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The Warship Division's Strategy Development of PT. PAL to Strengthen the National Defense Industry

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Abstract

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The strength of a country can be interpreted to align with its independence and capability of a defense industry so that its defense industry can be strong enough to maintain the existence of a country. The capability of the defense industry is also influenced by the direction of government policy, as is the vision and mission of the Ministry of Defense which is committed to improving the defense industry, one of which is PT. PAL, which is engaged in the maritime sector in shipbuilding and maintenance. To realize the government's vision and mission, PT. PAL felt the need to provide more exploration in developing its warship division. In developing the warship division, a special strategy is needed to achieve the PT. PAL desired target. This study aims to determine the strategy for the development of the warship division at PT. PAL. This study uses a descriptive analysis method with a qualitative approach. The study was conducted in the Warship Division of PT. PAL which is located at Ujung Street in Surabaya. Sources of data in this study are informants and documents. The data collection technique is triangulation. The results showed that the strategy used was a differentiation strategy and a focus strategy with breakthrough steps including implementation of front-end back-end mechanisms in business development, project financing to optimize production facilities, increasing productivity through the implementation of the Full Block Outfitting System (FSOB), optimization of production equipment, the productivity of measurement center, the productivity of welding center, quality policies and other policies that lead to the implementation of Good Corporate Governance http://dx.doi.org/10.3317 practices at PT. PAL.

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INTRODUCTION

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A strong country is greatly influenced by the strength of an independent defense technology industry to support the state's mission of maintaining state sovereignty and territorial integrity. The level of effectiveness of national defense is determined, among other things, by the ability of the defense industry to meet the needs of the procurement and maintenance of the main weapon system equipment independently. The independence of the defense industry requires the existence of an independent strategic defense and security industry that has special capabilities and can guarantee the availability of the required products. The government plays a role in maintaining the sustainability of the defense industry by providing capital, as well as being the main client of the defense industry. Defense industry development is part of maintenance defense as a whole and part of overall development. Coaching the national defense industry involves parties' users, producers, and governments as coordinated and synergized regulators by Defense Industry Policy Committee (*Komite Kebijakan Industri Pertahanan* or KKIP).

The future of Indonesian Sea Power will be influenced by environmental factors, maritime strategy, and foreign policy in the regional and global areas which will intersect with various geostrategic, geoeconomic, and geopolitical interests of Indonesia, as well as collide with Indonesia's national interests to comprehensively strengthen military capabilities. Indonesian Navy (TNI AL) is supposed to increase its development of sea power capabilities to enable the state to protect and control Indonesia's seawater, and also to prevent problems that are detrimental to Indonesia's national interests such as threats of maritime border disputes, disturbances of maritime security, violations of maritime law, seizure of resources nature and minerals (Antoni, 2022). That is why, the ability to manufacture warships is considered important.

PT. PAL Indonesia is one of the state-owned industries and manufacturers engaged in the maritime sector. In addition, PT. PAL is one of the most profitable Stated-Owned Enterprises which means it can generate profits for the country. Activities and businesses carried out by PT. PAL Indonesia are producing warships and commercial ships, providing ship repair and maintenance services as well as general engineering (Offshore Construction) with certain specifications based on orders. However, many other privately owned maritime industries have emerged, such as Suntos, Batam Corporation, and others, which offer products that, are no less competitive with PT. PAL's products.

Facing an increasingly competitive business environment, PT. PAL implements strategies on every level. The strategy for product quality improvement and development in the Warship Division is PT. PAL's strategy at the business level supports the national defense system. In this case, PT. PAL chose a positioning strategy and an adaptive strategy. In the positioning strategy, PT. PAL implements a cost-advantage strategy, differentiation strategy, and focus strategy. This positioning strategy is carried out by PT. PAL to get the attention of customers or win the competition.

Periska, Siahaan, & Aritonang (2020) pointed out that in the context of national defense and maintaining sovereignty, there are several pieces of equipment needed to support the national defense made by the defense industry in Indonesia through a comprehensive strategy realizing the Weapon System. Strategy is a comprehensive plan to achieve corporate goals. Not only achieving but the strategy is also intended to

maintain the sustainability of the organization in the environment in which the organization carries out its activities (Sule & Saefullah, 2017). Likewise, PT. PAL in dealing with and maintaining the continuity of the organization, especially the existence of the Warship Division, some efforts have been done. It is proven by the works or products produced as can be seen in Table 1.

