Similarity Strategy For Ship Industry Development In Supporting State Defense

By Sutrisno

STRATEGY FOR SHIP INDUSTRY DEVELOPMENT IN SUPPORTING STATE DEFENSE

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ABSTRACT

The location of Indonesia's strategic position and wealth of natural resources and having 3 ALKIs have great economic potential and have a serious level of vulnerability and security. To demand integrity and territory of sovereignty a strong national defense is needed by supporting all components of the nation. National industry as one of the supporting components in the national defense system has an important meaning including national industry in the shipping industry sector, has a great opportunity to improve the national economy. However, the shipping industry still needs to be developed to be able to fulfill the demand for shipbuilding or repairing and maintaining ships. In this study discussed the strategy of developing the shipping industry to strengthen national defense. The research method used was descriptive qualitative and quantitative SWOT analysis. This study found the strategy of developing the shipping industry is to improve shipyard facilities and infrastructure and also by increasing quality human resources, to improve management and mastery of technology and policy support from the government.

Keywords: *National Defense, shipping industry, SWOT.*

1. INTRODUCTION

Indonesia is the largest archipelagic country in the world with an area of 2/3 of the ocean (5.9 million km2), with details of 0.8 million km² of territorial sea; 2.3 million km² of island sea; and 2.7 million km² Exclusive Economic Zone (C.S. Marnani, 2016). Indonesia is also a country that has the world's number two longest coastline after Canada with the length of the Indonesian coastline reaching 95,161 km (Lasabuda1, 2013). Indonesia has abundant natural resources both energy reserves, fisheries, marine tourism. The source of Indonesia's natural wealth if it reaches Rp. 200,000 trillion Besides that, Indonesia also has three Indonesian archipelagic pathways (ALKI), making it a strategic shipping lane that can be utilized as an economic, geopolitical and martim culture development. This indicates that the ship has a very important role.

In an effort to safeguard and protect the sovereignty and wealth of natural resources therein requires an effort to form a strong national defense system. To realize strong resistance, a national defense strategy is needed to determine the direction of policy, posture and development of national defense, both military and non-military defense strategies. (Kemenhan, 2014). A strong and reliable defense system, namely a defense system that involves all components of the nation involving all citizens, the region and resources that are held in a sustainable manner to safeguard and uphold the sovereignty of the country, the safety and integrity of the entire nation and state (Kemensetneg, 2002).

National Industry is one part of the national defense component that is included in the supporting component. This is in line with the Government's vision to build Indonesia as one of the toughest industrial countries, as stated in Presidential Regulation No. 28 of 2008. The vision of Indonesia's National Industrial Development is Become a Tangguh Industrial Country. The Tangguh industry is characterized by first having a strong, deep, healthy and just national industrial structure, both industries that are highly competitive at the global level and the three industries that are innovation and technology based (Puskom, 2015). In the national industrial development plan contains the

mainstay industry of the future, supporting industries and upstream industries, where the three industry groups require basic capital in the form of natural resources, human resources, as well as technology, innovation and creativity. Future industrial development also requires prerequisites in the form of adequate infrastructure and financing, and supported by effective policies and regulations. To achieve the vision of becoming a strong industrial country, it is necessary to strengthen and control the mainstay industries of the future, one of which is the transportation industry such as the automotive industry, shipping industry, aerospace industry and the fire ship industry. (Puskom, 2015).

As a maritime country, the shipping industry which is part of the future mainstay industry has a very important role to support the sustainability of the sea transportation sector, both regarding repair, maintenance and new shipbuilding. Looking at the important and urgent function and role of the shipbuilding industry, it is appropriate that the shipbuilding industry is a very strategic maritime industry in the future. In accordance with the presidential instruction (INPRES) number 5 of 2005 concerning the empowerment of the national shipping industry, in its implementation it also depends also on the readiness of the national shipping industry.

UNCTAD on October 3, 2018 has published Review of Maritime Transport (RMT). In the review, one of them, wrote the number of merchant fleet fleets in the world as of January 1, 2018 was 94171 units, with a total tonnage of 1.92 billion DWT. Of the total vessels, the largest population is Dry Bulk Carrier, which is 42.5 percent by dwt. Followed by tanker type (29.2) and container (13,1). Dry bulk carrier ships grew by 20 million dwt in 2017. But growth, the largest type of gas carrier ship, reached 7 percent compared to 2016. Of the total number of vessels, tonnage of vessel ownership was Greece

(17.3%), Japan (11.7%), China (9.6%), and Germany (5.6%). Chinese-owned vessels account for 5512 units, the most in the world in a population. Followed by Greece (4371), Japan (3841), Germany (2869), and Singapore (2629). Indonesia ranks 8th with 1948 ships. But it is ranked 20th if it is calculated based on tonnage (20 million dwt). Throughout 2017, 65 million gross tons (gt) of new vessels were completed. While the ships that were scraped aka those that were sold were 23 million gt.

