

Research Article

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Analysis of Shipbuilding Business Development Strategy in Batang Port with Pest and Five Porter Approach

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Abstract: *This research examines the Karangasem shipbuilding business development strategy using the PEST and Five Porter approaches. Policy changes occurred in 2020 during the Covid-19 pandemic. Licensing for ship issuance has stopped so that orders have dropped drastically to the point that several shipyards have reduced the number of workers. Policy changes occurred again in mid-2021 until now, when the legality of ships was transferred from initially to regional government to central government. Entrepreneurs make money by making ships without orders (Idle Stock). Entrepreneurs' expectations that deviate greatly cause businesses to decline further, which has an impact on increasing production costs where additional raw materials are needed, direct labor costs increase and losses from raw materials that are not used increase. This has an impact on decreasing entrepreneurs' income and no returns. This research is descriptive research with a qualitative approach in the form of PEST (Political, Economic, Social & Cultural, Technological) and Five Porter's Diamond analysis. The results of the research show that competition between similar companies means that shipyards are quite strategic in the growth of similar industries each year, product differentiation with competitors is quite high and production costs are quite large, and the threat of new entrants is that shipyards have quite a high threat to government policy and the impact on government.*

Keywords: Shipbuilding Business, PEST, Five Porters, Business Development Strategy.

Introduction

Business development causes higher competition between businesses and more diverse techniques used to obtain a good image and company profits. In realizing this, companies must understand the business they are running and the business competition within industrial environment. One of the interesting things is the development of the marine industry. The marine industry can consist of marine catches, mariculture, ship equipment trading businesses, fish trading businesses and shipbuilding businesses. A shipbuilding business is an agency that is regulated by the owner by producing ships for customers and is able to pay an amount in accordance with the facilities received with the existence of a special agreement and legalization services for the ship (Dwi Putra & Nurhayati, 2021).

In Indonesia itself, many companies engaged in shipbuilding include the production of traditional or modern ships, ship licensing, ship repair, ship equipment installation services, ship painting services and ship escort services (Andika Putri et al., 2014). Customers or orderers usually consult first with the ship production owner regarding ship procurement plans so as to minimize the risk of making wrong decisions. The orderer feels that he has sufficient and certainty regarding the procurement of the ship, then the orderer negotiates regarding the price and special requests of the orderer with a sign of a certain agreement. The agreement contains an explanation of the ship procurement, special requests, agreed price, payment method, and the risk of default. Traditional ship construction takes up to 4 months or effective days 104 working days.

The ship construction stage is full of risks that cannot be controlled, such as rain which affects ship production, rainfall also causes rivers to overflow and river water to enter production warehouses. Apart

from that, ship berthing permits are also regulated by the regional government and the central government (Manik & Chrismianto, 2015). Indonesia only has one law regulating the use of the sea. The law in question is Law No. 21 of 1992 concerning Shipping which was refined by Law No. 17 2008. This law is used to control and supervise all types of activities in Indonesian waters. Indonesia as an archipelagic country should be able to sort out the regulations or laws used to regulate each of the different activities in the waters. However, the situation that occurs regarding ship berthing permits takes quite a long time and, moreover, changing local government policies cause buyers to think twice about purchasing a ship.

The shipbuilding business has great potential because according to Putra (2022) states that Indonesian marine products are in great demand by the international market and are a big opportunity for marine product. The large demand also needs to be balanced with adequate equipment and in accordance with global market needs so that Indonesia can balance global market demand. Adequate equipment with the completeness of the ship and accompanying equipment being of sufficient quality. Providing adequate ships has great potential for shipbuilding entrepreneurs. According to Trimulyono et al. (2014) The shipbuilding business not only produces fishing boats, but also wooden passenger ships and cruise ships of various sizes. In fact, shipbuilding businesses in Indonesia are quite popular with markets in Southeast Asia. Countries such as Malaysia, Thailand, Taiwan, and Vietnam. Includes quite complex businesses such as services addition and legalization of ships is also part of the task of a shipbuilding business to make customers feel comfortable with the services provided by the business. According to (Satrio & Sabana, 2021) The implementation of relational marketing is so good that there are many positive reviews from buyers and customers voluntarily provide recommendations to their colleagues, especially MSMEs.

To reach strategic decisions, strategic management is needed. Strategic management consists of the internal environment which includes the strengths and weaknesses of the company as well as the external environment which includes opportunities and threats for the company (Riky & Mustamu, 2014). Sulistio (2016) in His research suggests that to help plan strategies for developing early warning systems to avoid threats or develop strategies that can turn threats into profits for the company. Therefore, to be able to survive in the market or to develop its business, then a company or industry depends on Porter's five forces. Porter (2003) in Foris and Mustamu (2015) states that a company will have a competitive advantage if the company is in favorable conditions from five main competitive factors, namely the entry of new entrants, the threat of substitute products, the bargaining power of buyers, the bargaining power -bargaining for suppliers, as well as competition between existing competitors.

