



# The Relationship Between Customer Relationship Management (CRM) and Consumer Satisfaction at Hotel Puri Insan Asih (PIA) Pandan

**Author Name:** Sriayu Aritha Panggabean<sup>1</sup>, Andrian Irsyan<sup>2</sup>, Azriadi Tanjung<sup>3</sup>, Mhd. Shafwan Koto<sup>4</sup>, Riwayani<sup>5</sup>

**Affiliation:** Sekolah Tinggi Ilmu Ekonomi Al-Washliyah Sibolga

**Contact Information:** [arithasriayu@gmail.com](mailto:arithasriayu@gmail.com)<sup>1)</sup> [andrianirsyam@gmail.com](mailto:andrianirsyam@gmail.com)<sup>2)</sup> [riadybasten80@gmail.com](mailto:riadybasten80@gmail.com)<sup>3)</sup> [mhd.shafwankoto@gmail.com](mailto:mhd.shafwankoto@gmail.com)<sup>4)</sup> [riwayani9652@gmail.com](mailto:riwayani9652@gmail.com)<sup>5)</sup>

---

## Abstract

This study aims to examine whether there is a relationship between Customer Relations Management (CRM) and consumer satisfaction at the Puri Insan Asih (PIA) Pandan Hotel. To address this issue, a qualitative descriptive research design and quantitative analysis were used. The population of this study consists of all employees at the Puri Insan Asih (PIA) Pandan Hotel, totaling 71 individuals. Since the population is fewer than 100 people, the entire population of 71 individuals was taken as the sample. In addition to determining the sample or respondents, research informants were also selected, specifically the leadership elements within the organization. The research findings indicate that there is a relationship between Customer Relations Management (CRM) and consumer satisfaction at the Puri Insan Asih (PIA) Pandan Hotel. To verify the relationship and the influence between variables X and Y, several statistical tests were conducted. The correlation result showed a very strong correlation, with a value of 0.746. To examine the effect, the coefficient of determination was calculated to be 55.6%, which indicates that the independent variable (Customer Relations Management) influences consumer satisfaction, while the remaining 44.4% is influenced by other variables not discussed in this study, such as human resources quality, facility and infrastructure completeness, employee performance, and others. Based on the simple linear regression model, the regression equation  $Y = 13.250 + 0.715$  (Customer Relations Management) indicates that a certain increase in the X variable (CRM) will lead to an increase in the Y variable (consumer satisfaction) multiplied by the given coefficient value. From the hypothesis test, the calculated t-value was greater than the t-table value ( $7.335 > 1.995$ ), leading to the acceptance of the alternative hypothesis ( $H_a$ ), meaning that the hypothesis proposed in Chapter I is supported.

## Keywords

Customer Relationship Management, Consumer Satisfaction

---



## Introduction

To capture market share, companies must implement marketing strategies that understand consumer behavior in influencing purchase interest and increasing consumer satisfaction. Marketing strategy can be considered a function that interacts with the company's external environment, and in this case, the company has very limited control over external factors. Therefore, the strategies developed and implemented by the company play a crucial role in increasing sales through enhanced consumer satisfaction.

One of the strategies a company can apply is Customer Relationship Management (CRM), which functions as an effort to build good relationships between the company and consumers, aiming to influence consumer purchase interest and increase consumer satisfaction.

By implementing Customer Relationship Management (CRM), companies can more effectively introduce and market their products while establishing strong relationships with consumers. This enables companies to serve their customers better and understand their needs and desires. Furthermore, Customer Relationship Management (CRM) is a series of integrated activities designed to identify, analyze, retain, and develop profitable customers. Its primary goal is to optimize corporate profits through consumer satisfaction by shaping customer perceptions of the organization and its products/services. This is achieved through marketing, sales, and service strategies that motivate consumers to become loyal.

Given the increasingly intense competition, where more and more producers are involved in meeting consumer needs and desires, companies are placing greater emphasis on consumer satisfaction as their primary goal. This is reflected in the growing number of companies that incorporate their commitment to consumer satisfaction into their mission statements, advertisements, and public relations releases.

