
**THE INTEGRATION BETWEEN DWELLING TIME
WITH LOADING AND UNLOADING AT TANJUNG
PRIOK PORT (STUDY CASE AT JAKARTA
INTERNATIONAL CONTAINER TERMINAL INC 2018-
2020 PERIOD)**

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Abstract: This research aims to determine whether there is a correlation between dwelling time and loading-unloading at Tanjung Priok port. To prove it, author uses a qualitative descriptive research method with the calculation of the product moment correlation coefficient. Author took data for processing from the Jakarta International Container Terminal container terminal in Tanjung Priok. The result of this study shows that the results are negative, which means that the two are not strongly related and the results for three periods show the average dwelling time with a duration of 2 to 9 days.

Keywords: Port of Tanjung Priok, Dwelling Time, The cost of Loading and Unloading of Container Yard Stacking, Loading and Unloading Quantity

Introduction

Indonesia is the biggest archipelago state in the world, that consist of 70% sea and 30% land. Therefore, Indonesia has enormous marine and maritime potential (Sukanto, 2017). In addition, Indonesia has a very strategic position which is located between the two continents of Asia and Australia and between the two Indian and Pacific oceans. This position provides an advantage for Indonesia because it is at the crossroads of international travel traffic. Where the trade of Asian and Australian nations to other nations around the world will pass through Indonesian waters. As an archipelagic country, the role of ports is very important in supporting the Indonesian economy.

Port operational activities that are still not optimal are relatively common in almost all ports in Indonesia, that including Tanjung Priok Port. As a port with high import and export activities, Tanjung Priok Port is still the main focus in terms of dwelling time.

Dwelling time is the time calculated from the time a container is unloaded from the ship until the container leaves the port terminal through the main gate (Taringan, 2018). The high dwelling time will affect the economy from two sides. First, dwelling time adds uncertainty to the export process, making it difficult for local industries to sell goods abroad. Second, if there is a delay in the import process, it will result in additional costs for the domestic business and consumer prices (Henry Sandee, 2012). The length of dwelling time can be caused by many factors, but the factor that is usually the main cause is the number of licensing processes that must be passed.

Port management which is still not up to the target standard expected by the government has recently become a hot topic of discussion because of the very important role of the port as one of the country's largest foreign exchange sources (Anita & Asmadewa, 2017). Even though it has been repaired, the waiting time for loading unloading is still quite high, namely 4.7 in December 2020. This figure still cannot be compared with neighboring countries such as Singapore, which is only around 1.1.

The condition for these 2 years from 2019 to 2020 for import dwelling time has improved significantly, from an average of 4.3 to 2.97. However, it is different with the export dwelling time which is still above 3 days. From the data obtained in 2020, Jakarta International Container Terminal Inc stated that the export dwelling time at Tanjung Priok Port had decreased from 2.8 days to 3.2 days. Even though in the government regulation regarding the reduction of dwelling time at Tanjung Priok Port, namely ministerial regulation of transportation number 25 of 2017 which states that the time limit for the accumulation of goods in the stacking yard is no later than three days since the goods are piled up in the stacking field (PM 25 of 2017, n.d.). This is still not in line with what President Jokowi has targeted, which is 2 days for dwelling time.

The delivery operation process (export) start from the making of invoice (billing section) until the scheduling of the delivery. The large number of

document management processes, the lack of tools for the loading-unloading process cause long loading and unloading time. Commonly, if in loading-unloading activities at the port there are problems that result in the flow of goods being choked, then this will cause a loss of time and cost for the owner of the ship and goods (Basuki, 2015).

Method

In this research, researchers used a qualitative descriptive method. According to Sugiyono (2016: 9) qualitative research methods are research methods used to examine the condition of natural objects where the researcher is the key instrument (Albi ANGgito & Johan Setiawan, 2018). The researcher chose to use qualitative descriptive method that contained excerpts of data (facts) revealed in the field to provide support for what was presented in the report. The researcher decided to take Dwelling Time data for 2019-2020 and loading and unloading data for 2019-2020 obtained from Jakarta International Container Terminal (JICT) Inc.

