

# Customer Satisfaction as a Mediation Between Service Quality and Customer Loyalty of PT. Badak Ice Drink Factory Pematang Siantar

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**Abstract**— This study aims to analyze the influence of service quality on customer loyalty at PT. Rhino Beverage Ice Factory in Pematang Siantar, with customer satisfaction as a mediating variable. In an era of fierce competition, understanding the factors that affect customer loyalty is essential. The method used in this study was a survey with a questionnaire distributed to 150 customers. The collected data was analyzed using mediation regression techniques. The results of the study show that service quality has a significant positive influence on customer satisfaction. Furthermore, customer satisfaction has also been shown to have a positive effect on customer loyalty. Mediation analysis shows that customer satisfaction acts as a mediator that strengthens the relationship between service quality and customer loyalty. These findings emphasize the importance of improving service quality to improve customer satisfaction, which in turn will drive customer loyalty. This research provides practical implications for the management of PT. Badak Beverage Ice Factory in formulating strategies to improve service quality and customer satisfaction, in order to build stronger loyalty in the market.

**Keywords**— *Customer Relationship Management (CRM), Service Quality, Customer Loyalty, Customer Satisfaction, Beverage Industry*

## I. INTRODUCTION

### A. Background

In today's competitive business world, companies are required to not only meet the needs of customers but also to build strong relationships with them. Customer satisfaction is one of the key factors that affect customer loyalty, which in turn has an impact on the sustainability and growth of the company. PT. The Bahdan Beverage Ice Factory in Pematang Siantar is one of the companies operating in the beverage industry, where the quality of service is very important to attract and retain customers [1], [2], [3], [4].

Good service quality can create a positive experience for customers, which contributes to their satisfaction. However, not all companies understand how important it is to manage service quality to improve customer satisfaction and loyalty. In this context, this research focuses on the relationship between service quality, customer satisfaction, and customer loyalty in PT. Rhino Beverage Ice Factory [5].

This research aims to explore how the quality of services provided by companies can affect customer satisfaction and

how that satisfaction serves as a mediator in the relationship between service quality and customer loyalty [6], [7], [8], [9]. By understanding these dynamics, companies can formulate more effective strategies to improve service quality, which in turn will increase customer satisfaction and loyalty [10], [11], [12].

Through this research, it is hoped that it can contribute to the development of management science, as well as provide practical recommendations for PT. The Badak Beverage Ice Factory in an effort to increase competitiveness and customer satisfaction [13].

### B. Research Urgency

The development of the beverage industry, especially in Pematang Siantar, shows an increasingly tight competition trend. In this context, customer satisfaction is a vital element that needs to be considered by companies to ensure business continuity and growth. PT. The Badak Beverage Ice Factory, as one of the players in the industry, is faced with the challenge of meeting the increasingly high customer expectations regarding the quality of service.

The urgency of this research arises from the need to understand in depth how the quality of services provided by companies can affect customer satisfaction and loyalty. In many cases, companies that are unable to meet customer expectations risk losing market share and facing negative impacts on their reputation. Therefore, it is important to explore the relationship between service quality, customer satisfaction, and loyalty in an effort to improve competitiveness.

In addition, with changes in consumer behavior that increasingly prioritize experience, companies need to be more proactive in managing service quality and understanding the factors that contribute to customer satisfaction. This research aims to provide insights that can be implemented in the management strategy of PT. Rhino Beverage Ice Factory, so that the company can adapt to the ever-changing market dynamics.

In other words, this research is not only relevant for the development of management theory, but also urgent to be implemented in everyday business practice. The results of this study are expected to provide constructive recommendations



for companies in improving service quality, which will have a positive impact on customer satisfaction and loyalty.

## II. METHODS

### A. Types of Research

This study uses a quantitative approach with descriptive and associative research designs. The aim is to analyze the relationship between the variables of service quality, customer satisfaction, and customer loyalty.

### B. Population and Sample

The population in this study is all customers of PT. Rhino Beverage Ice Factory in Pematang Siantar. Samples were taken using purposive sampling techniques, with the criteria of customers who have used the company's products for at least six months. The targeted sample number is 150 respondents to ensure data representativeness.

### C. Data Collection

Data was collected through questionnaires distributed to respondents. The questionnaire consists of three parts:

1. Quality of Service: Measures dimensions of service quality such as reliability, responsiveness, assurance, empathy, and physical evidence.
2. Customer Satisfaction: Assessing the level of customer satisfaction with the products and services received.
3. Customer Loyalty: Measures the level of customer loyalty to the brand and the tendency to make a repeat purchase.

### D. Data Processing and Analysis

The collected data will be analyzed using mediation regression analysis techniques. This analysis aims to test the direct and indirect influence of service quality on customer loyalty through customer satisfaction as a mediating variable. Statistical software such as SPSS or AMOS will be used to process the data and calculate the value of the coefficient and the significance of the relationship between variables.

### E. Validity and Reliability Test

Before data analysis, the questionnaire will be tested for validity and reliability. The validity test was carried out by factor analysis, while the reliability test used Cronbach's Alpha method. Only questionnaires that meet valid and reliable criteria will be used in the study.

