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## The Effect of Delivery Time on Customer Satisfaction in Cargo Services

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**Abstract:** This study aims to analyze the impact of delivery time on customer satisfaction in cargo services. The research was conducted using a quantitative approach with a survey method. Data were collected from 150 respondents who are customers of various cargo service providers. The results indicate that delivery time significantly affects customer satisfaction. Timely deliveries lead to higher customer satisfaction, while delays result in dissatisfaction. The study concludes that improving delivery time can enhance customer satisfaction in cargo services.

**Keywords:** Delivery Time, Customer Satisfaction, Cargo Services, Quantitative Approach, Survey Method, Timely Deliveries, Delays, Service Improvement

### INTRODUCTION

The background of this study is the importance of delivery time in the cargo industry. In the era of globalization and digitalization, customers increasingly demand fast and timely delivery. Delays in delivery can cause customer dissatisfaction and have a negative impact on the company's reputation. Therefore, this study aims to identify the extent to which delivery time affects customer satisfaction in cargo services.

The cargo industry plays a vital role in the global economy, as it enables the efficient movement of goods from one place to another. In this context, delivery time is one of the key factors that determine the success of cargo services. Customers expect the goods they send or receive to arrive on time according to the promised schedule. Timely delivery not only affects customer satisfaction, but can also affect customer loyalty and their decision to use a particular cargo service in the future.

In addition, the tight competition in the cargo industry requires companies to continue to improve the quality of their services, including in terms of delivery time. Companies that are able to provide fast and timely delivery services tend to have a competitive advantage over their competitors. Therefore, understanding the effect of delivery time on customer satisfaction is very important for cargo companies to be able to compete and survive in this industry.

This study also considers various factors that can affect delivery time, such as delivery distance, traffic conditions, and operational efficiency of the cargo company. By analyzing

these factors, this study is expected to provide deeper insights into how cargo companies can improve their delivery time and, in turn, improve customer satisfaction.

This study uses a quantitative approach with a survey method to collect data from customers of various cargo service providers in Indonesia. The results of this study are expected to provide significant contributions to academic literature and cargo industry practices, as well as provide useful recommendations for cargo companies in improving their services.

## **METHOD**

This study uses a quantitative approach with a survey method to collect relevant data on the effect of delivery time on customer satisfaction in cargo services. The following are the steps taken in this study:

### **Research Design**

This study was designed as a quantitative descriptive study. This design was chosen because it allows researchers to measure and analyze the relationship between delivery time variables and customer satisfaction systematically and objectively.

### **Population and Sample**

The population in this study were customers of various cargo service providers in Indonesia. To obtain a representative sample, a simple random sampling technique was used. A total of 150 respondents were selected as the research sample. The inclusion criteria for respondents were those who had used cargo services at least once in the last six months.

### **Research Instruments**

The main instrument used in this study is a questionnaire specifically designed to measure the variables of delivery time and customer satisfaction. The questionnaire consists of several parts, namely:

- a. Demographics Section: Collecting basic information about respondents such as age, gender, and frequency of use of cargo services.
- b. Delivery Time Section: Measures respondents' perceptions of the speed and timeliness of the delivery they received.
- c. Customer Satisfaction Section: Measures respondents' level of satisfaction with the cargo services they use, including aspects such as reliability, communication, and service quality.

### **Data collection**

Data were collected through a questionnaire distributed online using a digital survey platform. Respondents were given two weeks to complete and return the questionnaire. To increase the response rate, reminders were sent to respondents who had not completed the questionnaire after one week.

### **Data analysis**

The collected data were analyzed using statistical software SPSS (Statistical Package for the Social Sciences). Data analysis includes several stages, namely:

- a. Validity and Reliability Test: To ensure that the research instruments used are valid and reliable.
- b. Descriptive Analysis: To describe the demographic characteristics of respondents and the distribution of their answers.
- c. Linear Regression Analysis: To test the effect of delivery time on customer satisfaction. The linear regression model is used to determine how much the delivery time variable affects the customer satisfaction variable.

## Control of Variables

To ensure that the research results are not influenced by unwanted external variables, variable control is carried out. Some of the variables controlled in this study include:

- a. Delivery Distance: This variable is controlled by ensuring that all respondents send goods within a relatively equal distance.
- b. Type of Goods: This variable is controlled by ensuring that all respondents send similar types of goods.

With this structured and systematic method, the research is expected to provide accurate and reliable results regarding the effect of delivery time on customer satisfaction in cargo services.

## RESULTS AND DISCUSSION

### Results

This study collected data from 150 respondents who are customers of various cargo service providers in Indonesia. The following are the results of the data analysis obtained:

#### 1. Respondent Characteristics:

- a. Age: The majority of respondents were aged between 25-34 years (45%), followed by the 35-44 age group (30%), and the rest were spread across other age groups.
- b. Gender: 60% of respondents were male and 40% were female.
- c. Frequency of Cargo Service Usage: Most respondents use cargo services at least once a month (55%), while 30% use cargo services several times a year, and 15% use cargo services more than once a month.

