# THE INFLUENCE OF BUSINESS ENVIRONMENT AND BUSINESS STRATEGY ON BUSINESS PERFORMANCE (A SURVEY ON THE SHIPBUILDING INDUSTRY BUSINESS UNITS IN INDONESIA)

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## ABSTRACT

*Market potential of shipbuilding industry is high and still open for significant growth. However, Indonesian shipbuilding companies can only seize small share of the worldwide market. This situation is presumably due to a less optimum implementation of business strategies. Particularly, the companies failed to adequately adapt to business environment. This study is aimed at investigating the impact of business environment and business strategies on the business performance of shipbuilding industry in Indonesia. This research is verification study with the type of investigation is causality. The unit of analysis was business unit of shipbuilding industry in Indonesia, and the observation unit was management leader of the business units. with a sample size of 50. Time horizon of this study was the cross section / one shoot. The data was analyzed and verified through Partial Least Square (PLS). The results show that business strategies provide a greater contribution than business environment to improve business performance. To improve business performance, shipbuilding industry business units in Indonesia need to improve the optimum implementation of business strategies involving optimum adaptation to business environment.*

Keywords: business environment, business strategies, business performance, shipbuilding industry.

## Introduction

The shipbuilding industry is one of strategic industries that has an important role to intensify the Indonesian economy and to support the growth of other industrial sectors. Moreover, the condition of Indonesia which consists of thousands of islands, requires the marine transportation that able in supporting the wheels of the traffic of people and goods.

The shipbuilding industry has several specific characteristics compared to other industries. This industry has a multiflier effect towards other industries, for example due to huge demand for materials of steel and any other supporting industries. Other industries that have linkages to this industry among others the steel industry, power plant industry, port industry, offshore industry, fishing industry, tourism industry, and defense industry. In carrying out its activities, the industry also needs support of intensive human resources, with the support with the support from relevant education and research institutions and high-tech technology. There are several other industries that are important for the sustainability of this industry, for example the financial industry, because the industry requires high capital and high investment. Thus the shipbuilding industry is a strategic industry that has a big role for other industrial sectors.

In the Seminar about the Strengthening of National Shipbuilding Industry, 15 April 2014, Buana Ma'ruf stated that the industry has some following business characteristics, which require the support from government:
1. Labor- intensive, capital-intensive and technology-intensive
2. Requires a long time in return on investment
3. The competition is on a global level (medium and large class)
4. Products of capital goods is influenced by macroeconomic conditions
5. requires infrastructure development and affect macroeconomic

6. Characteristics of operation

Besides, the shipbuilding industry also has some operating characteristics that require technology and productivity-based competitiveness, as follows:

1. Complexity in product specifications and production processes
2. The involvement of the buyer and third parties in the production process
3. Has a strict requirements and need third party certification
4. Requires an intensive inter-departments integration
5. The earnings depend on the efficiency of the process
6. The risk of loss in delaying

The high demand for the growth of this industry, is related to developments in other sectors, such as free trade expansion, or the increase for cruise ships demand, so that the shipbuilding industry tends to grow rapidly. The potential market of shipbuilding industry is very large so can provides great opportunities for its growth. Based on the IPERINDO Directory 2015, regarding the implementation of the cabotage principle of national policy that require domestic marine transportation activities using ships flagged and manned by a crew of Indonesian nationality since 2005, so far has been one factor driving the improved outlook for the shipbuilding industry in Indonesia. Policies of cabotage able to increase demand for supply vessels significantly, during March 2005 until July 2014 the population of national commercial ships increased by 132% or an increase of 7,995 units from 6,041 in 2005 to 14,036 units. Increased population growth in the national commercial ships coming from the supply shipyards in the country and abroad or imported. Iperindo recorded a total increase in the period of 10 years, is a huge opportunity in the domestic market and at the right moment to build the national shipbuilding industry as a whole. However, the growth coming from domestic shipyards production only reached 15%. Besides the domestic market, international markets also provide opportunities for the company shipyard in Indonesia to partake in international markets.

Buana Ma'ruf stated that at the peak production in 1998 amounted to 92.27 million dwt., Japan, Korea and China, as "The Asian Triangle" dominated a market share of 84.23%. The rest is shared by 20 other countries, including Indonesia, which gaines 0.35% (22 ships, a total of 325,000 CGT). In 2003-2004, less than half & utilities only 28.6% (BPPT, 2006).

