equation 2: } Y_2 = 0.431 Y_1$$

In Equation 1, the variable product quality, has a positive sign. Positive sign indicates that the direction of change that is if the variable increases, the Product Quality Customer Satisfaction will increase the value of the path coefficient of 0.538. Variable Quality Service, also has a positive sign. Positive sign indicates that the direction of change that is if the variable quality of service increases, customer loyalty will increase the value of the path coefficient of 0.302.

In Equation 2, Customer Satisfaction variable has a positive sign. Positive sign indicates that the direction of change that is if the variable increases, customer satisfaction Customer Loyalty will increase the value of the path coefficient of 0.431.

**Table 43.1** Validity (Source: Data, processed.)

No. Item	Validity		Explanation
	Correlation	Sig.	
Product quality ( $X_1$ )			
X <sub>1.1</sub>	0.868	0.000	Valid
X <sub>1.2</sub>	0.873	0.000	Valid
X <sub>1.3</sub>	0.868	0.000	Valid
Service quality ( $X_2$ )			
X <sub>2.1</sub>	0.839	0.000	Valid
X <sub>2.2</sub>	0.678	0.000	Valid
X <sub>2.3</sub>	0.865	0.000	Valid
Customer satisfaction ( $Y_1$ )			
X <sub>3.1</sub>	0.896	0.000	Valid
X <sub>3.2</sub>	0.868	0.000	Valid
X <sub>3.3</sub>	0.795	0.000	Valid
Customer loyalty ( $Y_2$ )			
Y <sub>1.1</sub>	0.843	0.000	Valid
Y <sub>1.2</sub>	0.810	0.000	Valid
Y <sub>1.3</sub>	0.775	0.000	Valid

**Table 43.2** Reliability with Cronbach Alpha Test (Source: Data, processed.)

Variable	Alpha	Cronbach' Alpha	Explanation
Product quality ( $X_1$ )	0.8878	> 0.6	Reliabel
Service quality ( $X_2$ )	0.7059	> 0.6	Reliabel
Customer satisfaction ( $Y_1$ )	0.8111	> 0.6	Reliabel
Customer loyalty ( $Y_2$ )	0.7279	> 0.6	Reliabel

**Table 43.3** Index structural equation modeling (Source: Data, processed.)

Goodness of fit measure	Cut-off value	Results of analysis	Evaluation model
$\chi^2$ -chi-square	Kecil,	286.630	Good fit
Significant probability	$\geq 0.05$	0.070	Good fit
RMSEA	$\leq 0.08$	0.052	Good fit
GFI	$\geq 0.90$	0.915	Good fit
AGFI	$\geq 0.90$	0.907	Good fit
CMIN/DF	$\leq 2.0$	1.002	Good fit
TLI	$\geq 0.95$	0.968	Good fit
CFI	$\geq 0.95$	0.971	Good fit

### 43.4.4 Goodness of Fit Test

Based on Table 43.3 that the SEM test requirements have been met, apparently the result of a Structural Equation Modeling index indicates a good values, the following is an explanation of each:

Value of c2-chi-square obtained at 286.630. The smaller the value Statistics Chi-Square ( $\chi^2$ ), the better the model (as in the chi-square difference test,  $\chi^2=0$ , meaning absolutely no difference,  $H \leftarrow 0$  received) and accepted by the probability of the cut-off value for  $p > 0.05$  or  $p > 0.10$ .

**Table 43.4** Loading values from each of each variable (Source: Data, processed.)

Variable		<i>Standard loading</i>	t value	t table
Product quality (X1)	→ Customer satisfaction (Y1)	0.538	3.730	1.96
Service quality (X2)	→ Customer satisfaction (Y1)	0.302	2.184	1.96
Customer satisfaction (Y1)	→ Customer loyalty (Y2)	0.431	3.706	1.96

1. RMSEA value (The Root Mean Square Error of Approximation) of 0.052, so it can be concluded that the acceptability of a model that shows a good model, because the value of RMSEA is less than or equal to 0.08 is an index to the acceptability of the model shows a close fit of the model based on degrees of freedom.
2. GFI value of 0.915, so that the model is good (better fit), where the value of GFI is between 0 (poor fit) to 1.0 (perfect fit). Value  $\geq 0.90$  is a good model (better fit).
3. Value of AGFI (Adjusted Goodness of Fit) of 0.907, which is the recommended level of acceptance when  $AGFI \geq 0.90$ , so that it can be interpreted that the models are at levels that are less well-good overall model fit.
4. Value of CMIN/ DF (The Minimum Sample Discrepancy Function) of 1.052, while the relative value of  $\chi^2 \leq 2.0$  or  $\leq 3.0$  is sometimes an indication of acceptable fit between the models with the data, so it can be concluded that there is no indication of acceptable fit between models with data.
5. Value of TLI (Tucker Lewis Index) of 0.968, which is recommended as a reference value for the receipt of a model is receiving  $\geq 0.95$ , so it can be concluded that the model was tested against a model is a good baseline.
6. Value of CFI (Comparative Fit Index) of 0.971, which is the recommended value of  $CFI \geq 0.95$ , so it can be concluded that the model is very good for measuring the level of acceptance of a model.

