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A SWOT Analysis for Enhancing Port Operations at Sukamara

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Abstract
The objective of this study is to uncover (1) the identification of SWOT factors in the operations of Sukamara Port and (2) the solutions for enhancing the operations of Sukamara Port. The survey included a total of 40 respondents, consisting of staff members at KSOP Sukamara and those employed at Sukamara Port. The data analysis procedure incorporates qualitative descriptive analysis, IFAS analysis (Internal Factors Analysis Summary), EFAS analysis (External Factors Analysis Summary), and SWOT analysis (Strengths, Weaknesses, Opportunities, Threats). The study findings suggest that Sukamara Port is located in the negative quadrant of the defensive category. The quadrant refers to a scenario in which the company's state is not meeting expectations or, in other words, is unfavorable.

Keywords: company value, dividend policy, leverage, profitability

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1. INTRODUCTION

Transportation in the era of globalization plays a crucial role in facilitating society's daily activities and routines. Transportation refers to the act of transferring or moving people or products from one place to another (Ceder, 2021). Transportation encompasses several modes of travel, such as railroads, buses, airlines, ports, ferry services, taxis, and more. The presence of public transit has a significant impact on the economic development of a region or area. This aligns with the transportation goals of establishing national, regional, and local networks while also facilitating a wide range of social and economic activities and interactions (Chacon-Hurtado et al., 2020). In reality, the achievement of economic progress in a nation is closely tied to the involvement of the government in endeavors to create secure, convenient, hygienic, and efficiently managed public transportation systems.

Every form of transportation has a distinct role and capacity in accommodating passengers. Sea transportation is one of the means of transportation that facilitates the government's development efforts (Prus & Sikora, 2021). Sea transportation plays a crucial part in the effort to achieve equal development across the nation by connecting islands and facilitating the distribution of commodities and passengers (Rodrigue, 2020). In order to enhance the well-being of the community and foster national unity and cohesion, government policies pertaining to sea transportation must encompass not only the actual transportation activities but also aspects of port and shipping safety.

A port is a designated area on land and sea that serves as a hub for government and trade activities. It is specifically designed for ships to dock, passengers to embark or disembark, and commodities to be loaded or unloaded using terminals and platforms. The Minister of Transportation of the Republic of Indonesia, in Regulation PM 57 of 2020 Article (1) Paragraph (2), states that the primary function of ports is to facilitate the efficient, secure, and organized movement of ships, passengers, and goods. This includes ensuring the safety and security of sailing, providing locations for intra- and intermodal transfers, and promoting the national and regional economy while considering regional spatial planning.

Sea transportation, particularly at Sukamara Port, plays a vital role in the supply chain management process. Shipping goods to distribution sites that have been officially established necessitates meticulous planning, coordination, and precision. Mistakes in the transportation management process can directly affect industrial operating performance and render all efforts futile. Furthermore, transportation faults can initiate the forfeiture of industrial and commercial prospects. The marine transportation infrastructure in one of the operational zones of Sukamara Port is insufficient, as evidenced by the inadequacy of the dock facilities at the port. According to Mr. Kimron M. Sinaga, the Implementing Shipping Safety Supervisor, the absence of adequate public docks and infrastructure facilities at the port has led to the inability of larger foreign ships to dock. Additionally, passenger ships like pilot ships are not favored by the local community due to the lengthy route they have to take.