Name	Ordering Country
FPB 28 M	Indonesia
FPB 38 M Aluminium	Indonesia
FPB 57 M	Indonesia
Missile Fast Ship 60 M	Indonesia
Landing Platform Dock Ship 125 M	Indonesia
Strategic Sealift Vessel 123 M	Philippines
Landing Platform Dock Ship 124 M	Indonesia
Hospital Auxiliary Ship	Indonesia
Missile Escort Destroyer (PKR) 105 M	Indonesia
Nagapasa Class Submarine 1500 Ton	Indonesia
	FPB 38 M AluminiumFPB 57 MMissile Fast Ship 60 MLanding Platform Dock Ship 125 MStrategic Sealift Vessel 123 MLanding Platform Dock Ship 124 MHospital Auxiliary ShipMissile Escort Destroyer (PKR) 105 M

Table 1. The list of warships produced by PT. PAL (PT PAL Indonesia, n.d.)

According to the President Director of PT. PAL, until 2022, PT. PAL has produced as many as 83 units of ships (PT PAL Indonesia, 2019). Most recently, at the end of 2021, the fifth 60-meter Fast Missile Ship (FMS) and hospital auxiliary ships were launched. This is enough to describe PT. PAL's capability in producing warships. Moreover, in supporting the policy of the Ministry of Defense in the development of the Defense Industry and the government's policy in realizing Indonesia as the world's maritime axis, an effort is needed to realize strategy in the development of the Warship Division. Given the importance of PT. PAL in the development of the Warship Division is also in line with the needs of state defense reinforcement. Based on the description of the problems above, this study will propose a strategy for developing the warship division at PT. PAL Indonesia.

METHODS

Research is a process or steps that are carried out in a planned and systematic manner that is used to get problem-solving and answers to questions. The study was conducted through a qualitative descriptive type of research (Afifudin & Saebani, 2012). In this case, the method was directed to collect concrete data in the field so that it can be used to describe the strategy for improving the Warship Division at PT. PAL Indonesia. In addition, qualitative research has a generalization property called transferability. The purpose of transferability is the results of the data from this study can be used in other places if the place has characteristics that are not much different (Afifudin & Saebani, 2012). The research method used aims to obtain data about the company's strategy in improving the Warship Division as a business strategy in achieving success in competition and realizing government programs towards the world maritime axis and MEF stage 3 target.

The locus of the study was conducted at PT. PAL Surabaya in June 2022. The information resources are coming from a couple of personnel in charge from the Warship Division of PT. PAL. In collecting data, the triangulation step was used. Triangulation is a combination of several existing techniques such as observation, interviews, and documentation. Sugiyono stated that in data collection techniques there are technical triangulation and source triangulation, in the case of this study, technical triangulation was used namely using different techniques in retrieving data from the same source (Sugiyono, 2014).

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RESULTS AND DISCUSSION

PT. PAL is one of the strategic industries that produce the main tools of the Indonesian defense system, especially for the marine dimension, its existence certainly has an important and strategic role in supporting the development of the national marine industry. The role of PT. PAL is getting stronger after the issuance of Law No. 16 of 2012 concerning the defense industry in which strategic Stated-Owned Enterprises (SOEs) are given a wider space. Based on the law, PT. PAL professionally carries out the mandate as well as the obligation to play an active role in supporting the fulfillment of the needs of marine defense equipment and acts as a lead integrator for the marine dimension. PT. PAL is located in Ujung, Surabaya, with its main business activities including (PT PAL Indonesia, 2020):

- 1. manufacturing warships and merchant ships;
- 2. providing ship repair and maintenance services; and
- 3. general engineering with specific specifications based on client's requirements.

From 1985 to 2019, PT. PAL has produced 232 units of ships of which 86 units were warships. So far, 45 ships have been exported both warships and merchant ships. From 1988 to 2019 it produced a total of 282 energy and electrification products such as Barge Mounted Power Plants, Wellhead Platforms, and others (PT PAL Indonesia, 2020). Figure 1 shows the organizational structure of the PT. PAL shipbuilding directorate.

