

The Effect of Customer Relationship Management (CRM) on Customer Loyalty with Satisfaction as a Mediating Variable at BRI Galunggung Branch

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ABSTRACT

The objective of this investigation is to investigate the impact of consumer Relationship Management (CRM) affects consumer loyalty, using customer satisfaction as a mediating variable. Quantitative methods are used in this study. The study's data are primary data collected by a questionnaire (questionnaire) with a measuring scale, namely the Likert scale. This study employed a sample size of 100 people. This analysis technique includes the results of instrument tests which comprise validity and reliability testing, traditional assumption tests that include normalcy, heteroscedasticity, and multicollinearity tests, statistical tests and path analysis tests. The findings revealed that customer relationship management has a positive and significant impact on customer satisfaction. Furthermore, customer satisfaction is proven to have a good impact on consumer loyalty.

INTRODUCTION

In an era of increasingly fierce to compete, businesses must focus on efforts to retain existing customers rather than focusing only on acquiring new customers. One approach that is recognized as effective in increasing customer loyalty is the implementation of Customer Relationship Management (CRM). CRM is a management strategy that integrates processes, technology, and all customer-related activities to improve customer relationships. The main goal of CRM is to understand customer needs better, provide quality service, and ultimately create customer satisfaction and loyalty. Previous research shows that CRM Has a huge impact on customers satisfaction and loyalty. For example, research by Ayang Tasya (2022) found that companies that implement CRM well tend to experience improvements in terms of their customer satisfaction and loyalty. This research highlights the importance of several CRM elements such as service personalization, responsiveness to customer needs, and customer data management in Developing long-term customer ties.

In the banking sector, the application of CRM is becoming increasingly important given the high level of competition and homogeneity of products offered by banks. A study by Sin et al. (2005) confirmed that effectively implemented CRM in the banking sector can increase customer value, which in turn enhances client loyalty. The study also showed that information technology plays a key role in facilitating successful CRM implementation in banks. Bank Rakyat Indonesia (BRI) as one of the largest banks in Indonesia, particularly in Galunggung branch, faces challenges in retaining their loyal customers. With the increasing number of banks offering similar services, BRI needs to ensure that the CRM strategies implemented can effectively increase customer satisfaction and loyalty.

One of the most significant factors is customer loyalty elements in determining the long-term success of a company. Customer loyalty not only helps reduce marketing costs, but also encourages positive word-of-mouth references that can attract new customers. Consumer loyalty is the availability of consumers to subscribe to the company for a long time, buy and use goods or services repeatedly and willingly recommend the company's products or services to the public or consumers (Cristopher and Lauren in Setiawan (2021). Customer satisfaction is an important variation in the link between CRM and customer loyalty. Satisfied customers tend to be more loyal, thus mediating the effect of CRM on customer loyalty. According to research by Gitosudarmo (2021: 63), client pleasure is strongly linked to client loyalty, and companies that can maintain high levels of satisfaction will usually see an increase in their customer loyalty.

As a result, it is critical to comprehend how much CRM implemented by BRI Galunggung branch is able to increase customer satisfaction and how that satisfaction contributes to customer loyalty. The purpose of this study is to investigate the effect of CRM on customer loyalty at BRI Galunggung branch with customer satisfaction as a mediating variable. Through this research, it is expected to provide insight into the effectiveness of CRM in creating satisfied and loyal customers, as well as providing strategic recommendations for BRI in

managing relationships with their customers. Based on this information, the researcher intends to perform a study called "The Effect of Customer Relationship Management (CRM) on Customer Loyalty with Satisfaction as a Mediating Variable at BRI Galunggung Branch."

LITERATURE REVIEW

Definition of Customer Relationship Management (CRM)

CRM stands for customer relationship management innovative approach to managing corporate and customer relationships at the corporate level in order to maximize communication and marketing by handling a variety of customer interactions. According to (Pawoon, 2019), CRM is a company's means of dealing with all new and former consumers in order to be useful for the business being run. CRM refers to a business approach that proactively increases an organization's influence or preference among individual employees, distribution networks, and customers, resulting in retention and improved performance. CRM is defined as a learning process to understand the value that is important to each customer and use that knowledge to provide the benefits that customers really want and make it easier for customers to conduct business with the organization.

Customer Relationship Management (CRM) Indicators

According to Sivesan (2012) in (Arief Budiyanto & Surya, 2019) there are three indicators that influence the success of CRM, namely:

a. Trust

Trust in relationships or interactions between individuals is the belief that the other party will act in a reliable and honest manner. In the context of CRM, building trust between companies and customers is very important so that customers feel comfortable and loyal.

b. Communication

Commitment Communication is the process of conveying information between two or more parties. In a business context, effective communication with customers is essential to understand their needs, provide clear information, and resolve problems or queries quickly and appropriately.