Figure 1 The Shipyard Market Share ( 2006 )
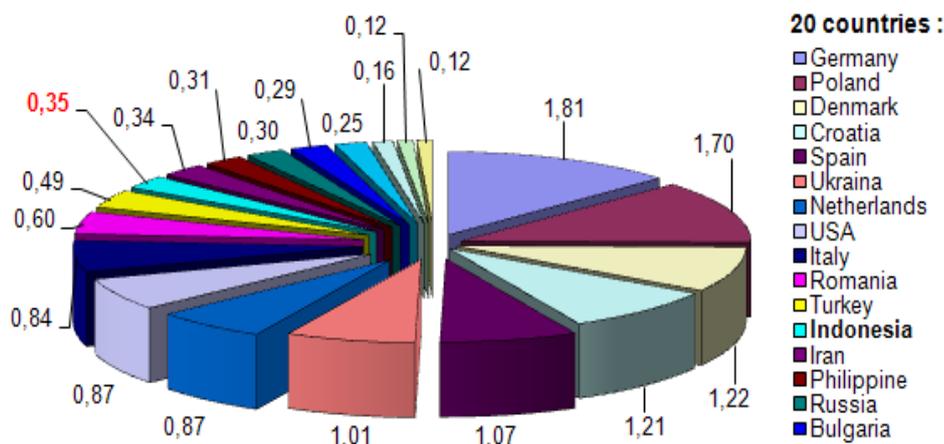


Source : Buana Ma'ruf in the Seminar on the Strengthening National Shipbuilding Industry,  15 April 2014

In 2007, The Asian Triangle reached a total share of 81.21% (CGT), which was Korea gained 35.67 percent, China 28.26 percent, and Japan 17.28 percent. The next sequence is divided to 11 countries with a total share of 12.98%. The remaining 5.81 % is divided in other countries, including Indonesia.  This was reinforced by IHS Maritime (2014) in the "Asian Shipbuilding: A Dynamic Market", which states that the industry of offshore energy equipment and global shipping has shifted to Asia, where South Korea, Japan and China dominate for 80% of orders: 134 liquefied natural gas (LNG) tanker, which was built in 2009, 133 built in Asia, 100 in South Korea, 20 in China and 13 in Japan.

Figure 2. Market Share of  11 Nations of 2007
(Lloyd's Register Fairplay 2007)
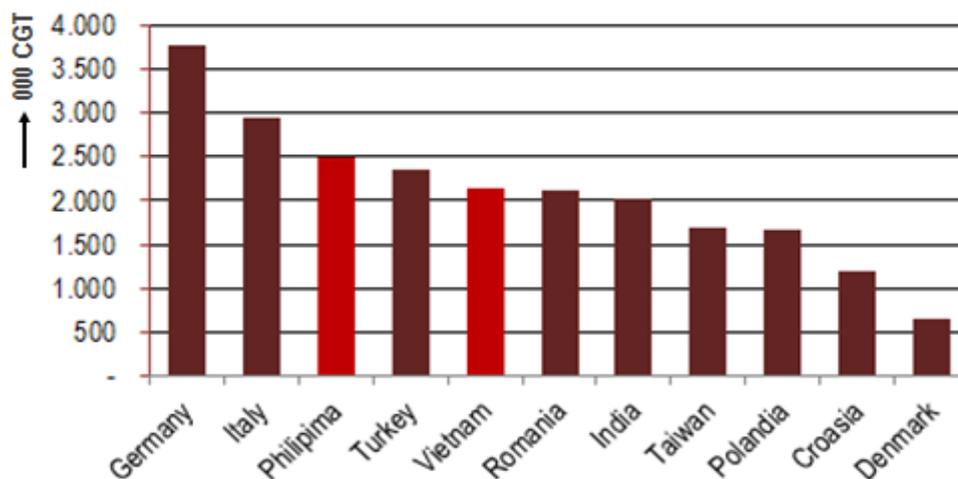
These conditions indicate the market share that is able to be acquired by business units of shipbuilding industry in Indonesia is still low. It shows that business performance of the industry in Indonesia tends to has not been high, while refer to Wheelen and Hunger (2015) business performance can be measured from profitability, market share and cost reduction. Likewise, according to David (2013), market share is one of measurements of the performance.

