

THE INFLUENCE OF SERVICE QUALITY AND PRODUCT QUALITY ON CUSTOMER SATISFACTION AT ANGIE'S CAKE SURABAYA

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ABSTRACT

The purpose of this research is to identify the impact of the service quality and product quality towards Angie's Cake's customer satisfaction at Surabaya. Furthermore, 180 Angie's Cake's customers are used as population in conducting the research. In this study, samples are taken using convenience sampling with 65 respondents involved in the process. Moreover, data are collected using a questionnaire that is measured by the Likert scale. Additionally, this study employs multiple linear regression analysis which is supported by the SPSS program version 20. Results have shown that the variable service quality and product quality variables have influenced Angie's Cake's customer satisfaction, either simultaneously or partially.

Keywords: Service Quality, Product Quality, Customer Satisfaction, Cake Industry

INTRODUCTION

Every moment that happened in life should be something special. The increase of social life in a big city makes people this day competing to shows what they got to capture every single moment that happened. It's no longer a simple and full of means celebration of birthday, anniversary, wedding day, and much more. Every single part of the party become something special that have to get so much intentions. It happened not only at Jakarta as the capital city, so did happened at Surabaya as one of a big city in Indonesia. The growth of Surabaya's populations increase in every years. A cake is not only one small part of this special event. For the birthday, wedding, and anniversary cake become one part of the decoration. The variation and innovation of designs, and flavors become something unique and pretty to served. Not only the qualities of the cake, a service of cake store could be one of people considerations to choose a cake vendor.

A Cake industry this days has a really great opportunities. Angie's Cake is one of so many cake store at Surabaya. Angie's Cake has a middle-high concentration for their market target. Comparing to their competitors Angie's Cake has few excellences, one of the many that makes Angie's Cake above their competitors is on their quality of products. Angie's Cake offers so many variant types of cakes: whole cake, popcake, cupcakes, and so many more. Not only the different type of cakes that they offers but they also got different flavors and designs for every cakes. The design can be customize

as what the customer wants. Angie's Cake never sell a ready stock for their product, every cake must be ordered before.

The competition in cake industry this far is growing so fast at Surabaya. Every cake store try to gives the best of what they have for their each customers, from the variation of the product that include the designs, types, flavors, a good price, and the quality of service. Each of them must have their value added to their customer that causes customer satisfaction and doing the repeat order and not turned to their competitors.

According to Tjiptono and Chandra (2011), service quality is a customer's perception. Customers will evaluate the quality of a service that they get based on the description of their mind. There's 5 indicators to measure the service quality based on SERVQUAL methods according to Zeithalm (2009:7):

1. Reliability: the ability to perform the promised service dependably and accurately.
2. Responsiveness: the willingness to help customers and to provide prompt service.
3. Assurance: the knowledge and courtesy of employees and their ability to convey trust and confidence.
4. [Empathy](#): the provision of caring, individualized attention to customers.
5. Tangibles: the appearance of physical facilities, equipment, personnel and communication materials.

Product quality is the understanding that the products offered by sellers have more selling points that are not owned by a competitor's product. Therefore, companies are trying to focus on quality products and compare them with the products offered by competitors. However, a product with the best view is not the highest quality products if the zoom is not needed and desired by the market. According to Kotler and Armstrong (2012:283) product quality is the ability to demonstrate a product in its function, it includes the overall durability, reliability, accuracy, ease of operation and repair products are also other product attributes. Product quality are the characteristics of products or services that depend on its ability to demonstrate its function, among others, the overall durability, reliability, accuracy, ease of operation and repair product attributes are also other products to satisfy consumer needs and wants. Kivela et al., in Gagic et al., (2013) recommended the 4 dimensional of product quality in food and beverage:

1. Fresh: the product must have a taste of freshness for example it must created by good quality of raw materials.
2. Presentation: the final presentation of the product have an attractive look.
3. Well cooked: the product must served in good way, hygienic, and saved to be consumed.
4. Variety of food and beverage: different customer has a different taste.

Moliner in Malik (2012) shows two different ways to measure the customer satisfaction, first is with cognitive nature that is by comparing the expectation and the result, and the other is by affective nature that is association that followed by feelings. This research is using the cognitive nature. According to Sivesan (2012) there's 4 indicators to measure customer satisfaction:

1. Service facility: facilities, vehicle, accessories.
2. Convenience and supporting service: delivery service, online order.
3. Customer loyalty: repeat order, good responses.
4. Customer value: value, benefits.