Porter (2008) in Di and Asia (2022) states that competition is the essence of success. Competition between similar companies is very sharp, new competitors can enter the industry relatively easily, and suppliers and customers can increase their bargaining power (Retnowati, 2010). In order to win every competition, every company must have a competitive strategy. The ultimate goal of competitive strategy is to overcome environmental forces for the benefit of the company. According to Elias (2018), competitive strategy, often also called business strategy, focuses on improving the competitive position of a company's products and services in a particular industry or market segment that the company serves. Competitive strategy is an effort to find a profitable competitive position in an industry, the fundamental arena in which competition takes place. Competitive strategy aims to build a profitable and strong position against the forces that determine competition in the industry. Therefore, competitive strategy is not only a response to the environment but also an effort to shape that environment according to the company's wishes.

Porter (2008) in Di and Asia (2022) also added that one of the methods used to deal with these factors is to use industry competitiveness analysis. Understanding industrial competitiveness can provide

benefits, namely: (1) encouraging productivity and increasing independent capabilities, (2) can increase economic capacity, both in the economic regional context and the quantity of economic actors so that economic growth increases, (3) confidence that market mechanisms create more efficiency.

Based on the background description above, the problem in this research can be formulated as follows:

1. What factors are part of the internal variables and external variables that can influence the development of the Batang Port (Karangasem) shipbuilding business?
2. How to evaluate the strategy implemented by the Batang Port shipbuilding business (Karangasem) currently based on PEST and five porter analysis?
3. What strategies should be implemented by the Batang Port (Karangasem) shipbuilding business so that it is not only able to survive but can also excel in competing fairly in the shipbuilding industry?

Determining strategies to improve business development is carried out using various specific analytical approaches. One analysis that can be used is the Porter's Diamond Model where the analysis is carried out by analyzing four factors that determine National Competitive Advantage in a business. These factors consist of Factors Condition, Demands Condition, Related and Supporting Industries and Firm Strategy, Structure and Rivalry (Arif & Wibawa, 2021).

Factors conditions refer to inputs used as production factors, such as labor, resources natural resources, capital and infrastructure. Shipbuilding businesses need to consider human resource management, raw materials, capital adequacy and business operational support. Businesses that implement appropriate human resource management can increase business productivity so that they can increase the effectiveness and efficiency of production factors. Adequate raw materials can be the main capital in carrying out the production process. If there is a possibility of a shortage of the required raw materials the production process will be greatly hampered. Adequate business capital also supports business development because with sufficient capital, company assets can be available to improve company operations. Apart from that, adequate company infrastructure can support better company performance, such as the application of technology that is useful for streamlining production processes.

Demands Condition refers to the availability of a domestic market that is ready to play an important role in generating competitiveness. This is characterized by the company's closeness to consumers. A good relationship between consumers and the company creates feedback where consumers feel dependent on the company's products. Large market demand followed by affordable prices, good product quality and service can increase purchasing decisions. Good relationships can increase consumer satisfaction so that consumers will return to make purchases.

Related and Supporting Industries refers to the availability of a series and the existence of strong links between supporting industries and the company. This relationship and support is positive which leads to increasing the company's competitiveness. This relationship and support can take the form of support from various parties such as good relationships with suppliers, associations and the government. Good relationships with suppliers can provide easy availability of raw materials and with a certain proximity can make the business superior in getting quality raw materials. Relationships and support from governments and associations also provide a shorter path to specific interests in business and government.

Firm Strategy, Structure and Rivalry refers to the strategies and structures that exist in most companies and the intensity of competition in certain industries. Firm Strategy, Structure and Rivalry consist of two aspects, namely: capital markets and individual career choices. Domestic capital markets influence corporate strategy, while individuals often make career decisions based on opportunity and

prestige. Business people need to assess the threats that might occur to their business in the future. This threat planning can take the form of competitor assessment. If business people do not analyze competitors, consumers can move to competitors because competitors have innovation, more affordable prices and better quality.

The process of determining the Porter's Diamond Model is assisted by PEST or Political, Economic, Social analysis Culture and Technology in order to obtain an analysis of internal factors and external factors that could be potential and threats to the company. Analysis carried out in a complex manner produces problem points from which the right solution to the problem is obtained. This solution can be used as a strategy to increase business development.

The main problem why this study needs to be studied is the error in the implementation of the shipbuilding business development strategy. The Covid-19 pandemic has had a lot of impact on this business. The decline in revenue, the congestion of receivables turnover and the reduction of workers are small parts of the impact of the Covid-19 Pandemic. Some entrepreneurs experienced a shortage of ship orders during the Covid-19 Pandemic, some entrepreneurs had an initiative by making ships first without ordering (trade supplies). Usually, the shipbuilding business is charged on the made-by-order process, but, because of the empty order, entrepreneurs take the initiative to make ships without orders (Idle Stock). This can be considered good, however, the expectations of entrepreneurs who deviate far cause the business to slump because the orderer always has a special request regarding the procurement of ships. Meanwhile, ship idle stock is a ship product with a percentage of finished goods of 75%. Not a few idle stocks were dismantled for the sake of customer demand. This has an impact on the swelling of production costs where additional raw materials are needed as well as increased direct labor costs and losses of unused raw materials increase. This has an impact on the decline in entrepreneurs' income and some entrepreneurs complain that they feel that capital costs do not produce returns. This is done by many shipbuilding entrepreneurs in Batang Regency.