This performance of the Indonesian shipbuilding industry was allegedly caused by the implementation of business strategy that has not properly implemented. The utilization of production on the construction of new vessels only amounted to 60% and from 2005 to 2014 is only able to absorb the domestic market 15% of the total increase in the number of new vessels (7,945 units). Besides, the facilities and equipment are still limited and the technology developed is still conventional, the volume of work is still great in an open area with a manual process, the volume of rework in building berth also still large,  the design process is still take a long period, and there is no yard standard, as well as the production planning and control remains is still weak and the qualification of direct employment is still low, the costs related to the elements, constrained by the material composition of imports, which reached 70%-80% (Rusdianto, 2014), so it is more costly and longer for Procurement in imported goods (especially the engine) with a lead time material and equipment by about 2- 3 months, and the main engine and auxilary engine under normal conditions approximately take six months, total hours-people are still very large (in relation to rework, facility / equipment), there is still high cost of VAT, interest rates, credit terms, land rent, as well as utilities and economies of scale on the assets remains low. These conditions affect to the inefficient delivery. In the last few years, the price of new ships in national shipbuilding could reach 20% -25% more expensive with long delivery times compared to the supply from foreign shipyards, due to the imported ship components and other costs. It can be one of the factors of market share that can be achieved is still low when compared to foreign manufacturers. In the construction of the ship, which required 70% material is imported while the remaining 30% using the material in the country. Thus this industry requires very high capital support. Nevertheless, Indonesian should be proud that 100% of design and engineering is done domestically. Similarly, the production process and construction is 100% done domestically as well.
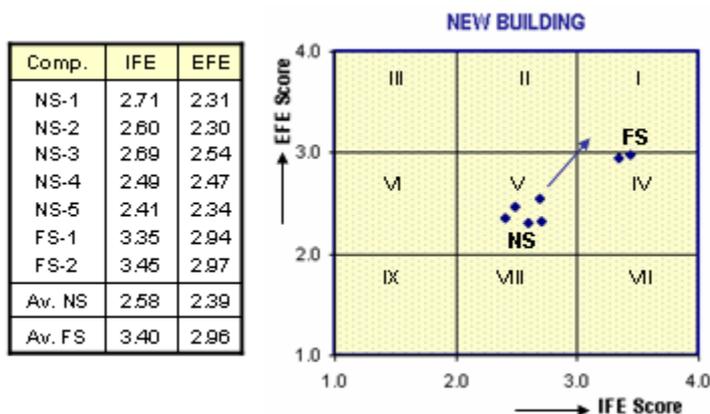
Meanwhile according to Wheelen and Hunger (2015, p203) state:

> "Business strategy focuses on improving the competitive position of a company's or business unit's products or services within the specific industry or market segment that the company or business units serves.
> Business strategy can be competitive (battling against all competitors for advantage) and/or cooperative (working with one or more companies to gain advantage against other competitors)"

The level of competitive advantage for shipbuilding industry in Indonesia can be seen on the below figure :

**Figure 3 Position of Indonesian Shipbuilding Competitive Advantage**

| Comp. | IFE | EFE |
|-------|------|------|
| NS-1 | 2.71 | 2.31 |
| NS-2 | 2.60 | 2.30 |
| NS-3 | 2.69 | 2.54 |
| NS-4 | 2.49 | 2.47 |
| NS-5 | 2.41 | 2.34 |
| FS-1 | 3.35 | 2.94 |
| FS-2 | 3.45 | 2.97 |
| Av. NS | 2.58 | 2.39 |
| Av. FS | 3.40 | 2.96 |

Source : Buana Ma'ruf  in the Seminar on the Strengthening National Shipbuilding Industry,  15 April 2014

Based on the IFE Score, showed that Competitive Advantage Position of National Shipbuilding industry (NS) is still weak compared to Foreign Shipbuilding   industry (FS). Buana Ma'ruf (2014) stated that competitive advantage of National Shipbuilding industry focus on *quality, cost,* dan *delivery.*

Meanwhile, the businesses of shipbuilding industry in other countries had done some more innovative business strategies, for example, Japan performed aggressive marketing strategies and strategic alliances with ship owners, suppliers, another shipyard; non-ship product diversification; joint venture with the shipyard machine manufacturer in Nantong-China; joint venture in the Philippines Cebu (THI shipyard); merger between IHI Marine United and Universal Shipbuilding Corp., etc. South Korea also made a similar strategy by conducting an aggressive marketing strategy to Europe and America, develop container vessels and LNG ships; collaborate with ship owners and gas companies; develop inter-shipyard alliance; develop a technology transfer from Japan; a joint venture in Vietnam, China, and Romania. European countries also carry out intensive marketing abroad (for local shipping companies tend booked vessels outside Europe) and focus on niche markets and special customers. While in China, which initially focused on ships simple technology, then forming two holding shipyard owned by the government (CSSC and CSIC), with the support of local banks, building components industry, importing the modern production equipment and CAD / CAM, as well as the development of designer and a lab test models. Furthermore, they do intensive marketing to Europe and America; alliances with customers and suppliers through the CSSC; as well as a joint venture with Japan. Vietnam also develop the shipbuilding industry to make cluster of industry into three clusters, where the center of cluster consists of six shipbuilding capacity of 250,000-300,000 DWT, Northern Cluster includes 16 shipbuilding with capacity of 70,000 DWT, and South Cluster that includes 5 shipyard with capacity of 30,000 DWT. The strategy succeeded in attracting foreign investment to shipyard companies and joint ventures with local companies, especially with the development of the components industry in the country rapidly to 60% in 2010.

