

THE DOCUMENT DISTRIBUTION AND THE TIME OF COMPLETION OF NOTE ON ONE DAY BILLING

Nur Widyawati¹, Rifa Syarri²

Sekolah Tinggi Ilmu Administrasi dan Manajemen Kepelabuhan
(STIAMAK) Barunawati Surabaya
Jalan Perak Barat 173 Surabaya
INDONESIA

Email: [1nurwidyawati25@yahoo.com](mailto:nurwidyawati25@yahoo.com), [2rifasyarri12@gmail.com](mailto:rifasyarri12@gmail.com)

ABSTRACT

Each service company claims that the company's goal is to satisfy customers and it is now increasingly recognized that customer service and satisfaction is a vital aspect of surviving in business and winning the competition. Customer satisfaction is also the key to the success of the company to achieve profit in the long term. Measurement of customer satisfaction at PT Pelabuhan Indonesia III (Persero) at Tanjung Perak Branch Service Division can be seen from One Day Billing service.

This study aims to determine (1) the effect of document distribution on One Day Billing, (2) the effect of the time of completion of a note to One Day Billing. The sample used in this research comes from secondary data that is 120 of ship movement. Technique of collecting data through library study method and observation directly. The used of Data analysis technique is binary logistic regression.

The results of this study indicate that the distribution of documents has no influence on One Day Billing, while the time of completion of the note effect on One Day Billing.

Keywords : One Day Billing, Document Distribution, Settlement Time Notes

INTRODUCTION

According to Shipping Law No. 17 in 2008, the port is a place that consisting of land and surrounding waters with certain limits as a place of government activity and economic activity which is used as vessel leaning, anchored, up and down passenger and / or loading and unloading of goods equipped with safety facility of shipping and supporting activities port as well as place of intra and inter-mode transportation. It is only through inter-island; inter-coastal, Indonesian unity can be realized. The Cruise that connects the islands is the lifeblood of life as well as unifying the nation and the State of Indonesia.

As an archipelago, the role of the port is very important in the Indonesian economy. The presence of an adequate port plays a major role in supporting the mobility of goods and people in this country. Theoretically, as part of a sea transport link, the port function is the interface of two or more transport modes and interfaces of interrelated interests. Goods transported by ship will be dismantled and transferred to other modes such as land mode (truck or train). Conversely, goods transported by truck or train to unloading ports will be loaded again to the vessel, so that ports in their activities also have strategic roles for both industrial and trade growth and are business segments that can contribute to national development and therefore mutual interests meet in ports such as banking, shipping companies, customs, immigration, quarantine, shahbandar and other activity centers. This brings consequences to the port business segment management in order that its operations can be done effectively, efficiently and professionally so that the port service becomes smooth, safe, and fast at an affordable cost.

Pelabuhan Indonesia III (Persero) in Tanjung Perak Surabaya is the second largest port in Indonesia after Tanjung Priok is required to further increase its role in providing the best possible service to the community. According to the users of sea transportation services when viewed from the aspect of development, sea transportation has the function of supporting all sectors of development and helps

achieve the allocation and utilization of economic resources in a good and optimal, it is able to support economic activities and production mobility to increase added value for goods transported. By looking at the existing facts it is natural that the development strategy of marine transportation subsector needs to be strengthened. The port provides facilities and services for the visiting vessel, the services are divided into two groups, they are ships service and service for goods. Services that are provided to the vessel include guidance services, delays, labuh and mooring. Vessel service is a job demanded responsibility of work performance, cooperation, and behavior of excellent physical condition in its implementation. The problem of the smoothness, security, safety of ships entering the port area is the main thing in the operation of ship operations.

In addition to the operational implementation of the vessel, as a service provider kepelabuhannan also provide administrative services ship service that supports the bill on ship service that has been done in a fast time when the ship is declared out of the port area called One Day Billing. In support of One Day Billing in the harbor requires good cooperation between the administrative system in this case relates to the distribution of documents and the process of the duration of the completion of the note related to the ship nota expected One Day Billing can run well and smoothly. The document distribution is done in the form of scanner certificate document (2A1) as proof of waveguide service which will become the basis in calculating the service cost of waveguide that is used, so that fast document distribution will accelerate the achievement of One Day Billing. Similarly, the time of completion of a memo on a 2A1 certificate which is input by the administration of the ship service will affect the process of One Day Billing, as the process of completion of the note will be difficult to achieve One Day Billing.

