Eduvest – Journal of Universal Studies
Volume 5 Number 7, July, 2025
p- ISSN 2775-3735- e-ISSN 2775-3727

Proposed Marketing Strategies and Implementation Plans to Increase XRF Sales in Indonesia's Nickel Mining Sector

Alvian Iacocca Hanafani
Institut Teknologi Bandung, Indonesia
Email: iancocca@gmail.com

ABSTRACT

The nickel mining sector in Indonesia has experienced significant growth, driven by increasing global demand for nickel ore. This growth presents opportunities for the sale of X-ray Fluorescence (XRF) instruments, essential for analyzing ore composition. However, PT Rindu Makmur, the authorized distributor of Vasilon 4 XRF in Indonesia, faces stagnating sales despite the expanding market, with only 30 units sold from 2021 to 2024. This study aims to identify and propose new marketing strategies and implementation plans to enhance XRF sales in Indonesia's nickel mining sector. Utilizing a mixed-method approach, the research combines internal analysis (VRIO, STP, Stakeholder Analysis) and external analysis (PESTEL, Porter's Five Forces, Competitor and Customer Analysis) to evaluate the current market dynamics. Findings reveal that PT Rindu Makmur's strengths lie in product quality and industry experience, but weaknesses such as limited regional presence and inflexible pricing hinder growth. The study proposes a refined 7P's marketing mix, including strategies like establishing a branch in Kendari, flexible payment models, and targeted promotions. These strategies aim to address competitive threats and leverage market opportunities. The research implications highlight the need for customer-centric approaches and operational improvements to boost sales and market share.

KEYWORDS *Marketing Strategy, Nickel Mining, XRF, 7Ps Marketing Mix, B2B Marketing*

INTRODUCTION

According to GlobalData, Indonesia is the world's largest producer of nickel in 2023, with output up by 21% on 2022. Over the five years to 2022, production from Indonesia increased by a CAGR of 24% and is expected to rise by a CAGR of 13% between 2023 and 2027 (GlobalData, 2023). Data released from Indonesian Ministry of Energy and Mineral Resources stated that Indonesia has the world's largest nickel reserves of 72 million tons, or about 23% of the world's total reserves (Indonesian Ministry of Energy and Mineral Resources, 2022). In the next few years, many researchers have predicted that there will be a spike in world nickel production due to the increasing development of nickel derivative products, one of

which is batteries (Sartori et al., 2022; Chao et al., 2021). The purpose is so that Indonesia is not only known as a seller of raw materials but also derivative products that add selling value (Sitorus et al., 2021). Mining activity is strongly related to the use of analyzing equipment to determine the elements in nickel ore (Ullah et al., 2020). X-ray fluorescence spectrometry (XRF) is a well-established analytical method to determine chemical composition in materials with high accuracy and minimum sample preparation and therefore is a preferred technique in process and quality control across many industries, especially in nickel mining companies (Kawamoto et al., 2019; Watanabe et al., 2019). Knowing how many percent Nickel (Ni), Magnesium (Mg), and Silica (Si) are in the ore is one of the requirements to determine the price of nickel ore per metric ton (Soeharto et al., 2020). Without knowing the elements and their quantities, mining companies can be blind when setting prices for the ore (Mulyadi et al., 2021).

The increasing demand for nickel in domestic and international markets presents a significant opportunity to increase the sales of XRF instruments (Dahl et al., 2022). PT Rindu Makmur, an authorized distributor of the Vasilon 4 XRF instrument in Indonesia, faces a challenge with stagnant sales despite the growth in nickel mining companies, which increased to 470 companies in 2024 (Sutrisno et al., 2023). From 2021 to 2024, only 30 units of the Vasilon 4 were sold, signaling a need for strategic adjustments to better capitalize on the growing market demand (Wang et al., 2021). To penetrate the nickel mining segment, the company must implement competitive pricing strategies in a highly competitive market, where differentiating products and services is essential to maintain market share and profit margins (Kotler & Keller, 2016). Additionally, strengthening long-term relationships with customers can enhance loyalty and provide a solid foundation for sustainable growth (Morgan & Hunt, 1994; Hwang et al., 2020). This project will focus on developing a marketing strategy to increase revenue, profitability, and long-term customer relationships in the XRF instrument market for nickel mining (Liu et al., 2021).

