

# Managing Service Quality And Customer Relationship Management To Increase Customer Satisfaction And Customer Retention

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**Abstract.** Customer retention (Customer Retention/CR) is very important for a company, with customer retention the company can survive and continue to grow. Many policies have been made by CEOs of multinational companies as well as research conducted by researchers to find out what factors are effective and have an impact on customer retention. This study aims to determine the relationship between the variables Service Quality, Customer Relationship Management, Customer Satisfaction, and Customer Retention. The analysis is based on 217 respondents who are customers who have used services at the company through a survey questionnaire. The measurement model for the analysis of the research hypothesis uses the Partial Least Square (PLS) procedure. The results showed that the CRM variable had a positive effect on the SQ variable, the SQ variable had a positive effect on the CS variable, the CRM variable had a positive effect on the CS variable, the SQ variable had a positive effect on the CR variable, the CRM variable had a positive effect on the CR variable, the CS variable had a positive effect on the CR variable CR. The advice that can be given is the need to maintain and improve the quality of service and customer relations, because it will give the company customer satisfaction which has an impact on customer retention. Companies also need to consider the feedback obtained from the customer relationship system to improve service quality and customer relations themselves.

**Keywords:** Service Quality, Customer Relationship Management, Customer Satisfaction, Customer Retention.

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## INTRODUCTION

Customer retention is critical to a company's success in a highly competitive environment (Han & Hyun, 2015). Customers who continue to use the company's products/services can contribute to the company's revenue on an ongoing basis. However, customer retention does not just happen, but through a fairly dynamic process, this is because customer retention is the impact of customer satisfaction based on the experience of experiencing service quality when customers use a company's products/services (Ibojo, 2015; Ranaweera & Neely, 2003; Venetis & Ghauri, 2004). In addition, good communication from the company to customers can also provide a satisfying experience (Dewi, 2015). Every company must have a desire to survive and continue to grow, therefore CEOs always try to make policies related to business models, business processes and develop communication models and relationships with customers (Lewis et al., 2016; Mornay, 2011). This aims to make customers have a pleasant and satisfying experience so that it is hoped that customers will be loyal and continue to use the company's products / services (Rust & Zahorik, 1993). Researchers are also interested in conducting research related to customer retention because there is a lot to research and to prove, many models can be developed to provide an overview of what factors can be effectively developed to influence customer retention (Artha et al., 2022; DeSouza, 1992; Quach, 2022).

## LITERATURE REVIEW

Customer retention is an effort made by a company to ensure that its customers do not switch to a competitor's product/service. It is very important to retain highly loyal and long-standing customers as they are the best advertisement for the business. They create a high-quality image and help in attracting other customers to use the company's products/services (Ocloo & Tsetse, 2013). Business success especially in times of competitive environment is based on customer retention. Competitors are always looking for ways to grab customers by providing better offers. Many studies have proven that it is more expensive for companies to acquire new customers than to retain existing customers (Ibojo, 2015). Customer satisfaction can be seen in various behavioral contexts and all are related to the meeting between expectations and evaluations of products/services purchased or consumed. In addition, satisfaction can also come from customer encounters or communication with the company. Some researchers have attempted to define the factors that influence customer satisfaction such as analyzing customer loyalty and value-added services, image, relationships, trust and customer service quality. (Al-Tit, 2015).

Customer satisfaction can increase customer loyalty, which reflects their intention to repurchase or keep using the services provided; i.e. Customer Retention. (Díaz, 2017).

The relationship between customer satisfaction and service quality has received much attention in the literature, but the literature does not clearly distinguish between quality and satisfaction. Satisfaction is a "post-consumption" experience that compares perceived quality with expected quality, while service quality refers to the global evaluation of the service provided by the company (Sivadas & Baker-Prewitt, 2000).

Customer relationship management applications have an effect on customer satisfaction for at least three reasons. First, CRM applications allow companies to customize their offerings for each customer. Second, CRM applications also enable companies to improve the reliability of the consumption experience by facilitating timely and on-demand processing of customer requests and ongoing management of customer accounts. Third, CRM applications also help companies manage customer relationships more effectively through the stages of relationship initiation, maintenance, and determination. Ultimately, effective management of customer relationships is key to managing customer satisfaction and customer loyalty (Mithas et al., 2005).