The formulation of the strategy uses the Five Porter analysis method or Porter's Five Forces and PEST Analysis. This method requires in-depth observation of the current condition through direct observation and interviews from several employers, workers and ship orderers. From the results of observations, PEST can be formed by evaluating the Internal and External environment to assessing Porter's Five Forces analysis so that it can produce a fairly accurate competitive strategy (Tiyana and Manuputty 2022). Determining strategies in improving business development is carried out with various analyses of certain approaches. One of the analyses that can be used with Porter's Diamond Model is that the analysis is done by analyzing the four factors that determine the National Competitive Advantage on a business. These factors consist of Factors Condition, Demands Condition, Related and Supporting Industries and Firm Strategy, Structure and Rivalry (Arif and Wibawa 2021).

1. Factor condition refers to inputs used as production factors, such as labor, natural resources, capital, and infrastructure.
2. Demand Condition refers to the availability of a domestic market that is ready to play an important role in generating competitiveness. This is characterized by the company's proximity to consumers.
3. Related and Supporting Industries refers to the availability of a series and the existence of a strong connection between supporting industries and companies, these relationships and supports are positive in nature which leads to an increase in the competitiveness of the company.

4. Firm Strategy, Structure and Rivalry refer to the strategies and structures that exist in most companies and the intensity of competition in a particular industry. Firm Strategy, Structure and Rivalry consist of two aspects, namely: capital markets and individual career choices.

Literature Reviews

Shipbuilding Business

Shipyards are a form of new shipbuilding business. However, there are also those who can receive ship repairs. Shipyard is different from ship *docking*. Ship *docking* is a ship repair workshop and does not undertake the business of building new ships. Ordering a ship from a shipyard can be complete with fishing gear or just the ship's frame. Generally, fishing shipyards are required to complete the ship's framework. Not all consumers order a complete boat from the frame to the fishing gear and engine. Most ship orders only reach the ship's shell.

Medium, Small and Micro Enterprises (MSMEs)

According to Wardhana and Tansamah (2019), the government is paying more attention to small and medium enterprises (UKM), because that is where the Indonesian people depend most for their lives. In the history of the Indonesian economy, SMEs are the largest business group and have proven to be reliable facing critical economic shocks. According to (Chalimah et al., 2021) factors that can support the ability and competitiveness of SMEs are professionalism, productivity, creativity and innovation from SME owners. According to Law of the Republic of Indonesia Number 20 of 2008 concerning Small and Medium Enterprises.

- a. Micro businesses are productive businesses owned by individuals and individual business entities meet the micro business criteria as regulated in the Law.
- b. Small businesses are independent productive economic businesses carried out by individuals or a business entity that is not a subsidiary or branch of the company owned, controlled, or become part, either directly or indirectly, of a medium-sized business or enterprise large businesses that meet the criteria for small businesses as intended in the Law.
- c. Medium businesses are productive economic businesses that stand alone, which are carried out by people individual or business entity that is not a subsidiary or branch of a company owned, controlled, or part directly or indirectly with a small business or large businesses with total net worth or annual sales proceeds as regulated in Law (Firdaus et al., 2021).

Competitive Strategy Michael E. Porter

According to Porter (2002) in Manik and Chrismianto (2015) a generic strategy is a strategic approach of business entities in order to outperform competitors in similar industries. The value chain is a systematic way to analyze sources of competitive advantage by examining all the activities a company carries out and how all those activities are integrated with each other (Jonathan Yeshua Saputra, 2022). According to Indarti and Susanti (2021) a country gains a competitive advantage if companies (in that country) are competitive. A country's competitiveness is determined by capability Industry innovates and improves its capabilities. *Porter's five forces* is a widely used approach to developing strategy in various industries (Rifai & Witriantino, 2022)

Method

Analysis The internal environmental analysis of a business entity is aimed at looking at the environmental sector in determining the strengths and weaknesses of the business entity. According to Candra (2013), internal factors of a business entity are factors that influence the direction and actions of a business entity that originate from the business entity. Internal environmental analysis is carried out using a business entity functional approach. This strategic information tool is the basis for identifying and evaluating the relationship between existing functions. Key strengths of internal factors include human resource management and organization, production and operations management, marketing management, financial management, management information systems. Through internal analysis, these strengths and weaknesses can be evaluated so that the business entity can take advantage of its strengths and overcome its weakness. Analysis of the external environment as a process carried out by strategic planning for monitor the environmental sector in determining opportunities and threats for business entities.

a. Political, Governmental and Legal Factors

The direction of government policy and political stability are important factors for entrepreneurs to do business. An unfavorable political situation will have a negative impact on the business world and vice versa. Central and regional governments are the main regulators, deregulators, employers and consumers of organizations. Political, governmental and legal factors can present major opportunities or threats, for both large and large organizations.