Commitment refers to the loyalty or determination to stay in a relationship or fulfill certain responsibilities. In business relationships, commitment leads to companies continually striving to provide excellent service and meet customer expectations, which in turn increases customer loyalty.

c. Commitment

Commitment Communication is the process of conveying information between two or more parties. In a business context, effective communication with customers is essential to understand their needs, provide clear information, and resolve problems or queries quickly and appropriately.

d. Conflict Handling

Conflict handling is a way to manage and resolve differences of opinion or tensions that arise between the parties involved. In the context of customer relationships, good conflict handling helps maintain a positive relationship despite any disagreements or issues that arise.

Customer Loyalty

Definition of Customer Loyalty

According to Tjiptono (2022: 250) Consumer loyalty is that consumers are committed to the brand based on positive characteristics in purchases in the long term. According to Oliver (2022: 9) Consumer loyalty is a consumer's profound commitment to being able to acquire products on a constant. Regardless, in the future the fact that situations and marketing efforts have the capacity to impact behavioral changes. According to Griffin (2022: 9) Consumer loyalty is the attitude of the decision-making unit so that it can continue to acquire goods or services from the chosen business.

Indicators of Customer Loyalty

According to Griffin (Irnandha, 2019) Customer loyalty, unlike satisfaction, which is an attitude, can be quantified based on purchasing behavior, making it a more dependable predictor of a company's success. The following are indicators of customer loyalty according to Asriani (2019: 2):

a) Make regular repeat purchases.

Loyal customers are those that purchase goods or services on a regular basis and will continue to do so even if prices rise.

b) Buying between product and service lines.

Customers who are loyal to a firm do not just buy one type of goods or service, However, they also purchase extra products or services offered by the corporation.

c) Referring to others.

Loyal customers frequently refer a product or service they use to others, whether they are friends or relatives, and they always strive to encourage people to use the same products or services by always telling the advantages of the products or services they use until the person tries them.

d) Show immunity to competitor attraction.

Loyal clients frequently decline offers of competing products or services. They already have a specific fondness for the product or service used.

Customer Satisfaction

Definition of Customer Satisfaction

Currently, companies are focusing in terms of customer happiness basically the goal of a company is to create a sense of satisfaction for customers. The higher the level of the more satisfied customers are, the likelihood that customers will return to buy the company's items. However, if the level of satisfaction felt by the customer is very small, then the possibility of the customer moving to a competitor's product will be higher.

Customer Satisfaction Indicators

Indicators for measuring Indrasari (2019:92) defines customer pleasure as:

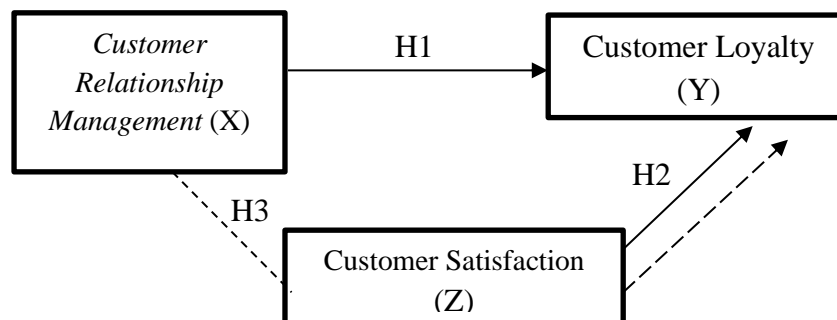
- a. Satisfaction is determined by the alignment or mismatch between consumer expectations and actual firm performance, rather than explicitly measuring it.

- b. Customer satisfaction is determined by their willingness to purchase or using the company's services in the future.
- c. Customer satisfaction is defined by their willingness to suggest a product or service to others, including family and friends.

Based on previous research that has been conducted, CRM has been proved to improve customer satisfaction. CRM allows companies to collect and analyze customer data, which is then used to offer services that more personalized and in compliance with the specific needs of the consumers. This high customer satisfaction, in turn, acts as a middleman, amplifying the impact of CRM on customer loyalty.

CRM is consistently described as an important strategy for managing customer interactions and building long-term relationships. CRM is generally defined as a process that involves collecting and analyzing detailed customer information to increase customer loyalty. The emphasis on CRM reflects its importance in understanding and meeting customer needs, thereby creating a personalized customer experience. Across various contexts in retail, financial services, and digital platforms. These studies consistently find that effective CRM practices favorable effect on client satisfaction. This satisfaction, in turn, is seen as an important prerequisite for customer loyalty.

