

# The Influence of Consumer Behavior, Service Quality and Digital Marketing on Usage Decisions Pelni Passenger Ship Transfer Services

**Paramitha Novianty<sup>1</sup>, Elwisam<sup>2</sup>, Kumba Digdowiseiso<sup>3\*</sup>**

Faculty of Economics and Business, Universitas Nasional, Indonesia<sup>1,2,3</sup>

Email: paramita.novianty@gmail.com<sup>1</sup>, wisamkrimuk@yahoo.com<sup>2</sup>,  
kumba.digdo@civitas.unas.ac.id<sup>3</sup>

---

## ABSTRACT

This study aims to analyze the influence of consumer behavior, service quality and digital marketing on the decision to use PELNI passenger ship transportation services. The research method used in this study is a quantitative descriptive method with the population in this study, namely users of PELNI passenger ship transportation services. The sampling method in this study is *purposive sampling*. The sample in this study was 100 respondents with the criteria of passengers who used PELNI ship transportation services at least 2 (two) times during 2019, and passengers who purchased tickets at the Jakarta counter or through online applications. The data used in this study were primary data in the form of questionnaires and processed using SPSS version 23. The data analysis technique used is multiple linear regression analysis. The results showed that Consumer Behavior variables, Service Quality variables and Digital Marketing variables had a positive and significant effect on the Decision to Use PELNI passenger ship transportation services.

Keywords: Consumer Behavior, Service Quality, Digital Marketing and Service Use Decisions.

---

## INTRODUCTION

The development of the industrial world in the era of digitalization has experienced very rapid growth. Not only experienced by the manufacturing industry, but the service industry also experienced significant growth. The service sector has a considerable contribution in a country's economy, one of which is transportation services. Indonesia as a maritime country, has the potential of the maritime industry that must be supported by reliable sea transportation. Therefore, to connect the archipelago and unite Indonesia, the Government of Indonesia established State-Owned Enterprises (SOEs) in the field of sea transportation, one of which is PT Pelayaran Nasional Indonesia (Persero) or known as PELNI.

Based on sales data for the last 5 years (2015-2019), the use of PELNI passenger ship transportation services tends to fluctuate. The occurrence of fluctuations shows that the decision in using PELNI passenger ship transportation services has not become the customer's main choice. The occurrence of fluctuations can be influenced by various factors, including consumer behavior, service quality and digital marketing. Based on the background of these problems, the author is interested in conducting research entitled

---

**How to cite:** Paramitha Novianty<sup>1</sup>, Elwisam<sup>2</sup>, Kumba Digdowiseiso<sup>3\*</sup> (2024). The Influence Of Consumer Behavior, Service Quality And Digital Marketing On Usage Decisions Pelni Passenger Ship Transfer Services. (5)3

**E-ISSN:** [2721-5202](https://doi.org/10.24127/jsss.v5i3.2721-5202)

**Published by:** CV. Syntax Corporation Indonesia

---

"The Influence of Consumer Behavior, Service Quality and Digital Marketing on the Decision to Use PELNI Passenger Ship Transportation Services".

In the condition of increasingly global, tight and open business world competition, in maintaining the continuity of the shipping business, PELNI is faced with several challenges including: fluctuations in the rise and fall of the number of passengers, changes in consumer tastes, competition from other modes of transportation, competition from regional players, and very rapid technological developments / *technology disruption*.

Based on the background of the problem, the formulation of the research problem is:

1. Does consumer behavior have a positive and significant effect on the decision to use PELNI passenger ship transportation services?
2. Does the quality of service have a positive and significant effect on the decision to use PELNI passenger ship transportation services?
3. Does digital marketing have a positive and significant effect on the decision to use PELNI passenger ship transportation services?

## RESEARCH METHOD

The object of this study is the Decision to Use PELNI Passenger Ship Transport Services which is influenced by Consumer Behavior, Service Quality and Digital Marketing. The source of data in the empirical study is respondents, namely users of PELNI passenger ship transportation services. The type of data in survey research is primary data

Definition of population according to Malhotra (2010:12) is the sum total of all elements that have similar characteristics and include the entire object or subject for the purpose of the problem in marketing research. The population in this study is users of PELNI passenger ship transportation services.

Understanding sample according to Ferdinand (2014:171) is a subset of the population, consisting of several members of the population.

Sample determination in this study uses the formula from Williams et. al., (2014:364) as follows:

$$n = \frac{(Z_{\alpha/2})^2 P(1-P)}{E^2}$$

Information:

n : minimum number of samples required

Z $\alpha/2$  : Z table with a significance level of 1.96 out of a significance level of 95%

P : the proportion of the population expected to have certain characteristics, population variation is expressed in the form of proportions.

