

The Influence of Customer Relationship Management on Customer's Loyalty through the Customer's Satisfaction at the Cellular Telecommunication Industry (Telkomsel) in Makassar, Indonesia

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Abstract:

Companies utilize Customer Relationship Management (CRM) to establish relationships with customers that are expected to increase customer satisfaction that will create loyal customers. This study aims to know there is a significant influence variable Customer Relationship Management consisting of human, process and technology together to customer loyalty and customer satisfaction, To know there is significant influence customer satisfaction to customer loyalty, To know the effect of variables Customer Relationship Management consisting of human, process and technology to customer loyalty with customer satisfaction as intervening variable. The research method used is path analysis method or commonly called path analysis with SPSS with a sample of 156 customers at PT. Telkomsel in Makassar. The results of this study

indicate that there is a significant influence Customer Relationship Management variable consisting of human, process and technology together to customer loyalty and customer satisfaction, The results show that there is significant influence customer satisfaction on loyalty, But the variable Customer Relationship Management consisting From human, process and technology to loyalty there is no influence of customer satisfaction as intervening variable.

Keywords

Customer relationship management, customer satisfaction, customer loyalty

1. Introduction

Recently, global telecommunication system had grown rapidly and takes the society to the world of information and communication technology (information society). Fixed line communication, mobile phone, and

internet that have multimedia nature had become the topic of today's conversation. The society begins to concern about the development of information and communication technology. It become more and more sophisticated especially the process of two way or multi way communications. The technology is important to get information about world's events or news.

Just like the other telecommunication operator service business, Telkomsel is always doing the best so that it could perform best feature and service to its customers. That is the only way to make Telkomsel keep exist in the middle of sharper competition of telecommunication operator service in Indonesia. Therefore, the basic element that should be Telkomsel's priority is to build a competition strategy which oriented to the customer's need. With a suitable strategy, Telkomsel could get satisfied and loyal customers.

Telkomsel is not only making an effort to get new customers, but also to maintain the old ones. Maintaining the relationship with old customers is the answer of today's marketing problems, which called Customer Relationship Management (CRM). Many companies

used various facilities in their effort to increase CRM [1]. Particularly, they are trying to give personal service so that the customers will have high satisfaction as stakeholder or shareholder. Therefore, hopefully there will be a strong value chain among them through customer relationship [2]. In the other hand, CRM has three main interrelated aspects such as: (1) people, is the employees as CRM conductor, how to manage the relationship or relation among them that needs personal touch; (2) process, a system and procedure that helps people to know more about customers and having good relationship to them; and (3) technology that helps to quicken and optimize people factor and business process in managing the relationship with the customers [3]. The company's activity is to pursue a new value or benefit, so that it can produce higher profit and satisfaction of both company and customer. Customer Relationship Management (CRM) is one of the means to sustain a relationship between a company with its stakeholder or shareholder [4]. Today, there are many companies that use CRM to make a relationship with the customer. By using CRM, the company will know

what the customer's need and expectation so that an emotional bond will be created among them. This will lead to a better business relationship which has two ways of communication [5]. Therefore, the customer's loyalty can be maintained and they will not be easily moved to other product or brand [6].

Every company needs to know, understand, and fulfill the needs of their customer better than their competitor [7]. If the customer's needs are fulfilled, it means that the basic expectation had been accomplished. Customer's satisfaction or dissatisfaction could only be known if the expectation had been compared to the performance of goods or services [8]. Customer's satisfaction had become part of most company's objective. Beside to gain the highest profit, the company is also need to face harder competition for their sustainability. Perpetual satisfaction could lead to loyalty [9]. Customer's loyalty is defined as a buyer who buys the product regularly and constantly [10]. Customer is someone who came regularly to the same place to satisfy the need by having a product or service and pay for that.

Some research results about CRM, such as by Adnin et al. [11] showed that CRM had a significant and positive effect on the customer's loyalty. This result indicates that to increase the customer's loyalty, PT. Nasmoco Pemuda Semarang should pay attention to the CRM factor that consists of human resource, process, and technology. An intense interaction with the customer is needed through customer retention program and good customer service from the employees. Imasari and Nursalin [12] showed that CRM had a real effect on customer's loyalty. Iriandini et al. [13] had determination coefficient of 0,872. It means that 87,2% of customer's loyalty variable had affected by the CRM and customer's satisfaction variables. Media et al. [14] showed that CRM variable had a simultaneous effect on satisfaction and loyalty, with significant effect of satisfaction on loyalty. Tiorini [15] showed that each variables of CMR had significant effect on customer's loyalty.

