OPTIMIZATION OF TNI AL BASE LOGISTIC SUPPORT IN ORDER TO INCREASE THE ABILITY AS A BASE CARRIER IN SUPPORTING OPERATIONS UNITS

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ABSTRACT

The development situation of the regional strategic environment is still dominated by the South China Sea conflict (SCS) involving several countries in the ASEAN region. This conflict was mainly triggered by China's unilateral claims regarding the nine dash line area "(Minister of Defense, 2016). The Indonesian Navy has bases spread across various islands in the Republic of Indonesia and is divided into three Indonesian Fleet commands, namely Koarmada I in Jakarta, Koarmada II in Surabaya and Koarmada II in Sorong. Due to the many obstacles and differences in the character and socio-economic conditions of each area used as a base by the Navy, complex problems arise in determining policies in determining logistical support. This study aims to improve inter-island logistical support capabilities in supporting the Indonesian Navy's operational units. To examine the above problems, it is necessary to identify the threat trend using the content analysis method approach with the SWOT analysis method. In this approach, a proper ranking is also carried out in making decisions using the SWOT matrix calculation which can produce the best strategy formulation by giving the weight and rating of internal and external factors to the four quadrants so that it is known that the results are in quadrant III, which supports the turn around strategy with the difference. between the strengths and weaknesses of 0.18 while the opportunities and threats of 0.73.

Keywords: *Nine dash line, content analysis method with SWOT analysis method*

1. INTRODUCTION

The Indonesian Navy is a major component of state defense, especially at sea, has the main task of implementing national defense policies, namely maintaining state sovereignty and territorial integrity, protecting the honor and safety of the nation, carrying out War Military Operations and Military Operations Apart from War and actively participating in regional peacekeeping tasks. and international. This is in accordance with government policy regarding the concept of Indonesia as a World Maritime Axis (Presidential Decree No. 16, 2017).

One of the main tasks of the Navy is to enforce sovereignty and law in the waters of national jurisdiction with the configuration of an archipelagic state where two-thirds of its territory is the sea. This regional configuration results in high demands for the readiness and readiness of Indonesian Navy units to carry out operations, therefore the role of logistics is crucial to the success of the implementation of the Navy's Task (Kasal, 2010).

Anticipating the potential threat of conventional warfare due to violations of the Indonesian archipelago, it is necessary to prepare ourselves by building military forces for operational purposes. The success of an operation cannot be separated from adequate logistical support. Given that in addition to strategy and tactics, one thing that is dominant and very much supporting the achievement of victory is adequate logistical

support for personnel and combat equipment used. Departing from the limited resources, researchers try to solve the problems faced by bases so that logistical support can be carried out effectively and efficiently.

Currently the base conditions are found 3 main problems, namely the number of personnel that is still lacking, the anchoring facilities that are not optimal and the infrastructure that is not optimal. formulating a policy that is outlined in detail in the process of determining strategies and efforts to improve some of the obstacles faced in the field today.

2. LITERATURE REVIEW

2.1 Logistics Management Theory.

Logistic support is a part that considers effective and economical support (Benjamin S Blanchard, 1992). This is an integral part of the aspects of system planning, design and development, evaluation, results of construction / construction and its use. The main element of logistical support is maintenance planning which leads to the development of an integrated maintenance concept with various other supports.

The next main element is inventory support consisting of all spare parts including repairs, consumables parts, software, test equipment, transportation and handling equipment, training equipment and other facilities (documentation, procurement, material distribution, storage, personnel related to expertise and maintenance of inventory repair Next is the test and support equipment which includes all equipment, equipment for special monitoring equipment, diagnostics, calibration and metrology, positions for repair, service equipment and other necessary handling Then distribution and transportation which includes special storage, containers (reusable) and disposable), packing, moving goods and mobile facilities.Other elements are personnel and training, namely to get the personnel needed for installation, operation, handling and repair as well as the level of expertise according to the required fields supported by the facility itas, namely the means / place of activity. Then the data which includes manuals / procedures, technical drawings; and software related to programming data for monitoring and diagnosis.