To support all that the need for alignment of document distribution and the completion of various problems related to ship notes required for ship service process in improving service smoothness in PT. Pelabuhan Indonesia III Tanjung Perak branch. In relation to this background, the problem formulation in this research is (1) Does the document distribution affect the One Day Billing Work System at PT port Indonesia III (Persero) Tanjung Perak branch? and (2) Does the time of completion of the note affect the One Day Billing Working System at PT Pelabuhan Indonesia III (Persero) Tanjung Perak branch ?

LITERATURE REVIEW

Administration Theory

In its administrative districts it encompasses all activities from setting up to the management of a group of people who have differentiated work to achieve a common goal. Administration can work with many people involved in it. This is in accordance with the definition of administration that can be divided into two parts that are proposed by Irra Chisyanti Dewi (2011: 3) in the book Introduction to Administration as follows:

1. Administration in the narrow sense, namely Administration derived from the word Administratie (Dutch), defined as writing or administration or secretarial work, including activities: receiving, recording, collecting, processing, organizing, sending, storing.
2. Administration in the broad sense, namely Administration is a process of cooperation some individuals in an efficient way in achieving the previous goals.

Based on the above understanding which explains the administrative sense in the narrow sense or the administration in a broader sense in order to better clarify the administrative sense, the researcher cites the notion of Administration according to Herbert A. Simon (1999: 2) that quoted by Harbani Pasolong in his book Theory of Public Administration, as follows: "Administration as activities of cooperation groups to achieve common goals". As mentioned above on the understanding of administration which means that the administration aims to achieve a goal.

Document Distribution

According to Kotler (2007), distribution is an organizational dependent device that is covered in a process that makes the product or service to be used or consumed by consumers or business users. According to Daniel (2001), distribution is an activity of an organization that aims to facilitate the delivery of goods or services from producers to consumers. Can be a conclusion that, the distribution is an activity or a process of distributing goods from one or a collection of producer organizations to

consumers. Documents are letters or valuables, including tapes that can be used as evidence to support information to be more convincing.

It can be concluded that, Distribution of documents is an activity in facilitating a correspondence activity or any valuable documents to achieve common goals.

Time of Completion of a Note

According to Muhammad Jawwad (2004: 183), time is the most precious resource that can not be replaced and can not be stored without use. According Mulyanto, et al (2008), settlement is a process whereby a situation is observed later if a problem is found to be solved by determining the problem, reducing or eliminating the problem or preventing the problem from happening. The note is proof of the purchase of a certain amount of goods in cash.

Based on the above understanding can be concluded, the time of completion of the Note is the length of time used in eliminating, reducing or preventing the administrative sanctions imposed on the corresponding violations of the applicable system of procedures.

One Day Billing

One day Billing is the process of accelerating the creation of a note service note (called proof of 2A1) with a note of service labuh and mooring (called proof of 2A2), can be called One Day Biling because the merger process can be realized one day after the exit vessel can be billed to the service user.

The existence of work system One Day Billing aims to provide maximum service to service users in the issuance of notes for services that have been given to the ship. With satisfactory services, service users are expected to use service more frequently and will increase revenue from PT Pelabuhan Indonesia III (Persero).

The services provided, especially for guidance services, use scout certificates (2A1) written directly by the pilot on the knowledge and remarks of the captain of the vessel guided on board. The document is declared invalid by the Assistant Manager of the guidance with the signature, after which the document submitted to the administration to do pengentrian existing data on the certificate 2A1 to be a note completed.

Not all completed notes can be resolved quickly, as it is possible to allow many obstacles in the note process, both from the document and the time of completion of the note. Distribution of documents from the guidance to the old administration will cause the One Day Billing work system to be difficult to achieve due to the complete guidance document document that can be done notes, if one of the movements document is incomplete, then the process of nota can not be done.

Similarly degan time of completion of the note, the faster the note process, then One Day Billing will be quickly achieved. Many ships have to settle for fines, apps that use troubled service users, hampered financial affairs to make the ship ready to become a note becomes obstructed with a long period of time, so the achievement of One Day Billing, is expected to be achieved well and benefit the company.