b. Economic Factors

The economic conditions of a region or country can greatly influence the business climate of a country business entity. Therefore, the government and all levels of society should work together maintain and even improve the regional economic conditions for the better so that business entities can move forward in their business.

c. Social, Cultural, Geographical and Environmental Factors

People's social life is always changing. These changes should be anticipated by the business entity. Social, demographic, service, market and consumer changes . Small, large, for-profit, and non-profit organizations across all industries are surprised and challenged by the opportunities and threats emerging from changes in social, cultural, demographic, and environmental variables.

d. Technological Factors

Nowadays technological developments are experiencing rapid progress, both in the business sector that supports business activities. In fact, technology does not only include new discoveries, but also includes new ways of implementing or methods of doing work, meaning that technology provides a broad picture, which includes designing, producing and distributing. Revolutionary technological changes and discoveries have had a dramatic impact on organizations, advances in super conductivity alone that increase the power of electrical products by reducing resistance to current have revolutionized business operations, especially in the transportation, utilities, health care, electrical, and computer industries.

e. Competitive Factors

According to Purba and Wijaya (2022) one of the external audits is identifying competing business entities and determining their strengths, weaknesses, capabilities, opportunities, threats, goals and strategies. Collecting and evaluating information about competitors is important for the formulation of a successful strategy. Identifying key competitors is not always easy, as many business entities having divisions that compete in different industries, many multidivisional business entities generally do not

provide sales and profit information by division for competitive reasons. In addition, private business entities do not publish financial or marketing information.

Result and Discussion

The type of research used is descriptive research. According to Porter (2008) in Kurniawan (2021) competition in the industrial environment depends on five basic factors of competition, namely (1) *Potential Entrants*, (2) *Suppliers*, (3) *Buyers*, (4) *Substitutes*, (5) *Competitors (Existing Firms)*, the following is a description of the five basic forces of competition according to Porter (2008) in (Kurniawan, 2021):

Threat of New Entrants

The threat of new entrants in an industry depends on the existing *barriers to entry*, along with the reactions of existing competitors. If *barriers to entry* are considered high and/or aggressive competition in an industry indicates that the threat of new entrants is weak. The entry of new entrants into an industry depends on the following things:

Table 1. Threat and New Entrant

Threat and New Entrant			
No	Indicator	Analysis	The knot
1.	Capital Requirement	All shipyard service products require varying amounts of capital 700 million to 1 billion Rupiah	Low threat
2.	How to Capital needs	Meeting capital needs through mutual holders and external funding	Low threat
3.	Customer loyalty level	Analysis A high level of loyalty depends on the match between the consumer and the business. Karangasem shipyard has regular customers above 80%	Low threat
4.	The channel distribution acces	Access to distribution channels using self- delivery. The shipyard always has special workers whose job is to send to customer	Low threat
5.	Cost requirement to distribution channels	The cost used are relative and depend on the distribution distance	Low threat
6.	Government policy	Business development will not be separated from the government because every ship order requires permission from the regional government for the issuance of new ships	High threat
7.	Government impact	Government policies have had quite a big impact, especially during the Covid-19 pandemic	High threat

Buyer's Offering Power

The bargaining power of buyers in the industry plays a role in pushing prices down, as well as providing offers for increased quality or more services, and makes competitors compete with each other. Buyers have strong bargaining power if they fulfill the following things:

Table 2. Buyer Bargaining Power

Threat and New Entrant			
No	Indicator	Analisis	The knot
1	Level of buyer	Analysis Purchasers by madrone meinfiastheidng companies and marine fish storage entrepreneurs	The bid-bargaining power of buyers is high
2	Buyer dominance every year	A fairly constant buyer dominance with a fairly predictable amount of demand	Strength bid-moderate buyer bid
3	Impact of product switching cost	The magnitude of the impact of product switching costs depends on the value of the switch	The bid-bargaining power of buyers is high
4	Reserve funds for product switching costs	The company has quite large reserve funds for product switching costs	The bid-bargaining power of buyers is high Strength Government policies have had quite a big impact, especially during the Covid-19 pandemic Table 5. 2 Customer level Reserve funds for product switching costs Level of buyer dominance High threat 2 High threat Low threat
5	Level of clarity of product information	Entrepreneurs are also a team sales and clear information about products can be obtained from	The bid-bargaining power of buyers is moderate
6	Official permission and information	Every order requires permission from the Government area	The bid-bargaining power of buyers is moderate
7	Growth in market share of buyers for each	Market share growth in one year is only 1 to 2 consumers	Low bid-bargaining power of buyers is moderate
8	Market share of buyers each year	The market share of buyers is relatively uncertain small because purchasing decisions are	Low bid-bargaining power of buyers is moderate

Threat of Substitute Products or Services

The existence of substitute products or services will limit the amount of potential profit that will be

obtained from an industry.