SWOT analysis is the process of evaluating and comparing the current and future strengths, weaknesses, opportunities, and threats. The purpose of doing a SWOT analysis is to identify and assess these factors in order to ascertain the possible growth trajectory of an entity or a specific area (Puyt et al., 2023). SWOT components, specifically Strengths, refer to the resources, talents, or other advantages that a company possesses in relation to its competitors and the market needs that it can fulfill. Strengths refer to certain factors that provide a company with a distinct advantage over its competitors in the market. The weakness lies in the restricted talent and skills within the company's resources, which hinders the growth of business activities. The shortcomings above encompass inadequate infrastructure, non-functioning bank accounts, deficient administrative supervision, and excessive marketing control. The weakness is in the restricted resources of the company in terms of talent and skills, which hinders the growth of business activities. The shortcomings above encompass inadequate infrastructure, non-functioning bank accounts, deficient administrative supervision, and excessive marketing control. Threats refer to adverse or unfavorable conditions that pose risks to the company. Threats are significant disturbances that might greatly impact a company's existing or intended status. Government laws, whether newly implemented or changed, can pose a substantial risk to a company's ability to achieve its objectives (Benzaghta et al., 2021).

2. LITERATURE REVIEW

SWOT Analysis

SWOT analysis is a strategic planning technique employed to assess the strengths, weaknesses, opportunities, and threats that arise in a project company venture or while evaluating one's product lines or those of competitors (Elavarasan et al., 2020). In order to conduct the analysis, the business objectives are established, and the items to be evaluated are identified. Strengths and weaknesses are categorized as internal elements, while opportunities and threats are recognized as external factors. Pearce and Robinson define SWOT as a concise representation of a company's internal strengths and weaknesses, as well as the opportunities and threats it encounters in its external environment. SWOT analysis is a methodical approach to identifying the variables and tactics that most accurately reflect their compatibility (Drastichová, n.d.). This analysis is predicated on the premise that a successful plan will optimize strengths and opportunities while minimizing weaknesses and dangers. When implemented with precision, this basic premise significantly influences the formulation of an effective strategy. This analysis can provide valuable insights to facilitate the decision-making process. The decision-making process is intricately linked to the company's vision, mission, and goals. SWOT analysis is a useful tool for examining the aspects that impact an organization and making strategic decisions (Pereira et al., 2021).

Matrix SWOT

In order to build a plan, it is necessary to assess both external and internal aspects. An examination of several elements is essential to identify the strengths and weaknesses of an organization. Meanwhile, an examination of external elements should be able to identify the possibilities available to the business and also identify the risks faced by the organization in question (Yusuf et al., 2022). In order to conduct a thorough analysis of SWOT, it is imperative to examine both external and internal elements, which are integral components of the SWOT analysis. These factors include (Grebski et al., 2022):

1 These exogenous factors impact the potential advantages and risks (O and T). This component pertains to external variables that influence the company's decision-making process. The aspects encompassed in this context are the industrial environment, macrobusiness environment, economics, politics, law, technology, population, and socio-culture.
2 These intrinsic characteristics impact the development of strengths and weaknesses (S and W). This aspect pertains to the internal conditions within the company, which in turn affect the process of

making decisions within the company. The internal variables encompass various functional areas of management, such as marketing, finance, operations, human resources, research and development, management information systems, and corporate culture.

The SWOT matrix describes how the company's strengths and weaknesses are considered in relation to the opportunities and dangers in its external environment (Suriyanti, 2020). The utilization of the SWOT matrix will facilitate the formulation of diverse strategies. Essentially, the strategic alternatives should focus on leveraging strengths, addressing weaknesses, capitalizing on commercial opportunities, and mitigating dangers. The SWOT matrix yields four distinct groupings of alternative tactics, namely SO strategies, ST strategies, WO strategies, and WT strategies (Safitri et al., 2023). Each of these various tactics is characterized by:

1 Strength Opportunity Strategy. This strategy is formulated based on the company's mindset, specifically by leveraging all its strengths to capture and exploit as many opportunities as feasible.
2 Strength Threat Strategy. This strategy is formulated by leveraging the company's inherent advantages to anticipate and mitigate prevailing risks proactively.
3 Weakness Opportunity Strategy. This strategy is executed by capitalizing on current possibilities while reducing existing disadvantages. The WT Strategy, also known as the Weakness-Threat Strategy, focuses on defensive measures to mitigate the company's weaknesses and proactively avoid potential dangers.
4 Weakness Threat Strategy. This strategy is grounded in defensive measures aimed at mitigating the company's vulnerabilities while simultaneously evading potential attacks.

