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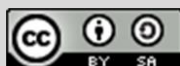
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## The Impact of Customer Relationship Management on Customer Retention at Sentral Mobil Medan

### Pengaruh Customer Relationship Management terhadap Retensi Pelanggan di Sentral Mobil Medan

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**Abstract:** The role of customers is so vital for organizations and that is why customer relationship management (CRM) is born based on the recognition of the value customers have. CRM is then known as a managerial approach which is customer-oriented in which information is provided by information systems in order to sustain collaborative, operational, analytical, and CRM processes leading to customer satisfaction and retention. Sentral Mobil Medan is having problem with the retention which is getting low. The objectives of the research are to analyze whether CRM has impact on customer retention and determine how strong the impact of CRM on customer customer retention in the company. The writer uses Slovin Formula to get the sample size. The sample size is 144 customers. The writer uses the simple random sampling which each member of the population has an equal and known chance of being selected. The correlation test shows Variable X (Customer Relationship Management) has a significantly strong and positive impact on variable Y (customer retention) at Sentral Mobil Medan.  $z_{count} > z_{table}$  ( $9.88 > 1.96$ ), Customer Relationship Management has impact on customer retention at Sentral Mobil Medan. Several recommendations after analysis and results are the staff of Sentral Mobil Medan may serve the customers with good manner, give personal attention and how to interact close what the customers really needs and identify problems and solve the problems fast.

**Abstrak:** Peran pelanggan begitu vital bagi organisasi dan karena itulah customer relationship management (CRM) lahir berdasarkan pengenalan terhadap nilai yang dimiliki pelanggan. CRM kemudian dikenal sebagai pendekatan manajerial yang berorientasi pada pelanggan di mana informasi disediakan oleh sistem informasi untuk mempertahankan proses kolaboratif, operasional, analitis, dan CRM yang mengarah pada kepuasan dan retensi pelanggan. Sentral Mobil Medan bermasalah dengan retensi yang semakin rendah. Tujuan dari penelitian ini adalah untuk menganalisis apakah CRM berdampak pada retensi pelanggan dan menentukan seberapa kuat pengaruh CRM terhadap retensi pelanggan di perusahaan. Penulis menggunakan Rumus Slovin untuk mendapatkan ukuran sampel. Ukuran sampel adalah 144 pelanggan. Penulis menggunakan simple random sampling dimana setiap anggota populasi mempunyai kesempatan yang sama dan diketahui untuk dipilih. Uji korelasi menunjukkan Variabel X (Customer Relationship Management) berpengaruh signifikan kuat dan positif terhadap variabel Y (retensi pelanggan) di Sentral Mobil Medan.  $z_{hitung} > z_{tabel}$  ( $9,88 > 1,96$ ), Customer Relationship Management berpengaruh terhadap retensi pelanggan di Sentral Mobil Medan. Beberapa rekomendasi setelah dilakukan analisis dan hasil adalah staf Sentral Mobil Medan dapat melayani pelanggan dengan baik, memberikan perhatian pribadi dan bagaimana berinteraksi dekat apa yang benar-benar dibutuhkan pelanggan dan mengidentifikasi masalah dan menyelesaikan masalah dengan cepat.

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## BACKGROUND

Customer relationship management (CRM) is a philosophy within the managerial arena that seeks to create lasting relationship with customer. CRM is being described as a strategic method which is concerned with creating enhanced shareholder value via the evolvement of suitable alignments with key customers and customer segments. CRM is a set of business activities supported by the alignment of both technology and process directed by strategy and designed to enhance firm performance in an area of customer management. Thus, successful customer relationship management aims at fathoming the desires and needs of the customers and is accomplished by the integration of these desires with the organization's strategy, technology, people and enterprise process.

Customer retention is defined as the number of customers who do business with a company that is expressed as a percentage of active customers. The high customer retention rate means a low displacement. Customer retention statistics are typically expressed as a percentage of long term clients, and they are important to a business since satisfied retained customers tend to spend more, cost less and make valuable references to new potential customers. The final goal of CRM is to survive in competitive markets for any firm. Customer retention and surviving in today's competitive environments require a heart to understand the customers; a brain to analyze; and hands to deliver the products to them. The customers are the source of revenue because they are the ones who pay the bills and generate profit. The role of customers is so vital for organizations and that is why customer relationship management (CRM) is born based on the recognition of the value customers have.