Shipbuilding Directorate

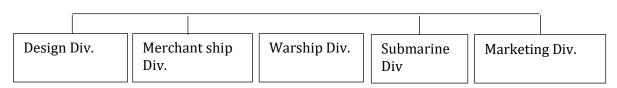


Figure 1. Organization Structure of Shipbuilding Directorate PT.PAL (PT PAL Indonesia, n.d.)

1. Design Division

This division has several main tasks:

- a. Carry out design and engineering planning for projects that are being produced.
- b.Carry out research and development in the field of design and production processes.

2. Merchant Ship Division

Merchant ship division has several main tasks:

- a. Carry out planning for the construction of commercial and non-commercial ships by the policy of the Director of shipbuilding.
- b. Detailing the Project Implementation Instructions (IPP) that have been prepared by the Directorate of ship development into a detailed project implementation schedule and project cost values.
- c. Implement shipbuilding effectively and efficiently according to Quality, Cost, and Delivery (QCD) aspects.
- d. Controlling and supervising the implementation of project development to obtain satisfactory results.
- 3. Warship Division

The warship division has several main tasks:

- a. Carry out planning and construction of warships and non-warships by the policy of the Director of shipbuilding.
- b. Detailing the Project Implementation Instructions (IPP) that have been prepared by the Directorate of ship development into a detailed project implementation schedule and project cost value.
- c. Implement shipbuilding effectively and efficiently according to QCD aspects.
- d. Controlling and supervising the implementation of project development to obtain satisfactory results.
- 4. Submarine Division

Submarine Division has several main tasks:

- a. Carry out planning and construction of submarines and non-submarine ships according to the policy of the Director of shipbuilding.
- b. Detailing the Project Implementation Instructions (IPP) that have been prepared by the Directorate of ship development into a detailed project implementation schedule and project cost values.
- c. Implement shipbuilding effectively and efficiently according to QCD aspects.

- d. Controlling and supervising the implementation of project development to obtain satisfactory results.
- 5. Marketing Division

The Shipbuilding Marketing and Sales Division has the main tasks as follows:

- a. Carry out long-term and short-term planning and marketing of ship development products.
- b. Carry out market research, market segmentation, and market feasibility studies on shipbuilding products.
- c. Carry out marketing and sales of shipped products.
- d. Carry out product development and market development to support new products.
- e. Carry out supervision of project implementation in terms of costs and customer satisfaction.

The purpose of a company in implementing a Strategic Management System is to provide direction for achieving the corporate goals. In this case, the leader of a company must be able to show all parties where the goals of the organization are going. A clear direction will be used as a basis for controlling and evaluating success. Next is to help thinking about the interests of various parties, the organization must bring together the needs of various parties, suppliers, employees, shareholders, banks, and the wider community related to the company or what is called Stakeholder Benefits, playing a role in the success or failure of the company. Apart from that, it can also anticipate any changes back evenly.

Strategic management enables top executives to anticipate change and prepare guidelines and controls, broaden their time frame or thinking perspective, and comprehend their contribution to both today and tomorrow. To achieve all the goals or objectives desired by an organization, the implementation of strategic management is needed. By using strategic management as a framework to solve every strategic problem in the organization, especially competition, the role of managers is invited to think more creatively or think strategically. Problem-solving by generating and considering more alternatives that are built from a more thorough analysis will be a more promising a profitable result. As stated by Ireland, Hitt, & Hoskisson (2011), there are several benefits that organizations get if they implement strategic management, namely:

- 1. Providing long-term direction to be pursued.
- 2. Helping organizations adapt to changes that occur.
- 3. Making an organization more effective.
- 4. Identifying an organization's comparative advantage in an increasingly risky environment.
- 5. Strategy-making activities will enhance the company's ability to prevent problems from arising in the future.
- 6. The involvement of organizational members in strategy-making will motivate them more at the implementation stage

The Ministry of Defense of The Republic of Indonesia in its a vision and mission, one of which is the development of the defense industry, and this is also in line with the stage 3 MEF program in the fulfillment of defense equipment, therefore PT. PAL in this case is the warship division, which must be able to run in harmony with the state's vision and mission. So that to realize the program of the Ministry of Defense and the MEF program phase 3, it is necessary to have a strategy, especially in the Warship Division.