Research Model



Research Hypotheses

Direct Effect Hypotheses

- **H1:** Customer Relationship Management (CRM) has a positive and significant effect on customer loyalty.
- **H2:** Customer Satisfaction has a positive and significant effect on customer loyalty.

Mediating Effect Hypothesis

- **H3:** Customer Satisfaction mediates the relationship between Customer Relationship Management (CRM) and customer loyalty.

Null Hypotheses (For Statistical Testing)

- **H01:** CRM has no significant effect on customer loyalty.
- **H02:** Customer satisfaction has no significant effect on customer loyalty.
- **H03:** Customer satisfaction does not mediate the relationship between CRM and customer loyalty

METHODOLOGY

Scope of Research

The research location was carried out at BRI Galunggung Branch located on Jl. Galunggung No.58k, Gading Kasri, Kec. Klojen, Malang City, East Java Malang, East Java, This study's data was collected via a questionnaire. Submission of questionnaires and interviews focused on respondents who are customers of Bank BRI Galunggung Branch.

This study relies on original data, based on filling out questionnaires and interviews. According to (Ahlyar et al., 2020), primary data is information gathered directly from research participants. Researchers collect primary data to help them solve research issues. The data was obtained directly by researchers from respondents who were customers of Bank BRI Galunggung Branch. This research is quantitative in analyzing data, using statistical methods Using the SPSS (Statistical Package for Social Science) software. Multiple linear regression was used to analyze the data, coefficient of determination, t-tests, and F-tests. The independent variable in this study consists of Managing customer relationships Customer loyalty is the dependent variable, and Customer Satisfaction acts as a mediator.

Population

Sugiyono (2020) defines population as a generalization region comprising of things or persons with specific Researchers' qualities and features analyze and derive conclusions from. This study's demographic consisted entirely of BRI Galunggung Branch clients.

Sample

To measure the sample size to be studied, The researchers employed the Lemeshow formula (1997), in which this formula is applied to take the quantity of samples to be examined. The calculation with the Lemeshow formula is the following:

$$n = \frac{Z^2 \times p (1-p)}{d^2}$$

Description:

n: Sample Count

Z: Standard Value = 1.96

p: Maximum estimate = 50% = 0.5

d: Alpha (0.10) or sampling error = 10%

From the formula above, the following numbers are obtained:

$$\begin{aligned} n &= \frac{1,96^2 \times 0,5 (1-0,5)}{0,10^2} \\ &= 96,04 \\ &= \text{rounded to } 100 \end{aligned}$$

So, according to the equations above, the sample value is 97 people. To facilitate the calculation, the amount of sampling is rounded up to 100 people.

Type of Data

This study used the following categories of data:

1. Primary data are data gathered by circulating questionnaires to selected respondents in connection with the data needed in the preparation of this thesis.
2. Secondary Data is data and information obtained using the documentation method In the sample, the outcomes of research in the library, and from related agencies.

Data Collection Methods

Referring to Sugiyono's research (2020) The study's methods for gathering data were:

1. Questionnaire
Specifically, data collection techniques through a collection of questions (questionnaires) submitted to parties directly connected to the subject being examined. The questionnaire will be distributed to all samples of BRI Galunggung Branch who are used as respondents.
2. Interview
Namely a way of collecting data used to obtain information directly from BRI customers Galunggung Branch. Interviews will be conducted with all sample employees of BRI Galunggung Branch customers.

Operational Definition of Variables

In this study, the variables are independent, which means they influence the dependent variable (Sugiyono, 2016:61). During this investigation, the independent variable is Customer Relationship Management (CRM). The independent variable influences the dependent variable. In this investigation, the dependent variable is Customer Loyalty. And the mediating variable is a variable that lies between the dependent and independent variables, so that the independent variable is not direct 3.4.1 Independent variables. The independent variables, also known as free variables, affect the reliant variables. CRM is the study's independent variable.

Customer relationship management (CRM) is defined as a corporate approach that proactively generates influence or preference for an organization among individual employees, distribution channels, and customers, which ends in retention and increased performance. According to Munandar (2023) there are three indicators that affect the success of CRM, namely:

- 1) Trust
- 2) Communications
- 3) Commitment
- 4) Conflict Handling

Dependent Variable

The independent variable influences the dependent variable. Customer loyalty is the dependent variable in this study. According to Tjiptono (2022: 250) Consumer loyalty is that consumers are committed to the brand based on positive characteristics in long-term purchases. Indicators of measuring customer loyalty are:

1. Make frequent, recurrent purchases.
2. Buy between goods and service categories.
3. Making reference to others.
4. Show how immunity to competitor attraction affects the change or start of the dependent variable.

