



Proposed Business Strategy for PT Aneka Tambang TBK for Market Development in Order to Increase Export of Ferronickel

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ABSTRACT: PT Aneka Tambang (ANTAM) Tbk is part of the SOE's Holding Mining Industry which vertically integrated, export-oriented, diversified mining and metals company. ANTAM has two big commodities which are gold sectors and nickel sectors. Nickel based products consist of Nickel Ore, Ferronickel, Bauxite, and Alumina. Ferronickel is a high-grade product of nickel downstream which contains 20% - 25% of nickel and mostly consumed by stainless steel companies. ANTAM is the only company in Indonesia that can produce Ferronickel. In the nickel market, many companies produce the substitute product of Ferronickel which is Nickel Pig Iron (NPI). Ferronickel and NPI are serving the same market while NPI itself contain lower of nickel and cheaper than Ferronickel. Government of Indonesia supported the development of downstream industries in Indonesia. The growth of battery industries is escalating resulted high demand for it. Technology is currently improving the process to transform Ferronickel and NPI into Nickel Mattes (Ni Mattes) which used to be an intermediate component to produce electric vehicles (EV). Based on the demand of global market, there are many demands for Ferronickel supplies in the worldwide. However, the capacity exports of Ferronickel in ANTAM are still far behind. This study analyzes business problems using several tools to identify the external environment and internal environment of ANTAM. SWOT analysis is used to capture the strength, weakness, opportunity, and threat that affects the business of the company. The Root Cause Analysis is used to define problems that happened in ANTAM and needed to be solved. Data and information were obtained from various sources such as interviews with the internal of ANTAM, observation, and study from the literature. The study found that ANTAM has lower export sales caused by the limited market scope, lack of promotion, and no product development. To overcome the problems that faced by ANTAM, the author proposes a business strategy for ANTAM for market development to increase export of Ferronickel by using the Strategy Diamond Framework and Ansoff Matrix as the strategy that will be implemented in ANTAM. The stages in this strategy were concerned more with the issues and provide solutions to increase the export of Ferronickel. Therefore, ANTAM should focus on market development to reach the widen market and fulfill the demand of Ferronickel in the global market.

KEYWORDS: Ansoff Matrix, ANTAM, Business Strategy, Export, Ferronickel, Strategy Diamond Framework.

1. INTRODUCTION

Ferronickel is a ferrous alloy that is made up of two major elements: iron and nickel. The iron and nickel alloy are commonly used to make stainless steel and other steel alloys. It has a numerous unique features, including corrosion resistance, hardness, and temperature tolerance, that make it a significant resource for enterprises [1]. The primary nickel can be sorted into two major groups such as high-grade nickel and low-grade nickel. High-grade nickel in the form of cathodes, briquettes, carbonyl nickel, and nickel compounds are produced from both sulphide and laterite feed. On the other hand, low-grade nickel like ferronickel, nickel pig iron, and nickel oxide are produced from laterite feed only. Ferronickel of ANTAM contains 20%-25% of nickel which categorized as the high grade product. Since ANTAM is the only company in Indonesia who able to produce Ferronickel, the buyers are very depended with the company. As a substitute product of Ferronickel, Nickel Pig Iron (NPI) has rapidly growing every year. NPI contains lower of 8%-15% nickel with cheaper price compared to the price of Ferronickel. In 2021, the production of Ferronickel was 52.000 TNi which not enough to supply the demand for Ferronickel globally. The Government of Indonesia has supported the development of downstream industries in Indonesia, including the growth business of battery industries. Based on the recent technology, it confirmed that there able to transformed Ferronickel and NPI into Nickel Mattes (Ni Mattes), the intermediate components to produce electric vehicles (EV). This however disturb the existing market and buyers of Ferronickel. Ferronickel used to dominated the total demand, meanwhile NPI has continue to lead in the demand of the global nickel. As the matter of fact, Ferronickel has its niche market especially big stainless steel companies



that requires of high grade of end product. Based on table 1, it shown the demand of nickel in the global world. The current leading was the demand of NPI. It has increasing each year and higher than the demand of Ferronickel. The new market of electric vehicles (EV) has become a mew oppportunity for ANTAM.