Another issue that allegedly lead to the low business performance in the shipbuilding industry is the inability of the industry to adapt business environment in the industry. According to Kotler and Keller (2012), business environment consists of internal and external environment that influence the formulation of business strategies in order to improve business performance. The power of the business environment represents "noncontrallables", which should be monitored and responded by the company. David (2013) suggested the external forces which are divided into five broad categories: (1) economic forces (2) social, cultural, demographic, and environment forces, (3) the political, government, and legal forces, (4) technological forces , (5) competitive forces.

Business environment of shipbuilding industry is very broad, because the industry is related to many other industries such as fishing, tourism, steel industries, and so on. Therefore the shipbuilding industry should always be able to adapt its business environment in order to raise their competitiveness. Meanwhile Essmui, Berma, Mohd Fauzi (2014) conducted a survey on manufacturing companies in three commercial cities in Libya and showed a strong correlation between the growth of the company's sales and the prevailing factors such as corruption, crime, finance, infrastructure, business regulation and human capital. In addition, the necessary alignment between strategy with business environment in the shipbuilding industry, as demonstrated by studies of Al-Zaabi & Pech (2015) discusses the complexity of SDI (Strategic Decision Implementation) and the role of opposing the government as major clients, partners and stakeholders interest in naval shipbuilding industry in two major shipyards in the capital of the United Arab Emirates, Abu Dhabi.

Based on the above phenomenon, it is very important and crucial to conduct a research on business environment and business strategy to improve business performance in the Business Units of Shipbuilding Industry in Indonesia.

## Literature Studies
### Business Environment
Kotler & Keller (2012) suggest that business environment consists of the internal and external environment that influence the formulation of business strategies in order to improve business performance. The power of business environment represents "noncontrallables", which should be monitored and responded by the company.

Hitt, Ireland, Hoskisson (2015) explained about general environment formed from multiple dimensions in the broader social environment affecting the industry and companies in the industry. The dimensions of the environment include seven segments namely: demographic, economic, political / legal, socio-cultural, technological, global, and physical. While the industry environment is a set of factors that directly affect the company and competitive action and response that includes: threat of new entrants, supplier power, buyer power, threat of substitute products, and the intensity of competition among competitors. Interaction between these five factors determine the profit potential of an industry, and in turn, influence the choices of companies in terms of competitive action and response.

At the strategic management process, there is environmental scanning process which according to Wheelen and Hunger (2015) is a monitoring, evaluation, dissemination of information from external and internal environment of the key people in the company are intended to help analyze in deciding the strategic decisions in the company.

Refer to Wheelen and Hunger (2015), the external environment consists of :
  a. Natural environment (physical resources, wildlife, climate)
  b. Sosietal environment, includes :
     1. Economic forces that regulate the exchange of materials, money, energy, and information.
     2. Technological forces that generate problem-solving inventions.
     3. Political-legal forces that allocate power and provide constraining and protecting laws and regulations.
     4. Sociocultural forces that regulate the values, mores, and customs of society.
  c. Task environment, includes those elements or groups that directly affect a corporation and, in turn, are affected by it. These are government, local communities, suppliers, competitors, customers, creditors, employees/labor unions, special-interest groups, and trade associations.

David (2013) suggested the external forces which are divided into five broad categories: (1) economic forces (2) social, cultural, demographic, and environment forces, (3) the politicalal, government, and legal forces, (4) technological forces , (5) competitive forces.

Based on the literatures study, the business environment in this study composed of three dimensions namely macro environment, technology environmental and industrial environments.

**Business Strategy**

Hubbard and Beamish (2011, p.31) define strategy as :
> "Those decisions that have high-medium to long-term impact on the activities of the organisations, including the analysis leading to the resourcing and implementation of those decisions, to create value for customers and key stakeholders and to outperform competitors"

There are five key questions of business strategy (Hubbard & Beamish, 2011, p.32) :
  a. What amount of growth and level of profitability does the organisations seek?
  b. What products and services does it plan to produce?
  c. What customer and geographic markets does it plan to service?
  d. What generic strategy does it plan to follow to positions itself uniquely against competitors?
  e. What position in the industry does it plan to hold in the future?