Mediating Variable

Mediating variables are variables that are located between the dependent and independent variables, so that the independent variable might be the dependent variables change or emergence is indirectly affected. In this study, customer satisfaction serves as the mediating variable. According to Fatihudin and Firmansyah (2019: 206) Customer satisfaction is a measurement or indicator of the amount to which consumers or users of a company's products or services are extremely pleased with the items or services obtained. Customer satisfaction is a comparison of expectations and perceptions of the experience. Indrasari (2019: 92) defines customer satisfaction indicators as:

1. Expectation conformity.
2. Loyalty return visit interest
3. Willingness to recommend.

Data Analysis Methods

Descriptive Analysis

Descriptive data analysis is used to examine data by describing or explaining the acquired data as is, without drawing inferences or making generalizations (Sugiyono, 2017:147). In this study, the descriptive data analysis employed is respondents' attributes, such as age and gender, most recent education, duration of service, and the mean of the accumulation of various statements on the questionnaires.

Validity Test

The validity test determines if a measurement device is valid (valid) or not. If the correlation significance level is less than 0.05, the item is considered legitimate.

Reliability Test

The dependability test is an index that indicates how much a measuring device can be trusted and relied on. Reliability indicates how consistently a measuring equipment measures the same symptoms, in several times implementing the Cronbach alpha measurement technique in SPSS. Cronbach alpha is considered dependable if it is more than 0.60.

Multiple Linear Regression Analysis

The hypothesis is proven applying multiple regression analysis to be proposed Multiple regression was employed as the analysis strategy in this investigation. The formula used to calculate multiple regression is:

$$Y = \beta_0 + \beta_1 X_1 + e_i; i = 1, 2, \dots, n$$

Where:

Y = Customer Loyalty

X = CRM

a = Constant

β_0, β_1 = Regression Model Parameters

e = Error Factor

T Test

The T-test was utilized to validate the study premise that each independent variable had a partial Impact on the dependent variable. The Coefficients table's significance value is used to make decisions. Regression results are typically tested at a 95% confidence level or 5% significance level ($\alpha = 0.05$). The criteria for the t statistical test (Ghozali, 2019s):

Based on the criteria for comparing the t value with the t table as follows:

- a. If the t value is smaller than the t-table, then the hypothesis is rejected, This indicates that the independent variable has no partial effect on the dependent variable.
- b. If the t value is greater than the t-table, the hypothesis is accepted, showing that the independent variable has a partial effect on the dependent variable.

Based on the significance value criteria as follows:

- a. If the t test's significance value exceeds 0.05, the hypothesis is invalid. This means the dependent variable is not always influenced by the independent variable.
- b. If the t-test results are < 0.05 , the hypothesis is accepted. This suggests that The independent variable has a partial effect on the dependent variables.

F Test

The F test is intended to evaluate the study hypothesis on the concurrent influence of independent factors on the dependent variable. The basis for Decision making was employed in the F test is by comparing the significance levels (Ghozali, I. 2019). If the test results are < 0.05 , the null hypothesis is rejected. This signifies that the dependent variable is significantly influenced by all independent variables at the same time. Meanwhile, if the test findings have a significance level greater than 0.05, the null hypothesis is accepted. The F test is also conducted by comparing the estimated F value to the F table in the following manner:

1. If the value of F count is greater than F table, the hypothesis is accepted, this signifies that the independent factors both influence the dependent variable at the same time.
2. If the F count < F table, the hypothesis is denied, indicating that the independent factors do not affect the dependent variable simultaneously.

Test Coefficient of Determination (R²)

This test determines the correctness of regression analysis estimates. The coefficient of determination (R²) simply evaluates how well the model Describes the variance in the independent variable. The coefficient of determination goes from 0 to one. A low R² value suggests that the independent factors' ability to explain variance The dependent variable is relatively limited. A value close to one suggests that the independent factors almost entirely predict fluctuations in the dependent variable.

Sobel Test

The Sobel test, devised by Sobel (Abu-Bader & Jones, 2021), can be applied to evaluate the mediation hypothesis. The Sobel test is conducted by testing the strength of the indirect effect of X to Y through I. The Sobel test formula is as follows:

1. To test the significance of the indirect effect, it is necessary to calculate the t value of the ab coefficient with the following formula:
2. The estimated t value is compared to the t table value; if the t count exceeds the t table value, the effect of mediation can be established. The Sobel test's assumption demands a high sample size; when the sample size is small, the Sobel test becomes less conservative.
3. The Sobel Test can be determined with the Sobel calculator (Adnan et al., 2017), namely by entering the value of the regression results of variable X to variable Y and the regression results of variable Z to variable Y. The value we use in the Sobel Test is the coefficient value of variables X and Z, then the standard error value of variable X and variable Z. Then click calculate, Sobel calculator. Then click calculate, the Sobel calculator will automatically calculate the value of the Sobel test statistic (the same as the t value) then the p-value significance both one-way (one-tailed probability) and two-way (two-tailed probability).