METHODOLOGY

This type of research is a quantitative descriptive type of research that describes the influence of service quality and product quality on customer satisfaction at Angie's Cake Surabaya. With a population is a collection of individuals who have the qualities and characteristics that have been set. Based on the quality and characteristics, the population can be understood as a group of individuals or objects that have at least one observation of the characteristic equation. The population in this research were customers of Angie's Cake Surabaya that made an order more than once time during May 2013 until May 2014.

In this research is using a sampling procedure according to Cresswell (2013:218), procedure sampling is typically proceeds after a study begins and occurs when the researcher asks participants to recommend other individuals to study.

The type of sampling that used in this research is a non probability in convenience sampling method. According to Kuncoro (2013:138) convenience sampling is the procedures to get the sample of research based on researcher's wants where researcher have the freedom to choose who encountered as a sample, but still restricted to respondents who are consumers of Angie's Cake Surabaya.

In this research, the number of samples that will be used for is as many as 180 respondents. The numbers of sample of this research (n) calculated from Slovin's formula which is:

$$n = \frac{N}{1+N(e)^2} = \frac{180}{1+180(0,1)^2} = 64,28 = 65 \text{ samples}$$

n : number of samples
N : number of populations
e : error tolerance

Therefore, the number of samples that will be used in this research is 65 samples based on Slovin's formula 64,28 with the error tolerance 10%.

Methods of data collection in this research is:

1. Questionnaire: according to Putro (2012: 33-36) questionnaire is a data collection method tools as a written question to respondent. The type of questionnaire that used is a closed questionnaire in Likert scale that already had the answer.
2. Literature study: a method to collect secondary data from books, magazines, journals, and another documents.

HYPOTHESIS

1. Quality of service and product quality has a simultaneous effect on customer satisfaction Angie's Cake Surabaya.
2. Quality of service has a partial effect on customer satisfaction Angie's Cake Surabaya.
3. Product quality has a partial effect on customer satisfaction Angie's Cake Surabaya.

RESULT AND DISCUSSION

Angie's Cake is one of so many cake store at Surabaya. It based and grow at Surabaya since 2002. Angie's cake has specialization in wedding and birthday cake. Angie's Cake has a special specification for their segmentation of buyers, middle-high become the target of customers. The store and production house of Angie's Cake is on 62th Kayun street, Surabaya. For the production Angie's Cake begin at 8.00-16.00, and for the store it open at 9.00-17.00. These day Angie's Cake has 30 employees consists of 2 people for marketing, 2 for administration, 3 drivers, and the rest of it in charge at the production house: baking, finishing, accessorize, and many others.

Statistic Description

Characteristic of Respondents

Number of male respondents as many as 27 people (41.5%) and women were 38 persons (58.5%). above data indicate that the majority of customers Angie's Cake is a woman. This is because women are more often pay attention to small things such as birthday, anniversary, and so forth. number of respondents aged <18 years were 3 (4.6%), respondents aged 18-30 years with as many as 33 people (50.8%), respondents aged 31-45 years were 19 persons (29.2%) , and respondents with age > 46 years as many as 10 people (15.4%). The above data shows that the majority of customers Angie's Cake aged 18 to 30 years. This is because in this age is the age at which the co-productive of vendors, are in the age group 18-30 years, and in this age category many customers from Angie's Cake is still in school and young mothers group where they have many friends and demands lifestyle.

Table 1. Characteristic Respondents

Characteristic Respondents		Frequency	Percentage (%)
Sex	Pria	28	41,5%
	Wanita	37	58,5%
Age	< 18 tahun	3	4,6%
	18-30 tahun	33	50,8%
	31-45 tahun	19	29,2%
	> 46 tahun	10	15,4%