According to Pearce and Robinson (2015), business managers evaluate and select strategies that will make their business successful. Business will be successful if the company has several advantages relative to its competitors. There are two sources of competitive advantage that is found in the cost structure of the business and its ability to differentiate its business over the competition.

The source of competitive advantage refer to Pearce & Robinson (2015, p.243-252) :

  1. Low cost strategies : business strategies that seek to establish long-term competitive advantage by emphasizing and perfecting value chain activites that can be achieved at costs substantially below what competitors are able to match on a sustained basis.
  2. Differentiation : a business strategy that seeks to build competitive advantage with its product or service by having it be "different" from other available competitive products based on features, performance, or other factors not directly related to cost and price.
  3. Speed-based strategies : business strategies built around functional capabilities and activities that allow the company to meet customer need directly or indirectly more rapidly than its main competitors.
  4. Market focus : this is generic strategy that applies a differentiation strategy approach, or low-cost strategy approach, or a combination-and does so solely in a narrow market (or focused) market niche rather than trying to do so accross the broader market. The narrow focus may be geographically defined or defined by product type features, or target customer type, or some combination of these.

According to Wheelen dan Hunger (2015, p.203) :

> "Business strategy focuses on improving the competitive position of a company's or business unit's products or services within the spesific industry or market segment that the company or business units serves. Business strategy

can be competitive (battling againts all competitors for advantage) and /or cooperative (working with one or more companies to gain advantage against other competitors).

The tow general types of cooperative strategies are collusion and strategic alliance Collusion, is the active cooperation of firms within an industry to reduce output and raise price in order to get around the normal economic law of supply and demand. A strategic Alliances, is a long-term cooperative arrangement between teo or more independent firms or business units that engage in business activities for mutual economic gain. Type of Strategic Alliance are:

(1) Mutual Service consortia, is a collaboration between similar companies in similar industries to develop resources in order to obtain the benefits that would be very expensive if done alone, such as access to advanced technology.
(2) Joint Venture is a cooperative business activity formed by two or more separate organizations for strategic purposes which would form an independent business entity and allocation of ownership, operational responsibilities, and financial resources.
(3) Licensing Arrangement, which the company is the licensor gives rights to another company in another country or another market to manufacture or sell a product.
(4) Value Chain partnership, a strong and closed alliance where a company or unit form a long-term arrangements with key suppliers or distributors for mutual advantage

Based on the description the business strategy in this study measured through two dimensions that are competitive strategies and cooperative strategies.

**Business Performance**
According to David ( 2013), Quantitative criteria that are generally used to evaluate strategies are financial ratio, for three reasons : first : to compare the company's performance over different time periods; second, to compare the company's performance to competitors; third, to compare the company's performance to industry average. Some financial ratios used to evaluate the strategy consists of : Return on Investment (ROI), Return on Equity (ROE), Profit Margin, Market Share, Debt to Equity, Earnings per share, Sales growth, Assets growth, Company Performance".

Hubbard and Beamish (2011, p.135) argues that every company has a special recipe for success so that performance measurements need to consider the industry in which it operates. Hubbard and Beamish (2011, p.135) provides a measurement of performance for different types of companies :

Table 2. Type of Organisation

| FACTORS | NON PROFIT | STATE-OWNED ENTERPRISES | | PRIVATE OWNED ENTERPRISES | COMPANIES LISTED IN STOCK EXCHANGE |
|---|---|---|---|---|---|
| | | Non commercial | Commercial | | |
| **Measurement Accuracy** | Customer satisfaction | Satisfaction of stakeholders | Sales | Market share | Shareholder value |
| | Efficiency | Customer satisfaction | Net profit | Sales | ROE |
| | Quality | efficiency | Customer satisfaction | Net Profit | Growth |
| | Break-even | quality | efficiency | Growth | Market share |
| | | Break-even | quality | ROA | Sales |
| | | | Net cash flows | ROE | Net Profit |
| | | | ROA | Customer satisfaction | ROA |
| | | | | efficiency | Customer satisfaction |
| | | | | quality | efficiency |
| | | | | | quality |

Source : Hubbard & Beamish (2011, p.135)

In other term, Wheelen and Hunger (2015, p.338) suppose that :

> *"Performance is the end result of activity. Select measures to assess performance based on the organizational unit to be appraised and the objectives to be achieved. The objectives that were established earlier in the strategy formulation part of the strategic management process (dealing with profitability, market share, and cost reduction, among others) should certainly bu used to measure corporate performance once the strategies have been implemented".*

So determined to construct the dimensions of business performance variables in this study consisted of: sales growth, customer growth, and financial leverage.