CRM tries to retain the customers by its relationship programs whose final goal is to deliver a high level of customer satisfaction. Therefore, if companies want to retain their customers, they must develop and efficiently execute a comprehensive set of relationship programs to deliver a targeted performance customers expect. The relationship between Customer Relationship Management (CRM) and customer retention by Ghahfarokhi and Zakaria (2009:310),

*"CRM is then known as a managerial approach which is customer-oriented in which information is provided by information systems in order to sustain collaborative, operational, analytical, and CRM processes leading to customer satisfaction and retention"*.

The customer retention rate is shown below on table 1 by the sales team of Sentral Mobil Medan.

**Table 1.** Data of Customers (2022)

Month	Total number of Customers	Percentage
January	27	-
February	30	+11.11%
March	30	0%
April	29	-3.33%
May	25	-13.79%
June	24	-4.00%
July	22	-8.33%
August	20	-9.09%
September	18	-10%
<b>Total</b>	225	

Source: Sentral Mobil Medan, 2022

The table 1 above shows that the total customers are getting low from the minus sign (-). The Low customer retention rate means a high displacement where the old customers do not stay loyal to the company. Customer retention statistics are typically expressed as a percentage of long term clients, and they are important to a business since satisfied retained customers tend to spend more, cost. By

preliminary research, the writer did interview the customers of Sentral Mobil Medan and the results of the interviews with one of the customers. The staff of Sentral Mobil Medan do not serve the customers with good manner, the staff do not give personal attention and how to interact close and well what the customers really needs for buying the cars based on their preferenve and needs, and identify problems and solve the problems fast regarding the cars purchase such as the receipt, the installments processing, car licenses. This makes them move to other companies. The management of Sentral Mobil Medan needs to dig further the good implementation of customer relationship management (CRM) in order to make sure the customers keep loyal.

## LITERATURE REVIEW

**Customer Relationship Management.** CRM (Customer Relationship Management) is an ongoing process to assess's strategy of the organization towards their existing and future customers.

Nwankwo and Ajemunigbohun (2013:2), "CRM has been described in a number of ways; and it means different things to different caliber of people depending on the working arena it's being used in". Importantly, CRM has been noted to be the most viable means to promote the development and expansion of customers' base which, consequently, will assist the enhancement of profitability and invite loyalty.

Customer relationship management amplifies the relationships of customers and competitors in a firm to increase the share of the organization in marketplace by integrating technology, procedures and people. The aim of CRM is to maintain the customers and increase their loyalty and organization profit. Customer satisfaction and pleasing are two main elements in a successful CRM implementation for retaining customer's loyalty to a firm. Reinartz (2012:23), "Customer relationship management (CRM) is a philosophy within the managerial arena that seeks to create lasting relationship with customer". CRM is being described as a strategic method which is concerned with creating enhanced shareholder value via the evolvment of suitable alignments with key customers and customer segments.

**Customer Retention.** Customer retention is extremely vital for business to remain competitive. It has recently become more significant compared to customer acquisition.

Ghahfarokhi and Zakaria (2009:211), "Customer retention is defined as the number of customers who do business with a company that is expressed as a percentage of active customers". The high customer retention rate means a low displacement. Customer retention statistics are typically expressed as a percentage of long term clients, and they are important to a business since satisfied retained customers tend to spend more, cost less and make valuable references to new potential customers. Customer retention is the activity that a selling organization undertakes in order to reduce customer defections. Successful customer retention starts with the first contact an organization has with a customer and continues throughout the entire lifetime of a relationship.

Kotler (2012:65), "Customer retention is the activity that a selling organization undertakes in order to reduce customer defections". Successful customer retention starts with the first contact an organization has with a customer and continues throughout the entire lifetime of a relationship.

Customer retention is the maintenance of continuous trading relationships with customers over the long term. Customer retention is the mirror image of customer defection or churn. High retention is equivalent to low defection. Kotler (2012), A solution to this problem is to consider three measures of customer retention: 1) Raw customer retention rate: this is the number of customers doing business with a firm at the end of a trading period, expressed as percentage of those who were active customers at the beginning of the period. 2) Sales-adjusted retention rate: this is the value of sales achieved from the retained customers, expressed as a percentage of the sales achieved from all customers who were active at the beginning of the period. 3) Profit-adjusted retention rate: this is the profit earned from the retained customers, expressed as a percentage of the profit earned from all customers who were active at the beginning of the period.

