

Analysis of Internal and External Factors of Transport Delay in PT Sari Dumai Oleo

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ABSTRACT: This research was conducted at PT Sari Dumai Oleo. The purpose of this study is to analyze Internal and External Factors of Transportation Delay at PT Sari Dumai Oleo. In this study, researchers distributed 20 questionnaires to respondents, and these respondents were directly related to the object of research. The research methodology used in this study is quantitative research method. Based on the results of data analysis and discussion of the results of research data analysis on the influence of internal and external factors on transportation delays, it can be concluded that the results of the study show a positive and significant influence between internal and external factor variables on transportation delay variables. Based on descriptive research variables, internal and external variable factors have a grand mean value of 4.11 which is categorized at Good level and transportation delay variable has a grand mean value of 3.80 which is categorized at Good level. Internal and external variables can explain or explain the variable of transportation delay by 56.4% and the remaining 43.6% is influenced by factors that are not included in this study. Based on the results of the t test, the t-count value was obtained $> t\text{-table}$ (6.022 > 2.048) with a significance level of $0.000 < 0.050$. This means that H1 is accepted and H0 is rejected. It partially shows that internal and external factors have a significant effect on transportation delays.

Keywords: Internal Factors, External Factors, Transport Delays



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INTRODUCTION

The economic development of a region cannot be separated from the support of several supporting sectors that can support the economy. Logistics is the management of the flow of goods movement from a point of origin that ends at the point of consumption to meet certain demand, for example aimed at consumers or companies One of the sectors that has an important role is the transportation sector. Service is the provision of a performance or invisible action from one party to another party. In general, services are produced and consumed simultaneously, where the interaction between service providers and service recipients affects the results of these services. (Rengkuti, 2016: 26)

Transportation is a very important means in helping the wheels of the economy, a region cannot stand totally alone in meeting the needs of its own region, so the region needs other regions as support, the means of connection is transportation or transportation (Costa et al., 2020; Lafazani & Lagarias, 2016; Valax et al., 2019; Verdouw et al., 2018; Zhao & Cao, 2021).

Transportation is more decisive on the "consequences" arising from the existence of transportation services not on the "cause", but transportation services are organized to achieve many "destinations" (Fatimah, 2019: 6-9).

The company was founded with various main objectives, namely obtaining profits, increasing stock prices, increasing the number of sales and maintaining its survival. In achieving the company's goals that have been set, management must pay attention to two main factors, namely, external factors that are not controlled by the company and internal factors that are fully within the control of the company (Muhammad, 2000: 4).

While in research conducted by Indriani Lesal in 2015 entitled Internal and External Analysis on CV. Gading Mas Surya Sidoarjo In the framework of this competitive strategy also explains how service companies, especially shipping services, must be able to analyze internal and external factors to find out what are the advantages and disadvantages as a competitive strategy in order to continue to be able to carry out their business activities well. PT. PT. Sari Dumai Oleo is an industrial company engaged in palm oil and its derivatives. This company was established in 2020 There are several data as a reference for transportation delays in exporting at PT. Sari Dumai Oleo (Bozhanova et al., 2022; Pawliczek et al., 2022; Sakai et al., 2019; Sulyová et al., 2020; Wantanakomol, 2021).

Judging from the table above, there is a delay in transportation delivery time at PT. Sari Dumai Oleo since 2020. As a result of this delay, the company suffered losses during exports, according to history, the company estimates losses to reach 1 billion rupiah in the last three years including fines agreed with consumers.

In addition to the fines experienced, the company is also disadvantaged in terms of man power owned by the company with an irregular schedule in forming the workforce needed in the loading and unloading process.

Other losses were also experienced due to transportation delays at PT. Sari Dumai Oleo cargo demolition Return due to missed sailing at the port (Barenji et al., 2019; Przybylska et al., 2023; Pushpamali et al., 2021; Sánchez-Rivero et al., 2020; Vijayakumar et al., 2022).

Internal factors

Internal factors are those that explain the discussion of the core problems of the subject matter of an activity or about the sources of problems from the core of an activity.

The internal factors causing this delay can be explained as follows:

- a) Job technician errors
- b) Disruption of structural functions of work
- c) Demands on the functional cost of work

External factors

External factors are those that explain the discussion from outside of a problem activity or natural symptoms that cannot be predicted / planned by a problem system.

The external factors causing this delay can be explained as follows:

- a) Flood
- b) Earthquake
- c) Volcano erupts
- d) Tornado
- e) Tsunami
- f) The lane is congested.

B.LITERATURE REVIEW

1 Definition of Logistics Management

According to Siahaya (2012) logistics management is a part of supply chain management in which planning, implementing, and controlling the flow of goods more effectively and efficiently which includes transportation, distribution, storage, services, and related information starting from where the goods come from to arrive at the consumer's place to be able to meet their needs.

