



The Effect of E-Commerce, Price and Service Quality on Consumer Interest in PT Jalur Nugraha Ekakurir (JNE)

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ABSTRACT

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This study aims to test and analyze the effect of E-Commerce, Price and Service Quality on Consumer Interest in PT Nugraha Ekakurir Line (JNE). The research method uses quantitative. The population was 196 consumers and the sample was 132 consumers. The sampling technique used was random sampling. The results of the calculation of hypothesis testing partially and Simultaneously E-Commerce, Price and Service Quality have a positive and significant effect on the Purchase Intention of Medan-Jakarta Delivery at PT Nugraha Ekakurir (JNE) Line. The result of the coefficient of determination test is the Adjusted R Square value of 0.216, this means 21.6% of the variation of the Purchase Interest variable, which can be explained by the variation of the independent variables, namely E-commerce, Price and Service Quality, while the remaining 78.4% is explained by other variables not examined in this study, such as innovation, level of trust, promotion and development and so on.

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1. Introduction

A company engaged in the service sector is one of the many companies that grow and develop in Indonesia. One of them is a company engaged in goods delivery services and courier services. The company that operates goods delivery services and courier services is able to survive the economic conditions in Indonesia. Delivery service is a form of public service that offers convenience in the process of sending goods from one city to another safely and can be held accountable by the service. Delivery of goods can be in the form of documents, logistics, electronic products and others. The means of transportation used to send goods can be by land, sea or air.

Purchase interest is the consumer's self instruction to make a purchase for a product, plan, take relevant actions such as proposing, and finally make a decision to make a purchase. Increased buying interest is supported by competitive E-Commerce, attractive prices and satisfying service quality. Interest in using PT The Nugraha Ekakurir route for the Medan to Jakarta area has decreased, as reflected in the decreasing number of consumer transactions.

E-Commerce is doing business online. In its most obvious form e-commerce sells products to consumers online, but the fact is that any type of business that is done electronically is E-commerce. Simply put, E-commerce PT Nugraha Ekakurir Line is creating, managing, and expanding commercial relationships online. E-commerce in this company is still not effective where online services provided in the form of an application can only track consumer packages of PT Nugraha Ekakurir Line so that it does not provide maximum and optimal service.

Price is an important component of a product, because it will affect producer profits. Prices are also a consideration for consumers to buy, so special considerations are needed to determine these prices. Price is thought to affect consumer interest in buying. The price of Medan-Jakarta delivery services sold by the company is higher than the price offered by competitors to consumers.

Service quality is a unique phenomenon, because its dimensions and indicators can differ among the people involved in the service. In the company PT Nugraha Ekakurir Line The number of complaints is caused by the lack of reliability in providing services in the form of less timely delivery, less alert and less



fast service provided, such as when handling complaints submitted by customers and delivery times which sometimes do not match the information given to customers so that disappointment arises. .

2. Literature review

According to Manullang (2013: 208), E-Commerce is a company's efforts to convince consumers to buy its products.

According to Nisusatsro (2016: 199), price is a sacrifice of energy and a sacrifice of feelings which is used to obtain information about the necessary goods and or services up to the purchase decision.

According to Surjaweni (2015: 144), service in this case is defined as services or services delivered by service owners in the form of ease, speed, relationship, ability and hospitality addressed through attitudes and characteristics in providing services for purchasing decisions.

2.1 conceptual framework

Based on the above discussion, a framework of thought can be identified as follows:

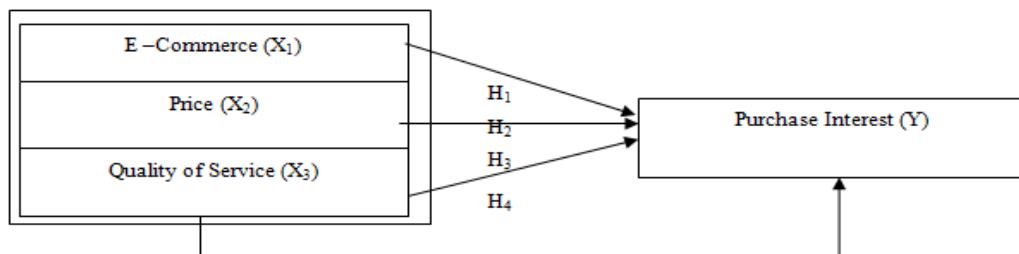


Fig 1. conceptual framework

3. Research methods

The research approach used in this research is a quantitative approach. This type of research is a type of quantitative descriptive research. This research is explanatory research. In explanatory research, the researcher tries to explain or prove the relationship or influence between variables. The population in this study amounted to 196 customers in 2020. The sampling technique used was simple random sampling. Simple random sampling is taking members of the sample from the population at random without paying attention to the strata in the population. The number of samples in this study using the Slovin technique in finding the number of samples obtained as many as 132 consumers 30 consumers for validity and reliability testing.