## RESEARCH METHOD

**Research Design.** Research design is all process in planning and doing the research. A good research design is those that can result in a logical and systematic conclusion. According to Bryman and Bell (2012:50), “Research design is all process in planning and doing the research. A good research design is those that can result in a logical and systematic conclusion”.

From the information and data of the research method above, then it needs to do the next step, which is analyzing the relationship between two variables. The analysis method is used to analyze the impact of Customer Relationship Management on customer retention at Sentral Mobil Medan. The research design used by the writer in analyzing the data namely:

**Descriptive Method.** Descriptive method is a method that is used to make the collected data or the condition of object which has been researched, can be classified, analyzed and being examined. In this research, the writer will use questionnaire and interview for collecting data.

**Correlational Method.** The method used as type of investigation is correlation analysis method and regression analysis method. Correlation analysis method is used to indicate the strength and direction of relationship between two random variables, where variable X as Customer Relationship Management and variable Y as Customer retention.

### Research Object

Place of research: Sentral Mobil Medan

Time of research: 11<sup>th</sup> September 2022 – December 2022 (Tentative)

Research Object: The population for this present study consists of the total customers of Sentral Mobil from September 2022 to December 2022.

Population is the overall research object as the resources of the data which have certain characteristics. Sample is the elements selected in a population where it can take conclusion to represent the entire population. The writer will take the sample of the population based on Slovin’s formula allows a researcher to sample the population with a desired degree of accuracy. It gives the researcher an idea of how large his sample size needs to be to ensure a reasonable accuracy of results. In taking sample for this research, the writer used random sampling techniques according to Slovin sampling formula which is finding the sample without any specific criteria. This kind of sampling method is the most convenient and easiest to conduct, for the writer can select the sample without qualifying the respondents, and this sampling method can be easier to measure, accessible and cooperative.

The population of this research is the total customers for 3 months which are 225 customers. To take the number of sample, the writer is using Slovin Formula, which is:

$$n = \frac{N}{(1 + Ne^2)}$$

Where,

n = sample size

N = total population

e = error tolerance (giving a margin error of 0.05)

From the calculation of using the Slovin Formula, the number of samples taken from the population of customers is:

$$n = \frac{N}{(1 + Ne^2)}$$

$$n = \frac{225}{1 + (225)(0.05)^2}$$

$$n = \frac{225}{1 + 0.5625}$$

$$n = 144$$

The sample size is 144 customers. The writer uses the simple random sampling which each member of the population has an equal and known chance of being selected. When there is large population, it is often difficult or impossible to identify every member of population.

**Definition OF Operational Variables.** The operational definition is thus a measurement definition. It defines how the writer is going to measure someone or something to determine the subject's score on a variable.

There are two variables that have being applied in this research, named: 1) Independent variable (variable X) is a factor that can be varied or manipulated in the research. In this research, the independent variable (variable X) is Customer Relationship Management. 2) Dependent variable (variable Y) is a variable that the writer trying to predict. In this research, the dependent variable (variable Y) is the customer retention.

## RESULT

**Descriptive Statistics.** The data of the respondents will be described as follows:

**Table 2.** Respondents Based on Gender

No	Gender	Total	Percentage
1	Male	81	56.25 %
2	Female	63	43.75%
<b>Total</b>		<b>144</b>	<b>100%</b>

Source: Data Questionnaires, 2022

From the data shown on table above, the total of male respondents is 81 persons or 56.25%. The total female respondents are 63 persons or 43.75%. Most customers are male.

**Table 3.** Respondents Based on Age

No	Age	Total	Percentage
1	20-30 years old	43	29.86%
2	31-40 years old	68	47.22%
3	Above 40 years old	33	22.92%
<b>Total</b>		<b>144</b>	<b>100%</b>

Source: Data Questionnaires, 2022

From the table above, the respondents who are within 20 to 30 years old are 43 respondents (29.86%). While respondents who are within 31 years old to 40 years old are 68 respondents (47.22%) and above 40 years old are 33 respondents (22.92%).

**Analysis of Independent Variable (CRM).** Here the writer would like to quantify the respondents' answers of variable X which is customer relationship management in the form of table. The total statement for variable X is 6 statements answered by customers as respondents in the questionnaire which can be seen belows:

No. 1. Management of Sentral Mobil Medan always get the customers' feedback.