Classical Assumption Test

Before regression analysis of the research variables is carried out, The first step is to perform a classic assumption test. The purpose of conducting a classic assumption test is so that the data used is feasible to be used as a source of testing and produces the correct decision. The traditional assumption tests employed in this study include according to Suganda, T., & Cahyadi, R. T. (2020) are:

Normality Test

Data distribution testing determines whether or not the dependent and independent variables in a statistical model are regularly distributed. The Kolmogorov-Smirnov test is one of the procedures used to assess the normalcy

of research data. According to Imam Suganda, T., & Cahyadi, R. T. (2020), data distribution can be seen by comparing the calculated Z with the Z table with the following criteria:

- a. If Z count (Kolmogorov Smirnov) < Z table (1.96), or significance number > significance level (α) 0.05; then the data distribution is said to be normal.
- b. If Z count (Kolmogorov Smirnov) > Z table (1.96), or significance number < significance level (α) 0.05 the data distribution is said to be abnormal.

Multicollinearity Test

The multicollinearity test determines if a regression equation's independent variables are related. A decent regression model should have no connections between its independent variables. Independent variables that are correlated cannot be orthogonal. Orthogonal variables are independent and have a zero correlation coefficient. The tolerance value and Variance Inflation Factor (VIF) exhibit multicollinearity. If the tolerance value is larger than 0.0001 and the VIF is less than 5, the regression is non-multicollinear. T. Suganda and R. T. Cahyadi. (2020).

Heteroscedasticity Test

Examining the plot graph of the dependent variable's projected value (ZPRED) against its residual (SRESID). The existence or lack of heteroscedasticity can be detected by checking for a specific pattern in the scatterplot graph between SRESID and ZPRED, where the Y axis represents the predicted Y and the X axis represents the residual (predicted Y - actual Y) that has been studentized. The graph shows no discernible pattern, and the points are scattered above and below the number 0 on the Y axis, indicating no heteroscedasticity (Ghozali, 2018).

RESEARCH RESULT

Overview of Research Object

This research was conducted on customers of Bank BRI Galunggung Branch located on Jl. Galunggung, Gading Kasri, Kec. Klojen, Malang City, East Java, Indonesia 65115. In this study, a questionnaire was provided to customers of Bank BRI Galunggung Branch. The questionnaires were distributed starting on Wednesday, September 4, 2024, which was carried out by direct distribution to the BRI Galunggung Branch office. Researchers obtained 100 questionnaires that could be processed and then analyzed the data based on their characteristics.

Respondent Characteristics Based on Gender

The genders of respondents in this survey are divided into two categories: male and female. Table 1 shows that there are 24 male respondents and 76 female respondents.

Table 1. Respondent Profile Based on Gender Category

Gender	Frequency	Percentage
Male	24	24%
Female	76	76%
Amount	100	100%

Source: Appendix 2, data processed in 2024.

Based on Education Level

The level of education of respondents in this study is classified into four, namely Senior high school, DIPLOMA, Bachelor's Degree (S1), and Master's Degree (S2). Table 2 shows that respondents with the last education of SMA were 36 respondents, DIPLOMA as many as 22 respondents, Bachelor's Degree (S1) as many as 40 respondents, Master's Degree (S2) as many as 2 respondents.

Table 2. Respondent Demographics Based on Last Education Category

Last Education	Frequency	Percentage
Senior High School	36	36%
DIPLOMA	22	22%
Bachelor's degree	40	40%
Master's Degree	2	2%
Amount	100	100%

Source: Appendix 2, data processed in 2024.

Respondent Characteristics Based on Age

The age of respondents in this study is classified into four, namely, <30 years, 31-40 years, 41-50 years, >50 years. Table 3 shows that respondents with age <30 years were 38 respondents, 31-40 years were 43 respondents, 41-50 years were 12 respondents, and age >50 years were 7 respondents.

Table 3. Respondent Profile Based on Age Category

Age	Frequency	Percentage
< 30 Year	38	38%
31-40 Year	43	43%
41-50 Year	12	12%
>50 Year	7	7%
Amount	100	100%

Source: Appendix 2, data processed in 2024

Data Collection Results

The outcomes of data collection gathered from the questionnaires completed by respondents are as follows:

Recapitulation of Respondents' Answers to the Customer Relationship Management Variable (X)

Table 4 displays the results of the recapitulation of respondents' responses to the CRM variable.

