

Evaluation of Relationship Marketing Using Service Profit Chain Model to Improve Customer Loyalty

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ABSTRACT

As a tight competition between internet services provider causes a number of customers to churn. PT Telkom needs to design relationship marketing strategy that is focused to the improvement of customer loyalty. Moreover, relationship marketing strategy is evaluated in the framework of service profit chain. Integration between good service, customer loyalty, and growth in service profit chain framework is the booster of profitability. These problems motivate the writers to evaluate service profit chain whose objective is to test the causal model of customer loyalty and identify the performance indicator of customer loyalty management using customer lifetime value (LTV) in the implementation of relationship marketing strategy by Customer Care department of PT Telkom Kandatel Surabaya Barat. Test the causal model between retention program and customer service quality to customer loyalty is using SEM (structural equation modelling) method. After that, calculate the customer lifetime value of Telkom Speedy customer. The result shows that customer service quality has positive and significant effect to customer loyalty as 0,75 with t-value=3,36 ($\alpha = 0,05$). While, retention programme has positive but not significant to customer loyalty as 0,29 with t-value=1,7 ($\alpha = 0,05$). LTV which is the performance indicator of loyalty management by PT Telkom in service profit chain framework, outcomes IDR 508.147,00.

Keywords: Service Profit Chain; Customer Loyalty; Retention Program; Customer Service; Structural Equation Modelling; Customer Lifetime Value.

1. INTRODUCTION

Increasing competition in internet service provider industries causing customers has more choices in choosing services. Intensive competition forces internet service provider companies are no longer product oriented, but began to take the view of marketing focuses on customer. According to Heskett, et al [5] the direction of a strong integration between the profitability, growth of company, customer loyalty, customer satisfaction is the driving force toward the improvement of profitability, market share and company growth. This integration is also called the service profit chain framework. Therefore, customer-oriented company builds customer loyalty by referring to the service profit chain framework, and implements it by applying the concept of relationship marketing [6]. In this research, customer loyalty perspective is focused on the concept of marketing relationships.

Telkom Speedy customers are divided into five groups based on a range of internet pulses per month expenditure categories, as shown in Table 1.

Table 1 Segmentation of Telkom Speedy Customer

Class	Groups Category	Range of Monthly Bill
Prime	Personal Customer A	IDR 5.000.000 - 50.000.000
	Personal Customer B	IDR 2.500.000 - 5.000.001
	Personal Customer C	IDR 1.000.000 - 2.500.001
Ordinary	Personal Customer D	IDR 500.000 - 1.000.001
	Personal Customer E	IDR 50.000 - 500.001

The problem is the churn rate of Telkom Speedy customer in Category Personal Customer(PC) D and E was in high

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rate. It causes Customer Care Department needs to identify problems which correlated with customer loyalty in those categories. The scope of activities, which are being the responsibility of the Customer Care department, as described above includes customer service quality and retention programs. Telkom Speedy's customers in the PC D and PC E category have been managed their loyalty to Telkom Speedy's products by giving retention programs periodically and good customer service provided by PT Telkom through Customer Care Department. However, the phenomenon of customer's churn rate in those categories remains high from year to year. Therefore, the initial steps which need to do are observing the relation of customer service quality and retention programs toward customer loyalty. By means of the study of the influence in several customer service programs and activities within the scope of responsibilities of the internal Customer Care Department, later, it can be proved whether there was a relationship between the variables of customer service quality and retention program to customer loyalty or not. After that, it can be seen how much influence among these variables. This study will use Structural Equation Model (SEM) to conduct confirmatory testing process models and to examine the patterns of causal relationships between variables, i.e., retention programs, service quality of customer service activities, and customer loyalty.

2.LITERATURE REVIEW

2.1.SERVICE PROFIT CHAIN

Heskett, et al [5] explained that the definition of the service profit chain is a directed and a strong integration between the profitability, growth, customer loyalty, customer satisfaction, value of goods and services in consumer, employee capability, employee satisfaction, employee loyalty and employee productivity. In this study, the concept of the service profit chain is used as the base frame of mind that consumer loyalty is the result of the synergy and effectiveness of corporate strategy.

Customer loyalty in the service profit chain framework described as the catalyst toward the improvement of profitability, market share and company growth. According to Reichheld and Sasser [9], the increasing 5% in customer loyalty can increase profits to be 25-85%. Therefore, research has focused on customer loyalty which is one component part of the service profit chain framework. This research is expected to contribute to a framework application service profit chain in a related company, PT. Telkom Indonesia (Persero) Tbk.