## METHOD

### Research Design

This research design uses a quantitative approach. Quantitative research is research that works with numbers, whose data are in the form of numbers (scores or values, frequency ratings) which are analyzed using statistics to answer research questions or hypotheses or to make predictions about service quality and customer relationship management to improve customer quality and customer retention to determine the dependent / independent variables X1, X2, X3 and Y which are interrelated.

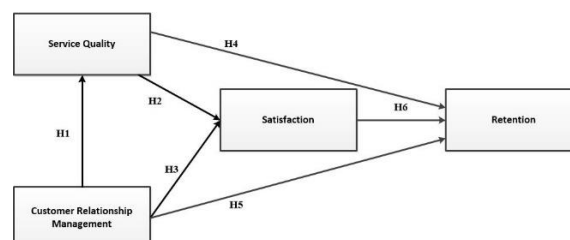


Figure 1. Research Model

The research model proposed in this study is a research model on service quality (Service Quality) and customer relationship management (Customer Relationship Management) to improve customer quality (Customer Satisfaction) and customer retention (Customer Retention).

### **Sampling Method**

The sample in this study is the distribution of questionnaires through the help of google doc, to obtain data on respondents who are in different places (wider range). The process of distributing questionnaires was carried out using chat facilities on the WhatsApp social network which were sent to respondents who happened to be suitable and willing to become respondents. Furthermore, respondents are required to answer the questions posed by the researcher through an online questionnaire (google.doc, questions include research on service quality and customer relationship management to improve customer quality and customer retention).

### **Unit of Analysis**

#### **Path Analysis**

Hypothesis testing in this study was carried out using path analysis techniques to show a strong relationship with the variables tested. The path analysis technique is used to describe and test a model of the relationship between variables in the form of cause and effect (Japariato 2018). Statistical testing on the path analysis model is carried out using the partial least square method. Partial Least Square (PLS) is part of SEM. PLS is the latest technique that is in great demand because it does not require a normal distribution or it can be said to be a study with a small number of samples.

#### **T-Test**

In this study, there are intervening variables, namely the link between the dependent variable and the independent variable. Testing the mediation hypothesis (intervening variable) can be done with the t-test procedure. The t-test is used to obtain the t-statistic value needed if the researcher wants to test the hypothesis, so that the researcher can say the effect of a variable can be said to have a significant effect or not. The t-test is carried out using the bootstrapping method. The bootstrapping method is a re-sampling testing process carried out by a computer system to measure the accuracy of the sample estimate. Bootstrapping is used to measure the accuracy of the sample. If the bootstrap value is more than (>) 1.96, it is stated that the variable has a significant influence, while if the bootstrap value is lower (>) than 1.96, it is stated that the variable's influence is weak (Prabowo 2018).

## **RESULTS**

### **Hypothesis**

H1: does the CRM variable have a positive effect on the SQ variable?

H2: does the SQ variable have a positive effect on the CS variable?

H3: does the CRM variable have a positive effect on the CS variable?

H4: does the SQ variable have a positive effect on the CR variable?

H5: does the CRM variable have a positive effect on the CR variable?

H6: does the CS variable have a positive effect on the CR variable?

Indicators	Indicator Correlations	Raw File	No.	Missing	Mean	Median	Min	Max	Standard Devia...	Excess Kurtosis
SQ1	1	0	3.661	4.000	1.000	5.000	0.773	1.437		
SQ2	2	0	3.949	4.000	2.000	5.000	0.811	-0.121		
SQ3	3	0	3.847	4.000	2.000	5.000	0.799	0.498		
SQ4	4	0	3.729	4.000	1.000	5.000	0.860	0.847		
SQ5	5	0	3.797	4.000	1.000	5.000	1.005	0.043		
SQ6	6	0	3.146	4.000	2.000	5.000	0.875	-0.222		
CR1	7	0	3.678	4.000	1.000	5.000	0.910	0.972		
CR2	8	0	3.932	4.000	1.000	5.000	0.800	2.451		
CR3	9	0	4.102	4.000	1.000	5.000	0.877	1.741		
CR4	10	0	4.237	4.000	1.000	5.000	0.851	3.120		
CR5	11	0	4.000	4.000	2.000	5.000	0.921	-0.331		
CR6	12	0	3.814	4.000	2.000	5.000	0.724	-0.098		
ST1	13	0	3.966	4.000	2.000	5.000	0.862	0.037		
ST2	14	0	4.119	4.000	2.000	5.000	0.666	2.062		
ST3	15	0	4.186	4.000	1.000	5.000	0.791	3.674		

Figure 2. Data on the results of filling in the respondents testing PLS tools

Figure 2 shows the results of filling in the respondent's data based on the questions asked through the questionnaire about research related to service quality variables (Service Quality) and customer relationship management (Customer Relationship Management) to improve customer quality (Customer Satisfaction) and customer retention (Customer Retention) which will be tested through PLS 03 tools.