According to Sule & Saefullah (2017), the company's business strategy to survive and achieve success in competition consists of a positioning strategy and an adaptive strategy. Based on the development of the strategic environment, the application of the differential strategy and the focus strategy is very suitable for use by PT. PAL, especially in the Warship Division. Moreover, Jannah, Apriyanto, & Bura (2021) stated that finance is an important factor regarding the budget used to support the defense industry in realizing the MEF. In the procurement of defense equipment as the embodiment of MEF, budgeting includes loans domestically, both State-Owned Enterprises and Private-Owned Enterprises, and foreign loans or facilities export credit. Meanwhile, policies in the defense industry are the legal basis and guidelines in the implementation of procurement of weapon system to realize MEF. Wibowo (2016) stated that the efforts in realizing defense industry independence cannot be separated from the concept of three pillars of industry players in the concept of defense and industrial cluster. The concept of the three pillars of the defense industry refers to the integrated relationship between universities or community, the Research and Development Center (R&D), the private or industry sector as the utilizer of production and distribution from the results of defense science and technology, and Indonesia Armed Forces as the user. Moreover, Efendie, Kiswara, & Purboyo (2022) added that, in the context of the independent defense industry, academics or scholars include researchers, educators or study groups, and other figures in the field of science related to the development of the defense industry. Academics or scholars are the main actors driving the birth of creativity, ideas, knowledge, and technology for the growth of independence in the defense industrial sector.

In addition, more input of ideas can be derived from the government in the position of the Penta-Helix which has an important role as a coordinator in developing the defense industry, because the government is the big buyer or the sole buyer of defense equipment that has been procured or produced domestically. The Government, in this case, the Ministry of Defense, as the coordinator will then use its purchasing power and determine the size, ownership, structure, entry and exit processes, products, prices, level of efficiency, and even the profitability of the national defense industry (Efendie et al., 2022). The Government in determining its policies prioritizes supporting the defense industry, among others using special purchases through the provision of direct subsidies and other policies to be able to optimally develops the capabilities of the domestic defense industry.

In the differential strategy, it is necessary to highlight the ability of PT. PAL in carrying out the manufacture and maintenance of warships, especially in terms of the

quality or quality of the products produced. It can be said that the differentiation strategy is a differentiating strategy from other companies. Warships have special characteristics and specifications compared to commercial ships, handling them requires different qualifications and professionalization, so this is an opportunity that can be utilized by PT. PAL, especially in the Warship Division. The Warship Division is a product differentiation strategy to provide space and create opportunities in various fields that can be offered to consumers. Product differentiation is a process that differentiates a product or service from others (Dirisu, Iyiola, & Ibidunni, 2013). This process involves detailing the characteristics of each product that consumers value and making it unique. When successful, product differentiated product as superior.

The focus strategy of PT. PAL is to ship products. Along with the development of the maritime industry in Indonesia, PT. PAL developed its production of warship products whose production was carried out by the Warship Division. Along with the development of the strategic environment and the fulfillment of defense equipment towards MEF stage 3, the need for defense equipment, in this case, is very large warships, so apart from being a challenge this is also a great opportunity that can be taken by PT. PAL to be able to realize the government's vision and mission in the field of defense while developing PT. PAL. So, to increase the competitiveness and development of the PT. PAL warship division and fulfill the needs of the Indonesian warship, it is necessary to make the following breakthroughs:

1. The implementation of front-end and back-end mechanisms in developing business.

The implementation of the front end is aimed at developing the company's website, especially the warship division to attract potential customers. The things that are usually done by front-end developers are combining design techniques, technology, and programming to produce an attractive, interactive website display, and handle debugging (problems) that occur. If the front-end deals more with the appearance of the website and is oriented to the convenience of visitors, then the back-end developer works more with things related to the server of an application or website. To reach customers both at national and international levels, PT. PAL, especially for the Warship Division, must have a team that is engaged in the front-end and back-end mechanism and prioritizes the convenience of customers in finding all information related to products, services, and after-sales.