Recognizing the importance of Customer Relationship Management (CRM) in consumer satisfaction, the author is interested in conducting research on the relationship between Customer Relationship Management (CRM) and consumer satisfaction. To ensure the originality of this study, comparisons can be made with previous research related to the study variables, as follows:

1. Aidil Surahman (2014) - "The Influence of Total Quality Management Strategy on Increasing Consumer Satisfaction at PT. Adikarya Guna Semarang." The research results showed an impact of 66.5%.
2. Zumrah Rosdiani (2013) - "The Implementation of Customer Relationship Management (CRM) on Organizational Performance Improvement at PT. Perkasa Abadi Wijaksono Rembang." The research results showed an impact of 68.2%.

The selection of Hotel Puri Insan Asih (PIA) Pandan as the research subject is based on the fact that this hotel is one of the hospitality service companies offering room rentals, playgrounds, and entertainment facilities, which also face increasing competition. This is evident from the growing number of competitors in the room rental, playground, and entertainment sectors that are making improvements to attract consumer interest. Therefore, a strategy is needed to enhance consumer interest, one of which is through improving consumer satisfaction, considering that the hotel industry is experiencing increasingly intense competition. Consequently, steps must be taken to address this competition.



One strategy that can be implemented is Customer Relationship Management (CRM) to improve consumer satisfaction by building strong relationships, thereby influencing the purchase interest of potential consumers.

Based on the above discussion, the author is interested in conducting this study, and the research findings will be presented in the form of a thesis titled:

"The Relationship Between Customer Relationship Management (CRM) and Consumer Satisfaction at Hotel Puri Insan Asih (PIA) Pandan."

---

## Methodology

### A. Research Design

The research design used in this study is a descriptive quantitative research design, as this method aims to obtain information by creating a depiction or description of what exists or is currently happening.

This aligns with the opinion of Nyoman Dantes (2012:29), who stated:

*"Descriptive research activities involve data collection to test hypotheses related to the status or condition of the object being studied at the time of the research."*

Descriptive research seeks to describe and interpret what exists (such as conditions, relationships, emerging opinions, ongoing processes, effects that occur, or current trends).

In descriptive quantitative research, data is typically collected through questionnaires, interviews, or observations. Thus, this study narrates and interprets the existing data about the situation experienced and shows the relationship between variable X (independent variable) and variable Y (dependent variable). Independent variable (X): Customer Relationship Management (CRM) Dependent variable (Y): Consumer satisfaction This research was conducted at Hotel Puri Insan Asih (PIA) Pandan, located on Jl. Padangsidempuan, Pandan District, Central Tapanuli Regency, North Sumatra.

### B. Population and Sample

#### 1. Population

In research, data collection is an essential step to understanding the characteristics of the population, which consists of elements within the research object. The collected data is used to make decisions and test hypotheses. According to Sugiyono (2010:115), population is defined as:

*"A generalization area consisting of subjects/objects with specific qualities and characteristics determined by the researcher to be studied and then concluded."*

Meanwhile, Sangadji and Sopiah (2010:185) stated that:

*"A population is a generalization area consisting of subjects or objects with specific qualities and characteristics determined by the researcher to be studied and then concluded."* Determining the population must begin with clearly defining the target population, which refers to the group to which the research conclusions will apply.

In research ethics, the conclusions drawn should only be valid for the specified



target population. Based on these definitions, the population in this study consists of all employees of Hotel Puri Insan Asih (PIA) Pandan, totaling 71 individuals.

## 2. Sample

In research, studying the entire population is often impractical due to limitations such as cost, workforce, and time. According to Suharsimi Arikunto (2009:117), a sample is: *"A portion or representative of the population being studied."*

Regarding the number of samples to be taken, Suharsimi Arikunto (2009:62) explained: *"As a guideline, if the subject is fewer than 100, it is better to take all of them, making it a population study. If the subject is large, 10%-15% or 20%-25% can be taken."* Based on expert opinions above, since the total population is below 100 people, the researcher takes the entire population as the sample, which consists of 71 individuals.

## C. Variables and Indicators

### 1. Research Variables

A variable is a concept with different values. There are two types of research variables:

- a. Independent Variable (X): Customer Relationship Management (CRM)  
CRM is the independent variable that is assumed to influence the dependent variable.
- b. Dependent Variable (Y): Consumer Satisfaction  
Consumer satisfaction is the dependent variable, which is assumed to be influenced by the independent variable.