Source: Analyze Primary Data

**Descriptive Analysis
Service Quality**

Table 2. Descriptive Analysis of Service Quality

Dimension	Skor Jawaban										Mean	Std. Deviation
	ST S	%	T S	%	C S	%	S	%	S S	%		
delivery service	0	0.0	0	0.0	12	18.5	24	36.9	29	44.6	4.26	0.76
appointment's accuracy	0	0.0	0	0.0	3	4.6	20	30.8	42	64.6	4.60	0.58
employee skills	0	0.0	0	0.0	5	7.7	37	56.9	23	35.4	4.28	0.60
good in responding customer needs	0	0.0	1	1.5	7	10.8	32	49.2	25	38.5	4.25	0.71
attitude	0	0.0	0	0.0	5	7.7	46	70.8	14	21.5	4.14	0.53
take corrections	0	0.0	0	0.0	4	6.2	18	27.7	43	66.2	4.60	0.61
trustworthy	0	0.0	0	0.0	2	3.1	21	32.3	42	64.6	4.62	0.55
friendly	0	0.0	0	0.0	7	10.8	42	64.6	16	24.6	4.14	0.58
online order	0	0.0	1	1.5	18	27.7	26	40.0	20	30.8	4.00	0.81
good in directing needs	0	0.0	1	1.5	4	6.2	22	33.8	38	58.5	4.49	0.69
safe and easy payment	0	0.0	0	0.0	3	4.6	31	47.7	31	47.7	4.43	0.59
comfortable showroom	0	0.0	0	0.0	3	4.6	32	49.2	30	46.2	4.42	0.58
fun showroom	0	0.0	0	0.0	5	7.7	29	44.6	31	47.7	4.40	0.63
showroom's design	0	0.0	0	0.0	7	10.8	28	43.1	30	46.2	4.35	0.67
employee performance	0	0.0	2	3.1	20	30.8	25	38.5	18	27.7	3.91	0.84

Source: Analyze Primary Data

Table 2 shows the mean of the variable service quality (X_1) as a whole is 4.33. The greater the standard deviation value indicates that the spread of respondents (heterogeneous), if the standard deviation gets smaller, then show the answer on this question homogeneous. The standard deviation value of the largest found in the statement of employee performance with a value of 0.84 which means that the respondent's answers to the statement most spread. While the value of the smallest standard deviation contained in the statement of trustworthy with the value of 0.55 which means that the statement has the most homogeneous response.

Product Quality

Table 3. Descriptive Analysis of Product Quality

Dimension	Skor Jawaban										Mean	Std. Deviation
	ST	%	T	%	C	%	S	%	S	%		
good taste	0	0.0	0	0.0	1	1.5	14	21.5	50	76.9	4.75	0.47
not rancid	0	0.0	0	0.0	2	3.1	12	18.5	51	78.5	4.75	0.50
fixing product	0	0.0	0	0.0	1	1.5	22	33.8	42	64.6	4.63	0.52
replacing product	0	0.0	0	0.0	3	4.6	21	32.3	41	63.1	4.58	0.58
outlook	0	0.0	0	0.0	7	10.8	25	38.5	33	50.8	4.40	0.68
product's consistency	0	0.0	1	1.5	12	18.5	29	44.6	23	35.4	4.14	0.77
design consistency	0	0.0	0	0.0	3	4.6	29	44.6	33	50.8	4.46	0.59
final product	0	0.0	0	0.0	6	9.2	26	40.0	33	50.8	4.42	0.66
color matching	0	0.0	0	0.0	3	4.6	18	27.7	44	67.7	4.63	0.57
raw materials	0	0.0	0	0.0	1	1.5	17	26.2	47	72.3	4.71	0.49
best before information	0	0.0	0	0.0	14	21.5	31	47.7	20	30.8	4.09	0.72
how to keep product	0	0.0	1	1.5	14	21.5	30	46.2	20	30.8	4.06	0.77
packaging	0	0.0	0	0.0	30	46.2	23	35.4	12	18.5	3.72	0.76
shape and size of the product	0	0.0	0	0.0	7	10.8	20	30.8	38	58.5	4.48	0.69
variance of cake	0	0.0	0	0.0	4	6.2	16	24.6	45	69.2	4.63	0.60
variance of taste	0	0.0	0	0.0	3	4.6	18	27.7	44	67.7	4.63	0.57
accessorize	0	0.0	0	0.0	5	7.7	33	50.8	27	41.5	4.34	0.62
accessorize quality	0	0.0	0	0.0	6	9.2	38	58.5	21	32.3	4.23	0.61
design's choices	0	0.0	0	0.0	2	3.1	18	27.7	45	69.2	4.66	0.54

Source: Analyze Primary Data

Table 3 shows the mean of the variable quality of the product (X_2) as a whole is 4.44. The value of the greatest standard deviation found in product's consistency and how to keep product with the value of 0.77 which means that the respondent's answers to the two statements is the most spread. While the value of the smallest standard deviation found in the first statement about the quality of good taste with a value of 0.47 which means that the statement has the most homogeneous response.

