The Implementation of Delivery Order Online as an Effort of Operational Efficiency

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Abstract. The development of the world of technology is now rapidly entering various fields. Information Technology (IT) has become a major factor and is widespread in various sectors. Information Technology (IT) is a driver of utilization in all aspects so that more and more companies are trying to improve their business, especially in the field of goods transportation services that are closely related to information technology (IT). However, some companies still carry out their business activities manually, as in handling Delivery Orders (DO). This causes high operational costs for the company. The DO Online system is present to facilitate companies in handling Delivery Order documents in import activities. After implementing DO Online, the transfer of documents becomes faster, the process of dispensing goods at the terminal becomes faster, in terms of security because it is easily monitored by the company and can minimize errors that arise in processing Delivery Order data, this can play a role in the company's operational efficiency. This research was conducted using a qualitative approach because it will explain clearly and deeply the activities that have been carried out. In this study, we will discuss the implementation of Delivery Order Online as an effort for the operational efficiency of the company. The answers to this paper are obtained by analyzing data from Freight Forwarding companies and terminal companies for loading and unloading goods that have implemented an Online Delivery Order system. The results of this study are expected to be a consideration for implementing import activities.

1. Introduction

In the current era of globalization, the level of competition in the business world is getting higher and only business entities that have good performance or performance will survive. Information Technology is an inseparable part of the business world, especially in the face of increasingly competitive business competition, companies are required to be more efficient in carrying out their activities especially in the current economic conditions that are full of uncertainty where the economic crisis that hit Indonesia is very heavy and damaging to all sectors from the economy, so it is necessary to optimize the resources and information technology (IT) that are owned. [1]. The need for information technology is a basic need for companies to survive in a competitive business world. Information technology has driven progress in product and process technology, and the formation of information-rich communities. Changes that occur due to globalization have an impact on changes in the business environment [2].

The development of technology in the digital era has grown rapidly. The role of Information Technology (IT) in this era will shift activities that are usually done manually to technology or virtual
based, because now the world is facing the era of digitalization industry 4.0. As globalization spreads, import activities also face more challenges. Therefore, companies in these fields must catch up with the development of information technology (IT) by implementing solutions in the form of digitizing company activities.

One of them is logistics activities in Indonesia, especially in the field of export-import which is growing very rapidly. In import activities in Indonesia, there are still many companies that carry out operational activities by manual means, including in the delivery of Delivery Order (DO) documents. Delivery Order data is very necessary for every company that conducts shipping or receiving goods. Because the Delivery Order is a delivery order made and issued by the Warehouse as proof of the purchase of goods by the customer and as proof of the expenditure of goods which will later be used as a payment collection tool [3]. Buying and selling activities at trading companies, in carrying out their sales activities to buyers or customers, certainly do not escape the data of goods orders. Likewise, with purchasing activities, a company will receive a delivery order which includes a description of the goods sent from the suppliers where the company orders goods.

In carrying out operational activities, each company must have goals and objectives to be achieved. One of the objectives of the company is to obtain maximum profit with certain efforts to maintain the survival of the company. These efforts are by following the development of information technology. To achieve this goal, it's now much easier. Rapid technological development comes with a variety of solutions to make business activities more profitable. The purpose of utilizing technology in the company is to maximize the efficiency of the company's operations. One form of technological development that exists in logistics companies now is the Online Delivery Order.

The Government of Indonesia has made Delivery Orders Online (DO online) as an effort to improve the smooth flow of goods, reduce logistical costs, and accelerate the service of dispensing goods from ports that have been issued in the Minister of Transportation Regulation No. 120 of 2017 concerning Electronic Order Delivery Services (Delivery Order Online) of Imported Goods at the Port. [4].

2. Research Method
This research utilizes a Qualitative approach to describe in depth how to implement an online Delivery Order or E-DO for importing companies as an effort for the company's operational efficiency.

Data collection is done through structured interviews, semi-structured and in-depth interviews, and focus group discussions. The data analysis technique used in this study is the approach developed by Miles and Huberman which includes (after data collection) data reduction, the separation of data from the unfocused and too detailed so that data can reveal patterns or themes. Next is to display data (data display) which serves to help understand the advanced analysis of certain information or events. The final process is the conclusion of the analysis based on patterns and themes. Drawing conclusions is carried out continuously and together with data reduction and data display. [5]

![Figure 1. Data Processing Technique](source: Miles, Huberman, & Saldana (2014))
The data sources in this paper are informants who have the ability and information expertise that are in accordance with this study (purposive). Because this study aims to determine how an online delivery order (E-DO) is implemented as an effort for operational efficiency for every company involved in import activities, the information needed is information from professionals involved in import activities, especially in the management of Delivery Orders.