Quadrant SWOT

To proceed, it is necessary to analyze the SWOT analysis diagram by establishing a point of intersection between the X-axis and the Y-axis, where the value of the SWOT analysis diagram consists of four quadrants, which can be described as follows (Phadermrod, 2016):

1 First quadrant. This quadrant represents an extremely advantageous circumstance. The company possesses favorable circumstances and beneficial qualities that enable it to exploit current prospects. The recommended approach in this situation is to adopt growth-oriented strategies to encourage aggressive expansion.
2 Second quadrant. Despite encountering numerous risks, the organization possesses inherent resilience. The recommended approach is to use strength in order to capitalize on long-term opportunities through the implementation of a diversification strategy, focusing on both product and market.
3 Third Quadrant. The corporation is presented with significant commercial prospects, although it also encounters several internal impediments or deficiencies. The company's strategy is centered around mitigating internal issues in order to capitalize on broader market prospects.
4 Fourth quadrant. This is an extremely adverse circumstance since the organization is confronted with multiple external threats and internal weaknesses.

Transportation

Transportation refers to the process of transferring or conveying something from one location to another (Agamez-Arias & Moyano-Fuentes, 2017). Transportation refers to the act of moving items or persons from one location to another with the purpose of delivering the product to its required destination (Sarder, 2020). Transportation is the act of transporting products or people from one location to another, using various methods or without any means at all—transportation is the act of conveying individuals or commodities between distinct locations utilizing machinery or vehicles. Transportation is a comprehensive system comprising specific infrastructure, as well as flow and control mechanisms, that facilitate the efficient movement of individuals or things between different locations, hence supporting human activities (Rodrigue, 2020). Transportation is a crucial and strategic element that facilitates growth, fosters unity and integrity, and impacts all aspects of life. Transportation is the movement of goods and people from one location to another. This activity requires three essential components: the presence of cargo to be transported, the availability of vehicles as a means of transportation, and the existence of passable roads (de Dios Ortúzar & Willumsen, 2024),

Ports and docks

The pier is a port building that is used to dock and moor ships that carry out loading and unloading of goods and boarding and disembarking passengers. Pier dimensions are based on the type and size of ships docked and moored at the pier (Koloay et al., 2024). When considering the size of the dock, it must

be based on minimum dimensions so that ships can move or leave the pier or load and unload goods safely, quickly, and smoothly. So, it can be concluded that a pier is a port building that is used to dock and moor ships that carry out loading and unloading of goods and boarding and disembarking passengers.

The Port is one of the nodes in the chain for the smooth transportation of sea and land cargo (Gurzhiy et al., 2021). So, in general, a port is an area of water that is protected from storms/waves/currents so that ships can turn (turning basin), anchor/drop anchor, and loading and unloading of goods and movement of passengers can be carried out. According to Indonesian Government Regulation no. 69 of 2001 concerning Ports, what is meant by a port is a place consisting of land and surrounding waters with certain boundaries as a place for government activities and economic activities used as a place for ships to dock, dock, board, and load and unload goods equipped with shipping safety facilities and port supporting activities as well as a place for intra- and inter-mode transfers.

Port performance is used to determine the level of port service to port users (ships and goods), which depends on the ship's service time while at the port. High port performance shows that the port can provide good service (Lakawa et al., 2024). Operational service performance is the measurable work results achieved at the port in carrying out services for ships, goods, utility facilities, and equipment within a certain period and unit. Below are service performance indicators (Vega-Muñoz et al., 2021):