Table 3. Threat of Substitute Products or Services

Threat of Substitute Products or Services			
No	Indicator	Analisis	The knot
1	Rate product against needs replacement	The level of need for substitute products is low, because consumers find it difficult to switch if they are satisfied with orders at the shipyard and the turnaround time is quite long	Low threat
2	Ease getting replacement product	It is not easy to get replacement product	Low threat

Supplier Offering Power

The conditions that make a supplier's position strong tend to resemble those that create it strong buyers. Suppliers have a strong position if:

Table 4. Supplier Bargaining power

Supplier Bargaining power			
No	Indicator	Analisis	The Knot
1	Degree of supplier dominance	Supplier are not dominated by one supplier	Low bid-bargaining power of buyers
2	Alternative suppliers	Entrepreneurs have 3-4 core supplier	The bid-bargaining power of buyer is high
3	Supplier's product quality level	The quality of the supplier's products is good because entrepreneurs have standards that must be met by suppliers	The bargaining power of buyers is moderate
4	Quality from the supplier's product is always constant	The quality of the supplier's products is not always constant because the purchase price follows the quality	Strength bid-moderate buyer bid
5	Level of supplier market competition	Suppliers compete on price by raising prices when raw material prices rise	The bid-bargaining power of buyers is high
6	Supplier market competition is always neutral	Supplier market competition is low	Low bid-bargaining power of buyers
7	The large costs of switching to another supplier	Switching costs depend on which supplier is used	The bid-bargaining power of buyers is moderate
8	Annual supplier switching costs	Supplier switching costs are not always constant every year	The bid-bargaining power of buyers is moderate

Competition between existing companies

Competitors in this case are players who produce and sell similar products, which will compete for market *share*. The intensity of competition will be high if:

Table 5. Competition between existing companies

Existing Inter-Company Competition			
No	Indicator	Analisis	The Knot
1	Number of competitors	Number of permanent competitors from 2018 to 2023	Low Competition
2	Increased amount competitors	There is no increase in competition from 2018 to 2023	Low Competition
3	Growth of similar industries every year	Industry growth continues increase along with increasing market demand, where market demand increases by 20-35% and industry growth also increases by up to 30%. There is no increase in competition from 2018 to 2018 7 No with competitors High competition Supplier market competition is low No Level of supplier market competition Low competition Low competition 5) Competition between existing companies Moderate competition The knot Table 5. 5 5 Production cost Industrial growth has an impact on inflation, because inflation has an impact on the purchasing power of the shipbuilding industry 5 2023 bidHigh competition I	Higt Competiton
4	Impact of industrial growth on infatton	Industrial growth has an impact on inflation, because inflation has an impact on the purchasing power of the	Moderate Cometitiom
5	Differentiation product with competitors	shipbuilding industry generally rarely have differentiated products	Higt Competiton
6	Raw material differentiation	The majority of companies use same raw materials	Low Competition
7	Product cost	The company's production costs are not fixed, where increases range from 10-15%. The majority of cost increases are from increases in raw materials and uncontrolled costs.	Higt Competitiom

Management of Capital Adequacy for Shipbuilding Businesses

The results of research on 16 shipyard entrepreneur informants in Karangasem regarding how to manage business capital adequacy, the Covid-19 pandemic condition has made shipyards quite worse, making entrepreneurs need to manage their business capital adequacy efficiently. All entrepreneurs have sufficient reserve funds within one year. Entrepreneurs only manage business capital to be more efficient in spending costs and entrepreneurs have also recognized costs for the final period of 2020. Business operational activities carried out using a shift system also reduce costs and maximize the use of available raw materials. Recognition of income is carried out by entrepreneurs by selling some remaining raw materials for products or raw materials that are of poor quality and sold at a break-even selling price. Entrepreneurs are of the opinion that selling raw material supplies is a fairly effective way to increase business income even though entrepreneurs do not get a margin on the sale of these assets.

Handling Raw Material Scarcity

The results of research on 16 shipyard entrepreneur informants in Karangasem related to how to handle scarcity of raw materials. The Covid-19 pandemic conditions also affected the supply chain *in* shipbuilding businesses. The main problem with this shipbuilding business is the temporary suspension of business operational activities which causes the shipbuilding process to stop for quite a long time. The cessation of the shipbuilding process causes the ship's raw materials (wood blocks) to also experience a decline in quality and asset depreciation. The wooden blocks attached to the ship's frame, which can be called the keel of the ship, are exposed to the sun and rain for quite a long time without any process that continues to degrade the quality of the ship's keel. This decline in the quality of ships has been understood by buyers (consumers) and several buyers have also confirmed to entrepreneurs that customers do not want the ships they order to be of poor quality. Entrepreneurs try to negotiate a reduction in the selling price or replace the ship's keel with new wooden blocks. However, purchasing wooden blocks as raw material for ships is also experiencing a shortage.

Good Relationship with Suppliers

The results of research on 16 shipyard entrepreneur informants in Karangasem related to strategies for good relations with suppliers. Entrepreneurs continue to maintain good relations between entrepreneurs and suppliers by negotiating with suppliers to provide good quality raw materials. If the supply of available raw materials is below the specified standard, the entrepreneur tries to ask the supplier for a purchase discount. Apart from that, several entrepreneurs are also looking for new suppliers who can provide quality raw materials according to specified standards. The entrepreneur's way to search Suppliers are said to be strategic because of the limited mobility of entrepreneurs during the Covid-19 pandemic, entrepreneurs are trying to find business colleagues. Colleagues in the form of buyers or close relatives of entrepreneurs. Bes Therefore, entrepreneurs also get the right information via the internet regarding suppliers of ship raw materials.