3.1 Identification and Operational Definition of Research Variables

The operational definitions for each of the dependent and independent variables are as follows:

Table 1
Identification & Operational Definition of Research Variables

Research variable	Definition	Indicator	Measurement Scale
E-Commerce (X ₁)	E-Commerce is a product of modern technological developments that are moving away from conventional business principles. E - Commerce is a transaction that includes the exchange of goods and services between two or more parties using electronic tools and techniques. Source: Bhakti (2015: 187)	1. Processes 2. Institution 3. Internet Source: Wirdasari (2019: 11-12)	Likert
Price (X ₂)	A monetary unit or other measure (including other goods and services) that are exchanged in order to obtain ownership rights or use of a good or service	1. Base price and discount 2. Terms of payment 3. Credit terms	



Research variable	Definition	Indicator	Measurement Scale
	Source: Tjiptono (2008: 151)	Source: Hasan (2014: 72)	
Service quality (X3)	The overall characteristics and characteristics of a good or service that affect its ability to satisfy expressed and implied needs. Source: Abdullah and Tantri (2014: 44)	1. Reliability. 2. The alacrity of service and speed. 3. Service certainty 4. Convenience. Source: Sunyoto (2013: 145)	Likert
Purchase Interest (Y)	Repurchase interest is a behavior that appears in response to an object that indicates a customer's desire to make a repeat purchase. Source: Setiadi (2017: 169)	1. Transactional interest 2. Referential interest 3. Preferential interest 4. Explorative Interest Source: Priansa (2016: 168-169)	Likert

4. Results and Discussion

4.1 Normality test

There are two ways to detect whether the residuals are normally distributed or not, namely:

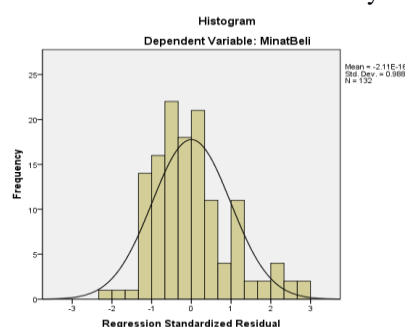


Fig 2. Histogram Normality Test

Source: SPSS data, 2021

The histogram graph shows real data forms curves that tend to be symmetrical (U) does not deviate to the left or right, so it can be said that the data is normally distributed.

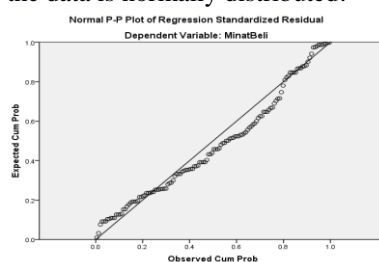


Fig 3. PP Plot Normality Test

Source: SPSS data, 2021

The PP Plot Normality Graph shows that the data spreads around the diagonal line, the spread is mostly close to the diagonal line. This means that the data is normally distributed.

Table 2.

Kolmogorov Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		132
Normal Parameters, b	Mean	.0000000
	Std. Deviation	6.34748749
Most Extreme Differences	Absolute	.099

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
	Positive	.099
	Negative	-.066
Kolmogorov-Smirnov Z		1,142
Asymp. Sig. (2-tailed)		.147
a. Test distribution is Normal.		
b. Calculated from data.		

Source: SPSS data, 2021

The results of the normality test using the Kolmogorov Smirnov test showed a significant value of $0.147 > 0.05$. Thus, the Kolmogorov Smirnov test results show that the data is normally distributed.

4.2 Multicollinearity Test

The following are the results of the multicollinearity test, namely:

Table 3.
Multicollinearity Test

Model		Coefficients ^a				Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients		Tolerance	VIF
		B	Std. Error	Beta	t		
1	(Constant)	3,350	1,896		1,767	.080	
	E-commerce	.228	.077	.240	2,968	.004	.919 1,089
	Price	-.226	-.070	-.263	-3,252	.001	.915 1,093
	Service quality	.173	.076	.188	2,275	.025	.872 1,147

a. Dependent Variable: InterestsBuy

Source: SPSS data, 2021

The tolerance value for the E-commerce variable is $0.919 > 0.1$, the price is $0.915 > 0.1$ and the Service Quality is $0.872 > 0.1$, while the VIF value for the E-commerce independent variable is $1.089 < 10$, the price is $1.093 < 10$ and the quality Service is $1.147 < 10$. Thus in the multicollinearity test there is no correlation between independent variables.