This research aims to know the effect of Customer Relationship Management variable that consists of people, process and technology on customer's loyalty

through customer's satisfaction in PT Telkomsel Makassar.

2. Materials and Method

2.1. Location and Research Design

This research was located on PT Telekomunikasi Seluler (Telkomsel) in Makassar, Indonesia. In this research, the researcher used quantitative method. Quantitative research method was used to study a particular population or sample. Sample was taken by random sampling technique. The data was collected by the research instruments. Data analysis used was quantitative or statistical analysis to test the research hypothesis.

2.2. Population and Sample

Population and sample of this research was customer of PT Telkomsel in Makassar, Indonesia. Population and sample was determined by Slovin equation. The customer population in Makassar was 1.539.490 people and the limit of error was 8%, so the sample acquired was 156 people. By that result, the researcher took 156 Telkomsel customers as sample. The sampling technique used was accidental sampling. Accidental sampling or convenience sampling is a sampling

technique based on a coincidence [16].

The population had met the researcher and was willing to become a respondent or sample. The researcher was also chose the nearest persons.

2.3. Data Collection Method

In a quantitative research, the data is collected through some prevalent methods such as: (1) Questionnaire, a technique by giving the respondents some written questions to be answered. To measure the respondent's attitude on every questions or statements, Likert scale was used. (2) Literature study is a data collecting technique by analyzing various references such as books, journal articles, magazines, and other sources related to the research.

2.4. Data Analysis

Validity test was done to measure the validity of a questionnaire. A questionnaire is said to be valid if the questions could reveal and measure something precisely. Validity test in this research was done by item analysis technique. The score of each item was correlated with the total score of each variables. Correlation technique in this

validity test was Pearson Product Moment. The criteria of instrument's reliability was based on Cronbach Alpha (α) that should be bigger than 0,60. To ease the calculation process, SPSS IBM 21 for Windows software was used.

Path analysis was used to find the explanation of relationship patterns among variables based on the theoretical and empirical considerations. It was then visualized in form of a path diagram as the tool to help the conceptualization of complex problem. Path analysis is a method to know the direct and indirect effect of a variable to another [17]. Variables in this path analysis were exogenous variable as a cause variable and endogen variable as an effect variable. Calculation of path coefficient (as direct effect) was done by SPSS Version 21 software through partial regression

where the path coefficient was the standardized coefficient beta. The indirect effect was the multiplication of path coefficient from every path equation. Meanwhile the total effect was the summation of direct effect with all indirect effects.

3. Results

3.1. Validity Test

Questionnaire validity test in this research showed that all question items in people variable, process, technology, customer satisfaction, and customer's loyalty had correlation coefficient above 0,3. That value was the limit of research questionnaire items said to be valid based on the criteria stated by Sugiyono [18]. By this result, it could be said that the instrument had good construct validity. Validity test result can be seen in Table 1.

Table 1. Validity Test Result

indicator	Item	r-count	r-critical	validity
People (X₁)	P1	0.891	0.30	valid
	P2	0.706	0.30	valid
	P3	0.407	0.30	valid
	P4	0.891	0.30	valid
Process (X₂)	P1	0.590	0.30	valid

	P2	0.615	0.30	valid
	P3	0.781	0.30	valid
	P4	0.781	0.30	valid
Technology (X₃)	P1	0.697	0.30	valid
	P2	0.611	0.30	valid
	P3	0.781	0.30	valid
	P4	0.647	0.30	valid
Customer's Satisfaction (Y₁)	P1	0.939	0.30	valid
	P2	0.377	0.30	valid
	P3	0.919	0.30	valid
	P4	0.939	0.30	valid
Customer's Loyalty (Y₂)	P1	0.891	0.30	valid
	P2	0.704	0.30	valid
	P3	0.409	0.30	valid
	P4	0.891	0.30	valid
	P5	0.891	0.30	valid
	P6	0.704	0.30	valid
	P7	0.392	0.30	valid
	P8	0.891	0.30	valid

3.2. Reliability Test

Questionnaire reliability test in this research was done to every indicator. Cronbach's Alpha value of people indicator was 0,705; process indicator was 0.633; technology indicator was 0.622; satisfaction indicator was

0.793; and loyalty indicator was 0.871. All of them were above 0.60 so that every questions for independent and dependent variables were reliable. By this result, it could be said that the instrument was reliable in measuring variables in this research. Result of reliability test can be seen in Table 2.