2.2 Teori Integrated Logistic Support.

The function of Integrated Logistic Support is an integrated logistics support system / equipment that ensures that its implementation is carried out efficiently and effectively (Jacobsen & Scott, 1996) This will determine that all elements of logistical support are planned, obtained, used, controlled and provided with time and cost. efficient. The things that are fundamental in integrated logistics support are as follows:

a. Machining support.

   Includes safety configuration and management.

b. Maintenance support.

   Support that includes maintenance, repair to general overhoul level for support needs during operation and day-to-day operational support.

   Supply management integration is a series of activities that include coordination, scheduling and control of procurement, production, supply and delivery of products or services to users which includes daily administration, operations, logistics and information processing from users to suppliers.

d. Analysis of training needs and training support.

e. Distribution activities ranging from packing, shipping, storage and transportation to logistical support.

f. Professional human resources in handling logistics.

g. Technical data includes data logistics required.

h. Risk management.

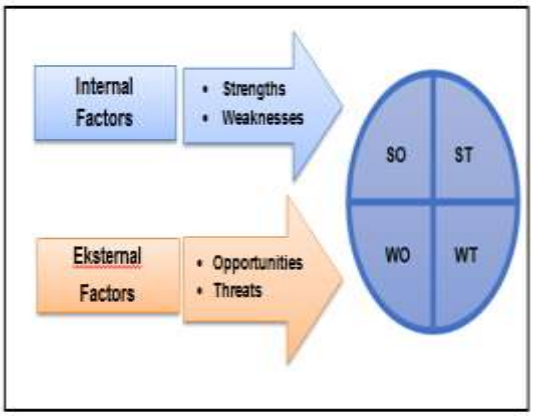
i. Support base facilities.

j. Deletion.

2.3 SWOT Analysis Theory.

SWOT analysis is the systematic identification of various factors to formulate the strategy of an organization. This analysis is based on logic that maximizes Strengths and Opportunities, but simultaneously minimizes Weaknesses and Threats.

Research shows that the performance of an organization can be determined by a combination of internal and external factors. These two factors must be considered, the internal environment (Strengths and Weaknesses) and the external environment (Opportunities and Threats). The SWOT analysis compares the two factors.



SWOT Matrix Analysis for Strategy Formulation

The planning process in a SWOT analysis goes through three stages, namely:

a. Data Collection Stage. At this stage the data obtained are classified into external data which are opportunities and threats and internal data which are strengths and weaknesses.

b. Analysis Phase. After collecting all the required data, a table of internal data and external data is created for external data, the table is called EFAS (external strategic factor analysis summary), while for internal data the table is called IFAS (Internal Strategic Factors Analysis Summary), then the two data are weighted as follows :

1) Arrange them in column 1 (5 to 10 opportunities and threats as well as strengths and weaknesses in each table).

2) Column 2 gives weight to each of the factors that have been made 1 (very important) to 0 (not important).

3) In column 3, calculate the rating for each factor by giving a scale ranging from 4 (out standing) to 1 (poor). For the rating value for the opportunity value is positive, the greater the opportunity is given a rating of +4, but on the other hand, if it is small, it is given a value of +1, this is inversely proportional to the rating for threats, as well as for strengths and weaknesses.

4) In column 4 is the result of multiplying the weight in column 2 with the rating in column 3.

5) In column 5 provide comments or notes on why certain factors were chosen and how their weighted scores were calculated.

6) Add up the weighted scores in column 4 to get the total weighted score, this value is a comparison of whether or not the external and internal environmental conditions can be used for further analysis to be complete and accurate with the SWOT matrix model.