Customer Satisfaction

Table 4. Descriptive Analysis of Customer Satisfaction

Dimension	Skor Jawaban										Mean	Std. Deviation
	ST S	%	T S	%	C S	%	S	%	S S	%		
Facilities	0	0.0	0	0.0	10	15.4	3	50.8	22	33.8	4.18	0.68
means	0	0.0	0	0.0	5	7.7	3	50.8	27	41.5	4.34	0.62
accessorize	0	0.0	0	0.0	22	33.8	2	30.8	23	35.4	4.02	0.84
delivery service	0	0.0	0	0.0	18	27.7	2	40.6	21	32.3	4.05	0.78
online order	0	0.0	3	4.6	14	21.5	2	44.9	19	29.2	3.98	0.84
repeat order	0	0.0	0	0.0	1	1.5	1	26.7	47	72.3	4.71	0.49
good responses from customers	0	0.0	0	0.0	0	0.0	1	27.8	47	72.3	4.72	0.45
customer's values	0	0.0	0	0.0	0	0.0	1	27.8	47	72.3	4.72	0.45
customer's benefits	0	0.0	1	1.5	0	0.0	1	23.1	49	75.4	4.72	0.55

Source: Analyze Primary Data

Table 4 shows the mean of the variable Customer Satisfaction (Y) as a whole is 4.38. The value of the greatest standard deviation found in accessorize and online order with the value of 0.84 which means that the respondent's answers to the two statements is the most spread. While the value of the smallest standard deviation found in the statements about good responses from customers, customer's values, and customer's benefits with a value of 0.45 which means that the statements has the most homogeneous response.

Validity and Reliability Test

Testing construct validity with SPSS is to use correlation. The criteria, the instrument is valid if the value of correlation (Pearson correlation) is positive, and the probability of correlation [sig. (2-tailed)] is less than significant level (α) of 0.05. Validity test is also performed by comparing the values of r calculated with the values of r product moment correlation. Table 5 below will show that the r value of each attribute (item statement) is greater than the value of r table product moment r value.

Table 5. Validity Test

Demensions	Pearson Colleration	Probability Colleration (Sig.(2-tailed))	Summary
Service Quality			
delivery service	.557	.000	<i>valid</i>
appointment's accuracy	.514	.000	<i>valid</i>
employee skills	.367	.003	<i>valid</i>
good in responding customer needs	.462	.000	<i>valid</i>
attitude of polite	.338	.006	<i>valid</i>
take corrections	.618	.000	<i>valid</i>
Trustworthy	.486	.000	<i>valid</i>
Friendly	.353	.004	<i>valid</i>
online order	.421	.000	<i>valid</i>
good in directing needs	.425	.000	<i>valid</i>
safe and easy payment	.425	.000	<i>valid</i>
comfortable showroom	.491	.000	<i>valid</i>
fun showroom	.452	.000	<i>valid</i>
showroom's design	.647	.000	<i>valid</i>
employee performance	.369	.003	<i>valid</i>
Product Quality			
good taste	.427	.000	<i>valid</i>
not rancid	.363	.003	<i>valid</i>
fixing product	.560	.000	<i>valid</i>
replacing product	.521	.000	<i>valid</i>
Outlook	.590	.000	<i>valid</i>
product's consistency	.721	.000	<i>valid</i>
design consistency	.601	.000	<i>valid</i>
final product	.618	.000	<i>valid</i>
color matching	.399	.001	<i>valid</i>
raw materials	.424	.000	<i>valid</i>
best before information	.298	.016	<i>valid</i>
how to keep product	.400	.001	<i>valid</i>
Packaging	.409	.001	<i>valid</i>
shape and size of the product	.510	.000	<i>valid</i>
variance of cake	.452	.000	<i>valid</i>
variance of taste	.504	.000	<i>valid</i>
Accessorize	.671	.000	<i>valid</i>
accessorize quality	.392	.001	<i>valid</i>
design's choices	.536	.000	<i>valid</i>

Customer Satisfaction			
Facilities	.441	.000	<i>valid</i>
Means	.589	.000	<i>valid</i>
Accessorize	.538	.000	<i>valid</i>
delivery service	.616	.000	<i>valid</i>
online order	.696	.000	<i>valid</i>
repeat order	.514	.000	<i>valid</i>
good responses from customers	.608	.000	<i>valid</i>
customer's values	.608	.000	<i>valid</i>
customer's benefits	.598	.000	<i>valid</i>

Source: Analyze Primary Data

Reliability testing in this study is to use the formula Cronbach 's alpha. Determinants values which were at 0.6 or more indicates that the variable is reliable that can be seen in Table 6 Reliability test results above show that all variables have a coefficient Cronbach 's alpha above 0.6 so that it can be said that every variable in the questionnaire is reliable.