Q : proportion of population (1-P)

E<sup>2</sup> : tolerable error rate (expressed in %) which is 10%

In the calculation obtained the following results:

$$n = \frac{(1.96)^2 0.50(1-0.5)}{0.12} = 96.04$$

The minimum sample number (n) in this study was 96 people. The sample is better added a little so that the results of the study are more precise, then determined

the number of samples to be as many as 100 people, assuming that the number can represent the population.

## **Analysis Methods**

### ***Descriptive Analysis***

According to Ferdinand (2014:229) Descriptive analysis is an analysis that provides an empirical picture or descriptive of the data in the study. The data that has been collected is then edited and tabulated into a table, after which a descriptive discussion is carried out by giving numbers.

### ***Inferential Analysis***

According to Ferdinand (2014:234), inferential analysis is an analytical technique used to analyze data and samples whose results apply to a population. In this study inferential statistical data analysis was measured using SPSS software (*Statistical Package for the Social Science*) version 23 using instrument tests, classical assumption tests, model feasibility tests, multiple linear regression tests and hypothesis testing.

## **Research Instrument Test**

### ***Validity Test***

According to Ghozali (2016), validity tests are carried out to measure the validity or validity of a questionnaire. The calculation of the validity test is carried out using SPSS 23 by comparing the  $r_{\text{count}}$  (*correlated item-total correlations*) with an  $R_{\text{table}}$ .

### ***Reliability Test***

According to Ghozali (2016:48), a reliability test is a tool to measure a questionnaire which is an indicator of a variable. A questionnaire is said to be reliable if a person's answers to questions are consistent or stable.

## **Classical Assumption Test**

### ***Normality Test***

Normality test is to see whether the residual value is normally distributed or not. According to Priyatno (2014:69), the statistical analysis that can be used to test the normality of the data is the test *Kolmogrov-Smirnov* and test *lilliefors*.

### ***Autocorrelation Test***

According to Omar (2013:48), the autocorrelation test is used to determine whether or not there are deviations from the classical assumption of autocorrelation, namely the correlation that occurs between residuals in one observation with other observations in the regression model.

### ***Heterokedasticity Test***

According to Ghozali (2016:134), heterokedasticity test aims to test whether in regression models there is an inequality of variance from the residual of one observation to another observation

### ***Multicollinearity Test***

Multicollinearity test is a test performed to ascertain whether in a regression model there is intercorrelation or collinearity between independent variables through the correlation coefficient  $R$

## **Model Due Diligence**

### ***Test F***

According to Ghozali (2016: 105) the F statistical test shows whether all independent variables included in the model have a joint influence on the dependent variable.

**Test Coefficient of Determination (R<sup>2</sup>)**

Test coefficient of determination (R<sup>2</sup>) is used to measure how far a variable is capable of explaining the dependent variable.

**Multiple Linear Regression Analysis**

Multiple linear regression analysis is used to determine the influence or relationship of independent variables, namely Consumer Behavior (X1), Service Quality (X2), and Digital Marketing (X3) as well as dependent variables (Y) Service Use Decisions using the following calculation formula:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots$$

Information:

- Y : Service Use Decision
- $\beta_1 \beta_2 \beta_3$  : regression coefficient
- X1 : Consumer Behavior
- X2 : Quality of Service
- X3 : Digital Marketing

**Research Hypothesis Test (Test t)**

The t test is performed to determine the effect of each independent variable partially on the dependent variable. This test is carried out to recognize whether each independent variable has a significant influence on the dependent variable

**RESULTS AND DISCUSSION**

**Table 1. Multiple Linear Regression Equation Model**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,790	,910		3,065	,003
	Perilaku_Konsumen	,171	,045	,320	3,782	,000
	Kualitas_Pelayanan	,145	,052	,246	2,755	,007
	Pemasaran_Digital	,238	,067	,314	3,531	,001

a. Dependent Variable: Keputusan\_Penggunaan\_Jasa

Based on the test results in the table above the Standardized Coefficients column, using a standardized regression model equation, namely:

Service Use Decision = 0.320 PK + 0.246 KP + 0.314 PD

Coefficient of Determination (R<sup>2</sup>)

The results of the coefficient of determination test (R<sup>2</sup>) are shown by the *R-Square* number as follows:

**Table 2. Determunation Test**

Model Summary <sup>b</sup>				
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725a	.525	.510	.934
a. Predictors:		(Constant),	Pemasaran_Digital,	
		Perilaku_Konsumen, Kualitas_Pelayanan		
b. Dependent Variable: Keputusan_Penggunaan_Jasa				

Based on the results of data processing, it shows that the dependent variable, namely the decision to use services, is explained by independent variables which include consumer behavior, service quality and digital marketing by 52.5%, while the remaining 47.5% is explained by other factors outside the independent variables used in this study.