2.2.RELATIONSHIP MARKETING

Building long-term relationships with customers can be done with the application of relationship marketing concepts, this concept emphasizes that firms need to establish rapport and maintain satisfactory service to its customers [7]. According Juwaheer [6], relationship-marketing concepts related with the identification of a stable long-term relationships between buyers and sellers. This definition is refined by Berry [3] which states that relationship marketing is a process of several steps which consist of the identification, acquisition, retention and customer development, contributes significantly to the company by focusing its strategy that is by maintaining relationships with customers effectively and efficient so that these relationships become a lifelong relationship / lifetime benefit.

Relationship marketing is a strategy to create customer loyalty. Stone, et al [10] state that relationship marketing is how companies are finding customers, identifying and seeking information about its consumers, trying to stay in touch, ensuring that consumers get what they want from service providers within each transaction, and ensuring that consumers get what company had promised earlier. In this study, the concept application of relationship marketing is represented in the form of customer retention programs and customer service.

3.RESEARCH MODEL

The first stage in the implementation of research is the preliminary observations in order to identify existing problems in the enterprise. The problem identified is how to influence retention program and service quality of customer service to customer loyalty of Telkom Speedy.

Research model as shown in Figure 1 illustrates that there is interaction between retention programs and services



Figure 1 Analysis Model

The model used by the Customer Care Department relating to the duties and obligations to manage customer loyalty. Based on the formulation of the problem and research purposes, as well as drawing on the research model, hypothesis testing will be conducted as follows:

- H1: There is influence of customer retention programs to customer loyalty
- H2: There is the influence of service quality customer service to customer loyalty

Variables used to prove the hypothesis in this study are:

1. Exogenous variables or also known as the independent variable indicated by the notation X.
2. Endogenous or also known as variable as the dependent variables are marked with the notation Y.

Operational definitions for each variable and indicators are as follows:

1. Exogenous variables (X), namely:
 - a. Customer retention programs (X1)

Customer retention program (RP) is a program that aims to identify, preserve, and improve the outcome of Telkom Speedy customer in the long-term relationships through providing value-added. Manifest variables used in this study were:

- PR1: customers get the right RP
- PR2: customers get more value from RP.
- PR3: customers feel closer to PT Telkom after getting RP.
- PR4: customers feel interested in the RP.
- PR5: customer believes that the RP is very important.

- a. Customer service quality (X2)

Latent variable of customer service quality consists of five dimensions of SERVQUAL (Service Quality), according to Zeithaml [12], i.e., which includes tangible, reliability, responsiveness, assurance, and empathy. Variables which are used in this study are partly a variable that was once used by Assauri [1] and partly derived from PT Telkom. Manifest variables among others:

- CS1: customers feel the physical condition in the plaza Telkom clean and neat.
- CS2: customers feel the look of the building plaza Telkom is already good.
- CS3: customers feel good Telkom plaza space in the building is quite neat and attractive.
- CS4: customers feel that the customer service employees look neat and clean.
- CS5: customers get the solution that is in conformity with promised by customer service.
- CS6: results obtained from recovery services satisfy customers and is free from error.
- CS7: the customer service would improve them, if something goes wrong.
- CS8: the punctual hours of work.
- CS9: customer feels that the customer services are quick in responding and resolving customer complaints.
- CS10: customers believe that customer service employees are able to provide the best solutions.
- CS11: customers believe that PT Telkom formulates satisfactory policies to solve customer problems.
- CS12: customers feel customer service employees to be friendly and polite to customers.
- CS13: customers feel that customer service give attention to the problems.
- CS14: customers feel that customer service pay attention to customer's opinion .

2. Endogenous variable (Y), namely:

Customer loyalty is a representation of customer behaviour and attitude positively toward the Telkom Speedy product. According to Zeithaml [12], the level of customer loyalty can be defined by several indicators:

- a. Say something positive about your product to others.
- b. Recommending products to colleagues or others who seek advice.
- c. Consider as the main choice when purchasing the same products or services.
- d. Do more activities through the service the same products and services for several years to come.

Based on the research object and the result of brainstorming with PT Telkom, the indicators (manifest variables) of customer loyalty as follows:

- L1: customers say positive things about Telkom Speedy.
- L2: Telkom Speedy customers to recommend to others who ask for suggestions of good internet service.
- L3: Customer advocate on your colleagues and family to use Telkom Speedy internet service.
- L4: Telkom Speedy customers to consider as a top choice if you need internet service.
- L5: Customers do more activities through Telkom Speedy internet service in the future.