Table 6. Reliability Test

Variable	Cronbach's Alpha	N of Items
Service Quality	.759	15
Product Quality	.893	19
Customer Satisfaction	.969	9

Source: Output SPSS 20.0

Reliability test results above show that all variables have a coefficient cronbach's alpha above 0.6 so that it can be said that every variable in the questionnaire is reliable.

Multiple Linear Regression Analysis

Regression equation model which is supposed to have met the requirements of the classical assumptions, among others: normal distribution, there is no multicollinearity and no problems heterocedastisity. Previous analysis has shown that the model equations in this study have met the requirements of the classical assumptions, so that the model equations in this study are correct. Regression analysis is used to measure the effect of more than one independent variable on the dependent variable. Based on the calculation of multiple regressions using SPSS 20.0 obtained results are listed in the table below.

Table 7. Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.554	5.070		1.293	.201		
	Service Quality	.188	.089	.256	2.117	.038	.645	1.549
	Product Quality	.294	.078	.458	3.787	.000	.645	1.549

a. Dependent Variable: Customer Satisfaction

Source: Output SPSS 20.0

Regression analysis is used to measure the effect of more than one independent variable on the dependent variable. Regression analysis was performed to determine the effect of independent variables in this research, the quality of service (X_1) and product quality (X_2) with the dependent variable in this research, namely customer satisfaction (Y). The results of the regression analysis is to determine the effect of quality of service (X_1) and product quality (X_2) to (Y), either partially or simultaneously.

It is known that the value of the constant is 6,554 which shows that if X_1 (service quality) and X_2 (product quality) fixed (constant) then customer satisfaction would be predicted to rise by 6,554. This means that the technical and functional has a direction (influence) toward positive customer satisfaction.

The service quality coefficient has a value of 0,188 indicating that if the service quality increase by 1 unit with the other variables remains the customer satisfaction will also be increased by 0,188 units. The product quality coefficient has a value of 0,294 indicating that if the product quality increase of 1 unit assuming the other variables remains the customer satisfaction will also be increased by 0,294 units.

COEFFICIENT OF DETERMINATION (R^2), COEFFICIENT OF COLLARATION (R),

To determine the coefficient of determination (R^2) can be seen in Table 8 that describes how much customer satisfaction explained by the variable quality of the technical and functional quality.

Table 8. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.644 ^a	.415	.396	2.57045	2.046

a. Predictors: (Constant), Service Quality, Product Quality

b. Dependent Variable: Customer Satisfaction

Source: Output SPSS 20.0

Table 8 shows that the coefficient of determination (R^2) was 0.415. This figure shows that 41.5% dependent variable can be explained by the independent variables in this study, while the remaining 58.5% can be explained by other variables that have not been

investigated. While the correlation coefficient value (R) has a value of 0.644 which indicates that the variable quality of service (X₁) and product quality (X₂) has a close relationship to the customer satisfaction variable (Y) because the value of (R) be between -1 to 1.

COLLERATION OF PARTIAL (r)

Table 9. Coefficients^a

Model		Unstandardize d Coefficients		Standardize d Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero- order	Partia l	Part
1	(Constant)	6.554	5.070		1.29 3	.201			
	Service Quality	.188	.089	.256	2.11 7	.038	.529	.260	.206
	Product Quality	.294	.078	.458	3.78 7	.000	.610	.433	.368

Source: Output SPSS 20.0

Table 9 shows that the value of the partial correlation between the independent variable service quality (X₁) with customer satisfaction (Y) is 0,260, while the value of the partial correlation between the independent variables of product quality (X₂) with customer satisfaction (Y) is 0,433. Variable product quality (X₂) has the highest partial correlation values that have the most dominant effect on customer satisfaction (Y).

F TEST

F test is used to determine the effect of independent variables in this study is the quality of service and product quality on the dependent variable in this study is that customer satisfaction variables simultaneously or together (Kuncoro, 2009: 239).