Table 2. Reliability Test Result

Variabel	Reliability Coefficient	Alpha Value Limit (α)	Reliability
People	0.707	0.60	Reliable
Process	0.633	0.60	Reliable
Technology	0.622	0.60	Reliable
Customer's satisfaction	0.793	0.60	Reliable
Customer's loyalty	0.871	0.60	Reliable

3.3. Calculation of Sub Structure 1 Path Analysis

Based on the result of structural equation 1 analysis, it could be seen that the determination test of three independent variables of CRM which consist of people, process, and technology simultaneously was 91,6% and could explain the customer's satisfaction level. This result was strengthen by F test (ANOVA) stated that F_{count} (551.211) was higher than F_{table} (2.43), and significant with probability value of 0.000 ($p < 0.05$).

This result explained that there was a significant effect of Customer Relationship Management variable consisted of people, process, and technology simultaneously on customer's satisfaction. T test coefficient of partial test showed that Customer Relationship Management variable consisted of people, process, and technology was significantly affect the customer's satisfaction (Y1) showed by Sig. Value < 0.05 . Table 3 shows the calculation of sub structure 1 path coefficient.

Table 3. Calculation of Sub Structure 1 Path Coefficient

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.957 ^a	.916	.914	.709

a. Predictors: (Constant), Technology, People, Process

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	831.722	3	277.241	551.211	.000 ^b
Residual	76.451	152	.503		
Total	908.173	155			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Technology, people, process

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.884	.507		-1.743	.083
People	-.628	.053	-.583	-11.819	.000
Process	1.621	.061	1.394	26.676	.000
Technology	.058	.028	.058	2.053	.042

a. Dependent Variable: Satisfaction

**3.4. Calculation of Sub Structure 2
Path Analysis**

Based on the sub structure 2 test, it could be seen that in simultaneous determination test CRM variable

consisted of people, process, technology, and customer satisfaction on customer's loyalty was 0.998 (99.8%). The other 0.2% was affected by other factors outside the model. There was a positive effect of CMR consisted of people, process, and technology simultaneously on customer's loyalty. This result was strengthened by F test (ANOVA) stated that F_{count} (16591.446) was higher than F_{table} (2.43) and significant with probability value of 0.000 ($p < 0.05$). This result explained that there was significant effect of CMR consisted of people, process, and technology simultaneously on customer's loyalty. T test coefficient or partial test showed that CMR variable consisted of people, process, and technology had significant effect on customer's loyalty (Y2) by Sig value of < 0.05 . Customer satisfaction on customer's loyalty was showed by path

coefficient value (β) of 0.059 with probability of 0.000 ($p > 0.05$). This result explained that there was significant effect of customer satisfaction of customer's loyalty.

Based on the summary and path coefficient 1 and 2, it could be known that the total amount of direct effect was $\beta = 0.955$, meanwhile the total amount of indirect effect was $\beta = 0.0514$. If those values are compared, the total amount of direct effect $>$ indirect effect ($0.955 > 0.0514$). Therefore, customer's satisfaction was not act as the intervening variable between Customer Relationship Management consisting of people, process, and technology and customer's loyalty.

Calculation of sub structure 2 path coefficient can be seen in Table 4. Meanwhile the total effect can be seen in Table 5.

Table 4. Calculation of Sub Structure 2 Path Coefficient

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 ^a	.998	.998	.216

a. Predictors: (Constant), Satisfaction, Technology, People, Process

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3103.931	4	775.983	16591.446	.000 ^b
Residual	7.062	151	.047		
Total	3110.994	155			

a. Dependent Variable: Loyalty

b. Predictors: (Constant), Satisfaction, Technology, People, Process

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.071	.156		.452	.652
People	2.075	.022	1.040	92.372	.000
Process	-.217	.044	-.101	-4.912	.000
Technology	.029	.009	.016	3.288	.001
Satisfaction	.109	.025	.059	4.409	.000

a. Dependent Variable: Loyalty

Table 5. Total Effect

Variable	Direct Effect	Indirect Effect	Total Effect
People (X1)	1,040	0,034	1.074
Process (X2)	0,101	0,082	0.183
Technology (X3)	0,016	0,0034	0.0194
Total	0.955	0.0514	1.2764

4. Discussion

This research showed that Customer Relationship Management consisting of people, process, and technology was simultaneously having positive contribution and significantly affect the customer's loyalty. It could be interpreted that better implementation of CRM could increase the customer's loyalty, proven by contribution value of 99,8%. This was also in accordance with Buttle's statement [19]. CMR is a concept that focused on relationship maintaining with customer for a long term and beneficial relationship. This is in accordance with the previous research of Imasari and Nursalin [12] about the effect of Customer Relationship Management on Customer's Loyalty in PT BCA Tbk. And Adnin [11] about the effect of Customer Relationship Management

on Customer's Loyalty in PT Nasmoco Pemuda Semarang.