Recognition of Shipbuilding Production Costs

The results of research on 16 shipyard entrepreneur informants in Karangasem related to how shipbuilding production costs are recognized. The temporary suspension of operational activities during the Covid-19 pandemic resulted in no turnover of working capital at the shipyard. This makes shipbuilding

businesses incur continuous costs without generating income. If this condition continues, shipyards in Batang Regency will experience bankruptcy.

Entrepreneurs strive to reduce operational costs, including variable costs, fixed costs and unexpected costs. Emphasizing variable costs can take the form of implementing operations with a shift system and only containing 50% of the workers that should be provided. Apart from that, raw material costs are reduced by *recovering* raw materials and asking suppliers to discount raw materials. Costs are still reduced by reducing the class level of water and electricity capacity supplied to shipyards. Emphasizing unexpected costs is only done by providing reserve funds and recognizing future costs for the allocation of unexpected costs.

Empowerment of Human Resources in the Shipbuilding Business

Operational activities are closed every Friday and employers never force workers to work overtime because they are deemed ineffective. Some employers responded that forcing workers to overtime and asking workers to leave on Fridays is a wrong decision because workers do not have good morale if they are ordered to work overtime on Fridays so their performance is considered ineffective. Overtime requests are usually made at the request of the worker himself who is willing to do overtime. Payment of overtime pay is also paid the day after workers work overtime (day+1). Apart from that, the payroll system is carried out every Thursday or can be called *pocoan*.

Application of Technology in Shipbuilding Business

The results of research on 16 shipbuilding entrepreneur informants in Karangasem related to how technology is applied in shipbuilding businesses. The method of shipbuilding is still very traditional, because ships are built without drawings and planning calculations. Meanwhile, the size of the ship (thickness of skin, tusks, deck beams, keel, and other construction parts) is only based on ships that have already been built. Some entrepreneurs answered that entrepreneurs use a lamination system. Lamination technique is a form of ship in which all the main construction activities such as keel, girth, dead beams, engine foundations, skeg, beam galleys, topside strips, hull/deck skin, tusk/wrang and longitudinal reinforcements are made from an arrangement of several planks. dry shipping wood which is joined to each other using special adhesive for shipping.

Expectations for the Application of Technology in the Shipbuilding Business

The results of research on 16 shipbuilding entrepreneur informants in Karangasem related to the hopes of developing technology in the shipbuilding business. The hopes of entrepreneurs regarding the application of technology for the future are that the shipbuilding business in Batang Regency will become a particular icon for Batang Regency with the application of appropriate technology without leaving behind the typical ships of the northern coast. Entrepreneurs are also optimistic about the development of shipyards for 2030 which will be increasingly brilliant because there are many orders from the international arena, such as orders from Japan, which are quite progressive.

Competition for products outside the Karangasem shipbuilding business

The results of research on 16 shipyard entrepreneur informants in Karangasem related to strategies for dealing with foreign product competition. Several entrepreneurs mentioned the development of shipyards in Karangasem, with both wooden and modern shipyards out there not being a serious obstacle

or competitor for entrepreneurs because shipyards in Karangasem has certain characteristics and advantages compared to other fishing vessels. Quite concrete evidence is that there are quite a lot of orders from international orders such as Vietnam, Malaysia, South Korea and Japan. Entrepreneurs are very optimistic that the shipyard in Karangasem can compete superiorly in Indonesia and even Asia.

Political, Government and Legal Relations Strategy

The results of research on 16 shipyard entrepreneur informants in Karangasem related to strategies for maintaining political, government and legal relations in the shipbuilding business. Several entrepreneurs mentioned the development of shipyards in Karangasem with both wooden and modern shipyards out there during the Covid-19 pandemic. The entrepreneur said that the condition of the shipyard in Karangasem during the Covid-19 pandemic was not that the shipyard was in decline because the shipyard in Karangasem had quite good relations with the local government. This is due to the good relations that have existed from the past until now, creating a certain advantage for the shipyard in Karangasem. Apart from that, the shipyard in Karangasem is a key commodity for Batang Regency. A manifestation of good relations between entrepreneurs and politics, government and law is the entrepreneurs'

Increase in Sales Volume

The results of research on 16 shipyard entrepreneur informants in Karangasem related to strategies for increasing sales volume. On average, shipyard entrepreneurs in Karangasem make 4 ship orders a year. During the Covid-19 pandemic, ship sales were only completed at a maximum of 1 ship. According to shipyard entrepreneurs, increasing sales volume cannot be said to be easy. Because the nature of the product is a tertiary need, inventory turnover is slow. 4 orders completed in 1 year is quite an achievement for entrepreneurs to be proud of.