1 Ship Waiting Time (WT) is the amount of time from the submission of a mooring request after the ship arrives at the anchoring location until the ship is moved to the mooring.
2 Guiding Service Time (Approach Time/AT) is the amount of time used for the ship to move from the anchoring location to attach the rope to the mooring or vice versa.
3 Effective Time (ET) is the number of hours a ship actually uses for loading and unloading while the boat is moored.
4 Berth Time (BT) is the amount of time the berth is ready to operate to serve the ship.
5 Receipt/Delivery of containers is the speed of service/reception at the container terminal, which is calculated from the time the transport vehicle enters until it exits, which is recorded at the entrance/exit.
6 Berth Occupancy Ratio (BOR) is a comparison between the time the pier is used and the time available (the dock is ready for operation) in a certain period, which is expressed as a percentage.
7 The Shed Occupancy Ratio (SOR) is a comparison between the number of storage space users and the available stacking space, which is calculated in tons/day or m3/day.
8 Yard Occupancy Ratio (YOR) is a comparison between the number of users of the stacking space and the available stacking space (ready for operation), which is calculated in units of tonnes/day or m3/day.
9 Equipment operation readiness is a comparison between the number of equipment that is ready to be operated and the number of equipment available in a certain period.

3. METHOD

This study employs a qualitative methodology that focuses on conducting comprehensive investigations. It aims to gather data, uncover significant insights, prioritize the process over the outcomes, and utilize inductive reasoning. The research is conducted in the Harbormaster and Port Authority Office, located at Jalan Pelabuhan No. 41, RT 1/RW 3, Mendawai Village, Sukamara District, Sukamara Regency, Central Kalimantan. The data sources utilized encompass primary data, secondary data, and observation. Data gathering is conducted through documentation and interviews. The research involved doing data analysis through descriptive analysis, IFAS (Internal Factor Analysis Summary), EFAS (External Factor Analysis Summary), and SWOT (Strengths, Weaknesses, Opportunities, Threats).

Table 1. Variable Operationalization

No	Variable	Definisi
1.	Internal Factors (Strengths and Weaknesses) and External Factors (opportunities and Threats)	Strengths are internal company factors that support or have advantages for achieving company development. Weaknesses are factors outside the company environment that are beneficial to the company's development. Opportunities are external factors that favor the corporate environment in the development of the company. Threats are factors outside the company's environment that pose a threat to the company and thus hinder the company's development.
2.	Operational	The capability of Sukamara Port to operate optimally and effectively in accordance with the wishes and needs of the community

Source: Processed data, 2022

4. RESULT AND DISCUSSION

Table 2. SWOT analysis of the Class IV Sukamara Harbormaster and Port Authority Office

	Strength	Weakness
Internal Factors	1. The service provided by Sukamara Port is quite good 2. The type of SDI landed has a high economic value 3. TPI, which is still operating	1. Less strategic location 2. The public pier is fragile 3. Lack of port infrastructure facilities
	Opportunities	**Threats**
External Factors	1. High market demand for marine products 2. There are marine products in the form of vaname shrimp, which have high economic value. 3. The marketing network for marine products is quite extensive	1. There are still fishermen who do not obtain documents to carry out marine product fishing operations 2. There are still ships that do not have permits 3. There are still some fishermen who are not aware of the cleanliness around the port dock.

Table 3. IFAS Matrix (Internal Factor Analysis Summary)

No	Indikator	Bobot	Rating	Skor
1	The services provided by Sukamara port are quite good	0,14	3	0,42
2	The type of SDI landed has a high economic value	0,14	3	0,42
3	TPI, which is still operating	0,14	3	0,42
4	Less strategic location	0,19	4	0,76
5	The pier is no longer suitable	0,19	4	0,76
6	Lack of port infrastructure facilities	0,19	4	0,76
				3,54

Source: Primary data developed, 2024

Based on the IFAS Matrix Table, it can be seen that the internal factor is 3.54, indicating that Sukamara Port has an internal position above average or is quite important in carrying out strategies that use its strengths and minimize its internal weaknesses.