**Table 4.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	32	22.22
2	Disagree	48	33.33

3	Average	22	15.28
4	Agree	29	20.14
5	Strongly Agree	13	9.03
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

The table above shows that there are 32 respondents (22.22%) answered strongly disagree, 48 respondents (33.33%) answered disagree, 22 respondents (15.28%) answered average, 29 respondents (20.14%) answered agree, and 13 respondents (9.03%) answered strongly agree. Most customers answered Disagree.

No.2. Management commit to convince customers that their feedback are taken seriously.

**Table 5.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	28	29.47
2	Disagree	41	43.16
3	Average	13	13.68
4	Agree	6	6.32
5	Strongly Agree	7	7.37
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires

From data above, there are 28 respondents (29.47%) answered Strongly disagree, 41 respondents (43.16%) answered disagree, 13 respondents (13.68%) answered average, 6 respondents (6.32%) answered agree, and 7 respondents (7.37%) answered strongly agree. Most customers answered disagree.

No.3. Sentral Mobil Medan provides good quality products with reasonable prices.

**Table 6.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	34	23.60
2	Disagree	49	34.03
3	Average	24	16.67
4	Agree	22	15.28
5	Strongly Agree	15	10.42
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

From data above, there are 34 respondents (23.60%) answered Strongly disagree, 49 respondents (34.03%) answered disagree, 24 respondents (16.67%) answered average, 22 respondents (15.28%) answered agree, and 15 respondents (10.42%) answered Strongly agree. Most customers answered Disagree.

No.4. Sentral Mobil Medan handles the customer complaints about the products and services tactfully.

**Table 7.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	46	31.94
2	Disagree	38	26.39
3	Average	20	13.89
4	Agree	26	18.06
5	Strongly Agree	14	9.72
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

The table above shows that there are 46 respondents (31.94%) answered strongly disagree, 38 respondents (26.39%) answered disagree, 20 respondents (13.89%) answered average, 26 respondents (18.06%) answered agree, and 14 respondents (9.72%) answered strongly agree. Most customers answered strongly disagree.

No.5. The employees of Sentral Mobil Medan respect the customers.

**Table 8.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	30	20.83
2	Disagree	25	17.36
3	Average	24	16.67
4	Agree	37	25.70
5	Strongly Agree	28	19.44
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

From data above, there are 30 respondents (20.83%) answered Strongly disagree, 25 respondents (17.36%) answered disagree, 24 respondents (16.67%) answered average, 37 respondents (25.70%) answered agree, and 28 respondents (19.44%) answered Strongly agree. Most customers answered Agree.

No.6. The employees of Sentral Mobil talks politely and patiently.

**Table 9.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	34	23.60
2	Disagree	49	34.03
3	Average	24	16.67
4	Agree	22	15.28

5	Strongly Agree	15	10.42
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

From data above, there are 34 respondents (23.60%) answered Strongly disagree, 49 respondents (34.03%) answered disagree, 24 respondents (16.67%) answered average, 22 respondents (15.28%) answered agree, and 15 respondents (10.42%) answered Strongly agree. Most customers answered Disagree.

**Analysis of Dependent Variable (Customer Retention).** The respondents' answers of Variable Y (Customer retention) are shown in the tables below: No.1. The customers feels happy after experiencing the products or services by the company.

**Table 10.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	28	19.44
2	Disagree	24	16.67
3	Average	37	25.70
4	Agree	46	31.94
5	Strongly Agree	9	6.25
<b>Total</b>		<b>144</b>	<b>100%</b>

Source: Data Questionnaires, 2022

The table 10 above shows that there are 28 respondents (19.44%) answered Strongly disagree, 24 respondents (16.67%) answered disagree, 37 respondents (25.70%) answered average, 6 respondents (31.94%) answered agree, and 9 respondents (6.25%) answered strongly agree. Most customers answered average.

No.2. The Customer relationship management of the company can fulfill their expectations.

**Table 11.**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	29	20.14
2	Disagree	45	31.25
3	Average	26	18.06
4	Agree	28	19.44
5	Strongly Agree	16	11.11
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

The table above shows there are 29 respondents (20.14%) answered strongly disagree, 45 respondents (31.25%) answered disagree, 26 respondents (18.06%) answered average, 28 respondents (19.44%) answered agree, and 16 respondents (11.11%) answered strongly agree. Most customers answered disagree. No.3. The customers will refer the company to family and friends.