Research result showed that Customer Relationship Management consisting of people, process, and technology was simultaneously having a positive contribution and significantly affect customer's satisfaction. It could be interpreted that better implementation of CMR would lead to higher customer's satisfaction, proven by contribution value of 91,6%. If a company implements CRM consisting of people, process, and technology well, customer will feel concerned, comfortable, and satisfied. Therefore, customer will prioritize to use Telkomsel product. This is in accordance with Buttle [19] stated that CRM should be implemented because this system will increase the business performance of company by

increasing the customer's satisfaction. In turn, it will also grow the customer's loyalty. This research result is in accordance with Iriandini et al. [13] about the effect of Customer Relationship Management on Customer's satisfaction and customer's loyalty (survey on customer's of PT Gemilang Libra Logistics, Surabaya). The result is also in accordance with Media et al. [14] about the effect of Customer Relationship Management on satisfaction and customer's loyalty (survey on customers of Bank Jawa Timur Cabang Gedung Inbis Malang). This research result showed that CRM had significant effect on customer's satisfaction.

Research results showed that satisfaction affect the customer's loyalty significantly. The customer's satisfaction is a determining factor on marketing. In other hand, customer's dissatisfaction about service will ruin the company in the future. In the highly competitive market, customer's satisfaction and loyalty are related to each other. It means that there is an effort of PT Telkomsel in increasing the customer's satisfaction the loyalty will be increased automatically. In

other hand, if the satisfaction decreased, the customer's loyalty will be decreased as well. In this relation, customer's satisfaction is the cause of customer's loyalty. Brand loyalty among the customer is caused by the effect of satisfaction and dissatisfaction that accumulated perpetually, beside the perception of product quality [10]. Customer's satisfaction is one of the determining factors of customer's loyalty. This research result is relevant with Media et al. [14] about the effect of CMR on satisfaction and customer's loyalty (survey on customers of Bank Jawa Timur Cabang Gedung Inbis Malang) and Normasari et al. [20] about the effect of service quality on customer's satisfaction, company image, and customer's loyalty (survey on customers of Pelangi Hotel Malang).

Research Result showed that in CMR variable consisting of people, process, and technology there was no effect of customer's satisfaction as intervening variable. This research is therefore could not prove the fourth hypothesis which stated that there is an effect of CMR variable consisting of people, process, and technology on customer's loyalty with customer's

satisfaction as intervening variable. Many of Telkomsel's customers who had used Telkomsel's service since 21 years ago and Telkomsel were the first provider in Indonesia. The loyalty of customer was not caused by high satisfaction, but by their unwillingness to move to other provider. Telkomsel's customers keep on using the service despite their dissatisfaction because their family, college, and friends had already known the number since long ago. The second reason is because Telkomsel had wide network that could reach remote areas of Indonesia. This is in accordance with Hasan [10] stated that if the satisfaction is low and the loyalty is high, then Telkomsel's customers are actually dissatisfied but they are tied with loyalty promotion of that company. The research result supports the previous research done by Irnandha [21] about the effect of service quality on customer's loyalty mediated by customer's satisfaction in land courier service (case study of customer's satisfaction in JNE Hijrah Sagan Branch, Jogjakarta).

5. Conclusion and Recommendation

Customer Relationship Management variable consisting of people, process, and technology was simultaneously and significantly affects customer's loyalty. Customer Relationship Management variable consisting of people, process, and technology was simultaneously and significantly affects customer's satisfaction. Customer Relationship Management variable consisting of people, process, and technology was not affecting the customer's satisfaction as intervening variable in PT Telkomsel. In this relation, Customer Relationship Management variable affect customer's loyalty directly without customer's satisfaction because of some factors. This was proven by the compulsion to become a customer because of the period of usage. In fact, the cost of internet product, call, and messaging are better in other providers. Telkomsel should be able to evaluate it. One of the best ways is to give the appropriate cost with the need so that they are not losing the cost competition and marketing. Telkomsel should also do some necessary changes, such as personal approach

and adjusting the cost with other competitor. Therefore, there will be no compulsion to use the product of Telkomsel.

6. References

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