The Port

Basicaly, The seaports and port are different from both theoretical and practical contexts. The understanding of the seaport in accordance with Chapter 1 of Article 1 Paragraph 14 of Law Number 17 Year 2008 concerning the voyage shall be anything related to the implementation of port functions to support the smoothness, security and order of ship, passenger and / or goods traffic flow, safety and security of sailing, intra-and / or intermodal shifts and encouraging the national and regional economies with due regard to spatial planning.

The definition of Ports pursuant to Chapter 1 of Article 1 Paragraph 16 of Law Number 17 Year 2008 concerning shipping is a place consisting of land and / or waters with certain limits as a place of government activity and business activities used as a place for leaning boats, up and down passengers, and / or unloading of goods, in the form of terminals and ship berths equipped with safety and security facilities of shipping and supporting activities.

It can be concluded that the port is a place of loading and unloading activities of goods or services from one mode of transportation to other modes of transportation.

Ship

According to government regulation number 82 year 1999, that is: "Ship is a water vehicle of any shape and type that is in motion with mechanical power, engine power, or delay, including dynamic shaman power vehicle, underwater vehicle, and floating tool and building floating motion" Suranto (2004: 7). "The ship is the vehicle carrying passengers and goods at sea" Suyono (2005: 15).

There are several types of ships that can be categorized as container ships (1) Full Container Ship, (2) Semi container ship, (3) Convertible container ships and (4) Ships with limited container load capability.

Public service

Public services may be defined as any form of service in the form of public goods or public services which in principle are the responsibility and implemented by the Government Agencies in the Central, Regional and State-Owned Enterprises in order to fulfill the needs of the community as well as in the context of the provisions of legislation, put forward by ratminto and Winarsih (2007: 5).

A good public service policy consists of: Services that include prompt and timely service indicators, direct service for instantaneous services, transparent information service guidelines, professional staffing, cost assurance, integrated service delivery (one roof) and survey the services provided. Kristiadi (1999: 2).

According to the Regulation of Board of Directors of PT Pelabuhan Indonesia III (Persero) No. PER.25 / PJ.01 / P.III-2016, Ship Services is a service provided to the vessel in ensuring the safety of ships in the port area. Ship Service Service consists of: (1) Labuh Service, (2) Scouting Services, (3) Delay Service, (4) Matching Service and (5) Kepil Service.

The effect of document distribution on One Day Billing at PT Pelabuhan Indonesia III (Persero) in Tanjung Perak

Documents are the basis for making a note of service ship, from service ship labuh, mooring, waveguide, or delay. The document is mooring and mooring is Berita Acara Tambat (BAT). The mooring document was obtained from the mooring officer in the field who supervised and recorded every ship entering and leaving the mooring at Tanjung Perak harbor. The guidance for waveguide and snooze is the Pandu-Menyda Certificate (2A1) obtained from the guides in charge of guiding the vessel to operate in the Tanjung Perak port area. Rapid document distribution from officers operating in the field to the administrations will accelerate the process of ship into a note so that the creation of One Day Billing is expected by service users, which will facilitate service users in providing billing for ship services to ship owners. Based on the above description, the first hypothesis in this study are: HI = Document distribution negatively affects One Day Billing

The Effect of Time of Completion of Notes to One Day Billing at PT Pelabuhan Indonesia III (Persero) in Tanjung Perak

Settlement time penalties on slow shipboards can hamper the process of One Day Billing, as each ship has different problems, both operational and non-operational, so there is a need for coordination with the relevant agencies. For operations it should contact the guiding party and ask the guide who guides the vessel. For non-operational, coordination and confirmation of service users and counter parties that determining the service of the vessel must be applied, so that the time spent varies in the settlement of the fines of the vessel. Based on the above description, the second hypothesis in this study are:

H2 = Settlement Time Notes negatively affect One Day Billing.

RESEARCH METHODS

Population and Sample

Population is a generalization region consisting of a group of people, events or anything that has certain characteristics or in the form of a collection of elements related to the expectations of researchers to take conclusions. The sample is part of the population or a number of characteristics possessed by the population. Ikhsan, Muhyarsyah, Tanjung, and Oktaviani (2014, p.105). The population in this study is the movement of ships that enter the territorial waters of PT PELINDO III (Persero) on Tanjung Perak, Surabaya in May 2017 as many as 800 ship movement.

The sampling method used is the method of "Purposive Sampling" in obtaining 120 data of ship movement with several categories of sampling that is (1) the movement of ship which dock at ICT terminal (International Container Terminal), Mirah terminal and Nilam terminal and (2) which is docked at ICT terminal (International Container Terminal), Mirah terminal and Nilam terminal which has one cycle of exit ship.

