A STUDY ON IMPORT CONTAINER MOVEMENT AT THE JOHOR PORT CONTAINER TERMINAL

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Abstract
Import container is a container that arrives at container terminals from abroad and transits to their destination via land transport, feeder or waiting to be taken by the consignee. Sometimes, the trucks assigned by the receivers are sent more or less at random to take a certain container. The purpose of this study was to understand the current process of import container movement at Johor Port Import Block and make a recommendation to reduce the slow container throughput at the port. Hence, the researcher will come out with the problem that involve through the container movement and also analyzed the Standard Operation Procedure at Johor Port Container Terminal.

Index Terms-- Delay, Port Congestion, Container Terminal

INTRODUCTION
This article focus on the import container movement at Johor Port Container Terminal. The process of import container movement also has been studied by researcher. Import container movement is about the movement of the import container arrived at the berthing area and quay crane will unload the container to the chassis and will be hauled by the utility truck terminal holder to send at the container yard. This is the part of the process of the import container movement at the Johor Port Container Terminal.

Nowadays, maritime transportation is one of mode of transportation that has major part in logistic industry. The transportation described the movement of the cargo or passenger or both to satisfy the demand and supply of customers. Maritime transportation is also a vital component of economic trade between nationwide countries. It enhances the economic growth and increase market share of port. [1]

LITERATURE REVIEW
Nowadays, maritime transportation is one of mode of transportation that has major part in logistic industry. The transportation described the movement of the cargo or passenger or both to satisfy the demand and supply of customers. Maritime transportation is also a vital component of economic trade between nationwide countries. It enhances the economic growth and increase market share of port. [1]

The delays had forced manufacturers in PasirGudang to truck their imports of raw materials from Singapore to avoid stoppage on production, increasing outflow of the country foreign exchange. [2]

Johor Port is a largest palm oil terminal port in Malaysia which located at the southern-most tip of Peninsula Malaysia and it is strategically positioned in the center of the sprawling 8,000-acre PasirGudang Industrial Estate which linked to important commercial and industrial centers in Malaysia as well as other ports and neighboring countries such as Singapore. Besides, Johor Port has grown since 1979 handling between 750,000 and 800,000 TEUs (twenty-foot equivalent units) and handling import and export shipment to satisfy the demand of clients and customers. [1]

Severe delays in ship berthing at the terminal of Johor Port had caused vessel operators to suffer tremendous losses in high running costs in charter-hire, schedule integrity and misconnections. For example, haulage companies were detained longer by the exporters, staging of containers at undesigned storage areas and security risks such as theft. [2]

The documentation of import containers should be complete and accurate information by the importers before given to the customs brokers to ensure the smooth flow at custom [3]. The procedures at customs should be follows by the importers in order to ensure the container and cargo safely arrives to the importers. The incorrect documentation will make the customers authorities to check the cargo and make the process at customs became longer.

There will be up and down in port terminal especially when it comes in shipping industry. The challenges were including the traffic congestions at ports and waiting time of trucks in port terminal.

According to (Carlo et. al, 2014), traffic increases demand for storage space at harbor ports. Users and port operators sometimes have some problems when it comes to traffic. Serious and complicated operation challenges for port operators in providing efficient services have been created with a combination of container throughput improvements and lack of storage capacity. [3]

Traffic Congestion is causing the delay in operation at port. The traffic situation affected the ship berthing at Lagos Port whereby Lagos Port is near to the commercial city, Apapa. Ships berth if it comes into ports to discharge the import goods and load export goods.

The city itself had a worse road condition which is traffic grid-lock so it made the trucks took a longer time at the city before enter the port and affected the ships to queue up and stay longer at the port. Next, the discharge goods would be taken away by the trucks and when the trucks unable to get in the port, the ships would remain at the port to discharge the goods. This can be proven that the traffic congestion would lead to delay in the shipment and effect negatively in many things. [4]

The objective of the paper is to study the process of import container movement at Johor Port Container Terminal. Next, the objective is to identify the problem faced during the operation of container movement at Johor Port Container Terminal. Last but not least, to analyze the standard operation procedure (SOP) of Johor Port.
The researcher had interview industry experts including Puan Malina as Senior Manager represents Johor Port Container Terminal, Mr. Nazri as Executive Manpower Unit Container Terminal represents Johor Port Berhad, Mr. Victor Beins as General Manager represents Panda Global Logistic (M) Sdn. Bhd and last but not least Mr. Tom represents Head of Academic from Netherland Maritime Institute of Technology (NMIT). By doing this study, the researcher can study the process of import container movement at Johor Port Container Terminal. All of the interviewees had explained the process of import container movement at Johor Port Container Terminal from starting until the end. The researcher also had obtained the Standard Operation Procedure (SOP) of Johor Port Container Terminal with including the procedure of import of containers. The objective has been achieved.

The objective has been achieved. All the interviewees agreed that the problems faced during the operation can cause delay of import container movement. This can be proven as the interviewee agreed that the equipment at the Johor Port are very old and has operating for many years. Besides, Johor Port Container Terminal has insufficient space at container yard and cause delay in the import container movement. Moreover, custom documentation procedure was also affect the import container movement for instance for custom inspection bay, the container need to inspect first if the import containers had some issues such as incorrect documentation or the goods are not compatible with the documentation. These process takes times as the import container might have delay because of some certain issues occurred during custom inspection. The objective has been achieved.

The researcher had obtained the Standard Operation Procedure (SOP) of Johor Port Container Terminal to be reviewed and analyzed the SOP. The interviewees also had provided...
recommendation regarding the import container movement at Johor Port Container Terminal. The objective has been achieved.

**IMPROVEMENT AS PER REVIEWER COMMENT**

**A. Open-up the new container terminal**

Based on the study, all the interviewee agreed that Johor Port Container Terminal has limited space especially at container yard due to geographical limitation. Besides, the strength of yard cannot accommodate the high of container stacking. So, the yard really has insufficient space. The plan is to open-up a dry terminal at Pasir Putih. Some activities at Johor Port will divert to the terminal. (Mr. Victor) By opening-up the dry terminal, the operation of import container movement can reduce the delay in Johor Port.

**B. Upgrade and Developing New System**

Besides, the system should do improvement in order to reduce the delay in operation at the terminal. The port must have a good system at port to control the yard operation. The system will be used to know the container location to make the job of haulage become easier and the yard planning become more systematic. This new system will monitor the movement of container.

**C. New Technology and Equipment**

The study finds that Johor Port Container Terminal has lack of equipment and several equipment are old enough and slow operate in handling containers. The researcher feels that the port authority needs to upgrade and apply new technology and equipment at Johor Port Container Terminal. Johor Port can take other ports such as Port of Singapore and Port of Shanghai as a benchmark in order to upgrade the technology at their container terminal. The new technology such as automated guided vehicle (AGV) can be apply at Johor Port and it will reduce delay at port. Besides that, this new technology and equipment will boost the productivity at the port and can reduce the delay during the operation at port.

**CONCLUSION**

As a conclusion, the study has successfully achieved its objectives by providing answer to three importance research questions. The current process of import container movement and the problem faced during the operation at the port has been revealed and need a lot of improvement at the port. The researcher also analyzed the Standard Operation Procedure (SOP) to relate with the process of import container movement at Johor port Container Terminal.

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