Table 1. Total World Projection Capacity of Ferronickel and NPI

Total World	2017	2018	2019	2020	2021	2022
Ferronickel	385	406	404	380	372	422
NPI	590	739	956	1119	1300	1391

2. LITERATURE REVIEW

PESTEL consists of six analyses such as Political, Economic, Sociocultural, Technological, Environmental, and Legal overviews. It used to evaluate and observe the macro-environment factors that can also overcome to the business. Porter's Five Forces Model is a method that was created by Michael Porter. Competitor Analysis If a corporation learns how its competitors are performing, its marketing efforts can be more effective. The business can compare tactics and learn which aspects of their business are likely to be competitive advantages and disadvantages [3]. The resource-based view is a concept that considers specific types of resources to be critical to a company's success. An important tool for evaluating a firm's wealth and resources is a framework that answers the issue of the resource qualities that support competitive advantage. This paradigm underpins the resource-based approach, which specifies the condition types of resources as crucial to enhanced firm performance. To obtain a competitive strategic advantage, the company should be valuable, rare, costly to imitate, and organized to capture the value of the resource. According to McCarthy, marketing activities are divided into four kinds of marketing elements, termed the 4Ps of marketing such as Product, Price, Place, and Promotion. The internal activities of a corporation that are performed along the horizontal chain are described by The Porter's Value Chain Model (Rothaermel, 2015). SWOT is a framework for a corporation to draw strategic that implications by combining insights from an internal examination of the organization's strengths and weaknesses with the insights from an external analysis of opportunities and threats. To be an effective management tool, SWOT must be completely completed. SWOT analysis allows a strategic leader to evaluate the company's state and future possibilities by taking into consideration both internal and external elements. Strategic leaders can use the SWOT analysis to scan their internal and external environments for significant elements that could affect their existing or future competitive advantage.

3. METHODOLOGY

To reach the research goal, the researcher will use a variety of qualitative and quantitative approaches. The qualitative research method gathers interpretations in order to have a better understanding of the company's business operations. The data for the study comes from both primary and secondary sources. The core data for the qualitative technique came from an in-depth interview with the president of BMSM, the head of marketing product, the marketing team, and the senior vice president of finance. It will be based on the observations made during the interview. Internal company data, websites, books, articles, and other media are used to obtain secondary data. All of the data will be analysed using SWOT and Root Cause Analysis. The findings of each framework's investigation will be summed up. The strategy will be developed using the Strategy Diamond Porter and The Ansoff Matrix methods.

4. RESULT AND DISCUSSION

A. SWOT

1) Internal Analysis: Strength and Weakness

Based on the internal analysis, the following points will be explained regarding the strengths and weaknesses:

a) Strength of ANTAM:

- ANTAM has a valuable mineral resource since it holds the mining license (IUP) for nickel and is rich with the great resources of nickel producers in Indonesia. As the only one company that is able to build a Ferronickel plant in Indonesia, ANTAM's product is famous for its quality of Ferronickel which contains 20%-25% of Nickel (Ni) along with its great quantity.



- ANTAM has a huge amount of nickel resources which require several plants with high capacity to produce the raw ore into the end product, which is Ferronickel. The plant also comes with many requirements to fulfil the whole production of Ferronickel. It also gained full support due to the electricity, coal, diesel, and other suppliers needed on the plant to increment the production of Ferronickel.
- ANTAM has a good reputation which is well-known not only in Indonesia, but also in the eye of the nickel buyer worldwide. As part of State of Enterprises (SOE), the company commits to implement good corporate governance (GCG) and earn the credibility of the company itself. Besides GCG, ANTAM also implements good corporate social responsibility, good management of the environment, and good mining practice. All of these values that ANTAM received has brought ANTAM to gain more trust from the buyers, to earn a good reputation, and increase credibility for company.
- ANTAM uses different technology while dealing with the nickel and mining industry. It often utilizes a high capital expenditure technology that is adequate to bring a positive output like an eco-friendly pollution for the environment, selecting the best raw material, producing high grades of ferronickel, and being able to be observed from distance. However, this high technology should be operated and managed by human resources with a bunch of knowledge. In this point, both technology and knowledge hold the same important part for the business.