The informants in this study were:
1. Mr. Doddy Himawan as Senior Account Manager and Partnership Indonesia Logistics Community Service (ILCS – Telkom Group)
2. Mr. Syarifudin as Customer Service Manager in PT Jakarta International Container Terminal (JICT)
3. Mr. Al-Amin as Business Development Manager in PT Jakarta International Container Terminal (JICT)
4. Mr. Lingga as an Import Staff in PT Agility International

3. Result and Discussion
An online delivery order is a document issued by a shipping line company on request from an importer or freight forwarding company that has been authorized by the importer to take care of documents on port clearance carried out online. DO documents are carried out online, with benefits especially in time efficiency and cost efficiency, reducing the queue of counters, avoiding traffic congestion and also the security of transactions. This method can also cut the post-clearance time in handling the expenditure of goods from the port.[11]

Operational efficiency in making a product by combining at least one input to produce an output that is technically the most efficient process. Other alternatives, companies can choose the process with the lowest cost to produce certain outputs that is the most economically efficient process. Efficient technology, measuring usage in physical size. Economical efficient, measurement in cost size.[6]

In accordance with the opinion of Jopie Jusuf (2006) that if the company can reduce operating costs, the company will be able to increase net income, and vice versa, if there is a waste of costs will result in decreased profits. [7]

The term operational is often used in an organization that produces output, both in the form of goods and services. In general, operations are interpreted as a business, activity or process of transforming inputs (inputs) into outputs. According to Jopie Jusuf (2008: 33) what is meant by Operational Costs is as follows: "Operational Costs are costs that continue to be incurred by the entity, which is not related to the product but are related to the company's daily operational activities." [10]

Delivery Order Online has two rooms, the first is between the service provider company or Freight Forwarding to the Shipping Line, and the second is between the Shipping Line to the Terminal company.

Between Freight Forwarding companies to Shipping Line companies handling DO before using an online system can take up to a full day to go to the shipping office (shipping line). It takes time related to the lead time. The distance between the freight forwarding office and the shipping office is quite far so that it requires mobility activities from the freight forwarding party, as well as the many documents that need to be carried out in the DO administration, it has a lot of risks in it.

Before the implementation of the Online Delivery system, DO management is done manually. The first step was for the company to ask how much it would have to pay for the redemption of DO to shipping line companies, when they had received information about the fees that had to be paid, then the payment was made through the transfer system. Then the company must come to the shipping office counter and queue to get services related to the submission of documents needed in making DO, of course, this process can take a long time because the queue causes inefficient operational activities of the company.

When it has now been implemented online DO, this time has been cut down, because those who previously had to come to the shipping office and queue for DO arrangements, did not need to come
enough to access the web or the system provided by the shipping line then input data and no more queuing, and the data transfer is faster. Automatically this process can reduce time and reduce the mobility of workers who are given the task of making DO so that the company's operational activities become more efficient.

If viewed from the side of the shipping company or the Shipping Line to the Terminal the process is more integrated because the terminal, namely PT JICT, has implemented the handling of its services with an online system. PT JICT has a website that can be accessed by everyone, namely jict.co.id and the My JICT application that can make it easier for customers to access services found in JICT companies. One of the services is online DO or E-DO, on the E-DO menu on the web customers or service users can monitor their property documents and provide data withdrawal control tools if there is a complaint from Freight Forwarding.

![Figure 2. Interface of web JICT](image)

Source: Elaborated by Authors

Cargo owner or Freight Forwarding who already have DO from the management to the shipping office, and already have SPPB from customs, then go to the Terminal or come to the JICT office for making SP2, but now SP2 has changed its name to an e-ticket. In making SP2, importers do self service by inputting 2 documents, namely SPPB and DO. If after inputting all the data comes out, then the document uses the online system. After that, print and then exit the note for SP2 payment.

JICT has not received DO hardcopy for data input, because the online system in JICT has been mandatory or must be implemented.

PT JICT as a loading and unloading terminal company at the port that is a party to SP2 expenditure has developed and innovated better, namely by creating an e-ticket or gate pass system instead of SP2 (Container delivery letter). This is one of the efforts of the company to minimize the occurrence of counterfeit SP2 documents, and is an innovation as a form of following the development of the digital technology era.

