

EFFECT OF J&T EXPRESS LEAD TIME AND DELIVERY PRICE ON CUSTOMER SATISFACTION DURING THE COVID-19 PANDEMIC

(Study on CP Letjend Suprpto, Central Jakarta)

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Abstract: This research was conducted during the COVID-19 pandemic because people chose to shop online so that they need delivery services. This study aims to analyze to what extent J&T Express Lead Time and Delivery Price affect Customer Satisfaction during the COVID-19 pandemic. The research method used was descriptive analysis with multiple linear regression quantitative approaches and SPSS ver.21.0 application to analyze data. The number of samples taken as many as 150 respondents, conducted by disseminating questionnaires. The results of this study show that J&T Express Lead Time and Delivery Price have a positive and significant effect simultaneously on Customer Satisfaction.

Keywords: COVID-19, Customer Satisfaction, Lead Time, Delivery Price, J&T Express.

Introduction

The COVID-19 period has created new challenges and strategies for businesses. The use of e-commerce is one of the public needs in transacting during this pandemic, given the government's call to stay home. E-commerce is an option for people to buy some of the needs done online from home through e-commerce platforms. In many cases, the nascent of e-commerce platform has difficulty in accommodating a surge in online customers, leading to the processing and delivery of long customer waiting times (Gray ; Debter, 2020).

Especially in the field of delivery services, the need for delivery services has increased quite rapidly. Based on observations, these queues often occur especially during rest hours, afternoons, and on Saturdays (Andira et al., 2020). In this case, the delivery service is a part of the needs of customers. Customers tend to want something that is fast, easy, safe, and cheap. Despite the difficulties experienced by customers, delivery services must be able to provide excellent service. One of them is that the goods delivered can arrive on time by the original schedule that has been determined.

Lead Time

Lead Time according to (Wawan, 2007), is the time elapsed between the beginning of the economic or manufacturing function and the completion of that function. (Kusnadi, 2009). Lead Time is defined as the average time for the flow of a single unit of product throughout the process (from start to finish) including waiting time between sub-processes. In addition, Lead Time according to (Jay Heizer & Barry Render, 2015) is the waiting time or delivery time, in a few hours or months. So, Lead Time is a predetermined time according to the set amount of time. Therefore, it takes the right Lead Time, so that the goods reach the recipient (consignee) as promised. Lead Time is an important factor for customer trust and satisfaction to be maintained and will even increase.

Delivery Price

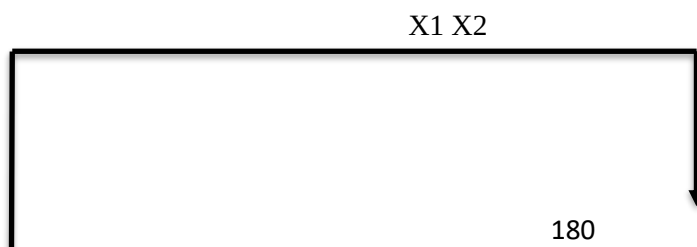
Price also has an important role that affects Customer Satisfaction in choosing delivery services. According to (Kotler dan Armstrong, 2012), price is the amount of money charged for a product or service or the amount of value that customers exchange for the benefits of owning or using the product. While according to (Swasta, 2013), price is the only element that generates revenue while the other element incurs costs. And according to (Harman Malau, 2018), price is the basic gauge of an economic system because price affects the allocation of production factors. So, price is a burden incurred for a product that a customer purchased. In other words, price is the value contained in a product or services that can be exchanged for money to get a sense of satisfaction with the product or service obtained.

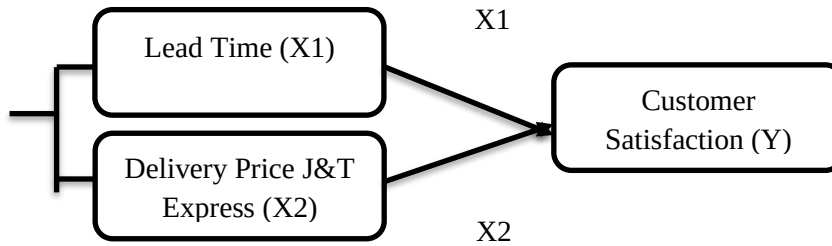
Customer Satisfaction

In the delivery service sector, goods must provide fast service and the most suitable Delivery Price for Customer Satisfaction. According to (Supranto, 2011), the level of satisfaction is a function of the difference between perceived performance and expectations. (Nugroho, 2015), explained that Customer Satisfaction is one of the important elements in improving marketing performance in a company. According to (Tjiptono, 2014), satisfaction is an emotional response to experiences related to products or services. So, Customer Satisfaction is the feeling of pleasure or disappointment of someone who appears to the expected product or service.

It can be concluded that J&T Express's Lead Time and Delivery Price to Customer Satisfaction is thought to have a significant effect, so that customers are satisfied with J&T Express delivery service. Therefore, the significance of this research is to find out Customer Satisfaction.

Hypothesis





- H_0 : It is presumed that there is no influence between independent variables on dependent variable.
- H_a : It is presumed that there is an influence between independent variables on dependent variable.

Research Methods

This research used descriptive analysis with a quantitative approach and multiple linear regressions. The data were taken from a questionnaire filled out by users of J&T Express delivery services as respondents. The 5-point Likert scale consisting of “Strongly Disagree (1)” to “Strongly Agree (5)” was used as a measure of attitude for independent and dependent variables. The research analysis technique was assisted with SPSS application ver.21.0 to analyze data from questionnaire results.

Population and Samples

Based on the research, the population of this research is the customers who use J&T Express delivery services. The customer population is 240 customers.