b) Weakness of ANTAM

- ANTAM has a low promotion tools or effort while promoting Ferronickel to the buyers worldwide. Currently, the promotions that are used through an email, telephone, the website of the company, and bidding buyer system to reach the new buyers. ANTAM itself does not have a special application for promotion. In the website of the company, it also gives the information to call the Head office, while the other companies provide the number of the internal marketing so the buyers can directly contact the marketing team. Moreover, there are no special tools for complaining to ANTAM. In addition, the tools that were used also meant to provide the buyers to determine whether to purchase nickel online or the product online through the application.
- ANTAM does not have a sales man who focuses more on doing the marketing and sales. As for now, each nickel based product in BMSM ANTAM is handled by one marketing. The marketing will be responsible for looking for customers, negotiating price and quantity, along with the preparation for scheduling the shipment with the shipping division.
- ANTAM has a lower export of Ferronickel whereas it has not fulfilled the demand of nickel in the global market. In Indonesia, it can be implied that ANTAM has a great resource of nickel which can be produced as Ferronickel. Meanwhile, the market of Ferronickel is 100% overseas for the global market. In this case, ANTAM needs to increase the exports along with the quality plan for Ferronickel to supply the demand of nickel in the global market.

2) External Analysis: Opportunity and Threats

Based on the external analysis, the following points will be explained regarding the opportunities and threats:

a) Opportunities of ANTAM

- The Government of Indonesia has supported the development of downstream industries such as Ferronickel, Nickel Pig Iron (NPI), and Nickel Mates. The support can be seen through the National Mid-Term Development Plan 2020-2024 (RPJMN 2020-2024).
- The demand for Ferronickel in the global market is increasing since there are many upcoming stainless steel companies which require a high quality of Nickel that can only be found in Ferronickel. Moreover, Ferronickel can be consumed by many other industries including the battery industries.
- ANTAM is well known with its reputation as part of SOE companies in Indonesia. According to the global times, 22%-24% of nickel global was supported from Indonesia. It can be inferred that ANTAM has a great amount of nickel reserves which are eligible to supply nickel for the global market and in turn the bargaining power of the buyers is low.
- ANTAM's Ferronickel is produced and sold 100% to overseas or global markets. It means that all of the quantities are able to be consumed by the buyers worldwide. Meanwhile, many other nickel companies might produce a large amount



of Ferronickel, but it is directly used to supply their own company. It is an opportunity for ANTAM to increase the export and the leader of Ferronickel to fulfil the demand of the nickel in the global market.

b) Threats of ANTAM

- The demand for a substitute product of Ferronickel which is Nickel Pig Iron (NPI) is increasing. Based on the Wood Mackenzie, in the future the demand of NPI will be multiple times compared to Ferronickel. Many stainless steel companies have tried to substitute Ferronickel with NPI regarding the different prices and quantities. Besides, NPI can be transformed as an intermediate component to produce electric vehicles (EV).
- ANTAM has a high bargaining power of suppliers. Even though ANTAM has its own nickel ore mine, there are external suppliers that take important part in producing Ferronickel. To produce Ferronickel, it requires a high capacity for electricity, coal, diesel, and others. If there are changing prices or scarcity on those suppliers, it will disrupt the production of Ferronickel. In this way, Ferronickel relies on these external suppliers to produce a high quality product of Ferronickel.

B. Strategy Diamond Model

To develop a new strategy for ANTAM, the diamond strategy framework highlights five essential points namely arenas, vehicles, differentiators, staging, and economic logic.

1. Arenas

To define where the company will be active and how much attention it will receive for ANTAM. It requires the company to decide which product categories, networks, market segments, or core technologies to focus on. Ferronickel of ANTAM is 100% sold to the export. The current buyers of Ferronickel are dominated with Southeast Asia such as China, India, and South Korea. The demand of Ferronickel in the global market is still rising, which gives an opportunity to increase the production to supply the worldwide. The upcoming market of new energy as developing, the segmenting and targeting buyers of Ferronickel should be expanding from stainless steel industries into adding the battery industries. To support this strategy of action, ANTAM could penetrate the market and considering to diversification the products.