**Table 3. F Test Results**

ANOVA						
Type		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	92,520	3	30,840	35,364	.000b
	Residuals	83,720	96	,872		
	Total	176,240	99			

Source: Data Processing with SPSS 23

Based on the results of data processing, it shows that the value of  $F_{count} > F_{table}$  or  $35,364 > 2.70$  and a significant rate of  $.000 \leq 0.05$  then  $H_0$  rejected then it can be concluded that  $H_0$  rejected and  $H_a$  accepted means Consumer Behavior, Service Quality and Digital Marketing together have a positive and significant influence on Service Use Decisions.

**Table 4. Test Results t**

Coefficients <sup>a</sup>						
Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,790	,910		3,065	,003
	Perilaku_Konsumen	,171	,045	,320	3,782	,000
	Kualitas_Pelayanan	,145	,052	,246	2,755	,007
	Pemasaran_Digital	,238	,067	,314	3,531	,001

a. Dependent Variable: Keputusan\_Penggunaan\_Jasa

Based on the results of data processing, it shows that:

The calculated  $t_{value}$  in the Consumer Behavior variable is 3.782 with a significant value of 0.000. With the table  $t$  value ( $\alpha = 0.05$ ) is 1.984, then the calculated value ( $3.782 > 1.984$ ) with a significant level ( $0.000 < 0.05$ ) then  $H_0$  is rejected, which means that there is a positive and significant influence between Consumer Behavior on Service Use Decisions.

The calculated  $t$  value in the Service Quality variable is 3.755 with a significant value of 0.007. With the table  $t$  value ( $\alpha = 0.05$ ) is 1.984, then the calculated value ( $3.755 > 1.984$ ) with a significant level ( $0.007 < 0.05$ ) then  $H_0$  is rejected, which means that there is a positive and significant influence between Service Quality and Service Use Decisions.

The calculated  $t$  value in the Digital Marketing variable is 3.531 with a significant value of 0.001 while the table  $t$  value ( $\alpha = 0.05$ ) is 1.984, because the calculated  $t$  value ( $3.531 > 1.984$ ) with a significant level ( $0.001 < 0.05$ ) then  $H_0$  is rejected, which means that there is a positive and significant influence between Digital Marketing on Service Use Decisions.

### **The Influence of Consumer Behavior on Service Use Decisions**

From the regression model it is explained that the value *Standardized Coefficients* Consumer Behavior variable (X1) has a positive value, which is 0.320 with a significance value of 0.000 smaller than the significance level of 0.05 ( $0.000 < 0.05$ ), meaning that consumer behavior variables have a positive effect on service use decisions, meaning that the more consumer behavior increases in meeting the need for transportation services, the consumer decision to use services will increase.

This is in line with research conducted by Nofri and Hafifah (2018), that cultural, social, personal and psychological factors positively and significantly influence purchasing decisions.

### **The Effect of Service Quality on Service Use Decisions**

From the regression model it is explained that the value *Standardized Coefficients* The Service Quality variable (X2) has a positive value, which is 0.246 with a significance value of 0.007 smaller than the significance level of 0.05 ( $0.007 < 0.05$ ), meaning that the service quality variable has a positive effect on the decision to use services, meaning that the more the quality of service provided by PELNI, the consumer's decision to use services will increase.

This is in line with research conducted by Octavia P. Juwita (2016), which states that the variables of service quality are *tangible, reliability, responsiveness, assurance* and *Empathy* Have a positive and significant influence on the decision to purchase/use services.

### **The Influence of Digital Marketing on Service Usage Decisions**

From the regression model it is explained that the value *Standardized Coefficients* The Digital Marketing variable (X3) has a positive value, which is 0.314 with a significance value of 0.001 smaller than the significance level of 0.05 ( $0.001 < 0.05$ ), meaning that the digital marketing variable has a positive effect on the decision to use services, meaning that the more the use of digital marketing carried out by PELNI, the consumer decision to use services will increase.

This is in line with research conducted by Khoernnikmah and Widarko (2018), which states that digital marketing simultaneously influences the decision to purchase/use services.