In this writing, there is a 5% increase in accuracy due to 5% tolerable sampling errors. The number of samples is calculated using the Slovin formula. Based on the Slovin formula, the research sample amounts to:

$$n = N / (1 + Ne^2)$$

$$n = 240 / (1 + 240 \times 5\%^2) = 150 \text{ people.}$$

Discussion and Result

Table 1 shows the respondent profile data based on gender, age, and occupation from this research.

Table 1. Characteristics of Respondents

Frequency	%
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Validity

	Gender	Male	69	46
		Female	81	54
		Total	150	100
	Age (years)	17-25	146	97.3
		26-35	3	2
		36-45	1	0.7
		Total	150	100
	Profession	College Students	136	90.7
		Employee	14	9.3
		Total	150	100

Table 2.1 shows the validity research data.

Table 2.1 Validity Result

No Item Statement	Lead Time	Delivery Price J&T Express	Customer Satisfaction
LT1	0.723**		
LT2	0.633**		
LT3	0.626**		
LT4	0.784**		
LT5	0.553**		
LT6	0.622**		
DP1		0.751**	
DP2		0.681**	
DP3		0.684**	
DP4		0.671**	
DP5		0.713**	
DP6		0.649**	

CS1			0.565**
CS2			0.617**
CS3			0.681**
CS4			0.678**
CS5			0.787**
CS6			0.813**

Source: Validity Test using SPSS, 2021.

$R_{arithmetic} > R_{table} = \text{Valid}$

The table above shows that all indicators used to measure variables in this study have correlation coefficients greater than $R_{table} = 0.159$ (values from R_{table} to $N = 150$), so it can be concluded that all indicators are valid.

Reliability

Variable Reliability of Lead Time, Delivery Price J&T Express, and Customer Satisfaction can be seen in table 2.2

Table 2.2 Reliability Results

Variables	Cronbach`s Alpha	Cronbach`s Alpha Based on Standardized Items	N of items
Lead Time	0.737	0.737	6
Delivery Price J&T Express	0.781	0.782	6
Customer Satisfaction	0.785	0.781	6

Source: Reliability Test using SPSS, 2021.

The table above shows that all variables have a large enough Cronbach Alpha that is above 0.60, so it can be said that all the concepts of measuring each variable from a questionnaire are reliable and worth to be used as a measuring instrument where each indicator can form a variable.

Hypothetical test data from J&T Express Lead Time and Delivery Price can be found in table 3.

Table 3. Partial Hypothesis Test (T-test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.027	1.383		2.912	.004
	Lead Time (X1)	.539	.082	.526	6.561	<.001
	Delivery Price J&T Express (X2)	.306	.080	.305	3.808	<.001

Source: Simultaneous hypothesis test using SPSS, 2021.

Dependent Variable: Customer Satisfaction (Y)

- If the sig value < 0.05 then the hypothesis is accepted.
- If $T_{arithmetic} > T_{table}$ then the hypothesis is accepted.

Based on test results $T_{table} = t(a/2; n-k-1) = t(0.05/2; 150-2-1) = (0.025; 147) = 1.97623$

Variable Lead Time has a value of (6.561) > T_{table} (1.97623), then test T variable Lead Time (X1) is accepted. So, Lead Time has a positive and significant effect on Customer Satisfaction.

Based on the results of the T_{table} test, J&T Express Delivery Price has a value of (3.808) > T_{table} (1.97623), then the T variable test Delivery Price J&T Express (X2) is accepted. So, J&T Express Delivery Price has a positive and significant effect on Customer Satisfaction.

Simultaneous hypothetical test data of regression and residuals can be seen in table 4.

Table 4. Simultaneous Hypothesis Test (F-test)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	792.143	2	396.072	118.856	<.001 ^b
	Residual	489.857	147	3.332		
	Total	1.282.000	149			

Source: Partial hypothesis test using SPSS, 2021.

- Dependent variable: Customer Satisfaction (Y)
- Predictors: (Constant), Delivery Price J&T Express (X2), Lead Time (X1)
 - a. If the sig value < 0.05 then the hypothesis is accepted.
 - b. If $F_{\text{arithmetic}} > F_{\text{table}}$, then the hypothesis is accepted.

Based on the test results the values $F_{\text{table}} = f(k; n - k)$, $F = (2; 150 - 2)$, $F_{\text{table}} = (2; 148) = 3.06$ with an error rate of 5%.

Variable Lead Time and Delivery Price J&T Express has a value of $(118.856) > F_{\text{table}} (3.06)$, hence the H_a hypothesis is accepted. Therefore, J&T Express Lead Time and Delivery Price have a positive and significant effect simultaneously on Customer Satisfaction.

Table 5 shows there result of R Square Determination Coefficient.

Table 5. R Square Determination Coefficient Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.786 ^a	.618	.613	1.825

- a. Dependent variable: Customer Satisfaction (Y)
- b. Predictors: (Constant), Delivery Price J&T Express (X2), Lead Time (X1)

The F test results in table 4 are strengthened through the R Square determination coefficient found in table 5, in which the influence of independent variables on variable dependent is 61.3% and the remaining 38.7% is caused by other factors.

Conclusion

This study shows that the Lead Time and Delivery Price of J&T Express have a positive and significant effect on Customer Satisfaction either partially or simultaneously during the covid

period. The results of the questionnaire in the percentage on Google Form from 150 respondents of J&T Express delivery service customers (Ruko Letjen Suprpto) showed the highest percentage on the Return Interest indicator of 59.3%, and the lowest percentage on the Delivery Time indicator of 0.7%. J&T Express delivery service must be able to maintain the security of the goods during the delivery time. So, it will be safe to be sent for a fairly long trip to maintain Customer Satisfaction. This proves that the pandemic is quite influential on customer behavior patterns in using J&T Express delivery services.

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