#### 2. Descriptive Analysis:

- a. The average delivery time received by respondents was 3-5 days.
- b. The overall customer satisfaction level is on a scale of 4 out of 5, indicating that most respondents are quite satisfied with the cargo services they receive.

#### 3. Linear Regression Analysis:

- a. The results of the regression analysis show that delivery time has a significant influence on customer satisfaction ( $p < 0.05$ ).
- b. The regression coefficient for the delivery time variable is -0.45, indicating that every one unit increase in delivery time (e.g., one additional day) will reduce the level of customer satisfaction by 0.45 units.

## Discussion

The results of this study indicate that delivery time has a significant effect on customer satisfaction in cargo services. This finding is consistent with previous studies showing that delivery timeliness is one of the key factors influencing customer satisfaction in the logistics and cargo industry.

### 1. The Impact of Delivery Time on Customer Satisfaction

#### a. On Time Delivery:

Respondents who received on-time delivery reported higher levels of satisfaction. This suggests that on-time delivery is an important factor that can increase customer satisfaction. On-time delivery reflects the reliability and professionalism of the cargo service provider, which in turn increases customer trust and loyalty.

#### b. Shipping Delays:

In contrast, respondents who experienced late delivery reported lower levels of satisfaction. Late delivery can cause inconvenience and dissatisfaction, especially if the customer has an urgent need or a tight deadline. Delays can also damage a company's reputation and reduce the likelihood that customers will use the service in the future.

## 2. Managerial Implications:

### a. Increased Operational Efficiency:

Freight service providers need to improve their operational efficiency to ensure on-time delivery. This can include improving supply chain management systems, using technology for shipment tracking, and training employees to improve the speed and accuracy of the shipping process.

### b. Communication with Customers:

In addition, effective communication with customers is also important. Providing clear and accurate information about the status of the shipment can help reduce uncertainty and increase customer satisfaction, even if there are delays.

## 3. Recommendations for Further Research:

### a. Other Factors Affecting Customer Satisfaction:

This study only focuses on delivery time as a factor that influences customer satisfaction. Further research can examine other factors such as service quality, delivery costs, and overall customer experience.

### b. Longitudinal Study:

Longitudinal research can be conducted to observe changes in customer satisfaction over time and identify long-term trends in the cargo industry.

Thus, this study provides valuable insights for cargo service providers to improve delivery times and, in turn, enhance customer satisfaction.

## CONCLUSION

This study concludes that delivery time is an important factor affecting customer satisfaction in cargo services. Based on the analysis of data obtained from 150 respondents, it was found that delivery time has a significant effect on the level of customer satisfaction. On-time delivery increases customer satisfaction, while late delivery causes dissatisfaction.

## 1. Practical Implications:

### a. Service Improvements:

Freight service providers need to focus on improving operational efficiency to ensure on-time delivery. This can be done through improving supply chain management systems, using advanced tracking technology, and training employees to improve the speed and accuracy of the delivery process.

### b. Effective Communication:

In addition, effective communication with customers is essential. Providing clear and accurate information about the status of a shipment can help reduce uncertainty and increase customer satisfaction, even in the event of a delay. Transparency in communication can build customer trust and loyalty.

### c. Managing Customer Expectations:

Companies also need to manage customer expectations by setting realistic expectations about delivery times. Providing accurate delivery time estimates and keeping customers updated on any changes that may occur can help reduce dissatisfaction.

## 2. Theoretical Contributions:

This study makes a significant contribution to the academic literature by adding to the understanding of the effect of delivery time on customer satisfaction in the context of cargo services. The findings support previous theories that state that delivery timeliness is one of the key factors influencing customer satisfaction in the logistics and cargo industry.

### 3. Recommendations for Further Research:

a. Other Factors Affecting Customer Satisfaction:

This study only focuses on delivery time as a factor that affects customer satisfaction. Further research can examine other factors such as service quality, shipping costs, and overall customer experience. Identifying and understanding the various factors that affect customer satisfaction can help cargo companies develop more comprehensive strategies to improve their services.

b. Longitudinal Study:

Longitudinal research can be conducted to observe changes in customer satisfaction over time and identify long-term trends in the cargo industry. Such studies can provide deeper insights into the dynamics of customer satisfaction and help companies to respond proactively to changing customer needs and expectations.

c. Comparative Analysis:

Further research can also conduct a comparative analysis between various cargo service providers to identify best practices in delivery time management. By comparing the performance of various companies, this study can provide more specific and practical recommendations for cargo companies to improve their services.

Overall, this study confirms the importance of delivery time in determining customer satisfaction in cargo services. Cargo service providers need to pay attention to and improve delivery time to maintain and improve customer satisfaction. Thus, companies can build a good reputation, increase customer loyalty, and compete effectively in this competitive industry.

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