Taking into account the current condition of the national shipping industry, this study discusses "How to develop a shipping industry in terms of facilities, facilities and infrastructure, human resources and mastery of shipping technology to support national defense at sea". This research is expected to be able to provide an overview of strategies for the development of the domestic shipping industry so as to be able to carry out the process of maintenance, repair and overhaul of ships in general and in handling warships.

2.　MATEIAL/METODHOLOGY
2.1　National Defense Strategy

Security strategies are made to determine risks and threats and what actions if an attack occurs, what steps must be followed to minimize the effects and capture the attacker (Nastasiu, 2016). National defense is organized and prepared early by the government through efforts to build and foster the ability to realize the deterrence of the nation and state. National defense is also called national defense is all efforts to defend the sovereignty of the country, the integrity of the territory of a country and the safety of all nations from threats and disruptions to the integrity of the nation and state both from within and from outside. National defense is a joint force (civil and military) organized by a State to guarantee its territorial integrity, protection from people and / or safeguard its interests.

In Republic of Indonesia Law Number 3 of 2002, Indonesian defense adheres to the Universal Defense System to deal with all forms of threats and disturbances that threaten the sovereignty of the state both from outside and arising within the country. In the universal defense system to face the threat of the military placing the TNI as the main component and all other national resources, as a reserve component and supporting component. In the face of non-military threats, the Universal Defense System places government institutions outside the defense sector as the main elements in accordance with the form and nature of the threats faced and supported by other elements of the nation's strength. Thus, in the face of non-military threats, the TNI became one of the supporting elements

2.2 National Industry

National industrial development contains a future mainstay industry, supporting industries, and upstream industries. To support this industry group, the availability of natural resources, human resources, technology, innovation and creativity is needed. Future industrial development also requires prerequisites in the form of adequate infrastructure and financing, and supported by effective policies and regulations. National industry is a means of driving national economic growth. in increasing the competitiveness of the national economy, national industry is one sector that can be used as a foundation, this must be balanced by increasing through the production process, the distribution process and the consumption of products produced by national industries.

In an effort to achieve national industrial development goals priority industry development programs are carried out jointly by the Government, State-Owned Enterprises, and the private sector. The government in establishing national industrial policies determines 10 priority industries which are grouped into mainstay industries, supporting industries and upstream industries, one of which is in the mainstay industry, namely the transportation industry consisting of the motor vehicle industry, shipping industry and the aerospace industry.

2.3 Strategy Theory

Strategic Management is the process of revising and analyzing internal and external environments to plan, implement and observe strategies (Charu Shri, 2015). At first the term strategy was used in the military world which was interpreted as a way of using all military power to win a war. While in terms of terminology many experts have proposed a definition of strategy with a different point of view, but basically all of them have the same meaning or meaning, namely achieving goals effectively and efficiently, among experts who formulate the definition of strategy is one of the processes by which to achieve a goal and oriented towards the future to interact in a competition to achieve the goal. According to (Istiqomah, 2017) management strategy can be defined as art and science to formulate, implement, and evaluate cross-functional decisions that enable organizations to achieve their goals

According to (David, 2011) management strategy can be defined as art and science to formulate, implement, and evaluate cross-functional decisions that enable organizations to achieve their goals. Historically, the main benefits of strategic management have helped organizations formulate better strategies using a more systematic, logical and rational approach to strategy choices. While (Hunger & Wheelen, 2010) explained that management strategy is a series of managerial decisions and actions that determine long-term performance. Management strategies include environmental observation, strategy formulation

(strategic planning or long-term planning), strategy implementation, and evaluation and control. Strategy management emphasizes the observation and evaluation of environmental opportunities and threats by looking at strengths and weaknesses. According to Bijah Subijanto (2004) on a strategy based on law number 3 of 2002 concerning National Defense it is said that the purpose of national defense is to safeguard the sovereignty of the State, maintain regional integration, and protect the safety of the Indonesian people.

2.4   Analisis SWOT

SWOT is one of the most popular strategies that aims to identify organizational strengths and weaknesses and opportunities and threats in the environment (X.P. Wang*1, 2014). SWOT analysis is used to understand and evaluate current positions in terms of strengths, weaknesses, opportunities, and threats in an organization, company, project or business speculation (Rangkuti., 2012). Of the four factors that make up the SWOT acronym (strengths, weaknesses, opportunities, and threats). In the process of SWOT analysis involves the direction of specific goals of business or project speculation in determining and identifying internal and external factors that have influence or not in achieving the expected goals.