**Table 10. F Test Result
ANOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	290.414	2	145.207	21.977	.000 ^b
	Residual	409.648	62	6.607		
	Total	700.062	64			

Source: Output SPSS 20.0

Based on the Table 5.13 it can be seen that the calculated F value of 21,977 with the Sig. of 0,000 which has a value of < 0,05 with the meaning of the variable quality of service and quality of the product together (simultaneously) and simultaneously have a significant influence on customer satisfaction from Angie's Cake.

t TEST customer satisfaction variable (Y) is partial. If significance value of each independent variable is smaller than 0,05; then there is a partial significant influence between independent variables with the dependent variable.

t test was used to test the effect of the independent variable in this study is the quality of service (X₁) and product quality (X₂) on the dependent variable in this study is that

Table 11. T Test Result Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.554	5.070		1.293	.201
	Service Quality	.188	.089	.256	2.117	.038
	Product Quality	.294	.078	.458	3.787	.000

Source: Output SPSS 20.0

Table 5.14 describes the statistical testing with partial test (t test) of each of the variables, namely:

1. Coefficients regression testing service quality (X₁) from Table 11, it can be seen that the value of Sig. 0,038 service quality. Because the Sig. smaller than 0,05 the conclusion is the variable quality of service (X₁) partially significant effect on customer satisfaction variable (Y).

2. Coefficient regression testing product quality (X₂) from Table 11, it can be seen that the value of Sig. product quality 0,000. Because the Sig. smaller than 0,05 the conclusion is the variable quality of the product (X₂) partially significant effect on customer satisfaction variable (Y).

NORMALITY TEST

Table 12. Normality Test Result One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		65
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.52996930
Most Extreme Differences	Absolute	.092
	Positive	.062
	Negative	-.092
Kolmogorov-Smirnov Z		.738
Asymp. Sig. (2-tailed)		.647

a. Test distribution is Normal.

b. Calculated from data.

Source: Output SPSS 20.0

Normality test aims to test whether the residuals in the regression model are normally distributed or not. To test whether the data is normally distributed or not, can be determined by using the Kolmogorov-Smirnov test which aims to test whether the regression model, the residuals have a normal distribution of the data or near normal. If the significance value > 0.05 then the decision is normally distributed residuals (Rini, 2012).

Table 5:17 shows that the significance of the residual value greater than 0.05 is equal to 0.738. This proves that the residuals are normally distributed.

AUTOCORRELATION TEST

In both regression models, autocorrelation should not happen. If there is autocorrelation, the resulting assessments have not minimum variance and t-test can not be used, and the results of the study will be biased because it will give a wrong conclusion that the researchers did not find the right research. Autocorrelation test aims to test whether a linear regression model is no correlation between errors (error) now with an error (error) before (Wijaya, 2009: 122). Decision making is the presence or absence of autocorrelation can be seen through the Durbin Watson autocorrelation criterion.

Tabel 13. Durbin Watson's Autocorrelation Criteria

H₀	If
No positive autocorrelation	$0 < d < dL$
No positive autocorrelation	$dL \leq d \leq du$
No negative autocorrelation	$4 - dL < d < 4$
No negative autocorrelation	$4 - du \leq d \leq 4 - dL$
No autocorrelation, positive or negative	$du < d < 4 - du$

Source: Aplikasi *Multivariate* Dengan Program SPSS (Ghozali, 2011)

Table 14. Autocorrelation Result Test

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.644 ^a	.415	.396	2.57045	2.046

Source: Output SPSS 20.0

Table 14 shows the Durbin-Watson value in this study was 2,046. 2,046 DW value, this value will be compared to the 5% significance table value, the number of samples 65 (n) and the number of independent variables 2 (K = 2) the obtained value of du 1,662. 2,046

DW value is greater than the upper limit (du) is 1,662 and less than (4-du) 4 to 1.662 = 2.338, it can be concluded that there is no autocorrelation.

MULTICOLLINEARITY TEST

Multicollinearity test conducted to test whether the regression model found correlates between the independent variables. A good regression model is not the case in which the correlation between the independent variable. A regression model can be said not occur when multicollinearity has the value of VIF < 10

Table 15 below shows the test results of multicollinearity, where there is a VIF value of each variable research.

Table 15. Multicollinearity Result Test

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	6.554	5.070		1.293	.201		
Service Quality	.188	.089	.256	2.117	.038	.645	1.549
Product Quality	.294	.078	.458	3.787	.000	.645	1.549

Source: Output SPSS 20.0

Table 15 shows that the VIF value of two independent variables is smaller than 10, that is equal to 1.549. This shows that there is no multicollinearity between the two variables, so the results of the regression fit for use in making decisions.