4.3 Heteroscedasticity Test

MHeteroscedasticity detection is:

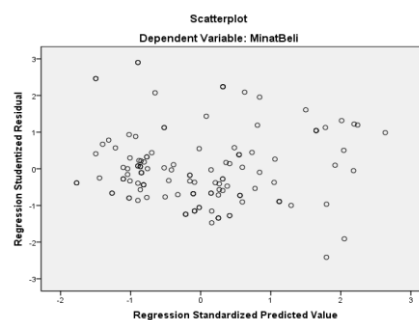


Fig 4. Heteroscedasticity Test

Source: SPSS data, 2021

The dots spread with an unclear pattern either above or below the zero (0) on the Y axis, not gathering in one place, so from the scatterplot graph it can be concluded that there is no heteroscedasticity in the regression model.

Table 4
Heteroscedasticity Test

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,226	1,188		1,874	.063
	E-commerce	.064	.048	.121	1,338	.183
	Price	.042	.044	.088	.972	.333
	Service quality	.042	.048	.081	.877	.382

a. Dependent Variable: ABSUT

Source: SPSS data, 2021

The significant value of E-commerce is 0.183 > 0.05, Price is 0.333 > 0.05 and Service Quality is 0.382 > 0.05, there is no heteroscedasticity problem.

4.4 Research Model

The regression model used is as follows:

Table 5.
Multiple Linear Regression Analysis

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,350	1,896		1,767	.080
	E-commerce	.228	.077	.240	2,968	.004
	Price	.226	-.070	.263	3,252	.001
	Service quality	.173	.076	.188	2,275	.025

a. Dependent Variable: InterestsBuy

Source: SPSS data, 2021

Employee Performance = 3,350 + 0,228 E-Commerce + - 0,226 Price + 0,173 Service Quality + e

A constant of 3,350 states that if the E-commerce, Price and Service Quality variables do not exist or are constant, the Purchase Interest variable on amounting to 3,350 units. The regression coefficient for the E-commerce variable is 0.228 and is positive, this means that if each increase in the E-commerce variable 1 unit will increase the Purchase Interest variable equal to 0.228 units with the assumption that the other variables are constant. The price variable regression coefficient is 0.226 and has a negative value, this means that if each decrease of the price variable is 1 unit, it will increase the Purchase Interest variable. equal to 0.226 units with the assumption that the other variables are constant. The regression coefficient of the independent variable Service Quality is 0.173 and is positive, this means that if each increase in the independent variable Service Quality 1 unit will increase the dependent variable Purchase Interest amounting to 0.173 units with the assumption that other variables are constant.

4.5 Hypothesis Determination Coefficient

Koefficient of determination, namely:

Table 6.
Coefficient of Determination

Model	Model Summary ^b			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension 1 0	.484a	.234	.216	6,421

a. Predictors: (Constant), Service Quality, E-commerce, Price

b. Dependent Variable: InterestsBuy

The coefficient of determination test results obtained an Adjusted R Square value of 0.216, this means 21.6% of the variation of the Purchase Interest variable. which can be explained by the variation of the independent variables, namely E-commerce, Price and Service Quality, while the remaining 78.4% is explained by other variables not examined in this study.

4.6 Simultaneous Hypothesis Testing (Test F)

The F testers are:

Table 7.
Simultaneous Testing

		ANOVA ^b				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1615,901	3	538,634	13,063	.000a
	Residual	5278,068	128	41,235		
	Total	6893,970	131			

a. Predictors: (Constant), Service Quality, E-commerce, Price
 b. Dependent Variable: InterestsBuy

Source: SPSS data, 2021

The test results obtained that the value of F count (13.063) > F table (2.68) and a significance probability of 0.000 < 0.05, meaning that Ho is rejected and Ha is accepted, namely simultaneously E-Commerce, Price and Service Quality have a positive and significant effect on Interests. Purchase Delivery Medan-Jakarta at PT Nugraha Ekakurir Line (JNE).

4.7 Partial Hypothesis Testing (t test)

The t test is.