Table 4. EFAS Matrix (External Factor Analysis Summary)

No	Indikator	Bobot	Rating	Skor
1	High market demand for marine products	0,15	3	0,45
2	There are marine products in the form of vaname shrimp, which have high economic value	0,2	4	0,8
3	Quite extensive marketing network	0,15	3	0,45
4	Fishermen who do not have a permit	0,15	3	0,45
5	Ships that do not have a permit	0,2	4	0,8
6	Community unawareness of cleanliness around the port	0,15	3	0,45
				3,4

Source: Primary data developed, 2024

Based on the EFAS Matrix Table, it can be seen that the external factor is 3.4, indicating that Sukamara Port, in running its company, is quite good at taking advantage of external opportunities and avoiding threats. Next, the total score value for each factor can be detailed: strength 1.26, weakness 2.28, opportunity 1.7, and threat 1.7. So, it is known that the difference in the total score of the strength and weakness factors is (-) 1.2, while the difference in the total score of the opportunity and threat factors is 0. Below is a cartesian diagram of the SWOT analysis of Sukamara Port.

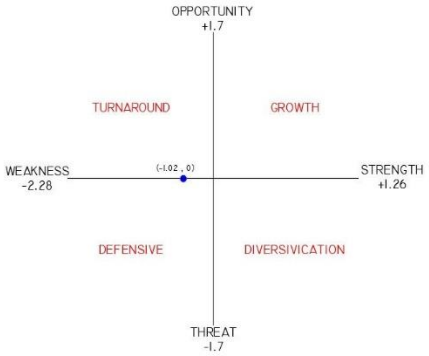

Figure 2. Cartesian SWOT diagram

From the Cartesian diagram, it can be seen that Sukamara Port is very clearly shown in the defensive quadrant, where this quadrant has a negative value. This quadrant represents a situation where the company's condition does not meet expectations. In a difficult situation like this, Sukamara Port needs to survive while maintaining internal performance so that the wheels of Sukamara Port continue to run. It is also hoped that Sukamara Port will have the courage to make breakthroughs so that what was previously a threat can become an opportunity for Sukamara Port.

Table 5. SWOT Matrix

IFAS / **EFAS**	**Strengths** a. The services provided by Sukamara port are quite good b. The type of SDI landed has a high economic value c. TPI, which is still operating	**Weaknesses** a. Less strategic location b. The pier is no longer suitable c. Lack of port infrastructure facilities
Opportunity a. High market demand for marine products b. There are marine products in the form of vaname shrimp, which have high economic value. c. Quite extensive marketing network	SO Strategy a. Expand distribution area b. Increase supervision of sea transport, passenger, goods, and animal traffic activities in order to optimize port production. c. Improving the quality of production results so that they have a high selling price	WO Strategy a. Complementing the facilities that are lacking at the port b. Rehabilitating maritime transportation infrastructure c. Structuring maritime transportation institutions and regulations d. Carry out routine maintenance for existing facilities
Threat a. Fishermen who do not have a permit b. Ships that do not have a permit c. Public unawareness of the cleanliness around the port	ST Strategy a. Tighten the granting of fishing permits b. Carry out security, control, and shipping crimes in port waters to ensure the smooth running of activities in the port area.	WT Strategy a. Carry out pollution prevention measures with the help of SAR in port waters. b. Urge the public to maintain cleanliness to reduce water pollution.

5. CONCLUSION

The research conducted at Sukamara Port using SWOT analysis revealed that the port may enhance its profitability by using SO strategies, which involve leveraging its strengths and capitalizing on available opportunities. This approach ensures the preservation of key aspects that contribute to its competitive advantage while exploiting the potential benefits offered by the market. In order to develop an effective ST strategy, the Port must capitalize on its current strengths to mitigate potential threats. The port's vulnerabilities and opportunities must be addressed through a WO strategy that maximizes current opportunities while reducing weaknesses. Lastly, the WT method necessitates ports to mitigate flaws and evade attacks. By accomplishing this, the port can sustain and enhance its operations, resulting in the maximization of port productivity.

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