Strategy for Facing Competitors in the Shipbuilding Business

The results of research on 16 Shipyard Entrepreneur Informants in Karangasem related to strategies for dealing with business competitors. Entrepreneurs were united in the Karangasem Shipyard Entrepreneurs Association. Entrepreneurs have an agenda every 2 months to gather with other entrepreneur friends in the community. Even though entrepreneurs are competitors, entrepreneurs try to compete in a healthy manner and make friends with fellow entrepreneurs. Community associations usually discuss environmental conditions that have an impact on shipbuilding businesses or entrepreneurs can provide space to complain and talk about the achievements they have achieved. Researchers asked additional questions to entrepreneurs, "Are you afraid of the shipbuilding business? Development of the Shipbuilding

Business after the Covid-19 Pandemic

The results of research on 16 Shipyard Entrepreneur Informants in Karangasem related to strategies for developing businesses after the Covid-19 Pandemic. The Covid-19 Pandemic presented financial constraints from 2020 to 2021. The improving condition of the shipyard in 2022 is a hope for Karangasem Village. The reason is that the current situation is that many entrepreneurs are quite inundated with shipbuilding orders. Operational activities are now becoming increasingly complex, in fact, the number of shipyard workers is now increasing. This can be interpreted as that the shipbuilding business began to recover after the Covid-19 pandemic hit. However, the idle inventory or *idle stock* of ships that several entrepreneurs created during the Covid-19 pandemic is now increasingly dull and the quality of ships

continues to decline. Entrepreneurs have given recommendations to buyers to order idle stock ships, however, all buyers choose to order ships that are not *idle stock* or *made by order* rather than *work in process*. Now, *idle stock* is just an abandoned asset in the shipyard.

Evaluation of the Karangasem Shipbuilding Business

The results of research on 16 shipyard entrepreneur informants in Karangasem related to how to evaluate the Karangasem shipbuilding business. Many shipyard entrepreneurs answered this question with the statement that shipyards could answer the supporting sector in improving the economy of Batang Regency. Special attention needs to be given to shipyards in Karangasem. The reason is, the shipyard in Karangasem is famous on the Asian stage and this could have quite a big potential if the shipyard in Karangasem is empowered to be superior. Context of shipyard empowerment in order increasing superior competition is the use of appropriate technology, empowerment of human resources, focus on environmental impact and sustainability and implementation of company compliance and bookkeeping.

Closing

Conclusion

Based on data processing and data results which refer to the problem formulation and objectives research in the previous chapter, several conclusions can be formulated as follows: Based on the results of data processing and discussions carried out by researchers during the research, then The researcher drew the following conclusions:

1. Competition between similar companies means that shipyards are quite strategic in the growth of similar industries every year, product differentiation with competitors is quite high and production costs are quite large.
2. The threat of new entrants that shipyards have is quite a high threat to policy government and the impact of government policy.
3. The threat of substitute products shows that all of these components have a low threat at the level of need for substitute products and the ease of obtaining substitute products.
4. The strength of the buyer's offer shows that the shipyard in Karangasem has strengthlarge at the level of buyer dominance, the impact of product switching costs and reserve funds for product switching costs.
5. The strength of the supplier's offer shows that the shipyard in Karangasem has strength which is quite high in supplier alternatives and the level of supplier market competition.

Suggestion and Recommendation

The results of research on 16 shipyard entrepreneur informants in Karangasem related to how to evaluate the Karangasem shipbuilding business. Many shipyard entrepreneurs answered this question with the statement that shipyards could answer the supporting sector in improving the economy of Batang Regency. Special attention needs to be given to shipyards in Karangasem. The reason is the shipyard in Karangasem is famous on the Asian stage and this could have quite a big potential if the shipyard in Karangasem is empowered to be superior. Context of shipyard empowerment in order increasing superior competition is the use of appropriate technology, empowerment of human resources, focus on environmental impact and sustainability and implementation of company compliance and bookkeeping.