SWOT analysis can be applied by analyzing and sorting out various things that affect the four factors, then applying them in the SWOT matrix image, where the application is how strengths are able to take advantage of existing opportunities, how to overcome weaknesses (weaknesses) which prevents the existing opportunities, then how strengths are able to deal with existing threats, and finally how to overcome weaknesses that are able to make threats become real or create a new threat.

2.5   Determination of IFAS and EFAS Matrix

Having known internal and external factors, after internal and external strategy factors of a company identified, after the data has been processed included in an IFAS and EFAS table prepared to formulate these internal strategy factors in the framework of Strength and Weakness. As for the external strategy factor in the framework of Opportunities and Threats (Nurcahya Dwi Asmoro, 2018). From the results of the respondents' questionnaires, the results of the identification of each variable are then sorted according to rank or rated using the number 4 (good), 3 (good enough), 2 (not good) and 1 (bad). Then we determine the weight of each variable based on the results of the comparison of the rating by means of the rating compared to the rating of all the variables in the table. Then the sum of all weights is 1.0.

2.6   Metodologi

This study uses a bibliographic with quantitative, namely a combination of descriptive qualitative approaches to literature. Secondary data obtained from library documentation data and theoretical data. Meanwhile, the primary data of the study was obtained relying on observations in the field of informant / respondent data related to the subject of the study. To determine the respondent, purposive sampling technique was used by preparing the respondent's target beforehand but in its development the respondent could be replaced. From the data obtained then the data is processed using the SWOT method, namely by identifying and analyzing and determining the existing data grouped into internal and external factors.

2.7   Thinking Framework

From the description above can help develop the shipping industry, it is necessary to consider internal and external factors, so that it can produce a

highly competitive shipping industry, provide added value for regional economic development, and improve its managers.
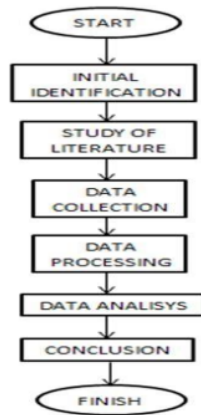

Figure 1. Thinking Framework

Target :   The purpose of this study is to provide an analysis of the importance of the strategy of developing the marine industry in supporting defense especially in preparing defense equipment in maintaining sovereignty at sea.

Steps :   The step of this research is step 1 to examine the condition of the current shipping industry resistance, step 2 to do an analysis, step 3 provides a conceptualization of the development strategy of the shipping industry, step 4 draws conclusions.

3.   RESULTS AND DISCUSSION

3.1   Maritime Industry

The drive to develop a maritime-based industry came from the Ministry of Industry. This is indeed intended to advance the economy. One of the concerns of the government is the development of the shipyard industry. For the repair shipyard industry there are 250 units of production facilities with reparation capabilities reaching capacities of up to 12 million deadweight tonnage (DWT) / year, 85% utilization. While the new shipyard has 160 production facilities with a capacity of one million DWT / year, and 45% utilization. From the Ministry of Industry note that in 2017, there were 218,300 gross tonnage (GT) orders. To meet the needs of the domestic market, only 83% can be fulfilled, which can be fulfilled around 120 units or 135,440 GT, while the rest is for exports. This causes the number of development orders from the government in 2018 to be limited, so some shipyard facilities are not used (Kontan.co.id, 2018). Besides that, in the case of spare parts there is no support from the manufacturers of components / spare parts that are needed in the construction of ships, so that 60% - 70% of the components must be imported from abroad. (S.Saroso, 2015). This condition is a weakness for the domestic maritime industry that has to find a solution. Government policy to build a maritime industry is an opportunity for industry players in this sector, including foreign investors.

3.2 Availability of Parts

To ensure the smooth operation of ships, they can operate safely and smoothly, so support from the availability of spare parts or spare parts is needed. To ensure the availability of these spare parts special attention is needed from industrial management, to be able to provide stock of the main spare parts of the ship. Especially the spart parts that cannot be produced from domestic industries such as cylinder liners and cylinder blocks, because these two components can only be fulfilled from the producer country (S.Saroso, 2015). So that many of the national ship ships carry out repairs and maintenance of ships in foreign shipyards

3.3 Human Resources

Strategic quality improvement for Human Resources is the main requirement in the era of globalization to be able to compete and be independent. This is what is being faced in the

context of the MEA which has started running since the beginning of 2016 ago. Employees involved have a high level of energy, are enthusiastic about their work, and they are often fully immersed in their work so time passes. (Despoina Xanthopoulou a, 2009) In an effort to improve the quality of maritime human resources, the government implemented several separate policies to strengthen Indonesian maritime human resources. Some of these policies are improving marine services, developing HR competency standards, improving science and technology, researching and developing marine information systems, improving community nutrition, protecting workers, compiling education curricula with maritime visions, improving the quality and number of maritime colleges, improving quality and the number of shipping and fisheries schools, as well as developing marine science and technology facilities and infrastructure (KemenkoKemaritiman, 2017).