7) The SWOT matrix can clearly describe how external opportunities and threats are adjusted to their strengths and weaknesses. The matrix is described as follows:

IFAS / EFAS	Strengths (S) Determine 5-10 internal strength factors	Weaknesses (W) Determine 5-10 internal weakness factors
Opportunities (O) Determine external opportunity factors	SO Strategy Create a strategy here that uses power to take advantage of opportunities	WO Strategy Create a minimizing strategy to utilize
Treats (T) Determine external threat factors	ST Strategy Create a strategy here that uses power to overcome threats	WT Strategy Create a strategy at minimize weaknesses avoid threats

Figure SWOT Matrix Diagram

1.SO Strategy

This strategy is made based on the mindset of the organization, namely by utilizing all the power to seize and take advantage of maximum opportunities.

2.ST Strategy

This is a strategy in using the strength of the organization to overcome threats.

3.WO Strategy

This strategy is implemented based on the utilization of existing opportunities by minimizing existing weaknesses.

4.WT Strategy

This strategy is based on activities that are defensive and try to minimize existing weaknesses and avoid threats.

SWOT Analysis Diagram

Quadrant I:

Is a very favorable situation, the organization has the opportunity and strength of the strategy being implemented that is supporting aggressive growth policies.

Quadrant II:

There is a threat, but it still has internal strength, the strategy being implemented

use the power to exploit long-term opportunities by means of a diversification (product / market) strategy.

Quadrant III:

Organizations face enormous market opportunities, but there are some internal obstacles / weaknesses. The strategy must be implemented by minimizing internal problems in order to seize market opportunities.

Quadrant IV:

Is a very unfortunate situation, the company faces various internal threats and

weaknesses

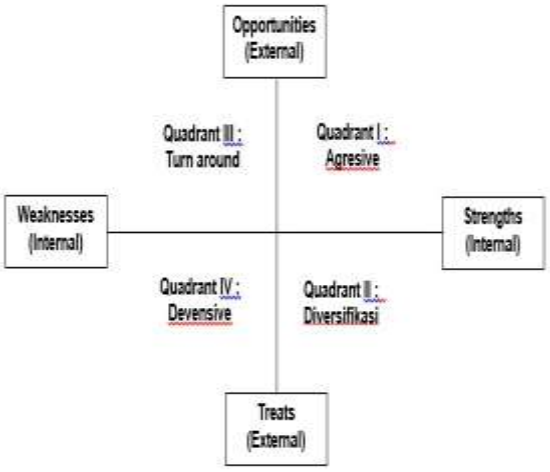


Figure SWOT Analysis Diagram

2.4 Teori Metode Content Analysis.

Content Analysis is a research technique for making repicable and valid inferences with due regard to the context. As a research technique, content analysis includes specific procedures for processing scientific data with the aim of providing knowledge, opening new insights and presenting facts (Klaus Krispendoff, 1993). In this study, later it will not only use a quantitative research model but also use qualitative research methods so that in this study, researchers will examine documentary documents in the form of text, images and symbols which are combined into weighting and rating figures in the hope of knowing the first, second priority. , third and so on.

Furthermore, as a scientific method, Content Analysis has a framework as a guideline for its use as proposed by Type (in Krippendorff, 1980: 35-36) as follows:

a. Pragmatic Content Analysis, which is a procedure to understand text by classifying signs according to their possible causes or consequences. (For example, counting the number of times a word is written or said, which can result in the appearance of liking or disliking a government regime.)

b. Semantic Content Analysis, which is a procedure that classifies signs according to their meaning. (For example, counting the number of times the word democracy is used as a reference as a choice of political systems adopted by most of the world's people). Or, for example, how many times the word Indonesia was mentioned by Obama as a reference to an example of a country with diversity of ethnicity, culture and religion, which is able to unite everything within the framework of a unitary state. In detail, Type develops Semantic Content Analysis into three kinds of categories as follows:

1) Designation Analysis, which is to calculate the frequency of how often certain objects (people, objects, groups, concepts) are referred to. This model analysis is also commonly referred to as Subject-Matter Content Analysis.