In this research, the researcher formulates the problem as follows:

1. What is the dwelling time condition in 2019 to 2020?
2. How are the loading-unloading conditions in 2019 to 2020?
3. Is there integration between dwelling time and loading-unloading in 2019 to 2020?

This study aims to determine whether there is an integration between dwelling time and a decrease or increase in loading-unloading capacity at the Tanjung Priok Port container terminal in export activities.

Discussion and Result

Dwelling Time

The length of dwelling time that occurs at Jakarta International Container Terminal Inc is caused by several micro factors, namely: 1) insufficient port facilities, 2) The differences of working hours between ports and other institutions, 3) lack of coordination between related institutions in the pre-

processing process. custom clearance, 4) limited access to the port, causing obstruction to the flow of vehicles. Based on the news that shown to the public, the president of Indonesia Mr. Jokowi, ordered the port authorities to improve dwelling time. This shows that the existing dwelling time in Indonesia is still below the standard set by the Minister of Transportation Regulation Number PM 117 of 2015 concerning the transfer of goods that are pass the stacking time limit (Long Stay) at Port of Tanjung Priok (PM_117_Tahun_2015.Pdf, nd).

High Dwelling times will also cause obstruction in the flow of goods caused by queuing containers, causing a domino effect on logistics distribution, and the large number of stacking fees that must be paid by exporters. Based on the new rates set by PT Jakarta International Container Terminal, namely:

Table 1

OLD RATE			NEW RATE		
Container Type	Unit	Rate (Rp)	Container Type	Unit	Rate (Rp)
Full Container 20'	Box a Day	17.500	Loaded Container 20'	Box a Day	42.500
Full Container 40'	Box a Day	35.000	Loaded Container 40'	Box a Day	85.000
Empty Container 20'	Box a Day	8.750			
Empty Container 40'	Box a Day	17.500			

The changing of Container Yard Stacking fees

Source: Jakarta International Container Terminal Inc

The increase in the cost of stockpiling goods aims to avoid the occurrence of congestion of goods accumulation (YOR) which can cause non-smooth flow of goods at the port. According to the Directorate General of Customs and Excise, as many as 43 percent of importers deliberately prolong the time for goods out, because they do not have warehouses outside the port (Ruwantono & Nugroho, 2016).

Dwelling time data for export containers from 2019 to 2020 will be compared between the average value or the Mean and the Median. Dwelling time can be called high if the Median value is lower than the average value for each day

Tabel 2

No	Month	2019	2020
1	January	2.66	2.72
2	February	2.51	2.94
3	March	2.58	2.87
4	April	2.8	3.06
5	May	2.9	2.85
6	June	2.67	2.61
7	July	2.78	2.76
8	August	3.53	3.06
9	September	2.67	3.15
10	October	2.76	3.86
11	November	3.02	4.21
12	December	2.77	4.7
Mean		2.8	3.2325
Median		2.765	3

Dwelling time recapitulation export Period of 2019 – 2020

Source: Internal data of Jakarta International Container Inc

The following table is the calculation of the export dwelling time recapitulation table for two years as shown in the table showing the dwelling

time conditions as follows; the average occupancy over the three years is 2.94 days. The longest average in 2020 is 3.23 days and the average dwelling time was found in 2019 with a figure of 2.80 days. Meanwhile, the highest media was found in 2020 with 3 days and the lowest median was found in 2019 with 2.76 days. The recapitulation table also shows that the longest export residence time is in December 2020 with a duration of 4.7 days. So, when compared to neighbouring countries such as Singapore and Malaysia with an average residence time of 1.1 days, Indonesia's Dwelling time is quite high. Another thing that strengthens that dwelling time in Indonesia is still high is that the median value for three consecutive periods is lower than the average daily Dwelling Time.