Table 1. The definition of operational and variable measurement

Variable	Definition
Dependent variable	
<i>One Day Billing</i>	Research on One Day Billing work system will be calculated by calculating the length of time of completion from the outgoing vessel to a completed note in a matter of days. Measurements using dummy that is 1 (one) for One Day Billing work system is achieved and 0 (zero) for One Day Billing work system is not achieved.
Independent Variable	
Document Distribution (X_1)	In the distribution of documents, the authors use certificate guidance (2A1) to do the calculation. When the guide is completed the guide and directly given to the administration administration and given to the administration of ship service for the memorandum process. The researcher analyzed data on the hours of submission of the waveguide document (2A-1) and the realization hours indicated on the certificate which will then be compared with the duration of the ship memorandum process and the settlement of the vessel having the fine. Measurement of document distribution using time units of day.
the time of completion of the note (X_2)	The research on the time of completion of a vessel note to One Day Billing at PT PELINDO III (PERSERO) Tanjung Perak branch is done by calculating from the date of the vessel to a note with the date of the complete filing hours, so that the length of time for the fines in the mooring and the next an identification of the time period of the ship to be a memorandum. Measurement of time of completion of memorandum using time unit of day.

3.3 Data analysis method

The analysis technique used in this research is binary logistic regression analysis to know the influence of the probability of the occurrence of the dependent variable (one day billing) can be predicted with the independent variable that is the distribution of the document and the timing of the completion of the note. Binary variables that are categorical with only two conditions that is 1 (one) for One Day Billing work system is achieved and 0 (zero) for One Day Billing work system is not achieved. Model of analysis in this research are:

$$\ln \frac{Y_{it}}{1 - Y_{it}} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it}$$

information :

β_0 = Constants of the regression equation

β_1 = Regression coefficients for independent variables of document distribution

β_2 = Regression coefficient for independent variables of the time of completion of the note

Y_{it} = One day billing, number 1 for "One Day Billing work system is achieved " and 0 for "One Day Billing work system is not achieved "

X_{1it} = Independent variables of document distribution

X_{2it} = Independent variables of the time of completion of the note

Y_{it} is the probability of One Day Billing with independent variables of document distribution and time of completion of notes. Interpretation of the coefficients of the document distribution variables and the timing of the completion of the note must be seen in terms of the log of the probability of Y_{it} and not the probability of Y_{it} .

RESULTS AND DISCUSSION

Company Overview

PT Pelabuhan Indonesia III (Persero) or abbreviated Pelindo III is a State Owned Enterprise (SOE) engaged in port services. PT Pelabuhan Indonesia III (Persero) manages 40 ports that are grouped into 19 branches and 21 regions spread across 7 provinces: East Java, Central Java, South Kalimantan, Central Kalimantan, Bali, West Nusa Tenggara, East Nusa Tenggara. Head Office PT. Pelabuhan Indonesia III (Persero) is located in Surabaya.

With such a vast Territory, Pelindo III has various customers. Variations of these customers can be seen from several things including there are boat trips, cargo / volume, arrival schedule, length of time anchored, until the frequency or intensity of the arrival of the ship. PT Pelabuhan Indonesia III is a state-owned enterprise in the form of a limited liability company whose capital is divided into shares of which all or at least 51% of its shares are owned by the government (on behalf of the State) whose main purpose is to pursue profits.

Of the ports managed by PT Pelabuhan Indonesia III (Persero), the port of Tanjung Perak Surabaya branch is the largest or the largest port of the port, where the port of Tanjung Perak Branch is one of the ports of the gate in Indonesia. As a port of the gate, Tanjung Perak becomes the center of collectors and distributors of goods to Eastern Indonesia especially for East Java Province

An Overview of How One Day Billing Works on the Tanjung Perak Branch's Service Division

As the largest port after Tanjung Priuk, PT Pelabuhan Indonesia III (Persero) Tanjung Perak branch has an important role for hinterland in East Java. This causes the number of vessels that are tethered at the Tanjung Perak branch to carry out loading and unloading and ship service to enter the port. As a reliable service provider PT Pelabuhan Indonesia III (Persero) is doing its best to provide service to the ship which is the main objective of the Ship Service Division. One of the important objectives of the Ship Service Division is to deliver a timely written note, that is, when the ship exits the port area and in real time makes a note issuing called One Day Billing.