## **CONCLUSION**

Consumer behavior variables have a positive and significant effect on service usage decisions, which means that the more consumer behavior increases in meeting the need for sea transportation services, the faster decision making in the use of PELNI

passenger ship transportation services. In this study, consumer behavior variables have the largest contribution in service use decisions.

Service quality variables have a positive and significant effect on service usage decisions, which means that the better or better the quality of services provided by the Company, the more decisions can be made in using PELNI passenger ship transportation services. In this study, service quality variables have the smallest contribution in service use decisions.

Digital marketing variables have a positive and significant effect on the decision to use services, which means that the increasing intensity of using digital marketing as a promotional medium carried out by the Company, it can increase decisions in the use of PELNI passenger ship transportation services. In this study, digital marketing has a sufficient contribution in the decision to use services.

## REFERENCES

- Ali, H. (2010). *Marketing*. Yogyakarta: Media Pressindo.
- Amanda, P. M., & Hadi, S. P. (2017). *Pengaruh Citra Merek dan Kualitas Pelayanan Terhadap Keputusan Penggunaan Jasa Angkutan Kapal Penumpang PELNI KM. Egon*. Universitas Diponegoro.
- Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2014). *Statistics for Business and Economics 12e*. Canada: Cengage Learning.
- Arifuddin, R. R., Kadir, A. R., & Kadir, N. (2019). *Pengaruh Personal Selling dan Digital Marketing terhadap Keputusan Pembelian Polis Asuransi PT. QBE General Insurance Indonesia Cabang Makassar*. 92–108. Universitas Hassanudin.
- Assauri, S. (2013). *Manajemen Pemasaran*. Jakarta: Rajawali Pers.
- Coviello, N., Milley, R., & Marcolin, B. (2001). Understanding IT-enabled interactivity in contemporary marketing. *Journal of Interactive Marketing*, 15(4), 18–33. <https://doi.org/10.1002/DIR.1020>
- Danang, S. (2013). *Perilaku Konsumen (Panduan Riset Sederhana untuk Mengenal Konsumen)*. Jakarta: PT Buku Seru.
- Dinawan, M. R. (2010). *Analisis Faktor-Faktor yang Mempengaruhi Keputusan Pembelian*. *Jurnal Sains Pemasaran Indonesia*, IX(3), 335–369. Universitas Diponegoro.
- Engel, J., R. Blackwell, & P. Miniard (2010). *Consumer Behavior*. 6<sup>th</sup> ed. The Dreyden Press. USA. Terjemahan Budiyanto. 2010. *Perilaku Konsumen*. Jilid 1. Jakarta: Binarupa Aksara.
- Ferdinand, A. (2014). *Metode Penelitian Manajemen (Edisi 5)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23 (Edisi 8)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hawkins, D. I., & Mothersbaugh, D. L. (2013). *Consumer Behaviour: Building Marketing Strategy*. USA: Mc. Graw Hills.
- Howard, J. A., Shay, R. P., Green, C. A., Howard, J. A., Shay, R. P., & Green, C. A. (1997). *Measuring the Effect of Marketing Information on Buying Intention*. 4–15.
- Joni, Rafiqi, Y., & Marlina, L. (2016). *Analisis Perilaku Konsumen terhadap Keputusan*