Loading-Unloading

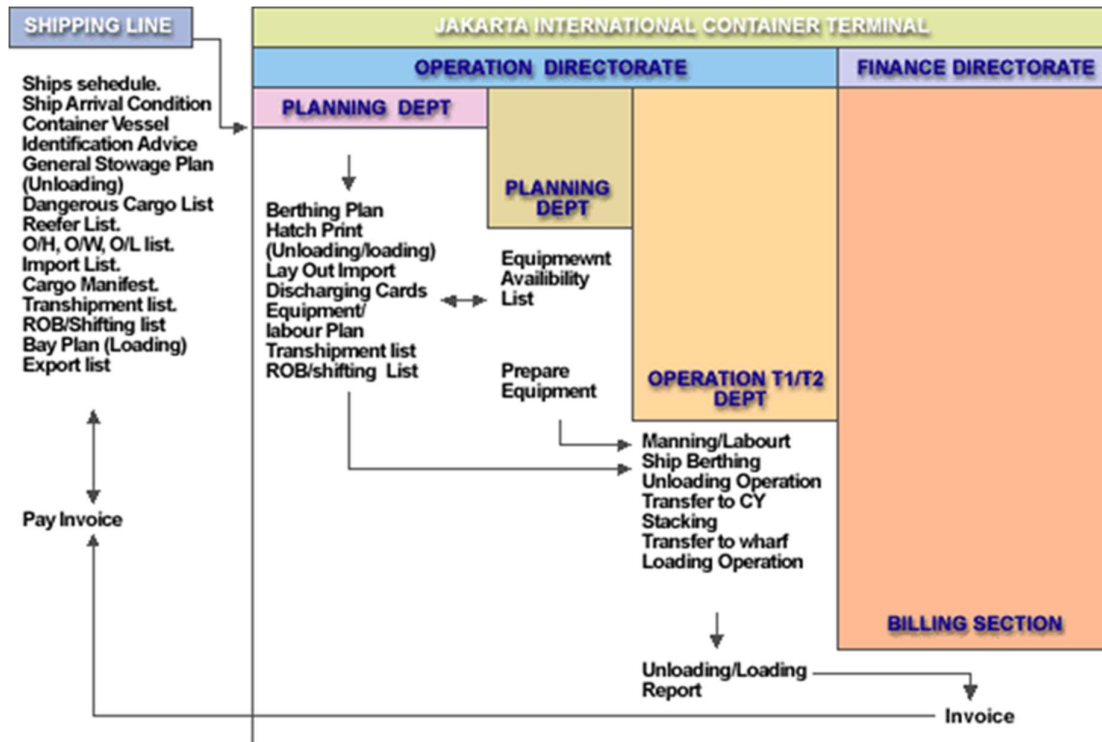
The definition of loading-unloading according to Arso Martopo and Herry Gianto in a book titled "*Pengoperasian Pelabuhan Laut*" (1999:31-32), is: Unloading is the work of unloading goods from the top of the deck or ship's hold and placing them on the dock or in the warehouse. Loading is the work of loading goods from the dock or in the warehouse to be loaded in the warehouse.

Loading-unloading is a shipping activity loading or unloading a cargo from a dock, barge, truck into a hold or deck, using cranes and pulleys on board or on land or by other means of unloading, where goods are moved from and onto the ship.

According to Dirk Koleangan (2008:241) in a book titled "*Sistem Peti Kemas*", the meaning of loading-unloading activities is as follows: Loading-unloading activities are activities to move goods from land transportation equipment, and to carry out these loading-unloading activities, facilities are needed. or adequate equipment in a shipping method or procedure (Theory et al., 2004).

From there it can be concluded that loading-unloading activities are activities of moving goods from ships to warehouses or vice versa, using facilities and equipment already available at the port.

Picture 1 Delivery operation



Source: www.jict.co.id

can be seen from the picture above, export activities start from making invoices (billing section) to scheduling shipments.