**Previous Research Review**

Larson (2000) show that environmental considerations and sustainability can be successfully integrated into the business strategy. Luo and Chang (2011), highlighting the challenges faced by executives in Taiwan and mainland China to a better competitive strategy. Heinzmann et al. (2013) shows a phase that characterized the strategy: control systems, industrial practice, systematic production, continuity of production strategy, business strategy, production investment in business strategy, production-related strategies, the development of equipment owned, are decisions, processes, guidelines for long-term, development production strategy, the focus of production, competition strength of production, communication strategies, and the people who work with planning. Al-Zaabi & Pech (2015) discusses the complexity of SDI (Strategic decision implementation) and the role of opposing the government as major clients, partners and stakeholders in the industry naval shipbuilding in two major Shipyards in the capital of the United Arab Emirates, Abu Dhabi ,

Akenbor & Arugu (2014) showed that the political environment in Nigeria have a significant negative impact on business performance. Chi (2015) shows the differences in the response of strategy in facing the increasingly turbulent business environment. Hales (2005) showed the influence of the B2B-EC on the operating performance fully mediated by changes in the procurement business processes. Davies & Ko (2006) showed that there is a performance benefit to be had when the business strategy, technology strategy and design strategy are all taken into account.

Spencer, Joiner and Salmon (2009) showed that there is a positive relationship between the company's strategic emphasis on differentiation and organizational performance. Billing et al. (2010) suggested that companies often respond to lower performance by implementing strategic change. In particular, if the company is not aware of the purpose of their performance, they will reexamine their past strategies and eventually adapt or, in some cases, completely abandon a strategy in an effort to improve the level of performance desired. Performance below expectations, can drive strategic change including the search for new customers, changing the domain of product / market, or develop new technologies in an effort to improve performance.

Lehtinen and Ahola (2009) focused on performance measurement systems used by companies in the shipbuilding industry are conducted as part of a three year research project between the Helsinki University of Technology, Åbo Akademi University and five companies that represent the shipbuilding industry in Finland. According to the study, performance measurement relating to the characteristics of the company. The fifth shipbuilding company was more focused on internal performance measurement. Four companies measure the performance of suppliers or customers, while the company measure both suppliers and customers. All five shows a measurement system that insists on past performance. The study showed the importance of inter-organizational relationships and collaborations, and lack of core decision-making authority should be considered when designing and implementing a performance measurement system for extended enterprise.

**Methodology**

This research is verification study with the type of investigation is causality. The unit of analysis was business unit of shipbuilding industry in Indonesia, and the observation unit was management leader of the business units. with a sample size of 50. Time horizon of this study was the cross section / one shoot. The data was analyzed and verified through Partial Least Square (PLS).

**Discussion**

1.     Goodness of fit

This section will discuss the results of the model fit tests using Partial Least Square (PLS). This testing is done through inner and outter models models. Model of conformance test aims to test whether the resulting model describes the actual conditions.

Structural analysis model (inner model) shows the relationship between the latent variables. Inner models were evaluated using Goodness of Fit Model (GoF), which shows the difference between the values of the observations with the values predicted by the model. This test is indicated by the value of R Square on endogenous constructs. Rated R Square is the coefficient of determination on endogenous constructs. According to Chin (1998), the value of R square of 0.67 (strong), 0.33 (moderate) and 0.19 (weak). Prediction relevance (Q square) also known as the Stone-Geisser's. This test is performed to determine the predictive capabilities with blinfolding procedure. If the value obtained 0.02 (minor), 0.15 (medium) and 0.35 (large). Can only be performed for endogenous constructs with reflective indicators. Here is the value of R square and the Q-Square on the construct:
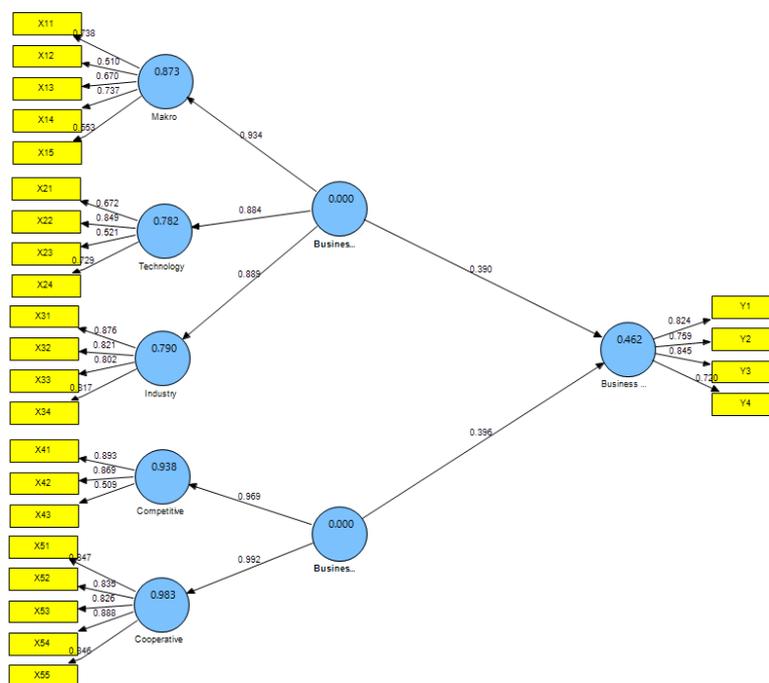
Table 2
Testing Model