HETEROSCADASTICITY TEST

Heteroscedasticity test aimed at testing whether the regression model of the residual variance inequality occurs one other observation to observation. If the variance of the residuals of the observations to other observations remain, it is called and if different homocadasticity called heteroscedasticity. How that is done for heteroscedasticity test is to glejser test. Glejser test done by regressing all independent variables with absolute residual. If the significance value > 0,05 for all variables, the residual variance is said to be homogeneous. This is the following test results of heteroscedasticity:

Table 16. Heteroscedasticity Result Test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.669E-15	5.070		.000	1.000
	Service Quality	0.000	.089	0.000	0.000	1.000
	Product Quality	0.000	.078	0.000	0.000	1.000

Source: Output SPSS 20.0

Table 16 shows the significance values greater than 0,05; that is equal to 1,000 for each variable quality of service (X1) and the variable quality of the product (X2). This shows that there is no heteroscedasticity and regression results worth taking a decision.

CONCLUSSIONS

Results of reliability and validity testing showed that all the statements in each of the variables are reliable and valid. In the classical assumption test that includes testing multicollinearity, autocorrelational test, heteroscedasticity test, and normality test showed that the regression model proposed not experience the correlation between independent variables, does not occur heteroscedasticity, and has a normal distribution. From the discussions that have been described, it can be deduced as follows.

Based on the results of research and discussion on the effect of service quality (X₁) and product quality (X₂) on customer satisfaction (Y) Angie's Cake Surabaya, it can be concluded that:

1. Service quality (X₁) and product quality (X₂) has simultaneous effect on customer satisfaction (Y) of Angie's Cake Surabaya. This reinforces the research that has been conducted by Saidani (2012). From this study it can be seen from the results obtained through the F-test is performed through input data from SPSS. In the results of the data it can be seen that the significance value of the F test performed on independent and dependent variables in this study showed a value below 0,05 in accordance with the standards prescribed these results indicate that two independent variables tested simultaneously can together affect customer satisfaction.
2. Service quality (X₁) partially significantly affect customer satisfaction (Y) Angie's Cake Surabaya. This shows that the higher the quality of services provided, the higher the customer satisfaction of Angie's Cake. This reinforces the research that has been conducted by Ghimire (2012) and Ackaradejruangsri (2013). This conclusion is obtained see sig value of the t test under 0,05 for this variable.
3. Product quality (X₂) partially significantly affect customer satisfaction (Y) Angie's Cake Surabaya. This shows that the higher the quality of a given product, the higher the customer satisfaction Angie's Cake. This reinforces the research that has been conducted by Yadav (2011). From the overall mean value,

product quality has a mean value of 4.44 and greater than the value of quality of service, as well as in the test of partial correlation is performed, the quality of the product has a partial value of 0,433 and is greater than the quality of service that has a value of 0,260. This shows as partial, the variable of product quality has the most dominant influence on customer satisfaction.

For the next research or study has to using other variables, such as customer value because the two variables are examined in this study has R^2 value of 41,5%, which means that the information provided on the independent variables in this study only 41,5% can provide information for the dependent variable and there are 58,5% of the information that could be explained by other variables that are not addressed in this study. Therefore, further research is recommended to add another variable that has not been used in this research. This is supported by research that has been done previously by Malik (2012) in which customer value is also a determinant of customer satisfaction.

REFERENCES

- Ackaradejruangsri, P. 2013 *The effect of product quality attributes on Thai consumers' buying decisions*. Ritsumeikan Journal of Asia Pacific Studies, 33.
- Bungin, Burhan. 2011 . *Metode Penelitian Kuantitatif*. Edisi 2. Jakarta: Kencana Prenada Media Group.
- Choi, Eun Jung & Kim, S. 2013 . The Study of the Impact of Perceived Quality and Value of Social Enterprises on Customer Satisfaction and Re-Purchase Intention. *International Journal of Smart Home*, VII (1).
- Creswell, J.W. 2013 . *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.
- Dantes, Nyoman. 2012 . *Metode Penelitian*. Yogyakarta: Penerbit Andi.
- Gagic, S., Tesnovic, D., Jovicic, A. 2013 *The Vital Components of Restaurant Quality that Affect Guest Satisfaction*, *Turizam*, XVII (4), p.p. 166-176.
- Ghasemi, M. Kazemi, A. Esfahani, A.N. 2012 *Investigating and Evaluation of Service Quality Gaps by Revised Servqual Model (Case Study: The M.A Students of Azad University of Najwar Abad)*, *IJCRB*, III (9).
- Ghimire, A.J. 2012 . *Service quality and customer satisfaction in restaurant business*. Finland: Central Ostrobothnia University of Applied Sciences.
- [Ghozali, Imam. 2011. 'Aplikasi Multivariate Dengan Program SPSS', Semarang: Badan Penerbit Universitas Diponegoro.](#)
- Kuncoro, Mudrajad. 2009. *Metode Riset Untuk Bisnis dan Ekonomi*. Edisi 3. Jakarta : Erlangga.
- Kuncoro, Mudrajad. 2013. *Metode Riset Untuk Bisnis dan Ekonomi*. Edisi 4. Jakarta : Erlangga.
- Kotler, Philip and Keller, Kevin Lane. 2012. *Marketing Management*. New Jersey: Pearson Education Limited.