### 43.4.5 Hypothesis Testing

Based on Table 43.4 the results of hypothesis testing can be described as follows:

1. Product Quality significant effect on the value of the Customer Satisfaction CR was 0.538 with a significance level of 3.730 (greater than 1.96).
2. Service Quality significant effect on the value of the Customer Satisfaction CR was 0.302 with a significance level of 2.184 (greater than 1.96).
3. Customer Satisfaction significantly affect the value of the Customer Loyalty CR at 0.431 with a significance level of 3.706 (greater than 1.96).



### **43.4.6 Discussion**

**1) There is influence of product quality to customer satisfaction at traditional restaurant in East Java** Product quality variable has an average value of 13.38 and this value indicates that respondents strongly agree with the statement that there is product quality variable. It is mainly related to the attitude of the respondents were referring to the statement that the shapes and colors of traditional restaurant is very interesting. Hypothesis 1 product quality is a significant positive effect on customer satisfaction at traditional restaurant in East Java acceptable. It can be seen from the value of CR at 0.538 with a significance level of 3.730 (more than 1.96). This means that it is consistent with the results of previous studies stating that product quality affects brand loyalty. In addition, product quality is the only variable that is important for consumers to be loyal to a brand.

**2) There is influence of service quality on customer satisfaction at traditional restaurant in East Java** Service quality variable has an average value of 10.9. This value indicates that respondents strongly agree with the statement that there is service quality variable. It is the attitude of respondents referred to the statement that traditional restaurant employees always have spare time to assist consumers in finding needs. Hypothesis 2 quality services is a significant positive effect on customer satisfaction is acceptable. It can be seen from the value of CR was 0.302 with a significance level of 2.184 (greater than 1.96). The result is consistent with prior research that explains that the service quality influences brand loyalty. It can be concluded that the service quality is an important variable for consumers to be satisfied.

**3) There is the influence of customer satisfaction on brand loyalty at traditional restaurant in East Java** Customer satisfaction variable has an average value of 12.24. This value indicates that respondents strongly agree with the statement that there is customer satisfaction variable. It refers to the attitude of respondent claim that consumers are satisfied with the prompt and proper service provided by traditional restaurant employees. Hypothesis 3 customer satisfaction is a significant positive effect on customer loyalty can be accepted. It can be seen from the value of CR at 0.431 with a significance level of 3.706 (greater than 1.96). The result is consistent with prior research that explains that customer satisfaction affects brand loyalty. It can be concluded that customer satisfaction is an important variable for consumers to be able to draw their attention to repurchase a brand.

## **43.5 Conclusions and Recommendations**

### **43.5.1 Conclusions**

1. Based on respondents' answers regarding the product quality variable, it is known that respondents strongly agree. Based on the calculation, product quality affects on customer satisfaction. It means that hypothesis 1 is accepted.

2. Based on respondents' answers regarding the product quality variable, it is in mind that respondents strongly agree. Based on the calculations in mind, service quality influences customer satisfaction. It means that hypothesis 2 is accepted.
3. Based on respondents' answers regarding customer satisfaction variables, it is in mind that respondents strongly agree. Based on the calculations in mind, customer satisfaction affects on customer loyalty. It means that hypothesis 3 is accepted.

### **43.5.2 Suggestions**

1. In order for companies trying to maintain the quality of existing products so that consumers can purchase goods of traditional restaurant and make consumers loyal to the brand of traditional restaurant desired.
2. In order to keep the company providing the best quality service so that consumers can remain loyal to the brand of traditional restaurant.
3. In the future studies in order to add information about the effect of product quality and service quality through customer satisfaction on customer loyalty at traditional restaurant in East Java.

### **43.5.3 Limitations of Research**

There are several limitations to this study as follows:

1. The lack of clear grouping of respondents to the knowledge of traditional restaurant.
2. The lack of clear language of the proposed research to the respondent so that the respondents find it difficult to understand the questionnaire.

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