2. Vehicles

To attain the presence in the geographic area, market segment, and the core of the technology for ANTAM. After regulating the arena, it should be continued with the decision to achieve and compete within the arena. There are several options that implied to maximize the issues at ANTAM. The first option is by increasing the export sales of Ferronickel. In order to develop the market outside Southeast Asia, the production and export should be increase from the current production 52.000 TNi, to supply the market worldwide. The second option is through a merger or acquisition company that produces nickel downstream products too. The demand of NPI are growing rapidly compared to the demand of Ferronickel. Although Ferronickel has its own niche market, but it will be better for ANTAM to provide all nickel downstream products like Ferronickel and NPI. Due to the high cost of production, resources planning, and other external supplies, merger or acquisition company will be a perfect solution for ANTAM. Whereas in the short-term, ANTAM could enlarge the market by offering Ferronickel and NPI to the same market. For the long-term strategy, ANTAM hopefully acquire stainless steel company to evolve the market, gain more profits, and becoming the leader of this industry.

3. Differentiators

To give a competitive advantage for the current condition and future condition for ANTAM. It could be an asset-based, which showed that it has something to do with the tangible or intangible assets of the company. Therefore these are several actions that needed by ANTAM to win the competition of Ferronickel:

- Create a new platform of promotion
Most of B2B companies are using the traditional communication like email and telephone to promote the product like nickel. However, through the development of technology, there must be a new way of promotion and communication that provides service to be enjoyed in the worldwide. For instance, ANTAM could create a special application that can be used to maintain the relationship with the buyers, adding an online customer service, and conduct an online bidding system.
- Create new market development



Southeast Asia market are now filled with the availability of NPI. While other countries such as Europe, America, Australia, South Africa lack of Ferronickel supplies. As an opportunity for ANTAM to move big and capture the market. In terms of changing, ANTAM should look for new market that eligible the sales target that can be done by market development.

- Create revenue stream from product development

Ferronickel's market is still going in the right path. Thus, there is no certainty demand of the global needs. To forecast the upcoming demand, ANTAM should provide all products that the customer needs, in this case are Ferronickel and NPI.

4. Staging

To plan about the timing and actions needed to construct the pace and strategic moves. In order to combine the staging phase, the initiatives of ANTAM might be stated as the internal development, product development, and market expansion and penetration.

- Internal Development

The internal of ANTAM should be well prepare due to the implementation of the new strategy. Some internal such as the human resources which will resulted the success or failed the implementation of the strategy.

- Product Development

Nickel downstream are come with variated products such as Ferronickel, NPI, and others. Meanwhile, the future demand of the world will always be changing and it will great to have company that offer variation products at the same time.

- Market Expansion and Penetration

Before achieving the demand of global market, ANTAM should prepare itself by increasing the exports that will be eligible to supply the global demand. Besides, the calculation of nickel resources are taking a serious part too.

5. Economic Logic

To implement the new strategy, it requires the calculation of the overall cost and the financial income. Based on the plant of Ferronickel, there are some external suppliers like electricity, diesel, and coals that plays the big part of the production cost. Ferronickel in Indonesia count as a scarcity product in the eyes of the buyers. However, there is no issue regarding the premium price of Ferronickel that offered by ANTAM to all buyers in the worldwide.

C. Ansoff Matrix

The strategy used to determine overarching strategy of the company that should employ and subsequently inform to deployed in the marketing activities [2] The matrix consists of diversification, market development, product development, and market penetration.

1. Market Penetration

To escalate the volume of sales in the same area with the existing of customers. ANTAM should penetrate more in the marketers and buyers as the main target market. Changes can be done by creating promotion through platforms and more offline exhibitions. Due to the pandemic situation, application will be a perfect solution since it can be conducted online and will not disturb the whole process while applying the restriction. For instance, there can be an online bidding system to select the new buyers of ANTAM.

2. Market Development

To keep the strategy by developing the existing product without changing the characteristics of the product. As for now, the current buyers are from Southeast Asia which are China, India, and South Korea. By implementing this market development, ANTAM should consider to expand the market of buyers too. ANTAM shall not be focus only for the stainless steel companies, but also new market like battery industries. To be able to do the market development, there should be an additional of salesman in the structure organization who will responsible on market development such as looking for new buyers, new markets, and sales target of ANTAM.

3. Product Development

To offer new products to the existing market. In terms of entering new market, ANTAM should maintain the communication between the internal marketing and the existing buyers. Based on the global data, some of the buyers of Ferronickel have switching to NPI since the demand is risen rapidly. This great demand became an opportunity for ANTAM to gain more profits by implementing the product development. ANTAM is equipped with high technologies that also able to produce NPI, since the process production are alike. By granting this product development, ANTAM could win the competition and become the top leaders.