The main target of the Ship Service Division is still not well realized, which is influenced by several factors, one of which is the distribution of documents and the timing of the completion of the vessel fines that delay the issuance of the completed note.

Based on the secondary data collection of Tanjung Perak Ship Division Services, it can be known that the dominant factor causes the One Day Billing work system less than optimal. This is done in the hope that this information can be input for PT. Pelabuhan Indonesia III (Persero) Branch of Tanjung Perak Surabaya in preparing the appropriate One Day Billing service strategy.

Statistic Description

Table 2. The result of statistic descriptive analysis

Variabel	N	Minimum	Maximum	Mean	Std. Deviasi
One Day Billing	120	0	1	0.280	0.453
Document Distribution	120	1	6	3.320	1.238
the timing of the completion of the note	120	1	14	4.220	3.317

The One Day Billing variable has an average value (mean) of 0.28 and a standard deviation value of 0.453. The minimum value is 0 and the maximum value is 1. Mean value < standard deviation, it shows that One Day Billing work system from 1 movement to another movement has high variation.

Document Distribution Variable has an average value (mean) equal to 3.32 and standard deviation value 1,238. The minimum value is 1 and the maximum value is 6. Mean value > standard deviation, it shows that document distribution from 1 movement to another movement has low variation.

The variable time of completion of the note has a mean value of 4.22 and the standard deviation of 3.317. The minimum value is 1 and the maximum value is 14. Mean value > standard deviation, it shows that time of completion of the note from 1 movement to another movement has low variation.

The result of Hypothesis testing and Model Analysis

The appropriate Model Test

Table 3. The result of Goodness of Fit test

Step	Chi-square	df	Sig.
1	253.195	8	.000

The table above shows that the significance value is $0.000 < 0.05$. The significance value in the table shows a number below 5% or less than 0.05 so that the decision H_0 is rejected which means Goodness Of Fit as a good model.

The regression model is assessed in its entirety by looking at the value of -2 Log Likelihood (LL) block number = 0 and block number = 1. The value is presented in the table as follows:

Table 4. The result of overall fit model

Iteration History	-2 Log Likelihood	n-1
Step 0	143.150	119
Step 1	105.118	117

Based on the table above, the value of Log Likelihood on block number = 0 is 143.150 while the Log-Likelihood value at block number = 1 is 105.118, with df is 2. If it is compared with χ^2 table is 5.99 with difference of -2 value Log Likelihood is 38,032 then $\chi^2 <$ difference of -2 Log Likelihood value. Therefore, the regression model as a whole is considered feasible.

Table 5. The result of Model Analysis

Variable	B	Wald	Sig.	Conclusion
Constanta	2.627	3.899	0.048	-
Document Distribution	0.074	0.069	0.792	Not significant
the timing of the completion of the note	-1.501	23.715	0.000	Significant
Cox & Snell R Square	0,451			
Nagelkerke R Square	0,647			

Based on table 5, it can be seen that only independent variable is the time of completion of the note that affects the dependent variable that is One Day Billing because it has a significant level = $0,000 < 0,05$ so the decision is H_0 rejected and has a B value of -1.501 so the variable time of completion of the note have a significant negative effect on One Day Billing. This indicates that the faster the time of completion of the note, the probability of One Day Billing is high.

Cox and Snell's R Square and Nagelkerke's R values can be used to assess the fit model. Nagelkerke R Square can be interpreted as R^2 value in multiple regression. In SPSS output results in table 5, gives Cox and Snell's R values of 0.451 and Nagelkerke R Square value of 0.647. This shows that variability of One Day Billing variables can be explained by variability of document distribution variable and time of completion of note of 64,7% while the rest is explained by variability of other variable not used in this research.

Table 6. The accuracy test output of classification

Observed		Predicted		
		One day billing		Percentage correct
		0	1	
One day billing	0	86	0	100,0
	1	4	30	88,2
Overall percentage				96,7

The classification accuracy in this research is 96,7%. This case indicates of 120 observations, there are 116 accurate observations classified by biner logistics regression in this research.