Based on PM 60 of 2014 Article 2 explains the stages of activities carried out during loading and unloading, including: 1) stevedoring, 2) cargodoring, 3) receiving/delivery. With the explanation, namely: Stevedoring is an activity to raise goods from a container yard or container storage area to a ship that will immediately depart according to their respective destinations (Menhub, 2014). cargodoring is the process of releasing goods from the warehouse to be carried and stockpiled in the container yard or the edge of the pier to be

lifted onto the ship. Receiving/delivery is the process of transporting and delivering goods in the warehouse to be stored in the container yard.

Table 3

Months	Year	
	2019	2020
Jan	56,25	50,66
Feb	45,73	39,55
Mar	55,63	45,93
Apr	55,47	50,31
May	56,44	44,89
Jun	42,15	43,35
Jul	55,17	43,23
Aug	58,18	45,1
Sept	53,72	46,07
Oct	51,95	43,48
Nov	54,58	42,4
Dec	57,27	53,02
Mean	53,2441	45,6663
Median	54,873	44,997

Results of recapitulation loading and unloading period 2019-2020

Sources:

From the results of the recapitulation of loading-unloading of export containers for two years, it can be described as follows: the highest average was in 2019 as many as 53,244 boxes and the lowest average was in 2020 as many as 45,663 boxes. The highest or highest number was in August 2019 as many as 58,180 boxes while the lowest number was in June 2019 as many as

42,150 boxes. The average loading-unloading of containers for two years is 49,455 boxes

To support the growth of the flow of container ships and other operational activities at the Port, PT Jakarta International Container Terminal (JICT) has facilities and equipment.

Tabel 4

BERTH		Container Yard		Equipment	
Quantity	8	Area	45.59 Ha	Quay Crane Container	16 Units
Length	1640 M	Capacity	39884 Teus	Rubber Tyres Gantry Crane	63 Units
Width	26.5-34.9	Ground Slot	10560	Hand Truck	128 Units
Depth Alongside	12-16 M	Reefer 380 V	546 Plugs	Chassis/ Trailer	128 Units
				Reach Stacker	4 Units
				Forklift Diesel	15 Units
				Side Loader	6 Units

Source: Jakarta International Container Terminal (JICT) Inc official website

With the facilities and equipment owned, PT Jakarta International Container Terminal can provide adequate services for operational activities at the port

Integration between Export Dwelling Time and the amount of loading-unloading export

Searching for integration between Dwelling Time and Containers, author uses the calculation of the Product Moment Correlation Coefficient with a result of 0.31, meaning that there is no correlation between dwelling time and the number of loading-unloading at Jakarta International Container Terminal Inc. Because both work processes are not carried out at the same time, and both have different operational activities.

This research is strengthened by several previous studies that discuss loading-unloading and Dwelling Time.

Conclusion

To conclude, In 2020. Export Dwelling time has a duration of 3.2 days. This result shows a longer time than the average from 2019 to 2020. The average export Dwelling Time at Jakarta International Container Terminal Inc for two years is 3.01 days. The median value is lower than the average per day, for two consecutive periods, making the Dwelling Time at Jakarta International Container Terminal Inc still very high. Although the average number is in accordance with Ministerial Regulation Number 117 of 2015 which is 3 days.

The highest loading-unloading of export containers at PT Jakarta International Container Terminal were in August 2019, which was 58,180 boxes and the average number of loading-unloading for two consecutive years was 49,455 boxes. This shows that the Port of Tanjung Priok, especially Jakarta International Container Terminal Inc, is still trusted by shippers in loading-unloading for export of goods to destination countries.

Dwelling Time and loading-unloading do not have a relationship with each other because they have different operational activities and work time that is not carried out at the same time. This means that dwelling time and loading-unloading can still be integrated, but they do not affect each other. Because export dwelling time is the waiting time for goods from the dock until the goods enter the ship.

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