### 2. Research Indicators

Based on the literature review, the research indicators are formulated as follows:

- a. Customer Relationship Management (CRM) Indicators  
According to Stonet (2007:122), several indicators influence the success of CRM strategies:
  1. Human resources
  2. Processes
  3. Technology
  4. Consumer satisfaction
  5. Loyalty
  6. Effective interaction
  7. Cost efficiency
- b. Consumer Satisfaction Indicators  
According to Hermawan Kartajaya (2010:59), seven indicators must be considered by companies:
  1. Service quality
  2. Product quality
  3. Emotional factors
  4. Pricing
  5. Facilities



6. Administration
7. Purchasing

#### D. Research Instruments

The instruments used to collect data in this study include:

1. Observation

A method of obtaining data by direct observation at the research location.

2. Interviews

A technique of collecting data through question-and-answer sessions with relevant parties who can provide the necessary information.

3. Questionnaires

A method of collecting data by distributing questionnaires containing multiple-choice questions to selected respondents.

In accordance with the research title, the questionnaire includes two aspects:

- a. CRM aspect - 15 questions
- b. Consumer satisfaction aspect - 15 questions

Table. 3.1 Lay Out Kuesioner

Num ber	Aspects Addressed	Indicator	The amount of goods	informat ion
1.	<i>Customer Relations Management (Variable X)</i>	a. Human Resources b. Process c. Technology d. Consumer Satisfaction e. Loyalty f. Effective Interaction g. Cost Efficiency	15 Items	Multiple Choice
2.	Consumer satisfaction (Y variable)	a. Service Quality b. Product Quality c. Emotional Factors d. Price e. Facilities f. Administration g. Purchasing	15 Items	Multiple Choice

Source: Stonet (2007:122) and Kartajaya (2010:59)

The questions in the questionnaire are developed based on the indicators of each variable. Each question consists of five options, each assigned a score as follows:

- a. The score for option (a) is 5.
- b. The score for option (b) is 4.
- c. The score for option (c) is 3.
- d. The score for option (d) is 2.
- e. The score for option (e) is 1.

According to Sangadji and Sopiah (2010:37), the obtained values can be determined using an interval formula:





$$\text{Measurement Range} = \frac{5 - 1}{5} = 0.8$$

With an interval of 0.8, the scale values used are as follows:

- a. A scale value between 4.2 – 5.00 is categorized as Very Good.
- b. A scale value between 3.3 – 4.1 is categorized as Good.
- c. A scale value between 2.4 – 3.2 is categorized as Fair.
- d. A scale value between 1.5 – 2.3 is categorized as Poor.
- e. A scale value between 0.6 – 1.4 is categorized as Very Poor.

### E. Data Collection Techniques

The data collection techniques used in this study are as follows:

1. Literature Study  
This involves studying various sources related to the research problem, including books, scientific works, and relevant regulations.
2. Field Study, conducted through:
  - a. Interviews – A data collection method involving direct face-to-face question-and-answer sessions with individuals who can provide insights into Customer Relationship Management (CRM) and customer satisfaction.
  - b. Questionnaires – A written instrument consisting of structured questions that respondents must answer in writing.

### F. Data Analysis Techniques

This study aims to predict how the independent variable influences the dependent variable. The validity of research results largely depends on the measurement instruments used. Sukmadinata (2006:228) states that "the minimum requirements for a research instrument include validity and reliability." To test and prove the research hypotheses, a descriptive quantitative approach is used with Statistical Package for the Social Sciences (SPSS) version 26 for Windows. The data analysis techniques include:

#### 1. Validity Test

Validity testing measures the accuracy of an instrument in assessing what it is supposed to measure. Situmorang and Lufthi (2012:75) state, "A valid instrument is one that can accurately measure the intended data." To test validity, the correlation between individual question scores and the total score is analyzed. Azwar (2007:36) further explains that "an item is considered valid if its correlation coefficient ( $r$ ) is  $\geq 0.3$ ," indicating good construct validity.