4. DATA PROCESSING

In this study, the type of sampling used is stratified random sampling method. Proportional random sampling was done on the PC category segmentation groups D and E in West Surabaya.

Data processing stage consists of confirmatory factor analysis, SEM processing, and the LTV calculation.

4.2 Confirmatory Factor Analysis

This stage checks whether the t-value of the standardized loading factor (λ) of the variables there are less than 1.96. Variables that have the t-value of more than 1.96 are a valid or significant variable in the formation of latent variables. Value t-value of the standardized loading factor (λ) with a value less than 1.96 in the construct of the model will look red.

4.2.1 Validity Testing of Retention Program

Based on the results of data processing through LISREL software, it can be obtained the measurement model for the variable of retention program (PR), as follows:

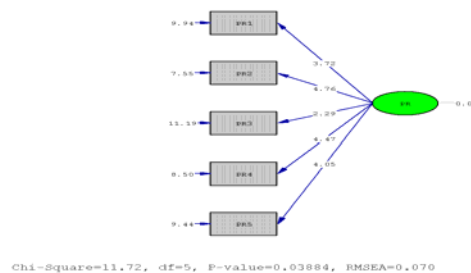


Figure 2. Measurement Model of The t-value Retention Program

Figure 2 shows that t-value obtained from the standardized loading factor (λ) is no less than 1.96. Hence, all indicators variables are valid (significant) in the formation of a latent variable retention program.

4.2.2 Validity Testing of Customer Service Quality

Based on the results of data processing through LISREL software, it can be obtained the measurement model for the variable of customer service quality (CS), as follows:

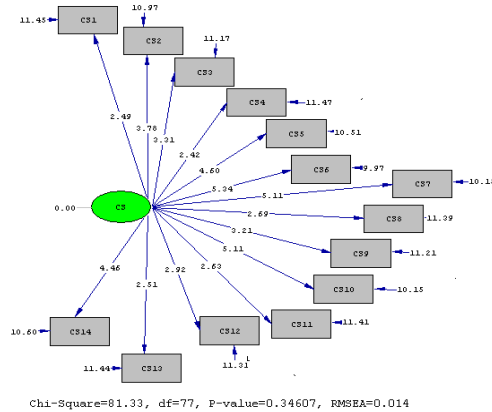


Figure 3. Measurement Model of The t-value Customer Service Quality

Figure 3 shows that t-value obtained from the standardized loading factor (λ) is no less than 1.96. Hence, all indicators variables are valid (significant) in the formation of a latent variable customer service quality.

4.2.3 Validity Testing of Customer Loyalty

Based on the results of data processing through LISREL software, it can be obtained the measurement model for the variable of customer loyalty (L), as follows:

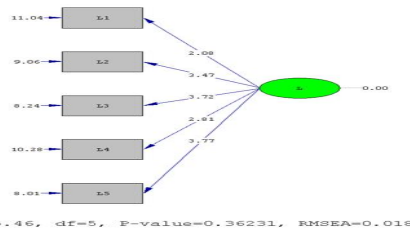


Figure 4 Measurement Model of The t-value Customer Loyalty

Figure 4 above shows that t-value obtained from the standardized loading factor (λ) is no less than 1.96. Hence, all indicators variables are valid (significant) in the formation of a latent variable customer loyalty.

4.3 Processing of Structural Equation Modeling

This stage will test the overall construct variables that have been declared valid from the previous stage (confirmatory factor analysis stage).

The size of the influence between variables can be viewed on the model solution standardize. The greater of the relationships between construct, the influence between variables will be better. Then the significance between variables can be seen on the t-value of the standardized loading factor (λ) which is obtained from the observed variables in the model. Variables which have the t-value more than 1.96 are significant variables in the formation of latent variables.

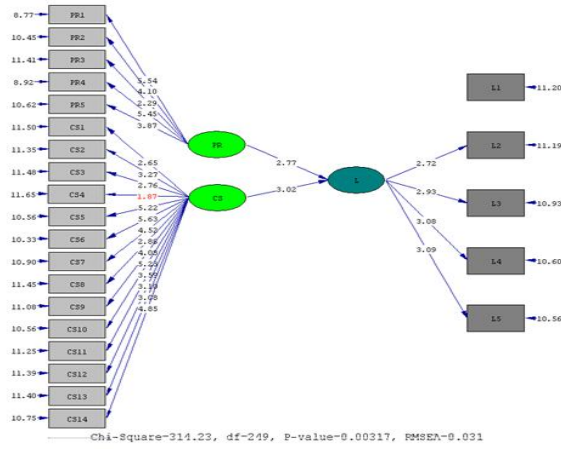


Figure 5. The Basic Structural Model (*t-value*)

Figure 5. shows that CS4 variable shows a red value and has a t-value less than 1.96. Therefore, the next iteration should be done by eliminating CS4 from the basic structural model (Figure 6).