| Variable | AVE | Composite Reliability | Cronbachs Alpha | R Square | Q2 |
|---|---|---|---|---|---|
| Business Environment | 0.434 | 0.906 | 0.885 | | 0.343 |
| Business Strategies | 0.655 | 0.937 | 0.920 | | 0.373 |
| Business Performance | 0.622 | 0.868 | 0.798 | 0.462 | 0.343 |

The above table gives the value of $R^2$ on the strong criterion (greater than 0.6 = strong), and the value of Q square above the medium, so that it can be concluded that the condition of the empirical support research model (model is fit).

Following figure show the result of complete path diagram :

Figure 4
Complete Path Diagram of Research Variables



The results of model analysis of dimensional measurement by the indicator shows that they are valid indicator since most of loading factor value is greater than 0.50 with t> 2.01 (t table at α = 0.05).

The following table presents the results of the analysis of the measurement model for the latent variables on each dimension.

Table 3
Loading Factor between latent variables-dimension

| Variable-> Dimension | λ | Standard Error | t | Conclusion |
|---|---|---|---|---|
| Business Environment -> Macro | 0.934 | 0.008 | 115.875 | Valid |
| Business Environment -> Industry | 0.889 | 0.025 | 35.374 | Valid |
| Business Environment -> Technology | 0.884 | 0.023 | 37.733 | Valid |
| | | | | |
| Business Strategies -> Competitive | 0.969 | 0.009 | 113.374 | Valid |
| Business Strategies -> Cooperative | 0.992 | 0.003 | 345.712 | Valid |
| | | | | |
| Y1 <- Business Performance | 0.824 | 0.022 | 36.970 | Valid |

| Y2 <- Business Performance | 0.759 | 0.050 | 15.070 | Valid |
| Y3 <- Business Performance | 0.845 | 0.025 | 33.780 | Valid |
| Y4 <- Business Performance | 0.720 | 0.067 | 10.697 | Valid |

The results of the measurement model analysis of the research variables on dimensions shows that all dimension are valid with the value of t> 2.01 (t table at α = 0,05).

2. **Hypotheses Testing**

The following shows the results of testing hypotheses simultaneously and partially:

a. **Simultaneous Hypotheses testing**

The following shows the results of hypotheses testing simultaneously :

Table 4
Hypotheses Testing Simultaneously

| Hypothesis | R2 | F | Conclusion |
| --- | --- | --- | --- |
| **Business Environment and Business Strategies →Business Performance** | 0.462 | 20.139* | Significant |

* significant at α=0.05 (F table =3.195)

According to the table above, it is known that with the degree of confidence of 95% (α=0.05), simultaneously there are significant influence of Business Environment and Business Strategies to Business Performance, where the influence of the two variables is equal to 46.2% while the remaining 53.8% influenced by other factors not examined.

b. **Partial Hypotheses testing**

The following shows the results of hypotheses testing partially :

Table 6
Hypotheses Testing Partially

| Hypotheses | γ | SE | t | $R^2$ | Conclusion |
| --- | --- | --- | --- | --- | --- |
| **Business Environment →Business Performance** | 0.390 | 0.085 | 4.581* | 0.228 | Significant |
| **Business Strategies →Business Performance** | 0.396 | 0.078 | 5.100* | 0.233 | Significant |

* significant at α=0.05 (t table =2.01)

In the above table, it is known that partially the effect of the above variables is significant on Business Performance, which Business Strategies have a greater influence.