Table 8.
Partial Testing

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3,350	1,896		1,767	.080
	E-commerce	.228	.077	.240	2,968	.004
	Price	.226	.070	.263	3,252	.001
	Service quality	.173	.076	.188	2,275	.025

a. Dependent Variable: InterestsBuy

Source: SPSS data, 2021

The results of the calculation of the partial hypothesis testing obtained $t_{count} > t_{table}$ or $2.968 > 1.979$ and the significant obtained was $0.004 < 0.05$, means that Ho is rejected and Ha is accepted, i.e. partially E-Commerce has a positive and significant effect on the Medan-Jakarta Shipping Purchase Interest at PT. Nugraha Ekakurir Line (JNE). The results of the calculation of the partial hypothesis testing obtained $t_{count} > t_{table}$ or $-3.252 > 1.979$ and a significant value obtained is $0.001 < 0.05$, means that Ho is rejected and Ha is accepted, namely partially Price has a negative and significant effect on Purchase Intention of Medan-Jakarta Delivery at PT Nugraha Ekakurir Line (JNE). The results of the calculation of the partial hypothesis testing obtained $t_{count} > t_{table}$ or $2.968 > 1.979$ and the significance obtained was $0.036 < 0.05$, means that Ho is rejected and Ha is accepted, namely partially Service Quality has a positive and significant effect on Purchase Interest in Medan-Jakarta Delivery at PT Nugraha Ekakurir Line (JNE).

4.8 Discussion

The results of the calculation of the partial hypothesis testing obtained $t_{count} > t_{table}$ or $2.968 > 1.979$ and the significant obtained was $0.004 < 0.05$, means that Ho is rejected and Ha is accepted, i.e. partially E-Commerce has a positive and significant effect on the Medan-Jakarta Shipping Purchase Interest at PT. Nugraha Ekakurir Line (JNE). According to Manullang (2013: 208), E-Commerce is a company's efforts to convince consumers to buy its products. E-Commerce is doing business online. In its most obvious form e-commerce sells products to consumers online, but the fact is that any type of business that is done electronically is E-commerce. Simply put, E-commerce PTNugraha Ekakurir Line is creating, managing, and expanding commercial relationships online. E-commerce in this company is still not effective where online services provided in the form of an application can only track consumer packages of PTNugraha Ekakurir Line so that it does not provide maximum and optimal service. activities *E-Commerce* PT The Nugraha Ekakurir route is still not innovative where it cannot make order and payment transactions only related to tracking consumer packages, checking delivery prices, applications are still quite difficult to use and the



system is also difficult to convey consumer complaints. This triggers low consumer interest PT Nugraha Ekakurir Line.

The results of the calculation of the partial hypothesis testing obtained $t_{count} > t_{table}$ or $-3.252 > 1.979$ and a significant value obtained is $0.001 < 0.05$, means that H_0 is rejected and H_a is accepted, namely partially Price has a negative and significant effect on Purchase Intention of Medan-Jakarta Delivery at PT Nugraha Ekakurir Line (JNE). Price is thought to affect consumer interest in buying. The price of Medan-Jakarta delivery services sold by the company is higher than the price offered by competitors to consumers. HJNE REG's price from Medan-Jakarta is still the most expensive compared to its competitors, namely J&T and Sicepat REG. This reflects that the pricing has not been able to compete where the price offered is almost the same as the delivery time, which is 3 days, so that many consumers choose a cheaper price.

The results of the calculation of the partial hypothesis testing obtained $t_{count} > t_{table}$ or $2.968 > 1.979$ and the significance obtained was $0.036 < 0.05$, means that H_0 is rejected and H_a is accepted, namely partially Service Quality has a positive and significant effect on Purchase Interest in Medan-Jakarta Delivery at PT Nugraha Ekakurir Line (JNE). According to Surjaweni (2015: 144), service in this case is defined as services or services delivered by service owners in the form of ease, speed, relationship, ability and hospitality addressed through attitudes and characteristics in providing services for purchasing decisions. Service quality is a unique phenomenon, because its dimensions and indicators can differ among the people involved in service. In the company PT Nugraha Ekakurir Line The number of complaints is caused by the lack of reliability in providing services in the form of less timely delivery, less alert and less fast service provided, such as when handling complaints submitted by customers and delivery times which sometimes do not match the information given to customers so that disappointment appears. The quality of service that is still not optimal can be seen from the number of employees who make complaints. Some of the complaints are the long delivery, inadequate service, the difficulty in complaints, and less call for staff PT Nugraha Ekakurir Line

5. Conclusion

The conclusions of this study are as follows:

- a. E-Commerce partially has a positive and significant effect on the Medan-Jakarta Shipping Purchase Interest at PT Nugraha Ekakurir Line (JNE).
- b. Partially the price has a negative and significant effect on the Medan-Jakarta Delivery Purchase Interest at PT Nugraha Ekakurir Line (JNE).
- c. Partially Service Quality has a positive and significant effect on Purchase Interest in Medan-Jakarta Delivery at PT Nugraha Ekakurir Line (JNE).
- d. Simultaneously E-Commerce, Price and Service Quality have a positive and significant effect on the Purchase Intention of Medan-Jakarta Delivery at PT Nugraha Ekakurir (JNE) Line.

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