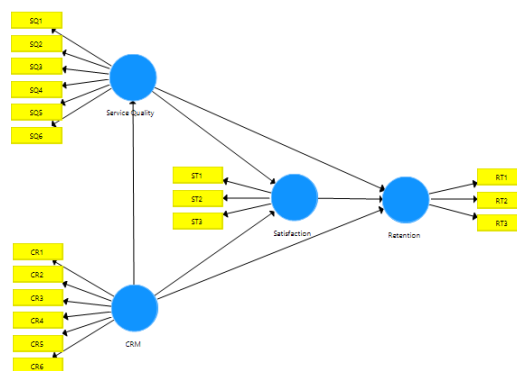


Figure 3. Model of Dependent and Independent Test Variables

Figure 3 shows a model related to the variables of the relationship between service quality and customer relationship management to improve customer satisfaction and customer retention that will be tested through PLS software as a support to determine the results.

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted
CRM	0.876	0.881	0.906	0.619
Retention	0.811	0.816	0.888	0.725
Satisfaction	0.899	0.905	0.917	0.832
Service Quality	0.870	0.875	0.902	0.605

Figure 4. Testing the results of construct reliability and validity

Figure 4 shows the results of the Cronbach's alpha value measuring the lower limit of the reliability value of a construct while the composite reliability measures the true value of the reliability of a construct. Construct Reliability measures how capable the indicator can measure the latent construct. (Memon et al., 2017). The tools used to assess this are composite reliability and Cronbach's alpha. The composite reliability value of 0.6 - 0.9 is considered to have good reliability (Sarstedt et al., 2017), and the expected Cronbach's alpha value is above 0.7 (Ghozali and Latan, 2015). And based on the figure above, it can be seen that all constructs have a Cronbach's Alpha value > 0.6 and even all of

them > 0.9, so it can be said that all of these constructs are reliable. For example, Cronbach's Alpha of latent variable X1 is 0.876 > 0.7, so X1 is reliable. Likewise with other variables where the value is > 0.7 so that everything is reliable.

	CRM	Retention	Satisfaction	Service Quality
CRM	0.786			
Retention	0.873	0.852		
Satisfaction	0.780	0.804	0.912	
Service Quality	0.672	0.683	0.773	0.778

Figure 5. Discriminant Validity results testing

Figure 5 shows the results of the discriminant validity analysis value, namely the Fornell Larcker Criterion which is the root value of AVE, Cross Loading and HTMT. Based on the table above, all the roots of the AVE (Fornell-Larcker Criterion) of each construct are greater than the correlation with other variables. For example X1: the AVE value (See the Picture of the Construct Reliability Results Table Above Previous) is 0.619 then the AVE Root is 0.786. The value of 0.786 is smaller than its correlation with other constructs, namely with X2 of 0.672, with X3 of 0.780 and with Y of 0.873. Likewise with other latent variables, where the AVE Root value > Correlation with other constructs. Because all latent variables AVE Root value > Correlation with other constructs, the discriminant validity requirements in this model have been met, as listed in the figure above.

Discriminant Validity

	CRM	Retention	Satisfaction	Service Quality
CR1	0.723	0.505	0.530	0.454
CR2	0.813	0.606	0.570	0.483
CR3	0.808	0.583	0.645	0.588
CR4	0.858	0.664	0.647	0.607
CR5	0.697	0.839	0.543	0.502
CR6	0.807	0.849	0.712	0.520
RT1	0.719	0.867	0.779	0.717
RT2	0.697	0.839	0.543	0.502
RT3	0.807	0.849	0.712	0.520
SQ1	0.596	0.561	0.558	0.753
SQ2	0.584	0.616	0.842	0.738

Figure 6. Testing the results of Cross Loadings

Figure 6 shows the results of testing cross loadings. The cross loadings value of each construct is evaluated to ensure that the correlation of the construct with the measurement items is greater than the other constructs. The expected cross loadings value is greater than 0.7 (Ghozali and Latan, 2015). Cross-loadings is another method to determine discriminant validity, namely by looking at the cross loadings value. If the loadings value of each item against its construct is greater than the cross loading value.