Tabel 4. Rekapitulasi Jawaban Responden Variabel CRM (X)

Variabel	Respondents' Answers											
	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
X.1	23	23%	71	71%	6	6%	0	0%	0	0%	100	100%
X.2	21	21%	68	68%	11	11%	0	0%	0	0%	100	100%
X.3	21	21%	63	63%	16	16%	0	0%	0	0%	100	100%
X.4	18	18%	71	71%	11	11%	0	0%	0	0%	100	100%
X.5	25	25%	64	64%	9	9%	2	2%	0	0%	100	100%
X.6	27	27%	63	63%	10	10%	0	0%	0	0%	100	100%
X.7	30	30%	65	65%	5	5%	0	0%	0	0%	100	100%

Source: Appendix, Processed data (2024))

Based on CRM variable data, the average respondents who answered agree and strongly agree were 23.57% and 66.42%. It can be concluded that most respondents (89.9%) of the facilities at BRI Galunggung Branch have been in accordance with customer needs. Respondents also agreed that BRI Galunggung Branch provides accurate information about existing services

Recapitulation of Respondents' Answers to the Loyalty Variable (Y)

The results of the recapitulation of respondents' answers to the Loyalty variable can be seen in the following table 5.

Table 5. Recapitulation of Respondents' Answers Loyalty Variable (Y)

Variabel	Respondents' Answers											
	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Y.1	24	24%	63	63%	11	11%	2	2%	0	0%	100	100%
Y.2	24	24%	70	70%	6	6%	0	0%	0	0%	100	100%
Y.3	31	31%	56	56%	12	12%	1	1%	0	0%	100	100%
Y.4	43	43%	52	52%	5	5%	0	0%	0	0%	100	100%
Y.5	31	31%	65	65%	4	4%	0	0%	0	0%	100	100%

Source: Appendix, Processed data (2024))

Based on customer loyalty variable data, the average number of respondents who answered agree and strongly agree was 30.6% and 61.2%. It can be concluded that most respondents (91.8%) will use other service products provided by BRI Gaunggung Branch. Respondents will also provide recommendations to friends, relatives or siblings to become customers at BRI Galunggung Branch.

Recapitulation of Respondents' Answers to the Satisfaction Variable (Z)

The results of the recapitulation of respondents' answers to the satisfaction variable can be seen in table 6 below.

Tabel 6. Rekapitulasi Jawaban Responden Variabel Kepuasan (Z)

Variabel	Respondents' Answers											
	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Z.1	24	24%	68	68%	8	8%	0	0%	0	0%	100	100%
Z.2	24	24%	67	67%	9	9%	0	0%	0	0%	100	100%
Z.3	21	21%	64	64%	13	13%	2	2%	0	0%	100	100%
Z.4	28	28%	68	68%	4	4%	0	0%	0	0%	100	100%

Source: Appendix, Processed data (2024))

Based on customer loyalty variable data, the average respondents who answered agree and strongly agree were 24.25% and 66.75%. It can be concluded that most respondents (91%) were satisfied with the ease of transactions and transaction security at BRI Galunggung Branch. Respondents were also satisfied with the facilities at BRI Galunggung Branch.

Descriptive Statistical Analysis

Descriptive statistical analysis can provide an overview of the research result variables seen from the perspective of the respondents' answers through the research questionnaire in the form of several statements. The researcher will provide an overview related to the average (mean) of the responses that have been given.

This study uses a measurement scale, namely the Likert scale. The questionnaire in this study will be distributed directly to respondents. To find out the average respondent's answer is included in a certain category, here are the categorization rules:

$$\frac{\text{High Score} - \text{Low Score}}{\text{number of categories}}$$

$$\frac{5-1}{5} = 0,8$$

From the calculation above, the value 0.8 is obtained, which is the class interval distance in each category so that the provisions apply with the following results:

Table 7. Class Interval

Interval	Score	Information
1,00-1,80	1	Strongly Disagree
1,80-2,60	2	Disagree (TS)
2,60-3,40	3	Somewhat Disagree
3,40-4,20	4	Agree
4,20-5,00	5	Strongly Agree

Source: Sugiyono (2019)

Based on the range of answer criteria and with the help of IBM Statistic 23 software, the descriptive assessment of respondents regarding each research variable can be explained as follows:

Table. 8 Statistical Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Total Customer Relationship Management	100	23	35	28.93	2.422
Total Loyalitas Nasabah	100	17	25	21.09	1.870
Total Kepuasan Nasabah	100	13	20	16.59	1.505
Valid N (listwise)	100				

Source: Appendix, SPSS Output

The statistical results in table 8. can show There are 100 data samples used in this investigation The table above clearly shows that the customer Relationship Management variable (X1) with the smallest value (minimum) is 23, for the largest value (maximum) is 35, and for the average value (mean) is 28.93 with a standard deviation (standard deviation) to measure the level of deviation from a variable value of 2,442. The customer relationship management variable's average value is bigger than its standard deviation value, indicating that it is homogeneous. The loyalty variable (Y) with the smallest value (minimum) is 17, for the largest value (maximum) is 25, and for the average value (mean) is 21.09 with a standard deviation (standard deviation) to measure the level of deviation from a variable value of 1,870. The loyalty variable's average value exceeds its standard deviation value, indicating that it is homogeneous.