Discussion

The Effect of Document Distribution on One Day Billing

The first hypothesis (H_1) in this study is the distribution of documents negatively effects on One Day Billing. Based on logistic regression test result in table 5, the value of B variable of document distribution is 0.074 and the significance level of the document distribution variable is 0.792 and

greater than 5% or 0.05. That is, the document distribution variable has no negative effect on One Day Billing. This indicates that how long the distribution of pilot documents to be processed into notes, does not encourage acceleration to make One day Billing.

Based on the data obtained, the distribution of documents conducted by the Office of Scouting only on weekdays that is Monday to Friday, and for Saturday and Sunday distribution is done on the next Monday, so it is suspected that One Day Billing is expected by the company not dependent on the distribution of documents because although the distribution for holiday is done, there is no entry admission officer who enters the data.

The Effect of Time of Completion of Notes to One Day Billing

The second hypothesis (H2) in this research is the time of completion of the note negatively affects One Day Billing. Based on the logistic regression test results in table 5, the B value of the time variable of the completion of the note is -1.501 and the significance level of the time variable of the completion of the note is 0,000, less than 5% or 0.05. That is, the variable timing of the completion of the note negatively affects One Day Billing. Referring to the results of the analysis, it can be concluded that the smaller the time of completion of the note can encourage the realization of One Day Billing achievement.

Based on the data, some vessels require different ways of completing notes, especially for vessels at a high dollar cost in the International Container Terminal (ICT) which incurs additional fees from applications. For this ship must always coordinate with the Division of PPU (Marketing and Business Development) and IT (Information and Telecommunications) so that additional cost given can be eliminated. The ship with the last movement is still in the rest area, it is also causes the timing of the completion of the note becomes long, due to lack of coordination of the ship to the administration of the ship in the rest area after exit from mooring, so it looks the time of completion of the note becomes old. Through One Day Billing with the acceleration of the note is faster, is the hope of the company and can provide maximum service to service users.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the results of the analysis and discussion, the conclusions that can be determined are as follows:

1. Document distribution variables have no effect on One Day Billing. That is, the length of the distribution of documents cannot encourage the achievement of One Day Billing work system.
2. Variable time of completion of notes has a significant negative effect on One day Billing. That is, the smaller the time of completion of the memorandum it can encourage the achievement of One Day Billing work system.

Suggestions

1. For companies in realizing the One Day Billing work system, there must be support from various parties and divisions within the company. One of the optimization of real time application program is FASA, which is expected wherever and whenever can do the process of memorandum when the ship has realization of service, so One Day Billing can be done well and give satisfaction of its own to service user and will help company in increasing earnings and income itself.
2. For further researcher, it is better not only to research in some terminal in Tanjung Perak, but it is able to research in all terminals. In addition, the next researcher can be increasing other variables such as application side, availability of waveguide in Tanjung Perak, coordination with related offices, certificate efficiency and availability of delay or increase the amount of data reporting period that will be tested.

REFERENCES

- Annisa, H. (2017). Determinan Pengungkapan *Internet Financial Reporting* Pemerintah Daerah dan Pengaruhnya terhadap Kualitas Laporan Keuangan Daerah. Skripsi Sarjana Ekonomi pada Universitas Lambung Mangkurat Banjarmasin: tidak untuk di publikasikan.
- Baiq, Y.A. (2014). Pengaruh Pelayanan *One Day Billing* (Percepatan Penagihan Nota Labuh, Tambat, Pandu dan Tunda Kapal) terhadap Kepuasan Pelanggan PT Pelabuhan Indonesia III (Persero)

- pada Divisi Pelayanan Kapal Tanjung Perak Surabaya. Skripsi Sarjana Administrasi Bisnis STIAMAK Barunawati Surabaya: tidak untuk di publikasikan.
- Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Semarang: Badan Penerbit Universitas Diponegoro.
- Peraturan General Manager PT Pelabuhan Indonesia III (Persero) Cabang Tanjung Perak (Nomor : Per.3.1/PJ.04/TPR-2011).
- Setiawan, B. (2015). *Teknik Praktik Analisis Data Penelitian Sosial & Bisnis dengan SPSS*. Yogyakarta: ANDI.
- Suyono, R.P. 2007. *Shipping "Pengangkutan Intermodal Ekspor Impor Melalui Laut"*. Edisi Keempat, Penerbit PPM, Jakarta.
- <http://repository.unpas.ac.id/10146/4/BAB%20II.pdf>.
- https://id.m.wikipedia.org/wiki/regresi_logistik.