From the explanation above, it can be seen that all loading indicators on the construct > cross loading. For example in the CR4 construct, where the loadings of all indicators are greater than all cross loading to other constructs. An example is the CR4 indicator where the loading value is 0.858 which is greater than the cross loading to other constructs, namely 0.719 to RT1, 0.411 to SQ1 and 0.596. Likewise with all other indicators where the loadings value to the construct > cross loadings to other constructs.

Path Coefficients					
	Original Sample	Sample Mean	Standard Devia...	T Statistics (O...	P Value
CRM -> Retention	0.621	0.637	0.113	5.483	0.000
CRM -> Satisfaction	0.475	0.468	0.099	5.304	0.000
CRM -> Service Quality	0.672	0.666	0.095	7.055	0.000
Satisfaction -> Retention	0.282	0.266	0.128	2.201	0.028
Service Quality -> Retention	0.048	0.044	0.100	0.480	0.631
Service Quality -> Satisfaction	0.455	0.454	0.089	5.124	0.000

Figure 7. Bootstrapping result testing

Bootstrapping is a process to assess the significance level or probability of direct effects, indirect effects and total effects. In addition, bootstrapping can also assess the significance level of other values including: r square and adjusted r square, f square, outer loading and outer weight.

1. The t statistic value, which is compared with the t table value to test whether or not the exogenous variable has a significant effect on the endogenous.
2. The p value, to compare whether the value is below the significance level, for example below 0.05 or above 0.05 to state whether the null hypothesis or alternative hypothesis is accepted or rejected.
3. Original sample, used as a regression coefficient value, to complete the regression equation

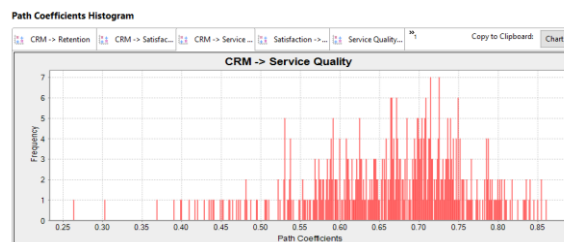


Figure 8. CRM has a significant positive effect on Service Quality.



Figure 9. Histogram of Path Coefficient Histogram of CRM Path Coefficient > Customer Satisfaction

Service quality has a significant positive effect on customer satisfaction.

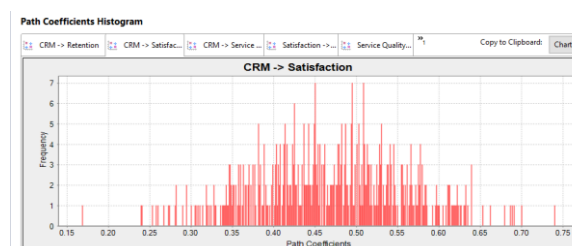


Figure 10. Path Coefficients Histogram CRM > Customer Satisfaction



CRM has a significant positive effect on Customer Satisfaction.

Figure 11. Histogram of Path Coefficient Histogram of Path Coefficient of Service Quality > Customer Retention. Service Quality has a significant positive effect on Customer Retention



Figure 12. Path Coefficients Histogram CRM > Customer Retention

CRM has a significant positive effect on Customer Retention



Figure 13. Histogram of Customer Satisfaction Path Coefficient > Customer Retention

Customer Satisfaction has a significant positive effect on Customer Retention

Total effects is the total effect which is the result of adding direct effects with indirect effects. As in this path model, namely, for example, the total direct effect of X1 on Y, the total effect of X2 on Y, the total effect of X3 on Y, the total effect of X1 on X2 and the total effect of X3 on Y. Because the total effect of X1 on X2, X3 on Y and X3 on Y has no intermediate variables, the total effect value is automatically the same as the direct effect.

The results showed that the CRM variable had a positive effect on the SQ variable, the SQ variable had a positive effect on the CS variable, the CRM variable had a positive effect on the CS variable, the SQ variable had a positive effect on the CR variable, the CRM variable had a positive effect on the CR variable, the CS variable had a positive effect on the CR variable.

## CONCLUSION

From the results of the exposure analysis that has been carried out, it can be concluded that the variables that influence customers to continue using the company's services/products are: service quality and customer relations. Excellent service quality and excellent customer relations can provide satisfaction for customers. This perceived

satisfaction is what encourages customers to continue using the services/products of a company. So that every company is required to be able to provide good service quality and excellent customer relations, because this will affect customer retention. Which means that the company will obtain continuous revenue, which in turn can improve the company's financial performance.

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