2) Attribution Analysis, which is to calculate the frequency of how often certain object characteristics are

referred to or referred to. (For example, characterization of the dangers of using drugs for life)

3)Statement Analysis (Assertion Analysis), which is text analysis by calculating how often certain objects are labeled or given special characters. (For example, how often has Iran been referred to by America as a country that has challenged the international community's appeal in terms of building nuclear projects).

c. Sign-Vehicle Analysis, namely the procedure for understanding text by counting the frequency of the number of times, for example, the word Indonesia appeared in Obama's remarks during a visit to Indonesia.

3. Research methods

This research was conducted in four stages, namely the preliminary stage, data collection, data processing, analysis and finally the Conclusion and Suggestion Stage. Shown in the flow chart as follows:

The preliminary stage consists of problem identification, research objective setting, literature study, field study. At the data collection stage, namely data that supports the data processing process.

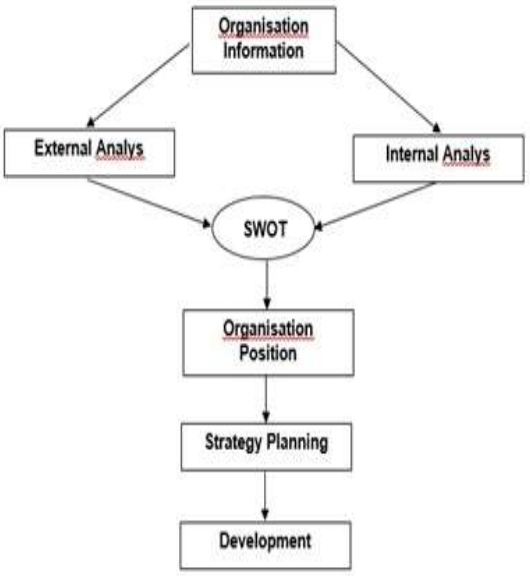


Figure Flow Chart of Though

The preliminary stage consists of problem identification, research objective setting, literature study, field study. At the data collection stage, namely data that supports the data processing process. At the data processing stage, the steps for calculating the matrix are carried out by giving weight and rating values first. In the Analysis Phase, an analysis is carried out from the results of the calculations that have been contained in the quadrant which will later be used as an option for strategies and efforts to resolve these problems. At the conclusion stage, conclusions are drawn from the research that has been carried out as well as suggestions for further research that are related to this research.

4.Results and Discussion

Strategies, which are derived from policies, can be formulated to provide certainty or ensure that all existing problems can be answered by considering opportunities and threats as well as using the strengths and weaknesses of logistical support. has been identified in the discussion of the current conditions by paying attention to the indicators of success. SWOT analysis is used to identify the strategy to be formulated. These factors will be used as a calculation of weight, rating and score which can be described as follows:

a. Determine the strengths and weaknesses as internal factors.

1)Strength Factor (Strength).

The factors that can be a strength in supporting the task of the Indonesian Navy to increase its capability in implementing logistical support at Pangkalan are as follows:

a) Professionalism of soldiers sufficient

b) The spirit of the warrior high enough

c) The Indonesian Navy's policy of prioritizing the development of the foremost island base forces is of strategic value.

2)Weakness factor

The weakness factors that can inhibit the strength factor are as follows:a) SDM prajurit yang terbatas

b) The base facility has not standard

c) Limited infrastructure

b. Determine the opportunity and constraint factor as an external factor.

1) Opportunity Factor

In determining the strategy, it is inseparable from the opportunity factor, which later can be beneficial for the strategy to be taken, as for the things that can be used as opportunities are as follows:

a) The strategic position of the island area which is occupied by the base

b) Government Policy on the World Maritime Axis

c) Government support in the program to accelerate development on islands which are occupied by bases

c. Threat factor.