For the satisfaction variable (Mediation) with the smallest value (minimum) is 13, for the largest value (maximum) is 20, and for the average value (mean) is 16.59 with a standard deviation to measure the level of deviation from a variable value of 1.505. The average value of the satisfaction variable is greater than the standard deviation value, this indicates that the satisfaction variable is homogeneous.

Validity Test

The Validity Test aims to test the extent to which an instrument is accurate or true as a measuring tool for research variables. The validity test is used to determine if a questionnaire is valid or invalid. A questionnaire is deemed to be

valid if the questions on it can reveal anything that the questionnaire can measure (Ghozali, 2018). The validity test of this study was carried out by comparing the calculated r-value with the r-table value, table at $\alpha = 0.05$ with degree of freedom (df) = n-2. In the initial study, it was intended for 100 respondents. The r-table calculation formula is as follows:

$Df = n - 2 = 100 - 2 = 98$ (Sugiyono, 2020)

The data produced by table 84 is 0.165

Reliability Test

A reliability test is a tool for determining the validity of a questionnaire that serves as an indicator of a variable. A questionnaire is said to be dependable when a person's response to a question remains constant or stable over time. In this study, a variable is considered dependable if its Cronbach Alpha value exceeds 0.60.

Normality Test

The normality test examines if the use or residual variables in the regression model follow a normal distribution (Ghozali, 2018). Ghozali (2018) defines the testing requirements for the normalcy test as follows:

- a. If the likelihood of the Z value of the K-S test is less than 0.05, the data is not normally distributed.
- b. If the Z value of the K-S test is significantly more than 0.05, the data is regularly distributed.

The normality test in this study employs IBM SPSS Statistics 23 software to perform the One Sample Kolmogorov Smirnov value test, which determines whether or not the data is normally distributed if the significance value is greater than 0.05.

Multicollinearity Test

The multicollinearity test determines whether there is a correlation between the regression model's independent variables (Ghozali, 2018). The measurement standards to determine whether multicollinearity exists or not are:

1. A tolerance value greater than 0.1 and a VIF less than 10 indicate no multicollinearity in the investigation.
2. If the tolerance value is less than 0.1 and the VIF is greater than 10, the study has multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test aims to see whether there is inequality in the variance of the residuals from one observation to another in the regression model (Ghozali, 2011:139). To identify the presence of heteroscedasticity is to look at the image in the Scatterplots test where heteroscedasticity will not occur. If there is no distinct pattern (wavy, broadening, then narrowing) in the scatterplot image, and the points are scattered above and below the Y axis value of 0. A good regression model is one that does not experience heteroscedasticity. In this study, IBMS PSS Statistic 23 software was used to conduct a heteroscedasticity test using scatterplots images, as follows:

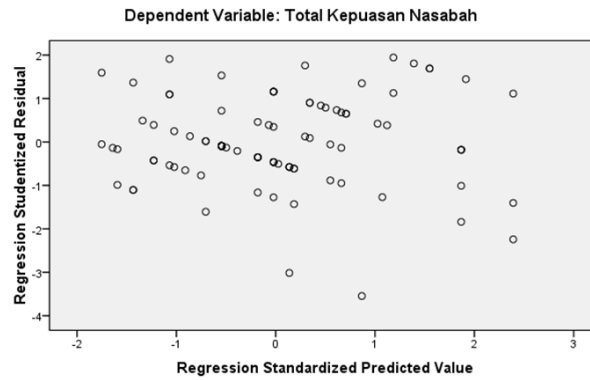


Figure 1. Results of Heteroscedasticity Test
 Source: Appendix, Processed Primary Data (2024)

Figure 1 indicates that there is no visible pattern (wavy, broadening, and narrowing) in the scatterplot image, and the dots are evenly distributed above and below the number 0 on the Y axis, showing that there is no heteroscedasticity. So it can be concluded that the regression model in this study is good, because there is no heteroscedasticity.

T-Test

The t-test (partial test) is used to determine whether the independent variable has any influence on the dependent variable. The t-test basically reveals how much one explanatory or independent variable influences the variation of the dependent variable (Ghozali, 2016).

F-Test

The F-test (simultaneous test) is used to determine if the independent or free variables in the model have a combined influence on the dependent or bound variable. If the significance probability value is <5%, then the independent variables will have a significant effect together on the dependent variable (Ghozali, 2018).