Services provided at PT JICT are self service. So customers enter DO numbers and SPPB documents at kiosks available at the JICT office.
Figure 3. Flowchart DO
Source: Elaborated by Authors

The illustration above is the flow of the document management process for imported goods carried out online, which can be explained as follows: [8]

1. Cargo Owner / Freight Forwarder requests DO to the Shipping Line and make payment according to the costs listed.
2. After the Cargo Owner / Freight Forwarder has completed all required documents and made a payment, the Shipping Line will release DO.
3. The Shipping Line also sends the DO to the Container Terminal.
4. In addition to managing DO documents, the Cargo Owner / Freight Forwarder also requests SPPB to the Customs main service office (KPU BC).
5. The released SPPB document is then sent to the Container Terminal together with the DO document through an online system.
6. Next, the Cargo Owner / Freight Forwarder comes to the Terminal to issue SP2. At the JICT Terminal, the thing that needs to be done by the Freight Forwarder is inputting the DO number and SPPB at the kiosks available at the JICT office and then going out the proforma invoice containing the bills to be paid.
7. After making a transfer regarding the charge bill stated on the Proforma invoice, SP2 is published. But now SP2 has changed to an e-ticket or gate pass with high security and following the development of information technology (IT).
8. After having an E-ticket or Gate pass Freight Forwarder, contact trucking for a pick up container containing imported goods at the port to exit the port and deliver it directly to the consignee.
9. The e-ticket or Gate pass that has been held by the truck driver who will carry out the pick-up of goods greatly facilitates access to and out of the port so that the truck queue and mobility of the cargo-carrying truck will be reduced more smoothly.
Manual Delivery Order (DO) processing reaches IDR 300,000 in 2 days, but after implementing DO online it can save 81% of the time, 85% of the queue, and 60% of the cost.[9]

By implementing DO online can speed up the transfer of data, can reduce human errors in inputting data, can find out deficiencies in inputting data, can know the accuracy / authenticity of documents and minimize paper use. Thus, the application of Online Delivery Orders can improve operational efficiency. [8]

4. Conclusion

The existence of the DO online system in import activities, especially in revolution 4.0, is currently very good because it can shorten the time, in terms of cost efficiency, and be more effective in terms of time. Because what is now running specifically DO online is very influential in increasing the operational efficiency of the company.

On DO online systems there are 3 (three) entities or parties, namely Terminal, Shipping and Cargo owner. Those who have run 100% use an online system that is between terminals and shipping. But on the other hand, there are still a number of cargo owners who carry out their operational activities with manual handling, they do mobility to the shipping office to take care of DO after that, they come to the terminal to arrange the expenditure of goods from the port. This has caused the company's operational activities to not be carried out efficiently.

The industrial revolution 4.0 must be balanced by still prioritizing the human resources (HR) that are owned, not to have human resources (HR) sacrificed because of the development of the industry that has everything using digital technology.

The parties that most benefit from implementing DO online are cargo owners, but the impact of implementing online DO can also be felt by shipping companies and terminals because the document process is faster. The faster the process of processing documents, the faster the expenditure of goods from the port.

By implementing DO online, there are many advantages, such as saving from the accumulation costs in the Terminal and saving the operational costs of the company's mobility. In terms of costs there are several factors, namely:

a. DO management costs, which is the company's operating costs in managing DO such as mobility costs are needed because it is related to the distance to the shipping office.

b. Stacking costs in the Terminal, which are costs incurred along with the length of goods or containers that are stacked in the Terminal. If the document management can be completed quickly, the goods or containers can also quickly exit the Terminal, so that the costs borne for stacking containers do not increase.
For Port Terminals, there is not much influence because there is no significant difference that is felt when viewed in terms of cost, but the DO Online system can provide satisfaction to customers because they make them enjoy faster service in the Terminal.

Then in terms of securities, such as accuracy or authenticity of data. Because if the document has not used the online system, there is a possibility that it can be falsified, but if you have used the online system, it cannot be falsified because it has been entered into an integrated system. The authenticity of DO can also be easily known through the system and the accuracy of ownership of goods. So it can be concluded that using DO online can improve security and avoid fake documents.

Online DO implementation offers several benefits because of cashless, paperless / environmentally friendly and integrated systems. Therefore, implementing DO online will help in an effort to reduce operating costs in Freight Forwarding companies, facilitate the movement of goods and people, reduce wasted time, and improve the efficiency of the company's operations. Furthermore, manual Delivery Order (DO) processing reaches IDR 300,000 in 2 days, but after implementing DO online it can save 81% of the time, 85% of the queue, and 60% of the cost. DO Online will work well if cargo owners want to use DO online systems in carrying out their activities. The author recommends the implementation of Delivery Order Online as an effort to efficiency operational efficiency.

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