1) Conflict Disputes still exist state maritime border country region

2) Inclined marine weather extreme

3) There is a threat of action crime at sea

The next step is to carry out weighting on internal factors and external factors, the weighted value is obtained by taking data with experts in the Indonesian Navy in the role of diplomacy. The results of weighting the SWOT factor are as follows:

Strengs	weight	rating	Weightx Rating
Soldier professionalism	0.13	2	0,26
High morale soldi	0.12	3	0,36
Indonesian Navy policy regarding priority development of strategic island base forces	0.20	2	0,40
			1,02

weakness	weight	rating	Weightx Rating
Human resources of soldiers are limited	0.30	4	120
base facilities are not standard	0.13	4	0,52
limited infrastructure	0,12	3	0,36
			2,08

Tabel faktor Internal

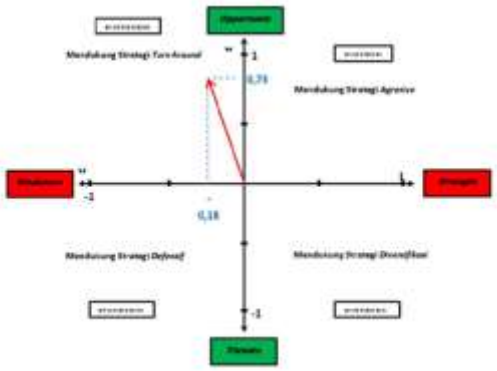
Oportunities	weight	rating	Weight x Rating
outer islands strategic position	0.30	3	090
government policy on the world's maritime axis	0.17	3	0,34
government support for the development of the outer islands	0,20	3	0,60
			`,84

Threats	weight	rating	Weigh tx Rating
border conflicts with other countries	0.16	2	0.32
extreme weather	0.17	2	0,34
threat of crime at sea	0,15	3	0,45
total	1;00		1.11

Tabel faktor Internal

Internal (X)	score	Eksternal (Y)	score
Strength	1.02	Opportunity	1.84
Weakness	1.20	Threat	1.11
difference	-0,18	difference	0,73

Quadrant Calculation Table



Based on the results of the calculation table and the SWOT quadrant image above, it can be seen that the right strategy is in quadrant III, (a combination of weakness-opportunity (W-O) which means it supports the Turn-Arround strategy, which means using available opportunities to turn weaknesses into advantages.

IFAS / EFAS	**Strengs (S)**	**Weakness(W)**
	1.Soldier professionalism 2.High morale soldier 3.Indonesian Navy policy regarding priority development of strategic island base forces	1.Human resources of soldiers are limited 2.base facilities are not standard 3.limited infrastructure
Oportunities(o) 1.outer islands strategic position 2.government policy on the world's maritime axis 2.governme nt support for the development of the outer islands	**strategi SO** Combination of strategies: *S1O1,S1O2 ,S1O3 *S2O1S2O2, S2O3 *S3O1,S3O2 ,S3O3	**Strategi WO** Combination of strategies *W1O1,W1O2. W1O3 *W2O1,W2O2, W2O3 *W3O1,W3O2, W3O3

Threats (T)	Strategi (ST)	Strategi (WT)
1.border conflicts with other countries 2.extreme weather 3.threat of crime at sea	Combination of strategies: *S1T1;S1T2;S1T3 *S2T1,S2T2,S2T3 *S3T1,S3T2,S3T3	Combination of strategies: *W1T1,W1T2,W1T3 *W2T1.W2T1,W1T3 *W3T1,W3T2,W3T3

SWOT Quadrant Combination Table

e. From data processing using SWOT, it can be concluded from the results of data processing, namely as follows:

1) The difference between strengths and weaknesses is -0.18 points.
2) The difference between opportunities and threats is 0.73 points.
3) From the results above, the SWOT position is in quadrant III, which means it supports the turnaround / investment investment strategy.