#### 2. Reliability Test

A research instrument is considered reliable if it provides consistent results when used multiple times under the same conditions. Situmorang and Lufthi (2012:79) define reliability as "an index that indicates the extent to which a measuring instrument can be trusted or relied upon."

According to Situmorang and Lufthi (2012:82), reliability is classified based on Cronbach's Alpha as follows:

- $> 0.8$  = Very high reliability
- $0.7 - 0.8$  = High reliability
- $< 0.7$  = Less reliable

#### 3. Normality Test

A normality test determines whether the data distribution follows a normal distribution pattern. Normality testing is applied only to the dependent variable (Y). Graphical analysis is used for normality testing, utilizing histograms and P-P plots. Situmorang and Lufthi (2012:89) explain:



- a. A histogram indicates normal distribution when the data forms a bell-shaped curve.
- b. A P-P plot confirms normality when the data points are evenly distributed around the diagonal line.

#### 4. Correlation Coefficient Analysis

To determine the strength of the relationship between variables, SPSS is used to calculate the correlation coefficient. According to Sugiyono (2012:250), the correlation strength is classified as follows:

Correlation Coefficient	Strength of Relationship
0.80 – 1.000	Very Strong
0.60 – 0.799	Strong
0.40 – 0.599	Moderate
0.20 – 0.399	Weak
0.00 – 0.199	Very Weak

#### 5. Simple Linear Regression Analysis

A simple linear regression analysis is conducted to examine the relationship between the independent variable (X) and the dependent variable (Y) using the formula:

$$Y = a + bX$$

#### 6. Coefficient of Determination ( $R^2$ )

The coefficient of determination measures how well the independent variable explains variations in the dependent variable. It is calculated using the formula:  $KD = r^2 \times 100\%$

#### 7. Hypothesis Testing (t-Test)

The t-test is conducted to determine the significance of the relationship between the independent variable (X) and the dependent variable (Y). Hypothesis testing compares the t-calculated value (t-count) with the t-table value (t-table). According to Husein Umar (2005:197):

- a. If  $t\text{-count} > t\text{-table}$ , the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_0$ ) is rejected.
- b. If  $t\text{-count} < t\text{-table}$ , the alternative hypothesis ( $H_a$ ) is rejected, and the null hypothesis ( $H_0$ ) is accepted.

---

## Findings

### Research Data Analysis

#### 1. Validity Test

The validity test results for all question items in variable X (Customer Relationship Management), as shown in the Corrected Item-Total Correlation column, indicate that all items have a value greater than 0.300, meaning all question items are valid.

The validity test results for variable Y (customer satisfaction) correlate the question item scores with their total scores, as follows:

Table. 4.10  
Item Total Validity Statistics Variable Y

Quiz	Corrected Item- Total Correlation	r critical	information
------	--------------------------------------	------------	-------------



VAR00001	0,760	0,300	Valid
VAR00002	0,735	0,300	Valid
VAR00003	0,693	0,300	Valid
VAR00004	0,798	0,300	Valid
VAR00005	0,747	0,300	Valid
VAR00006	0,690	0,300	Valid
VAR00007	0,651	0,300	Valid
VAR00008	0,758	0,300	Valid
VAR00009	0,762	0,300	Valid
VAR00010	0,759	0,300	Valid
VAR00011	0,690	0,300	Valid
VAR00012	0,651	0,300	Valid
VAR00013	0,758	0,300	Valid
VAR00014	0,762	0,300	Valid
VAR00015	0,759	0,300	Valid

Source: SPSS-26 data processing, 2020

The validity test results for all question items in variable Y (customer satisfaction), as shown in the Corrected Item-Total Correlation column, indicate that all items have a value greater than 0.300, meaning all question items are valid.

## 2. Reliability Test

The reliability values are shown in the Cronbach's Alpha column, with variable X (Customer Relationship Management) scoring 0.946 and variable Y (customer satisfaction) scoring 0.951. Since both values exceed 0.60, all question items in variables X and Y are considered reliable.

## 3. Normality Test

The data distribution does not violate the normality assumption, forming a bell-shaped curve. Therefore, the histogram graph for Customer Relationship Management and customer satisfaction suggests a normal distribution. In the SPSS-26 normal probability plot of regression, the data points are closely aligned with the diagonal line in the normal P-P Plot, confirming that the data is normally distributed.