4. Diversification

To offer new products into new markets. The changes might be volatile since the transformation from the existing product of the service to the new market structure. According to the internal and external environment analysis, there might be chance for ANTAM to apply the diversification strategy. There are two classes of nickel which are class 1 and class 2. Nickel class 1 can be found in the battery industry while nickel class 2 are like Ferronickel, NPI, and other nickel products. Since Ferronickel and NPI can be transformed as the intermediate components to produce electric vehicles (EV), ANTAM should consider to produce NPI and battery.

D. Proposed STP

To increase the export of Ferronickel at ANTAM, this study proposes a business strategy for market development. However, to success the goal of this study, there should be adjustment on the segmentation, targeting, and positioning of the previous of Ferronickel. By identifying and proposing the new STP, hopefully it will bring a great impact for the changes on the business. Before, the geographic of ANTAM was more into the Southeast Asia since the market was dominated by China and India. Due to the demand of Ferronickel at other countries, the segmentation of ANTAM should expanding to the worldwide and not limited to Southeast Asia. Speaking of the buyers, ANTAM should not be focus on looking for stainless steel companies. ANTAM could capture an opportunity to look for buyers from the battery industries. Since Ferronickel can be used as the component to produce EV, there will be no issue regarding the limitation of the market. The widen the market, the more chance for ANTAM to gain profits.

Table 2. Proposed STP for ANTAM

No Segmentation PT ANTAM Tbk

1	Geographic	The nearest countries which often purchase Ferronickel of ANTAM are from China, India, and South Korea. The market should continue to expand to the world-wide and not limited to Southeast
2	Demographic	The buyers of Ferronickel are usually high class of stainless steel companies and some electronic industries. As for the future, ANTAM should consider the batteries industries to become the new buyers of ANTAM
3	Behavioural	Companies who seek the good quality of Ferronickel, companies who seek a great quantity of Ferronickel, companies who seek an affordable price of nickel, and companies who seek an easy delivery of product

E. Proposed Marketing Mix (4P)

The marketing mix (4P) tools are used to further analyze the product in the marketing segment. Based on the analysis from the previous condition of ANTAM, there are several changes on the product, place, and promotion that need to be proposed. ANTAM currently focuses on increasing the sales of Ferronickel. However, company should seize the opportunity of the business. Nickel Pig Iron (NPI) has become popular in the stainless steel companies. Therefore, ANTAM should consider to produce NPI. ANTAM has great resources of nickel which conform to continuously produce NPI. In this case, ANTAM could maximize the domestic sales and export sales. Another thing, ANTAM should provide a special salesman who will responsible on market development to new market and new buyers. Besides, ANTAM should improve the tools for promotion by creating an application that provides an online customer service to solve the current issues of buyers and conduct an online bidding system for the new buyers of ANTAM.



Table 3. Proposed Marketing Mix (4P) for ANTAM

<i>Marketing Mix (4P) PT ANTAM Tbk</i>	
Product	1. Ferronickel 2. Nickel Pig Iron (NPI)
Price	LME
Place	1. Head Office, Tanjung Barat 2. Site
Promotion	1. Email 2. Telephone 3. Word of Mouth 4. Bidding 5. Exhibition 6. Company's Website 7. Salesman 8. Application

5. CONCLUSION

Based on the external environment analysis, there are an increasing demand of Ferronickel in the global market with the growth of stainless-steel companies and the development of electric vehicles in the battery industries. By the support of the Government of Indonesia, ANTAM commitment to increase the quality for its Ferronickel which 100% dedicated for exports. The Ferronickel production of ANTAM was not enough to accomplish the demand of the global nickel. The technology can transformed Ferronickel and NPI into the intermediate components for producing electric vehicles (EV). The existence of NPI and demand of EV have disturbed the existing market and buyers of Ferronickel. ANTAM has a potential market which can be described through the core of the company. It has great quality of mineral resources and IUP for the mining, which brings more credibility to the company. The propose business strategy for ANTAM are to strengthening the internal of ANTAM, to conduct product development by producing NPI, and implement the market development to widen the market to worldwide and able to supply for the demand of global market.

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