2. Project financing to optimize production facilities

Project financing is one approach to optimizing the return on an investment project. According to Mansur (2007), several reasons why Project Financing is needed include:

- a. Project Financing is a method of obtaining large funds for the implementation of a project and allocating risks and rewards to several parties through a mutually beneficial agreement.
- b. The shareholders can monitor the cash flow of the investments they invest in the project so that they can be used as a basis for decision-making. This project

financing strategy can be utilized by PT. PAL, especially by the warship division to complete and optimize all existing production facilities.

3. Increased productivity through the implementation of a Full Block Outfitting System

According to Muhamad (2012), Full Block Outfitting System (FOBS) is a production method that already refers to "Advance Outfitting" technology. With this method, ship construction is equipped with outfitting work that assembles on the unit, on the block, and onboard before splicing in the building berth. So, outfitting work can be done simultaneously with hull construction work. This advanced outfitting technology has been applied by almost all modern shipyards in developed countries, although the percentage of outfitting work completed before launch is different. The Warship Division's advantages in implementing this strategy are increased productivity and shorter shipbuilding times. This increase is possible because the work efficiency on the outfitting unit is the work efficiency of outfitting on board (Muhamad, 2012).

4. Optimization of Production Equipment

In improving the performance of the PT. PAL warship division, must be supported by sufficient production equipment so that all work can be properly covered.

5. Productivity & Measurement Centre

According to Daryanto & Rahardjo (2012), the notion of productivity is a concept that describes the relationship between results/outputs (amount of goods and/or services produced) with sources that produce these results/inputs (amount of labor, capital, land, energy, and so on). By implementing the PIM (Productivity & Measurement) Center strategy, the results of measuring the productivity of the warship division can be used as a guide to determine the level of performance achieved by individuals, groups, and industries, as well as overall performance, even internationally. Productivity can show an index of business growth from time to time. So, the company can find out and improve it to be more productive than before. Thus, the company can compete with competitors.

6. Welding Centre

The Warship Division, which is included in PT. PAL is a division that has special characteristics and qualifications and differs from other similar companies. This division has its benefit value, therefore with the implementation of a welding center strategy in the warship division which aims to the preparation of superior human resources in the field of welding, will be able to boost the capability of PT. PAL, especially the Warship Division in warship manufacturing.

7. Quality policies and policies that lead to the implementation of Good Corporate Governance practices at PT. PAL.

Government policies are considered important things that cannot be separated and as the most decisive in the effort to implement the process towards independence of the defense industry. It is hoped that the Government will remain consistent in supporting PT. PAL Indonesia is a strategic national defense industry in the maritime sector. Both in terms of regulations and legislation that can be used as a guideline and legal umbrella, as well as in terms of decisions and determining plans to purchase defense equipment in the future to be able to master and develop the same type first. Here, policy consistency from the government is needed (Sulistijono, 2017).

Putri, Sudarya, & Khaerudin (2020) pointed out that the developments in the strategic environment affect efforts to organize the national defense. This is adjusted to the dynamics that are developing which are influenced by the patterns and forms of existing threats. Currently, defense products continue to develop along with technological advances in the era of the industrial revolution 4.0. In the national ship industry roadmap based on the National Maritime Congress. In the manufacture of warships, the implementation of this strategy refers to the quality output produced so that the main target is customer satisfaction with the performance of PT. PAL, especially the warship division.

CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

To realize the Government's program in fulfilling the MEF stage 3 target and toward realizing the vision and mission of the Ministry of Defense. At the same time the increasingly fierce business competition in the Maritime Industry, the Warships Division needs to carry out a breakthrough strategy of differentiation and focused strategy. The recommended following steps are (1) implementation of front-end back-end mechanism in business development, (2) project financing to optimize production facilities, (3) increase productivity through the implementation of a Full Block Outfitting System (FSOB), (4) optimization of production equipment, (5) Productivity & Measurement Center, (6) Welding Centre, and (7) quality policies that lead to the implementation of Good Corporate Governance practices at PT. PAL.

The limitation of this study is the implementation of the strategy to the resulting output quality so that the main target is customer satisfaction with the performance of PT. PAL product, especially the warship division.

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