- Nasabah dalam Memilih Pembiayaan Murabahah di BMT Al Hidayah Kawalu Tasikmalaya*. 1(1), 75–86. Universitas Siliwangi.
- Kartikasari, D., Arifin, Z., & Hidayat, K. (2013). *Pengaruh perilaku konsumen terhadap keputusan pembelian*. 1–8. Universitas Brawijaya.
- Khoernikmah, I., & Widarko, A. (2018). *Pengaruh Pemasaran Online terhadap Keputusan Pembelian Konsumen*. Universitas Islam Malang.
- Kim, E. Y., & Kim, Y. (2004). *Predicting online purchase intentions for clothing products*. 38(7), 883–897. <https://doi.org/10.1108/03090560410539302>
- Kotler, P., & Keller, K. L. (2012). *Marketing Management*. Prentice Hall. New Jersey. Terjemahan B. Sabran. 2012. *Manajemen Pemasaran*. Edisi 13. Jakarta: Erlangga.
- Kusumawardani, D. (2011). *Studi mengenai Keputusan Pembelian Jasa Wedding and Event Organizer*. Universitas Diponegoro.
- Lovelock, C., Wirtz, J., & Mussry, J. (2017). *Service Marketing*. 7<sup>th</sup> Ed. Prentice Hall. New Jersey. Terjemahan D. Wulandari & D. B. Putera. 2017. *Pemasaran Jasa*. Edisi 7. Jakarta: Erlangga.
- Lupiyoadi, R., & Hamdani, A. (2011). *Manajemen Pemasaran Jasa* (Edisi 2). Jakarta: Salemba Empat.
- Malhotra, N. K. (2010). *Marketing Research*. 4<sup>th</sup> Ed. New Jersey. Terjemahan S. R. Maryam. 2010. *Riset Pemasaran*. Edisi 4. Jakarta: PT Indeks.
- Nofri, O., & Hafifah, A. (2018). *Analisis Perilaku Konsumen Dalam Melakukan Online Shopping Di Kota Makassar*. Jurnal Minds: Manajemen Ide Dan Inspirasi, 5(1), 113–132. <https://doi.org/10.24252/minds.v5i1.5054>. UNI Alauddin Makassar.
- Octavia Puspa Juwita, S. (2016). *Pengaruh Kualitas Layanan Terhadap Keputusan Pembelian Kredit Kepemilikan Rumah Pada BTN Kantor Cabang Surabaya KCP Mojokerto*. Jurnal Pendidikan Tata Niaga (JPTN), 1(1). Universitas Negeri Surabaya.
- Oke, A. O., Kamolshotiros, P., Popoola, O. Y., Ajagbe, M. A., & Olujobi, O. J. (2016). *Consumer behavior towards decision making and loyalty to particular brands*. International Review of Management and Marketing, 6(4), 43–52. Nigeria University.
- Peter, P. J., & Olson, J. C. (2013). *Consumer Behavior & Marketing Strategy*. 9<sup>th</sup> Ed. McGraw-Hill. Boston. Terjemahan D. T. Dwiandani. 2013. *Perilaku Konsumen dan Strategi Pemasaran*. Edisi 9. Jakarta: Salemba Empat.
- Prabowo, W. A. (2018). *Pengaruh Digital Marketing terhadap Organizational Performance Dengan Intellectual Capital Dan Perceived Quality sebagai Variabel Intervening Pada Industri Hotel Bintang Tiga Di Jawa Timur*. Jurnal Manajemen Pemasaran, 12(2), 101–112. <https://doi.org/10.9744/pemasaran.12.2.101-112>
- Priyatno, D. (2014). *SPSS 22, Pengolahan Data Terpraktis*. Yogyakarta: CV. Andi Offset.
- Rahardian, D., & Andarini, S. (2014). *Variabel yang Mempengaruhi Keputusan Penggunaan Jasa Komuter Sulam (Studi Kasus Penumpang Kereta Api Komuter SULAM)*. 5(2), 181–192. Universitas UPN Veteran Jawa Timur.
- Ryan, D., & Jones, C. (2009). *Understanding Digital Marketing: Marketing Strategies for*

- Engaging the Digital Generation*. United States: Kogan Page Limited.
- Sangadji, E. M., & Sopiha, N. (2013). *Prilaku Konsumen: Pendekatan Praktis disertai Himpunan Jurnal Penelitian*. Yogyakarta: Penerbit Andi.
- Sanjaya, R., & Tarigan, J. (2009). *Creative Digital Marketing*. Jakarta: PT Elex Media Komputindo.
- Schiffman, L., & Kanuk, L. L. (2008). *Consumer Behavior*. 7<sup>th</sup> Ed. Prentice Hall. New Jersey. Terjemahan K. Zoelkifli. 2008. *Perilaku Konsumen*. Edisi 7. Jakarta: PT Indeks.
- Siburian, P. S., & Zainurossalamia, S. Z. (2016). *Pengaruh Kualitas Produk Dan Kualitas Layanan Terhadap Keputusan Pembelian Sepeda Motor Honda*. Universitas Mulawarman.
- Umar, H. (2013). *Metode Penelitian*. Jakarta: Salemba Empat.
- Urban, G. L. (2004). *Digital Marketing Strategy: text and cases*. New Jersey: Pearson Education.
- Yasmin, A., Tasneem, S., & Fatema, K. (2015). *Effectiveness of Digital Marketing in the Challenging Age: An Empirical Study*. *The International Journal of Management Science and Business Administration*, 1(5), 69–80. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.15.1006>. Northern Univ. of Bangladesh, Asian University of Bangladesh.
- Zulian, Y. (2013). *Manajemen Kualitas Produk dan Jasa* (Edisi 6, J). Yogyakarta: Ekonisia.

---

**Copyright holder:**

Dh Paramitha Novianty, Elwisam, Kumba Digidowiseiso (2024)

**First publication right:**

Journal of Social Science

**This article is licensed under:**