Meanwhile, according to The Council of Logistics Management, logistics management is a part of supply chain procedures that are useful for implementing, controlling and planning the effectiveness and efficiency of the storage flow of a product, goods, services, and related information from the beginning to arrive at consumers to meet their needs (Alazzawi, 2021; Wang et al., 2018).

So if conclusions are drawn, logistics management is basically, an application to various management principles in logistics activities to move personnel and goods so that they can be done more efficiently and effectively. Another definition of logistics management is a part of supply chain management efforts that have important functions for the process of implementing, planning, and controlling the effectiveness and efficiency of storage and distribution of goods, services, and information to a point of consumption in order to meet the needs of consumers

2 Logistics Management Functions

Abbas (2012), logistics management is a process of functional activities to manage materials, which includes planning and determining needs, budgeting procurement, storage and distribution, maintenance,

its removal and control. In the process of its application, logistics management has various important functions that will always be related to one another. The following are the functions of logistics management.

1) Planning and Fulfillment of Needs

In this case, logistics management serves as a planning and also determines the needs of any organizational program. This includes product analysis activities used, priority scales, to product availability. This planning activity must always pay attention to the budget owned by the company, availability factors, to the ease of accessing an item.

2) Budgeting

The function of budgeting in logistics management is to ensure that the procurement needs are in accordance with the company's budget. If the logistics budget costs are not appropriate, changes must be made to the planning.

3) Procurement Function

Logistics management basically focuses more on procurement of goods and is an important thing that must be considered. When there is a budget mismatch and it becomes difficult to change planning, logistics management must improvise in managing logistics activities with a limited budget.

4) Storage and Distribution

The function of logistics management in storing and distributing is a process in which a product of goods has been obtained in the place it should be. Later the goods will be distributed to other interested parties in accordance with the company's SOP.

5) Maintenance

In this case, it includes the entire maintenance of goods. Generally, the purpose of maintaining logistics goods is to ensure that stored goods products do not become damaged quickly.

6) Deletion

In this process there is also a deletion activity. The removal function is performed to separate items that have been damaged, repair them, or replace them with appropriate ones.

7) Control

Logistics management also functions as control, which will be carried out by a logistics manager with stages that are in accordance with the various functions mentioned above. The goal is to ensure that all logistics functions can be carried out in accordance with the

It is expected

3) Logistics Management Objectives

Logistics management aims to make goods or materials needed for the production process or operational activities available in quantity, quality, time and place needed at the most efficient cost possible, through the application of the concept of standardization (technical standards, storage standards, destruction, procurement), optimization (as needed) and accuracy. According to Lumenta (1990), there are three objectives of logistics management, namely:

- 1) Operational objectives, namely the availability of goods and materials in the right quantity and the quality and time needed.
- 2) Financial goals, namely the implementation of operational objectives at the lowest possible cost with optimal results.
- 3) The purpose of security, so that inventory is not disturbed by damage, waste, unauthorized use, theft and other unreasonable depreciation, as well as the actual value of inventory in the accounting system

4. Components of Logistics Management

According to Bowersox, the logistics management component is a logistics activity that can run well if supported by various components in a good logistics system as well. Some of the components of logistics management are:

1) Facility Location Structure

The presence of a network of facilities in a company is a series of locations where and with what materials or products will be carried or transported. To be able to achieve planning goals, these facilities include factories, warehouses, and retail stores. If you use special services from courier or warehouse companies, these facilities will certainly be a very important part of the network.

2) Transportation

There is one thing needed to complete transportation, namely the speed of transport services. This speed is closely related to transport that can provide fast service at a high price, besides that faster service will also be better able to cut the production time of goods.

3) Inventory

Material procurement is carried out with a logistics system for reasons different from the procurement of a mature product or finished product. By utilizing the MRP time stages, the most important goal is to maintain the number of production schedules with a minimum commitment from procuring supplies.

4) Communication

Communication is an activity that cannot be separated in the logistics system. The speed of information processing is also closely related to the integration of facilities, transportation, and company supplies. A company will be more sensitive to disruption of information flows if the design of the logistics system applied in it is more efficient.

5) Handling and Storage

Handling and storage include movement, packaging, and packing. For this reason, the less product handled, the more limited or more efficient the total physical flow will be. If integrated more effectively, these handlers will be able to reduce problems with speed and ease with the system.

5 Definition of Transportation

According to Adisasmita (2011) Transportation is a means of connecting or connecting between production areas and markets, or it can be said to bring production areas and markets closer, or often said to bridge producers with consumers. The role of transportation is very important, namely as a suggestion of liaison, closer and bridging between parties who need each other.

According to Salim (1993) Transportation is a science that has many links with other sciences such as management, marketing, development, economics, law and government policy. According to Salim (2000) transportation is the activity of moving goods (cargo) and passengers from one place to another.

According to Miro (2005) transportation can be interpreted as an effort to move, move, transport, or transfer an object from one place to another, where in this other place the object is more useful or can be useful for certain purposes.