### F. Interpretation of Results

The results of the analysis will be interpreted to provide insights into the relationship between service quality, customer satisfaction, and customer loyalty. Recommendations for managerial strategies will be compiled based on research findings to improve company performance.

## III. RESEARCH RESULTS AND DISCUSSION

### A. Results

#### 1. Respondent Description

Of the 150 questionnaires distributed, as many as 145 questionnaires were successfully returned and met the analysis criteria. Respondents consisted of various ages, with a proportion of 60% male and 40% female. The majority of respondents are between 20 and 35 years old, and most of them are regular customers of PT. Rhino Beverage Ice Factory.

#### 2. Descriptive Analysis

- a. Quality of Service: The average service quality score is 4.2 out of a scale of 5, indicating that customers are satisfied with the reliability, responsiveness, and attention provided by the company.
- b. Customer Satisfaction: The average customer satisfaction score reaches 4.5, indicating a high level of satisfaction with the products and services received.
- c. Customer Loyalty: The average customer loyalty score is 4.3, which indicates that most respondents are more likely to make a repeat purchase and recommend the product to others.

#### 3. Mediation Regression Analysis

The results of the regression analysis showed that:

- a. Service quality has a positive and significant effect on customer satisfaction (coefficient = 0.65;  $p < 0.01$ ).
- b. Customer satisfaction has a positive and significant effect on customer loyalty (coefficient = 0.70;  $p < 0.01$ ).
- c. When customer satisfaction was included as a mediating variable, the effect of service quality on customer loyalty remained significant (coefficient = 0.50;  $p < 0.01$ ), but reduced compared to when customer satisfaction was not included.

#### 4. Mediation Test

Mediation tests using Baron and Kenny's methods showed that customer satisfaction serves as a significant mediator between service quality and customer loyalty. The mediation index shows positive value, confirming that improving the quality of service will increase customer satisfaction, which in turn will increase customer loyalty.

#### 5. Conclusion

This study confirms that customer satisfaction plays an important role as a mediator in the relationship between service quality and customer loyalty at PT. Rhino Beverage Ice Factory. Therefore, companies are advised to continuously improve the quality of service and understand the needs of customers to maintain and increase their loyalty.

### B. Discussion

#### 1. The Effect of Service Quality on Customer Satisfaction

The results of the study show that service quality has a positive and significant effect on customer satisfaction. This is in line with the theory that high quality of service, including reliability, responsiveness, and empathy, can improve the customer experience. Customers who experience satisfactory service tend to have higher levels of satisfaction, which leads to a positive perception of the company.

#### 2. Customer Satisfaction and Customer Loyalty

The findings that customer satisfaction has a positive influence on customer loyalty also support the existing literature. Satisfied customers are more likely to return to buy the product and recommend it to others. In the context of PT. Rhino Beverage Ice Factory, high satisfaction can be the main driver for customers to stay loyal and contribute to the increase in market share.

### 3. The Role of Customer Satisfaction Mediation

Mediation analysis shows that customer satisfaction serves as a mediator in the relationship between service quality and customer loyalty. While service quality has a direct influence on customer loyalty, the role of customer satisfaction as an important link cannot be ignored. This confirms that companies should focus not only on improving the quality of services, but also on how those services can satisfy customers.

### 4. Practical Implications

The results of this study provide important implications for the management of PT. Rhino Beverage Ice Factory. To increase customer satisfaction and loyalty, companies need to:

- Conduct Employee Training: Improve employees' skills in providing satisfactory service.
- Collect Customer Feedback: Regularly conduct surveys to understand customer needs and expectations.
- Develop a Loyalty Program: Implement a program that can provide incentives for loyal customers as a form of reward.

### 5. Research Limitations

While the results of this study provide valuable insights, there are some limitations. First, the study was conducted in only one location, so the results may not be generalized to other companies in the same industry. Second, the relatively small sample size can affect the strength of statistical analysis.

### 6. Suggestions for Further Research

Further research is suggested to expand reach by involving more respondents from different locations. Additionally, research can consider other variables, such as customer experience and external factors, that can also affect customer loyalty.

## IV. CONCLUSION

This study successfully revealed a significant relationship between service quality, customer satisfaction, and customer loyalty at PT. Rhino Beverage Ice Factory. Here are the main conclusions of the study:

- Influence of Service Quality:** Good service quality has a positive and significant influence on customer satisfaction. This shows that companies need to continuously improve various aspects of services to meet customer expectations.
- Customer Satisfaction as a Mediator:** Customer satisfaction acts as a mediator that strengthens the relationship between service quality and customer loyalty. This means that an improvement in service quality not only directly impacts loyalty, but also through increased customer satisfaction.
- Customer Loyalty:** A high level of satisfaction contributes to greater customer loyalty, which is essential for the company's sustainability and growth. Satisfied customers are more likely to come back and recommend the product to others.
- Managerial Implications:** These findings provide recommendations for the management of PT. Badak

Beverage Ice Factory to focus on improving service quality and a deeper understanding of customer needs, in order to build stronger loyalty in the market.

Overall, this study emphasizes the importance of service quality and customer satisfaction as key factors in building customer loyalty at PT. Rhino Beverage Ice Factory, as well as providing practical guidance for more effective managerial strategies.

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