**Table 3.11**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	34	23.60



2	Disagree	49	34.03
3	Average	24	16.67
4	Agree	22	15.28
5	Strongly Agree	15	10.42
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

From data above, there are 34 respondents (23.60%) answered Strongly disagree, 49 respondents (34.03%) answered disagree, 24 respondents (16.67%) answered average, 22 respondents (15.28%) answered agree, and 15 respondents (10.42%) answered Strongly agree. Most customers answered Disagree.

No.4. The customers will often come to company for the transactions.

**Table 12**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	32	22.22
2	Disagree	48	33.33
3	Average	22	15.28
4	Agree	29	20.14
5	Strongly Agree	13	9.03
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

The table above shows that there are 32 respondents (22.22%) answered strongly disagree, 48 respondents (33.33%) answered disagree, 22 respondents (15.28%) answered average, 29 respondents (20.14%) answered agree, and 13 respondents (9.03%) answered strongly agree. Most customers answered Disagree. No.5. The customer will increase the quantities of the purchases.

**Table 13**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	34	23.60
2	Disagree	49	34.03
3	Average	24	16.67
4	Agree	22	15.28
5	Strongly Agree	15	10.42
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

From data above, there are 34 respondents (23.60%) answered Strongly disagree, 49 respondents (34.03%) answered disagree, 24 respondents (16.67%) answered average, 22 respondents (15.28%) answered agree, and 15 respondents (10.42%) answered Strongly agree. Most customers answered Disagree.

No.6. The customer trust with the products and will not have many considerations to purchase the products.

**Table 14**

NO.	LIKERT SCALE	FREQUENCY	PERCENTAGE
1	Strongly Disagree	28	29.47
2	Disagree	41	43.16
3	Average	13	13.68
4	Agree	6	6.32
5	Strongly Agree	7	7.37
<b>TOTAL</b>		<b>144</b>	<b>100</b>

Source: Data Questionnaires, 2022

From data above, there are 28 respondents (29.47%) answered Strongly disagree, 41 respondents (43.16%) answered disagree, 13 respondents (13.68%) answered average, 6 respondents (6.32%) answered agree, and 7 respondents (7.37%) answered strongly agree. Most customers answered disagree

### TEST OF DATA QUALITY

In doing a research, the writer needs to determine the data sources gathered to be analyzed further. The writer will check the questionnaires by using validity test and reliability test first.

**Validity Test.** The validity test is to check whether the questionnaires are valid or not. According to Sugiyono (2009), (The number of respondents to test the instrument, there is no selected numbers required, however, it is suggested to use 10-20 respondents). The writer will use 10 people out from the sample size to be used in the test to determine how valid the questionnaires. The Test results question the validity of each variable on the research instrument can be seen in the summary table as follows:

**Table 15.** Validity Test for Variable X

Validity Variable X		
1	0.650	Valid and High
2	0.738	Valid and High
3	0.671	Valid and High
4	0.794	Valid and High
5	0.615	Valid and High
6	0.742	Valid And High

The table above is the results of validity test of each questions of variable X (CRM), The statements of variable X got the value of the validity test is in the range of 0.60-0.80 which in the scales is indicated as High Validity.

**Table 16.** Validity Test for Variable Y

Validity Variable Y		
1	0.762	Valid and High
2	0.781	Valid and High

3	0.654	Valid and High
4	0.747	Valid and High
5	0.641	Valid and High
6	0.652	Valid And High

The tables above is the results of validity test of each questions of variable Y (Consumer Retention), The statements of variable Y got the value of the validity test is in the range of 0.60-0.80 which in the scales is indicated as High Validity.

**Reliability Test.** The purpose of this test is to determine the precision of a measurement (consistency) as measured by the variance of repeated measurements of the same object. To ensure the data is reliable, the writer uses Cronbach's Alpha formula in proving that the data are not error. The result of reliability test can be seen in the table below:

**Tabel 16.** Reliability Statistics

Cronbach's Alpha	N of Items
.840	12

To check whether the questionnaires are reliable or not, the writer needs check at the scale of the reliability test. The reliability test the writer got is 0.84 is located at the scale  $\alpha > 0.80$  which  $0.84 > 0.80$ , this means the questionnaires have good data reliability.