3.4. Identification of Internal-External Environment (IE) Via IE Matrix

Internal analysis is done to get the strength factor that will be used and the weakness factor that will be anticipated. To evaluate it, the IE evaluation matrix (Internal-External) is used. The following are the results of environmental analysis. Important points that can be taken from the results of the analysis affect the strategic decision making. The influential factors are summarized in Table 1.

Table 1. Factors Affecting Decision Making

	Influential factor
1	General managerial in the shipping industry
2	Government program on maritime axis through the sea highway program
3	Ability to build ships by domestic shipping industry
4	Ability to repair ships by domestic shipping industry
5	Spare parts depend on the supplier
6	Technology demands on the shipping industry
7	Quality of Human Resources in the country
8	Implementation of government policies through the Cabotage Principle
9	Request for domestically-made fleets
10	Weakened Capital Sector
11	National Shipyard Empowerment

From these decision-making points, it is then processed into the SWOT matrix table by entering these points into groups of internal factors in the position of strength or weaksness, and also in the external factor in the opportunity position or treats according to the results obtained from respondents

The position of these points can be seen in Table 2.

Internal / Eksternal	Strength	Weaksness
	• Ability to repair ships by domestic shipping industry • Ability to build ships by domestic shipping industry • Availability of shipping industry facilities	• Spare parts depend on the supplier • Quality of Human Resources in the country
Opportunity • Government program on maritime axis through the sea highway program • Implementation of government policies through the Cabotage Principle • National shipping industry Empowerment • Request for domestically-made fleets	**Strategy SO** Make a strategy by optimizing the power to take advantage of opportunities	**Strategy WO** Make a Strategy by minimizing weaknesses to take advantage of opportunities

Treats	Strategy ST	Strategy WT
• Technology demands on the shipping industry • Weakened Capital Sector	**Strategy ST** Make a strategy by optimizing the power to overcome threats	**Strategy WT** Make a strategy by minimizing flexibility and overcoming threats

After the influential factors are grouped into the SWOT matrix, proceed with weighting on internal factor (IFE) and external factor (EFE). Weighting values use members from 1 to 4 which are obtained from the results of questionnaires from the respondents. IFE weighting processing as in table 3 and EFE in table 4.

Tabel 3. Internal Faktor Evaluation

Strenght	Rating	Weight	Skor (rating x weight)
Amenities	4	0.57	2,29
Human Resource Ability	3	0.43	1,29
Total		**1,00**	**3,58**
Weakness			
Quality of Human	**3**	**0,5**	**1,5**
Resources	**3**	**0,5**	**1,5**
Availability of Parts			
Total		**1,00**	**3,0**

Tabel 4. Eksternal Faktor Evaluation

Opportunity	Rating	Weight	Skor (rating x weight)
World maritime axis	3	0,3	0,9
Cabotage Principle shipping	2	0,2	0,4
industry Empowerment	3	0,3	0,9
Ship Request	2	0,2	0,4
Total		**1,00**	**2,60**
Treats			
Technology demands	3	0,5	1,5
Weak Capital	3	0,5	1,5
Total		**1,00**	**3,00**

From the results of IFE and EFE table processing, then determine the position of the strategic quadrant by entering into the weight score table by putting the value of Strenght (S) and Weakness (W) in the Internal column and the difference between (S) and W as the X axis. Opportunity (O) and Treats (T) are placed in the external column and the difference between O and T is the value on the Y axis.

In Table 5 we can find that the value of the X axis is 0.98 and the value of the Y axis is 0.40.

Table 5. Processing of Quadrants

Internal (X)	Value	Eksternal (Y)	Value
Strenght	3,58	Opportunity	2,60
Weaksness	3,00	Treats	3,00
Score difference	**0,58**		**-0,40**

From the difference in value in table No. 5, we enter the strategy quadrant to determine the strategy, so we can analyze what strategies are appropriate to be used in solving the problem
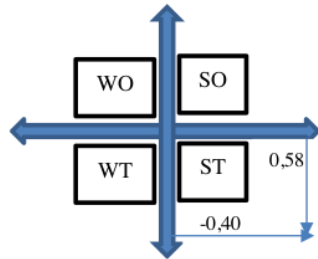

Figure 2. Strategy quadrant

Looking at the picture, that the strategy position lies in the ST quadrant, this shows that the ST strategy is used to solve the problem by optimizing the existing strength to overcome the threats faced.

4.   CONCLUSION

From the results of the discussion it can be concluded that the strategy for the development of the domestic shipping industry is to improve shipyard facilities and infrastructure and also to improve HR capabilities. Of course this must be supported by improving the quality of human resources in mastering the latest technology, either by conducting training training, courses or by participating in higher education, of course this is also followed by government policies to make it easier for companies to borrow capital to advance the shipping industry

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