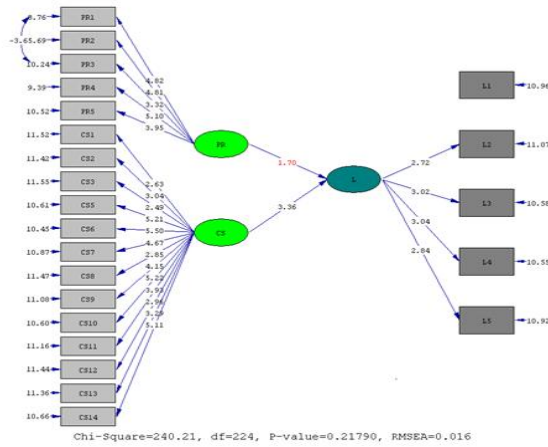


Figure 6. The Modified Basic Structural Model (*t-value*)

Figure 6. above shows that all of the manifest variables show no red value and have the t-value more than 1.96.

The result of modified basic structural model also shows that latent variable PR is not significant to latent variable L. The next output on SEM processing is standardized solution which shows the size of influence between variable on structural model.

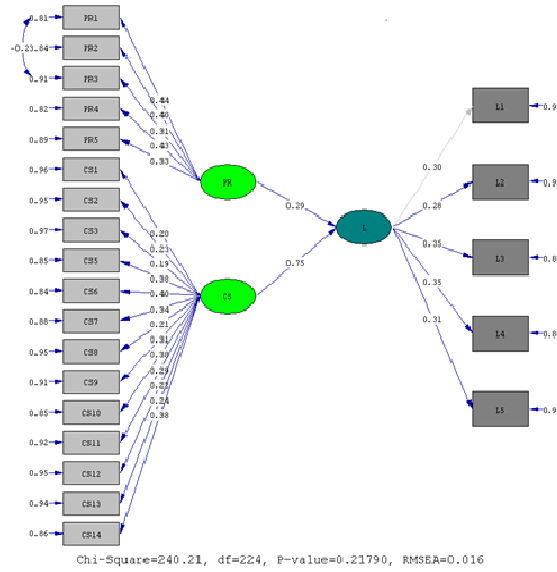
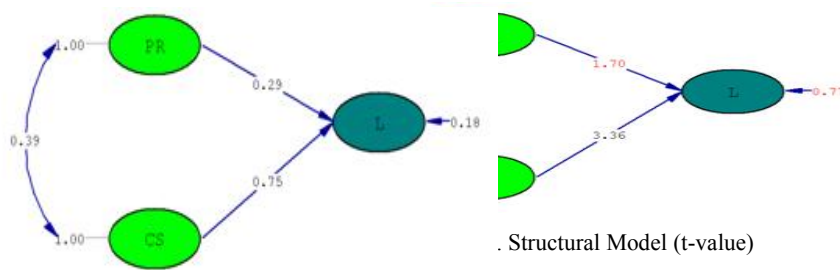


Figure 7. The Standardized Solution Basic Structural Model

After obtaining the basic structural model, it can be derived structural model through LISREL software as follows:



After knowing the structural model, the suitability of structural models is evaluated using GOFI size (Goodness of Fit Indices). Table 2 summaries of GOFI evaluation results which is obtained from LISREL software.

Table 2 Recapitulation of GOFI Values

Goodness of Fit Indices Value	Cut off Value	Actual Value	Model Evaluation
Chi Square (χ^2) Testing	Less is better	248,88	
P-value	$\geq 0,05$	0,22	Good
Root Mean Square Error of Approximation (RMSEA)	$\leq 0,08$	0,016	Good
Goodness of Fit Index (GFI)	$\geq 0,9$	0,93	Good
Adjusted Goodness of Fit Index (AGFI)	$\geq 0,9$	0,91	Good
Non-Normed Fit Index (NNFI)	$\geq 0,90$	0,9	Good
Comparative Fit Index (CFI)	$\geq 0,9$	0,91	Good

4.4 Lifetime Value (LTV) Calculation

This stage will calculate the value of LTV. LTV calculation that is used is LTV calculation for average customers at certain time. According to Allis [2] the formulation are as follows:

• **The Mean-Adjusted Lifetime Value =**

Average Sales Value x Average-Adjusted Customer Reorder Value

Table 3 shows calculations of Telkom Speedy's Customer LTV for PC D and PC E segments.