- Kotler, Philip and Armstrong, Garry. 2012. *Principles of Marketing*. New Jersey: Pearson Education Limited.
- Loke, S.P, Taiwo, A.A, Salim, H.M, & Downe, A.G. 2011. *Service Quality and Customer Satisfaction in a Telecommunication Service Provider*. *IPEDR*, XI, p.p. 24-29.
- Malik, S.U. 2012 *Customer Satisfaction, Perceived Service Quality, and Mediating Role of Perceived Value*. *International Journey of Marketing Studies*, IV (1), pp. 69-71.
- Putro, Eko. 2012. *Teknik Penyusunan Instrumen Penelitian*. Yogyakarta: Pustaka Pelajar.
- Render, B. & Hazer, J. 2011. *Operation Management*. Edisi 10. New Jersey: Prentice Hall.
- Rini, T. 2012. *Analisis Pengaruh Corporate Governance Terhadap Kinerja Keuangan*. Semarang: Universitas Diponegoro.
- Saedani, B. & Arifin, F. 2012 *Pengaruh Kualitas Produk dan Kualitas Layanan Terhadap Kepuasan Konsumen dan Minat Beli pada Ranch Market*. *Jurnal Riset Manajemen Sains Indonesia*, III (1).
- Sangaji, E.M, & Sopiah. 2013. *Perilaku Konsumen Pendekatan Praktis Disertai: Himpunan Jurnal Penelitian*. Yogyakarta: C.V Andi Offset.
- Siregar, Syofian. 2013. *Metode Penelitian Kuantitatif: Dilengkapi Perbandingan Perhitungan Manual & SPSS*. Edisi 1. Jakarta: Kencana Prenada Media Group.
- Sivesan, S. 2012. *Service Quality and Customer Satisfaction: A Case Study – Banking Sectors in Jaffna District, Sri Lanka*. *International Journal of Marketing, Financial Service & Management Research (IRJC)*, I (10).
- Smith, J. 2012. *Pengaruh Kualitas Layanan, Kualitas Produk, dan Harga Terhadap Kepuasan Konsumen Wei Xiao di Surabaya*.
- Sutawidjaja, A.H, Tuti, W, & Suharyanti. 2012. *The Influence of Service Quality on Customer Satisfaction (Study in Starbucks Café-Indonesia)*. Jakarta: Universitas Bakrie.
- Tanuwidjaja, M. & Anshori, M.Y. 2013 *Penaruh Kualitas Layanan dan Kualitas Produk Terhadap Kepuasan Pelanggan Pipop Copy*. *Jurnal NeO-Bis*, VII (1).
- Tjiptono, F & Chandra, G. 2011. *Service, Quality & Satisfaction*. Edisi 3. Yogyakarta: C.V Andi Offset.
- Tjiptono, F & Chandra, G. 2012. *Pemasaran Strategik*. Edisi 2. Yogyakarta: C.V Andi Offset.
- Wijaya, Tony. 2011. *Analisis Data Penelitian Menggunakan SPSS*. Yogyakarta: Universitas Atma Jaya Yogyakarta.
- Yadav, I. 2011. *Influence of Service and Product Quality towards Customer Satisfaction : A Case Study of Carterers, Sangli City*. Sangli.

Yadav, R.K. & Dabhade, N. 2013. *Impact of Service Quality on Customer Satisfaction of Mobile Users – A Case Study of Airtel*. *International Journal of Innovative Research & Studies*, II (5), pp.141-143.

Zeithmal V.A, dkk. 2009. *Services Marketing*. Fifth Edition. New York: McGraw-Hill International Edition.