References

- Andika Putri, D., Wijayanto, D., & Setiyanto, I. (2014). Analisis Kelayakan Usaha Galangan Kapal di Kabupaten Batang. *Journal of Fisheries Resources Utilization Management and Technology*, 3(2012), 54–61.
- Arif, & Wibawa, G. R. (2021). Analisis daya tarik industri kerajinan rajapolah melalui. *Jurnal Ekonomi Perjuangan*, 3(2), 79–86.
- Candra, S. (2013). Aplikasi Model Lima Kekuatan Porter pada Restoran Drupadi. *Binus Business Review*, 4(1), 398–404. <https://doi.org/10.21512/bbr.v4i1.1387>
- Chalimah, Milasari, D., Santoso, T. B., & Sultoni. (2021). Kompetensi Sumber Daya Manusia (SDM) dan Kinerja Usaha Kecil Menengah (UKM) Kabupaten Pekalongan. *PPMA FE Unikal*, 3, 1–25.
- Di, K. R. I. S.-, & Asia, R. (2022). Tantangan dan Peluang Pelaksanaan Operasi Human Assistance and Disaster Relief (HA/DR) KRI Dr. Soeharso-990 di Regional Asia Tenggara. *NUSANTARA : Jurnal Ilmu Pengetahuan Sosial*, 9(4), 1045–1056.
- Dwi Putra, R. A., & Nurhayati, E. (2021). Strategi Maritime Domain Awareness dalam Meningkatkan Ekonomi Berkelanjutan di Kabupaten Belu. *SEMESTA*, 84–9
- Elias, M. C. (2018). Analisis Strategi Bersaing Pada Perusahaan Biro Perjalanan di Malang. *Jurnal AGORA*, 6(2)
- Firdaus, A., Chrisstyadi, I. W., Oktaviyanti, V. A., Lastiyono, S. D., Fikriyaddien, H. M., & Pakarbudi, A. (2021). Perencanaan Strategi Sistem Informasi dan teknologi Informasi pada Perusahaan Manufaktur Menggunakan Metode Ward dan Peppard (Studi Kasus: PT. ABC). *SNESTIK*.
- Foris, P., & Mustamu, R. (2015). Analisis Strategi pada Perusahaan Plastik dengan Porter Five Forces. *Agora*, 3(1), 736–741.
- Indarti, D., & Susanti, E. D. (2021). Analisa Porter Five Force Dalam Upaya Meningkatkan Strategi Bersaing. *Jurnal Revolusi Indonesia*, 1(6), 505–517.
- Jonathan Yeshua Saputra, A. R. T. (2022). Perencanaan Strategis Sistem Informasi dengan Menggunakan Metode Ward and Peppard pada Swalayan. *Jurnal Sistem Komputer Dan Informatika (JSON)*, 3(1), 289–296. <https://doi.org/10.30865/json.v3i3.3907>
- Kurniawan, E. (2021). Perencanaan Strategis SI dan TI Pada Aplikasi Gudang Menggunakan Metode Ward and Peppard Pada CV.Ribka Furniture. *JATISI (Jurnal Teknik Informatika Dan Sistem Informasi)*, 8(1), 141–151. <https://doi.org/10.35957/jatisi.v8i1.618>
- Manik, P., & Chrismianto, D. (2015). Pelatihan Mould Loft (Lantai Gambar) Kapal Bagi Pengrajin/Pembuat Kapal Tradisional Di Kabupaten Batang - Jawa Tengah. *Kapal*, 12(3), 165–172. <https://doi.org/10.12777/kpl.12.3.165-172>
- Purba, M. A. Y., & Wijaya, A. F. (2022). Perencanaan Strategis Sistem Informasi Menggunakan Metode Ward and Peppard (Studi Kasus: Oemah Djari Kitchen Salatiga). *Journal of Information Technology Ampera*, 3(1), 185–191. <https://doi.org/10.46984/sebatik.v23i1.467>
- Putra, H. P. (n.d.). Melihat Sentra Industri Galangan Kapal di Batang. *AntaraNews.Com*.
- Retnowati, N. D. (2010). Analisis Lingkungan Internal Dan Eksternal Studi Kasus: PT Intan Pariwisata Klaten. *Jurnal Buana Informatika*, 1(2), 91–96. <https://doi.org/10.24002/jbi.v1i2.299>
- Rifai, Z., & Witriantino, D. A. (2022). Analisis Digital Marketing Website Hompimpaa.id Menggunakan Metode Analisis SWOT, Value Proposition Canvas, dan Competitive Five Force. *Indonesian Journal on Software Engineering (IJSE)*, 8(1), 75–82. <https://doi.org/10.31294/ijse.v8i1.11796>

- Riky, A., & Mustamu, R. H. (2014). Porter Five Forces Model Pada PT. Ruci Gas. *Agora*, 2(2), 1–9.
- Sabana, C., Satrio, D., Suryani, S., Madusari, B. D., Pratikwo, S., Hartati, L., Baroroh, I., & Suraji, I. (2019). Analisis Potensi Dan Strategi Pengembangan Objek Wisata Pantai Pasir Kencana Kota Pekalongan. *Jurnal Litbang Kota Pekalongan*, 16, 10–18. <https://doi.org/10.54911/litbang.v16i0.92>
- Satrio, D., & Sabana, C. (2021). Pelatihan Membangun jejaring Pemasaran pada Masa Pandemi UMKM Kab. Batang. *Jurnal ABDIMAS*, 2(1), 1–7.
- Sulistio, F. (2016). Analisis Lima Kekuatan Porter Pada Pt Borneo Membangun. *Ágora*, 4(1), 34–43.
- Trimulyono, A., Wibawa, A., Santosa, B., Perkapalan, T., Teknik, F., Diponegoro, U., & Production, S. (2014). Pemberdayaan masyarakat pesisir di kabupaten batang jawa tengah melalui pengembangan industri galangan kapal tradisional. *Kapal*, 11(1).
- Wardhana, D. S., & Tansamah, A. R. (2019). Perencanaan Strategis Sistem Informasi Menggunakan Metode Ward and Peppard Studi Kasus CV. XYZ. *Jurnal Teknologi Informasi*, 23(2), 611–618.