6 Definition of transportation management

Transportation management is an effort to achieve predetermined goals with the income of transportation services by transportation companies in such a way, so that the applicable tariffs can meet the public interest. In general, transportation management according to Nasution (1996) faces three main tasks:

- a. Develop plans and programs to achieve the goals and mission of the organization as a whole.
- b. Increase productivity and company performance.
- c. Social impact and social responsibility in operating city transport.

A common problem of traffic management is how to achieve optimization of freight capacity. Transport capacity is the ability of a means of transportation to move cargo or goods from a place to a certain place. The elements of transport capacity according to Abbas Salim (1993) "consist of weight and payload, distance traveled, time needed".

9 Transportation Delays

The notion of delay according to Casey (2004: 65) is one of the most persistent performance problems and one of the most difficult to change. The definition of delay according to Ervianto (1998: 9) is as implementation time that is not used in accordance with the activity plan so that it causes one or several following activities to be delayed or not completed exactly according to the planned schedule.

In accordance with the conclusion of the delay, the author concludes that delay is a loss of time, material, capital and has an impact on some activities following being delayed and not running as expected actions in the process or way in an effort towards something achieve the goals that have been set so that the results can be utilized as much as possible with available tools.

METHOD

According to Mulyanto (2010) in Hutagalung and Triastuti (2019) stated that quantitative research is an objective research approach, emphasizing testing theories through measuring research variables with numbers and conducting data analysis with statistical testing methods.

In this study, the research method used is the quantitative method of causal survey studies. Researchers use this method with the aim of being able to describe quantitatively the tendencies, opinions or attitudes of a particular population. The data used is primary data. Data collection techniques used are by distributing questionnaires, observations, literature studies and interviews as well as theories used sourced from books, magazines and journals.

According to Sugiyono (2016: 80), population is a generational area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population that the researchers will choose as the object of research in this study is staff or employees of the Warehouse (Inventory) section of PT. Sari Dumai Oleo with an operator group of 77 people.

According to Sugiyono (2019: 127), samples are part of the number and characteristics possessed by the population. In this study, sampling was carried out with the consideration that the existing population was very large, so it was not possible to examine the entire population so that a population representative was formed. According to Arikunto (2012: 104) if the population is less than 100 people, then the number of samples is taken as a whole, but if the population is more than 100 people, then 10%–15% or 20%–25% of the total population can be taken. Based on this study, the sampling of this study is 20% of the existing population, because the population is more than 100, namely 100 members. Means $100 \times 20\% = 20$. So the sample used in this study was 20 members

RESULT AND DISCUSSION

Discussion

Based on the title that the researcher will examine and the results of the research above, the researcher conducts evidence to determine the magnitude of the influence of internal and external factor variables on transportation delays. With the results or statistical values of each criterion. Testing starts from Validity, Reliability, Descriptive Analysis, Normality, and Hypothesis Test consisting of Correlation Coefficient, Determination Coefficient, F Test, and T Test (Partial) can be explained through discussion.

Based on the results of the recapitulation of internal and external factor variables, the average is 4.11. For this this value of 4.11 is included in the good category. As for the recapitulation of the variable transportation delay of 3.80. For this this value of 3.80 is included in the good category. In this study, researchers conducted a correlation coefficient test. From the test results, the correlation coefficient shows a value of 0.751. According to Sugiyono (2013: 250) with a scale of 0.60 – 0.799 shows that the correlation is strong between internal and external factors variables on transportation delays. In this study, researchers also tested the coefficient of determination to determine the ability of independent variables, namely internal and external factors in explaining the dependent variable, namely transportation delays. Obtained R² value of 0.564 or 56.4%. This means that the variable of transportation delay can be explained by variations of internal and external variables while the remaining 43.6% is explained by other factors that exist outside the variables of this study.

In addition, in this study researchers also obtained results from Test F, from the test researchers obtained results that the regression value X of 0.603 was positive. This shows that every increase in internal and external factors (X) will be followed by an increase in transportation delays (Y) by 0.603 units.

Based on the results of the t test, it shows that internal and external factors affect transportation delays as evidenced by t-hitung results of $6.022 > t\text{-table } 2.048$ with a signification level of $0.000 < 0.050$. So it can be concluded that internal and external factor variables have a significant effect on transportation delays.

CONCLUSION

Based on the results of data analysis and discussion of the results of research data analysis on the influence of internal and external factors on transportation delays, it can be concluded that the results of the study show a positive and significant influence between internal and external factor variables on transportation delay variables.

Based on descriptive research variables, internal and external variable factors have a grand mean value of 4.11 which is categorized at Good level and transportation delay variable has a grand mean value of 3.80 which is categorized at Good level. Internal and external variables can explain or

explain the variable of transportation delay by 56.4% and the remaining 43.6% is influenced by factors that are not included in this study.

Based on the results of the t test, the t-count value was obtained $> t$ -table ($6.022 > 2.048$) with a significance level of $0.000 < 0.050$. This means that H1 is accepted and H0 is rejected. It partially shows that internal and external factors have a significant effect on transportation delays.

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