**Statistics.** From the data tabulation of variable X and Y from the customers' answers to the questionnaires, the writer can calculate the statistics (mean, median, mode) value of variable X and Y. The writer makes some scales by determining the interval range of collected data which steps are shown below:

$$\text{IntervalRange} = \frac{\text{HighestValue} - \text{LowestValue}}{\text{NumberofClasses}}$$

Variable X and Y:

Highest value = 6 (number of statements) x 5=30

Lowest value = 6 (number of statements ) x 1= 6

Interval range =  $\frac{30-6}{5} = \frac{24}{5} = 4.8$

5 5

After interval range has been determined, the writer can develop a table of scale that can be used to calculate the mean, median, and mode of variable X and variable Y. Here, the writer simply starts from the lowest value to the highest value which is:

**Table 17.** The Scale for Statistics Variable X and Y

Class Interval	Notes
6 – 10.8	Strongly Disagree
10.9 – 15.6	Disagree
15.7 – 20.4	Average
20.5 – 25.2	Agree
25.3 – 30	Strongly Agree

Based on the responses to the questionnaires distributed to respondents about Variable X (Customer Relationship Management), the results of statistics calculation is as shown below:

**Table 18.** Statistics  
CRM

N	Valid	144
	Missing	0
Mean		15.53
Median		15.00
Mode		15.00

Mean of variable X (Brand Awareness) is 15.53. The mean is 15.53 (Disagree), the value is compared with the interval class of variable X, This means that averagely, the respondents (Customers) answered disagree with Customer Relationship Management (CRM) implemented by Sentral Mobil Medan.

Median is the score found at exact middle of the set of value. The middle or median value of the respondents' answer for variable X is 15.00 (disagree) means the customers answered disagree with Customer Relationship Management (CRM) implemented by Sentral Mobil Medan.

Mode is the number that often comes out in the table. The mode is 15. This means most customers are disagree with Customer Relationship Management (CRM) implemented by Sentral Mobil Medan.

The statistics (mean, median and mode) for variable Y (Customer retention) using SPSS. The result is shown below:

**Table 19.** Statistics  
Customer Retention

N	Valid	144
	Missing	0
Mean		15.32
Median		15.00
Mode		15.00

Mean of variable Y is 15.32. The mean is 15.32 (Disagree), the value is compared with the interval class of variable Y, This means that averagely, the respondents (Customers) are disagree that the Customer Relationship Management of the company make good retention.

The middle or median value of the respondents' answer for variable Y is 15 means Customers are disagree that Customer Relationship Management of the company make good retention.

The mode of variable Y is 14. This means most customers are disagree that Customer Relationship Management of the company make good retention.

**Normality Test.** Normality test is the test whether the sample being used is normal or not, is actually by conducted tests on normally or not the distribution of the data to be analyzed. The writer will use the Kolmogorov Smirnov. The basic concept of Kolmogorov Smirnov normality test is to compare the distribution of the data (which will be tested normality) with the standard normal distribution.

**Table 20.** One-Sample Kolmogorov-Smirnov Test

		CRM	Customer Retention
N		144	144
Normal Parameters <sup>a</sup>	Mean	9.89	8.45
	Std. Deviation	4.170	2.797
Most Extreme Differences	Absolute	.034	.115
	Positive	.183	.115
	Negative	-.103	-.109
Kolmogorov-Smirnov Z		1.282	1.184
Asymp. Sig. (2-tailed)		.169	.193
a. Test distribution is Normal.			

Based on the result above, the significant or probability value which is 0.169 and 0.193 which is greater than 0.05. This means, the sample has normality distribution.

**Correlation Test.** The writer uses the correlation formula according to Pearson's product moment coefficient. In order to count the product moment correlation, the writer prepares arrange the table as follows:

**Table 21.** Correlations

		CRM	Customer Retention
CRM	Pearson Correlation	1	.830**
	Sig. (2-tailed)		.000
	N	144	144
Customer Retention	Pearson Correlation	.830**	1
	Sig. (2-tailed)	.000	
	N	144	144

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result of the correlation test between Variable X (Customer Relationship Management) and Variable Y (Customer Retention), the writer got the result of 0.83. In the table of scale of correlation test, the value of 0.83 is indicated as significantly strong and positive. This means that Customer relationship management (CRM) has a significantly strong and positive impact on customer retention at Sentral Mobil Medan.