## 4. Correlation Coefficient

To determine whether there is a correlation between Customer Relationship Management (variable X) and customer satisfaction (variable Y), the response data was processed using Statistical Package for Social Sciences (SPSS) Version 26 for Windows, with the results as follows:

Table 4.12  
Correlation Coefficient Output

Coefficients<sup>a</sup>





Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	13,250	5,374		2,466	,018
CRM	,715	,098	,746	7,335	,000

a. Dependent Variable: Consumer Satisfaction

Source: SPSS-26 data processing, 2020

To determine the strength of the correlation coefficient from the calculation above, a correlation coefficient value of 0.746 was obtained. This indicates a relationship between Customer Relationship Management (variable X) and customer satisfaction (variable Y), which falls into the category of a strong correlation.

## 5. Coefficient of Determination

The coefficient of determination is 55.6%, meaning that 55.6% of the variation in customer satisfaction (dependent variable) is explained by Customer Relationship Management (independent variable). The remaining 44.4% is influenced by other factors not examined in this study, such as human resource quality, availability of facilities and infrastructure, employee performance, and other variables

## 6. Simple Linear Regression

The simple linear regression equation is:

$Y = 13.250 + 0.715X$  This indicates that customer satisfaction (Y) is influenced by Customer Relationship Management (X) with a regression coefficient of 0.715. This means that if variable X (Customer Relationship Management) increases by one unit, variable Y (customer satisfaction) will increase proportionally, multiplied by 0.715.

## 7. Hypothesis Testing

**To determine whether the proposed hypothesis is accepted or rejected, the following approach is used:**

- Comparison of t-value (t-calculated) and t-table value:
  - If t-calculated is greater than t-table, the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_o$ ) is rejected.
  - If t-calculated is smaller than t-table, the alternative hypothesis ( $H_a$ ) is rejected, and the null hypothesis ( $H_o$ ) is accepted.
- Degree of Freedom (dk):  $dk = n - 2 \rightarrow dk = 71 - 2 = 69$  At a 95% confidence level, the t-table value is 1.995.



Hypothesis testing is conducted using Statistical Package for Social Sciences (SPSS) Version 26 for Windows, with the following results:

Table. 4.15 Output t count

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	13,250	5,374		2,466	,018
CRM	,715	,098	,746	7,335	,000

Dependent Variable: Consumer Satisfaction

Source: SPSS-26 data processing, 2020

Based on the calculation results above, the t-calculated value is compared with the t-table value. The comparison shows that t-calculated (7.335) is greater than t-table (1.995). Since t-calculated is greater than t-table, the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_o$ ) is rejected. Therefore, the hypothesis proposed in Chapter I is "accepted."

## Conclusion

1. From the validity test of variables X and Y, it was obtained that for each question item (Quiz 1 – Quiz 15), the Corrected Item-Total Correlation value was greater than the critical r value. Thus, all statement items for variables X and Y are declared valid and meet the requirements as measurement tools for the variables.
2. From the reliability test, the Cronbach's Alpha value for variables X and Y is above 0.60, which means that the values of variables X and Y are reliable.
3. There is a positive relationship between Customer Relationship Management and customer satisfaction at Hotel Puri Insan Asih (PIA) Pandan, as seen from the increase in the number of service usage transactions over the past 5 months, totaling 293 transactions.
4. From the correlation coefficient calculation, a positive correlation between variables X and Y was found with a value of 0.746, meaning there is a relationship between Customer Relationship Management and customer satisfaction, and this relationship is considered strong.
5. From the linear regression equation of variables X and Y, the equation obtained is:  $Y = 13.250 + 0.715 X$ . This means that the dependent variable (customer satisfaction) is influenced by the independent variable (Customer Relationship Management) with a regression coefficient of 0.715. This indicates that for every one-unit increase in



variable X (Customer Relationship Management), variable Y (customer satisfaction) will also increase by a factor of 0.715.

6. From the coefficient of determination calculation, it was found that 55.6% of the influence is determined by the independent variable (Customer Relationship Management), and the remaining 44.4% is determined by other variables not discussed in this study, such as Human Resource quality, availability of facilities and infrastructure, employee performance, and others.
7. From the hypothesis test, it was found that the t-value was greater than the t-table value ( $7.335 > 1.995$ ), meaning the hypothesis proposed in Chapter I is accepted as true.