The hypotheses testing results described as follows:

Figure 5
Research Finding
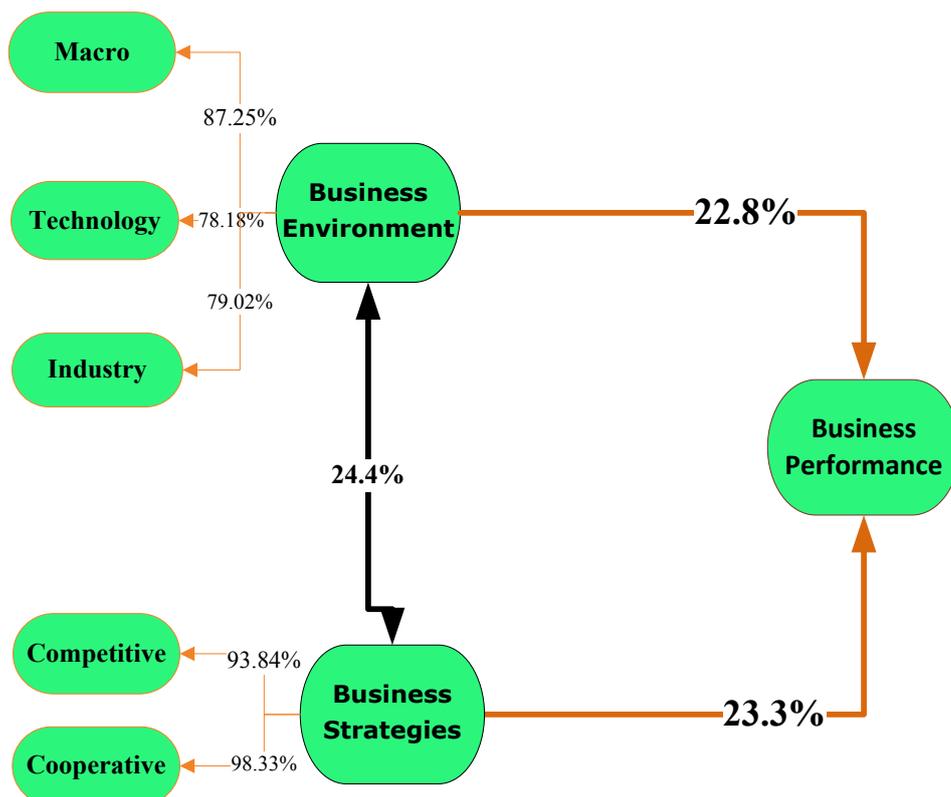
The results showed that business performance is influenced dominantly by business strategy rather than by business environment. Improved business performance greater formed by the implementation of the cooperative strategy and competitive strategy. To support the achievement of business performance, it is also required more adaptation to business environment that is focused on three aspects, especially the industrial environment, then macro and technology environments.

The role of business strategies on business performance as evidenced in the results of hypothesis testing, in line with Spencer, Joiner, and Salmon (2009) which showed a positive relationship between company's strategic emphasis on differentiation and organizational performance through the mediating role of the size of the financial and non financial performance. In addition, Davies & Ko (2006) showed the performance benefits that can be obtained when the business strategy, technology strategy and design strategy all taken into account. Phongpetra & Johri (2009) found three business strategies of car manufacturers in Thailand have a positive effect on financial performance and marketing organization ie the focus on cost (first priority), cost leadership (second priority), and cost leadership and differentiation are integrated (third priority).

**Conclusions And Recommendations**

Business strategy has a bigger role in improving business performance in the shipbuilding industry in Indonesia. Adapting to the business environment contributed to the achievement of business performance.

Based on the results of studies in which business strategies are influential to improve business performance. To that end, the management of the shipbuilding industry are advised to prioritize the improvement in terms of:
  a. Cooperative strategy, with regard to implementation of the startegies of collusion, mutual service consortia, joint venture, license arrangement, and value chain partnership.
  b. Competitive strategy, with regard to the implementation of cost leadership strategy, differentiation strategy, and speed-based strategy.

In addition, business environment also contributes to improve business performance. To that end, the management of the shipbuilding industry are advised to prioritize the improvement in terms of:
  a. Macro environment, with respect to management's understanding of the economic, political turmoil, government policy, labor conditions, and policy banking conditions.
  b. Industrial environment, with regard to management understanding of the power of competitors, customer strength, the power supplier, the power of substitution.
  c. Environmental technology, with respect to management's understanding of design technology, both software and hardware that supports the design stage to production, technology transfer, and the threat to the company's internal technology.

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