NO	STRATEGY FORMULATION	Weight x Rating		total	rang king
1	2	3		4	
1	W-01	120	0.90	1,08	1
2	W-02	120	0.34	0.41	
3	W-03	120	0,60	0,72	2
5	W-01	0,52	0.90	0,47	3
6	W-02	0,52	0.34	0,18	
7	W-03	0,52	0.60	0,31	
9	W-01	0,36	0,90	0,32	
10	W-02	0,36	0,34	0,12	
11	W-03	0,36	0.60	0,22	

In order to optimize the capability of logistical support to support the duties of the Navy, an appropriate strategy is needed by taking into account the factors that influence it so that it can achieve the expected conditions. The following are several strategies that need to be formulated based on predetermined policy directions in order to optimize the capability of the TNI AL bases function

a. Strategy - 1.

Carrying out maintenance and repair functions to support the maintenance of KRI and other defense equipment elements in accordance with the standard of base functions to support TNI / TNI AL operations.

b. Strategy - 2.

Carry out increased base functions in terms of maintenance through coordination and cooperation with the Government to build Pangkalan maintenance facilities

c. Strategy - 3.

Improving anchoring facilities through the construction of independent mooring facilities and pontoon wharves to ensure speed in providing logistical support for elements of the Navy operations that will carry out refilling.

In order to realize these policies and strategies in order to face the existing opportunities and constraints, concrete efforts are needed, including:

a. Strategic Efforts 1.

1) Realizing the availability of spare parts for elements of the Indonesian Navy operations, including KRI, submarines, aircraft and marine combat vehicles by building an integrated warehousing facility as a sub-depot for supplies on Island B.

2) Determine the basis for determining needs including material strength in accordance with provisions along with reserves, norm or stock index, number of days of provisions in accordance with operating needs.

3) In this case Disbekal cooperates with related agencies, namely PT. Pertamina in ensuring the availability of fuel and lubricating oil which is needed at any time, especially types of special lubricants or those that are difficult to obtain and also for the possibility of easy distribution so that they can be directly pushed to areas that can later be stored in the warehouse of the Sub Depo of Supplies on the island of B.

4) Build Ammunition and Weapons Warehouse in support of defense equipment.

5) Cooperation with local governments to increase the need for supplies in the form of fresh water and foodstuffs to support defense equipment.

6) Increasing the quality and quantity of transportation facilities in sending supplies to operational elements.

b. Strategy efforts 2.

1) Build a docking facility for KRI repairs to carry out maintenance of the underwater stomach.

2) Build a machining workshop which is supported by complete and modern equipment.

3) Building an electrical repair shop.

4) Build a navigation and communication equipment workshop

5) Providing technicians who have expertise in fixing elements from the top overhoul to general overhoul levels.

6) Cooperation with available shipyards around the archipelago.

c. Strategic Efforts 3.

1) Build an independent dock berthing facility with specifications that can accommodate large tonnage Indonesian Navy ships.

2) Build a pontoon dock to dock the submarine.

3) In cooperation with the local government to get priority to use the existing public jetty around Island B, if the jetty construction cannot yet be carried out.

4) Build warehouse building facilities to speed up the logistics distribution process that has been approved.

5) Providing complete infrastructure and facilities to support anchoring facilities.

6) Build buildings for generators as a substitute for ship electricity so as to save users of ship generator engines.

5. Conclusion

a .. Integrated base logistics support in the field of supplies, especially the need for spare parts, can be optimized by building integrated infrastructure on Island B. As for liquid logistics, the collaboration with Pertamina is to be able to provide sufficient amount of fuel to support the TNI AL operations unit.

b. Logistic support in the field of maintenance and repair of all defense equipment can be optimized by building workshop facilities supported by reliable mechanics.

c. Logistic support in the field of anchoring facilities can be optimized for on-water boat jetty and pontoon jetty for submarines complete with infrastructure.

d. Logistical support in the field of personnel care can be optimized by optimizing existing hospitals and medical personnel.

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