**Determination Test.** Determination test is tested in order to find out how the relation of variable x to the variable y in the term of percentage. The result of determination test is as follows.

**Table 22.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.830 <sup>a</sup>	.689	.698	1.215

a. Predictors: (Constant)

The percentage impact of CRM on customer retention at Sentral Mobil Medan is 68.90% and the remaining of 31.1% is impacted by others which were not discussed in this *skripsi*.

**Linear Regression Equation**

**Table 23.** Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.64	.780		4.483	.018
	Total_X	.78	.074	.830	5.295	.000

a. Dependent Variable: customer retention

$$Y = a + b X$$

$$Y = 27.64 + 0.78 X$$

$$X= 0 \longrightarrow Y= 27.64 + 0.78(0) = 27.64$$

$$X= 1 \longrightarrow Y = 27.64 + 0.78 (1) = 28.42$$

$$X= 2 \longrightarrow Y = 27.64 + 0.783 (2) = 29.20$$

$$X=3 \longrightarrow Y = 27.64 + 0.783 (3) = 29.98$$

After the calculation, the writer concludes that when variable X (CRM) is zero, the variable Y (customer retention) is 27.64. When CRM (X=1), variable Y (customer retention) is 28.42 which increases 0.78, and when CRM (X=2), variable Y (Customer retention) is 29.20. This means, Customer Relationship Management (CRM) has a positive equation on customer retention at Sentral Mobil Medan.

**Hypothesis Test.** Test of hypothesis is conducted by comparing the z-table value and the z counted value in order to test whether the value is accepted in certain area. Z-test is used for sample size more than 30 people. The calculation is as follows:

$$z = \frac{r}{1/\sqrt{n-1}}$$

$$z = \frac{0.83}{1/ 11.96}$$

$$z = 9.88$$

The confidence level of hypothesis test is 95% or 0.95, since use the two-tailed hypothesis test,  $0.95/2=0.4750$ . the  $z_{table}$  is 1.96. From the calculation above, the writer got  $z_{count}= 9.88$ . The  $z_{count} > z_{table}$

(9.88 > 1.96), This means the Null hypothesis (Ho) is rejected and the alternative (Ha) is accepted. Customer Relationship Management has impact on customer retention at Sentral Mobil Medan.

## RESULTS AND ANALYSIS

From the calculation of the results from the questionnaires, the writer concludes the results as follows:

The results of validity for variable X (CRM) and variable Y (Customer retention), the result is in the range of 0.60-0.80 which in the scales is indicated as High Validity.

The reliability test is 0.84 is located at the scale  $\alpha > 0.80$  which  $0.84 > 0.80$ , this means the questionnaires have good data reliability.

The statistics of variable X (CRM), The respondents (Customers) answered disagree with the customer relationship management in Sentral Mobil Medan. The statistics of variable Y (Customer Retention), the customers are disagree that the CRM can make the retention in the company.

The significant or probability value which is 0.169 and 0.193 which is greater than 0.05. This means, the sample has normality distribution.

The correlation test shows Variable X (CRM) has a significantly strong and positive impact on variable Y (customer retention) at Sentral Mobil Medan.

Determination result percentage impact of CRM on customer retention CV. Sentral Mobil Medan is 68.90% and the remaining of 31.1% was impacted by others which were not discussed in this *skripsi*.

The linear regression equation shows CRM has a positive equation on customer retention at Sentral Mobil Medan.  $Z_{count} > Z_{table}$  (9.88 > 1.96), This means the Null hypothesis (Ho) is rejected and the alternative (Ha) is accepted. Customer Relationship Management has impact on customer retention at Sentral Mobil Medan.

## CONCLUSIONS

After some research and review from the previous chapters, the writer cordially would like to present some conclusions which related to the objectives of the research which are as follows: 1) Customer relationship management has impact on customer retention at Sentral Mobil Medan which can be seen from the result of hypothesis test which  $Z_{count} > Z_{table}$  (9.88 > 1.96), This means the Null hypothesis (Ho) is rejected and the alternative (Ha) is accepted. 2) Variable X (CRM) has a significantly strong and positive impact on variable Y (Customer retention) at Sentral Mobil Medan which can be seen from the result of correlation test

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