## References

1. Agustiyadi Tri, 2008 *Customer Relationship Management*. Malang : Bayu Media.
2. Alkindi, 2010. *Bekerja Sebagai Ibadah*. Solo: CV Aneka.
3. Arikunto, Suharsimi. 2009. *Prosedur Penelitian Suatu pendekatan praktek*. Jakarta : Rineka Cipta.
4. Aziz Abdul, 2013. *Etika Bisnis Perspektif Islam*, Bandung : Alfabeta.
5. Azwar. Ahmad. 2007. *Metode penelitian*. Jakarta : Raja Grafindo Parsada.
6. Buttle, Francis. 2006. *Manajemen Pemasaran Jasa*. Salemba Empat. Jakarta
7. Dantes Nyoman. 2012. *Metode penelitian*. Yogyakarta : Andi Offset.
8. Gaffar. 2007. *Pengantar Bisnis*, Liberty, Yogyakarta Gaffar. 2007. *Pengantar Bisnis*, Liberty, Yogyakarta
9. Irawan Handy. 2008, *10 Prinsip Kepuasan Pelanggan*. Jakarta : Elex Media Komputindo.
10. Jumadi. 2010. *Desain Penelitian MSDM dan Perilaku Karyawan Paradigma Positivistik dan Berbasis Pemecahan Masalah*, Jakarta : PT RajaGrafindo Persada.
11. Kartajaya Hermawan. 2010. *Syariah Marketing*. Bandung : PT Mizan Pustaka.
12. Kotler Philip. 2008. *Manajemen Pemasaran*, edisi 12, cetakan pertama, Jilid I dan II, terjemahan Hendra Teguh, , Jakarta : PT. Erlangga.
13. Kotler, Amstrong . 2008. *Principles Of Marketing*. Edisi13. Alih Bahasa oleh Benyamin Molan Jakarta : PT Indeks.
14. Lukas. 2012. *Pemasaran Strategik*, Yogyakarta : Andi,
15. Mokodongan. 2010. *Paradigma Baru Manajemen Sumber Daya Manusia*, Penerbit Amara Book, Yogyakarta
16. Porter. 2002. *Kiat meningkatkan Produktivitas Kerja*, Rineka Cipta. Jakarta
17. Rahmayanti Nina. 2010. *Dasar-Dasar Pemasaran*. Jakarta : Raja Grafindo Persada.
18. Rangkuti. 2008. *Etika Customer Service*, Jakarta : Raja Grafindo Persada
19. Sangadji dan Sopiah. 2010. *Metodologi Penelitian (Pendekatan Praktis Dalam Penelitian)*, Yogyakarta : Andi Offset.
20. Situmorang, dan Lufti., 2012, *Analisis Data Penelitian (Menggunakan Program SPSS)*, Medan : USU Press
21. Stanton William. 2011. *Bauran Pemasaran*, Edisi VII, Jilid ke-2, Jakarta : Erlangga
22. STIE Al - Washliyah Sibolga / Tapanuli Tengah, 2020, *Pedoman Penulisan dan Penyusunan Skripsi / Laporan Penelitian* . Sibolga : STIE Al- Washliyah Sibolga/ Tapanuli Tengah.
23. Stoner. 2013. *Customer Relationship Management, Konsep dan Kasus*, Jakarta : Harvarindo.
24. Sugiyono. 2010. *Metode Penelitian*. Bandung : Alfabeta.
25. ----- 2012, *Metode Penelitian Bisnis*, cetakan ke enam belas, Bandung : Alfabeta



26. Sukmadinata. 2006. *Landasan Psikologi Proses Pendidikan*. Bandung : Remaja Rosda Karya.
  27. Tjiptono, Fandy, 2009, *Strategi Pemasaran*, Malang : Bayu Media.
  28. Tunggal Amin Widjaja 2008. *Pengantar Konsep Nilai Tambah Ekonomi (EVA) dan Value Based Management (VBM)*. Harvarindo.
  29. Umar Husein. 2005 *Metode Penelitian*. Jakarta : Salemba Empat.
-