Determination Coefficient Test (R2)

According to Kuncoro (2013), the determination coefficient indicates the magnitude of the relationship between the independent factors and the dependent variable. The R2 value goes from 0 to 1, with higher values indicating a stronger link and lower values indicating a weaker relationship.

Sobel Test Results

Tabel 9. Sobel Test Results

Input:		Test statistic:	Std. Error:	p-value:
a	0.568	Sobel test: 3.08473645	0.05634452	0.00203733
b	0.306	Aroian test: 3.07249333	0.05656904	0.00212279
s _a	0.053	Goodman test: 3.09712711	0.0561191	0.00195406
s _b	0.095	Reset all	Calculate	

Source: Processed primary data (2024)

To determine the mediation value in this study, the Sobel test was used. How to use the Sobel test is by using a Sobel calculator. The testing criteria are that the hypothesis is accepted if the Test Statistic value $>$ p-value and the hypothesis is rejected if the Test Statistic $<$ p-value. From the results of the Sobel test calculation, it can be seen that the Test Statistic value is 3.085 and the p-value is 0.002. The Test Statistic value $>$ p-value ($3.085 > 0.002$), this indicates that H3 is accepted, which means that Customer Relationship Management through customer satisfaction has an effect on customer loyalty at Bank BRI Galunggung Branch.

DISCUSSION

The influence of Customer relationship management (CRM) has a positive and significant effect on customer loyalty

The partial test results obtained a t-value of 7.993. The t-value, t-table value ($7.993 > 1.968$) and the significance value of the CRM variable $0.000 < 0.05$, then H01 is rejected and Ha1 is accepted. This means that there is a positive and significant partial influence of the CRM variable on customer loyalty. This means that if customer relationship management is managed well by the company, it will have a positive impact on customer loyalty. The results of this study are in line with research conducted by Prasetya, A., & Utari, R. (2022) showing a positive correlation between the CRM variable and the Customer Loyalty variable.

The Influence of Customer Satisfaction on Customer Loyalty

The partial test results obtained a t-value of 3.235. The t-value, t table value ($3.235 > 1.968$) and the significance value of the satisfaction variable $0.002 < 0.05$, then H02 is rejected and Ha2 is accepted. This means that customer satisfaction has a positive effect on loyalty. Customer satisfaction has a higher level and is in accordance with customer expectations, then customer loyalty will also increase. A high degree of satisfaction can promote customer loyalty and avoid customer turnover, reduce customer price sensitivity, lower marketing failure costs, lower operating expenses due to increased customer volume, increase advertising effectiveness, and improve business reputation. Customer loyalty has an impact that can provide a good contribution to the company, with the contribution of customer loyalty. Then the company can increase the quality and efficiency of the company to the public, and the community, especially customers who have a positive impact on the company.

The influence of Customer Relationship Management has a positive and significant effect on Customer Loyalty through Consumer Satisfaction

From the results of the sobel test calculation, it can be seen that the Test Statistic value is 3.085 and the p-value is 0.002. Test Statistic Value $>$ p-value ($3.085 > 0.002$), this indicates that H3 is accepted, which means that Customer Relationship Management through customer satisfaction has an effect on customer loyalty at Bank BRI Galunggung Branch. This means that there is a positive and significant partial influence of the CRM variable through satisfaction on customer loyalty. Based on the study's findings, there is evidence

that the customer relationship management variable has an indirect effect on customer loyalty, with customer satisfaction serving as a mediating variable between customer relationship management and customer loyalty. The findings of this study are also consistent with research conducted by Caruana (2002), who found that service quality might indirectly influence client loyalty through customer satisfaction. Supar, D. A. W. A., & Atmosfer, I. G. A. K. G. (2017) satisfaction as a mediating variable has a strong influence on influencing customer loyalty.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results and discussion of this study, the conclusion for the study entitled "The Influence of Customer Relationship Management (CRM) on Customer Loyalty with Satisfaction as a Mediating Variable at BRI Galunggung Branch" is as follows:

1. The study found that customer relationship management (CRM) affects client loyalty.
2. The results of the study prove that satisfaction has an effect on customer loyalty.
3. The results of the study show that customer relationship management (CRM) through satisfaction has an effect on customer loyalty.

ADVANCED RESEARCH

Based on the results of the study and the conclusions of the study above, there are several suggestions from the researcher in order to provide benefits and suggestions for related parties:

1. Future researchers are advised to increase the scope of their research objects to several Bank branches within the scope of the District or in one Regency.
2. Future researchers are advised to add several data collection methods such as interviews and observations.
3. Future researchers are advised to replace other independent variables such as service quality variables, promotions, relationship marketing, etc.

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