Table 3 LTV Calculations

No	Variable	Value	Explanation
1	Number of Costumer	40000	Until February 2009
2	Number of units Telkom Speedy's Line	45000	Until February 2009
3	Total Sales	IDR 26.750.876.625	
4	Average Sales	IDR 594.463	Variable 3 divided by Variable 2
5	Average Customer Reorder Value	1,125	Variable 2 divided by Variable 1
6	Mean of Basic Lifetime Value	IDR 668.772	Variable 4 divided by Variable 5
7	Average Time of Subscribing Telkom Speedy	878	In unit of days
8	Number of Customer acquired during 878 days	16306	878 day countdown before February 1, 2009
9	Sales Value of Telkom Speedy during 878 days	IDR 12.681.444.000	
10	Number of units Telkom Speedy's Line during 878 days	20081	
11	Average of sales value during 878 days	IDR 631.515	Variable 9 divided by Variable 10
12	Adjusted Number of units Telkom Speedy's Line	24919	Variable 2 minus Variable 10
13	Adjusted Number of Customer	23694	Variable 1 minus Variable 8
14	Adjusted Average Customer Reorder Value	1,0517	Variable 12 divided by Variable 13
15	Mean-Adjusted Lifetime Value	IDR 625.198	Variable 4 multiplied by Variable 14

From the calculations above, the mean-adjusted Lifetime Value is IDR 625.198,00. With PT Telkom's internal assumptions for interest rate amounted to 9%, the present value of lifetime value (LTV) for each customer is acquired by using the following formula:

• $PV = FV / (1+r)^n$

Where:

- PV = present value of lifetime value
- FV = mean-adjusted lifetime value
- r = interest rate
- n = fraction of the average span of subscription time divided by 365 days.

Thus obtained:

- $n = 878/365 = 2,405$
- $PV = IDR 625.198,00 / (1/(1+0,09)^{2,405})$
 $PV = IDR 508.147,00$

Hence, the LTV of Telkom Speedy customers in segment PC D and PC E is IDR 508,147.00 per customer. After obtaining LTV, the value of customer acquisition cost can be calculated in accordance with the following equation:

• ***Customer acquisition cost (Max) = Present Value of LTV – Cost of goods sold – Customer operating***

Based on secondary data which is obtained from PT. Telkom Kandatel Surabaya Barat, The Mean of Telkom Speedy's COGS and COE with IDR 594.463 mean sales value is IDR 255.619,00 per customer. The value of customer acquisition cost is equivalent to:

*Customer acquisition cost (Max) = IDR 508.147,00 – IDR 255.619,00 = **IDR 252.528,00***

The next step of calculation is budgeting projection in PT. Telkom Kandatel Surabaya for the acquisition of new customers in PC D and PC E segment throughout the year 2009. Refers to the minimum target of PT Telkom Kandatel

Surabaya Barat, customer acquisition in personal customer D and personal customer E segments for the year 2009 amounted to 18000 customers. Accordingly, the total of budgeting projection is equivalent to:

Total Budgeting Projection=IDR 252.528,00 x 18000 = IDR 4.545.504.000,00

6. CONCLUSION AND RECOMMENDATION

6.1. Conclusion

The conclusions that can be given in this research are as follows:

1. Retention program variable has an effect in the amount of 0.29 but not significant to customer loyalty. It can be proved by the calculated of t-value which is only 1.70 or less than the t-value table in the amount of 1.96 on significance level $\alpha = 0.05$.
2. Customer service quality variable has an effect in the amount of 0.75 and significant to customer loyalty. It can be proved by the calculated of t-value which is 3.36, higher than t-value table in the amount of 1.96 on significance level $\alpha = 0.05$.
3. The equity value of Telkom Speedy's customer in the personal customer D and personal customer E category which is a performance indicator from customer loyalty management conducted by PT. Telkom Kandatel Surabaya Barat on the service profit chain framework outcomes IDR 508.147.

6.2. Recommendation

Some recommendation and suggestions that can be given in this research are as follows:

1. The results of this research can be used by companies to design policy strategies related to marketing and customer relationships loyalty.
2. The results of this study can be used as a reference for companies to make improvements to those aspects that still have low of performance and immediately improve customer service.

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