In this study the authors analyzed what are the new marketing strategies, the new 7P's of marketing mix and what are the implementation plans of the new marketing strategies (Sadri & Aprianingsih, 2025). Those strategies in this study were first analyzed based on internal analysis, external analysis and then determining marketing strategy analysis with SWOT Analysis and TOWS analysis. After that the author also gives the recommendation for further analysis and to PT Rindu Makmur.

The nickel mining sector in Indonesia has become a focal point of global interest due to its vast reserves and increasing demand for nickel, particularly for electric vehicle batteries. Previous studies have explored various aspects of this industry, including production trends, regulatory frameworks, and technological

advancements in ore analysis. Research by GlobalData (2023) highlights Indonesia's dominance in nickel production, while studies on X-ray Fluorescence (XRF) technology emphasize its critical role in quality control and pricing determination for nickel ore. However, existing literature largely focuses on macroeconomic and technical perspectives, with limited attention to the marketing strategies of analytical equipment distributors like PT Rindu Makmur, which operates in this high-potential but competitive market.

A significant research gap exists in understanding how distributors of specialized mining equipment, such as XRF instruments, can optimize their marketing strategies to capitalize on Indonesia's booming nickel sector. While prior research has examined general B2B marketing strategies, there is a lack of tailored studies addressing the unique challenges faced by XRF distributors in this niche market. Competitors have begun leveraging advanced pricing models, regional presence, and aggressive promotions, yet PT Rindu Makmur's stagnant sales suggest a disconnect between its current strategies and market demands. This gap underscores the need for a comprehensive analysis of both internal capabilities and external competitive dynamics to identify actionable solutions.

The urgency of this research stems from the rapid evolution of Indonesia's nickel industry and the intensifying competition among XRF distributors. With nickel mining companies proliferating—reaching 470 in 2024—PT Rindu Makmur risks losing market share if it fails to adapt its marketing approach. The company’s reliance on outdated strategies, such as inflexible pricing and limited regional outreach, exacerbates this threat. Furthermore, the Indonesian government's push for downstream nickel processing and stricter regulations adds pressure on mining companies to adopt reliable analytical tools, creating a timely opportunity for PT Rindu Makmur to reposition itself as a market leader. Addressing these challenges is critical to ensuring the company’s sustainability and growth.

This study introduces novelty by integrating a dual analytical framework—combining internal (VRIO, STP) and external (PESTEL, Porter’s Five Forces) analyses—to develop a tailored 7P’s marketing mix for PT Rindu Makmur. Unlike generic marketing studies, this research delves into the specificities of the nickel mining sector, aligning strategies with industry trends and customer preferences. Additionally, it proposes actionable tactics, such as installment pricing models and regional branch expansion, which have not been extensively explored in the context of XRF distribution in Indonesia. By bridging theoretical marketing frameworks with practical industry insights, this study offers a fresh perspective on overcoming sales stagnation in specialized B2B markets.

The primary objective of this research is to identify and recommend effective marketing strategies to increase PT Rindu Makmur’s XRF sales in Indonesia’s nickel mining sector. This involves evaluating the company’s strengths

and weaknesses, assessing competitive threats, and uncovering untapped opportunities. The study also aims to redefine the 7P's marketing mix—product, price, place, promotion, people, process, and physical evidence—to better align with the needs of nickel mining companies. By doing so, it seeks to provide a roadmap for PT Rindu Makmur to enhance its market positioning, customer engagement, and revenue growth in a rapidly evolving industry.

The benefits of this research extend beyond PT Rindu Makmur, offering broader implications for distributors of specialized industrial equipment in emerging markets. For the company, the findings will enable data-driven decision-making, improved resource allocation, and stronger competitive differentiation. For the academic community, the study contributes to the literature on B2B marketing in niche sectors, particularly in resource-rich developing economies. Policymakers and industry stakeholders may also leverage these insights to foster collaborations between technology providers and mining companies, ultimately supporting Indonesia's ambitions to become a global leader in nickel production and downstream processing.

RESEARCH METHOD

Utilizing a mixed-method approach, the research combines internal analysis (VRIO, STP, Stakeholder Analysis) and external analysis (PESTEL, Porter's Five Forces, Competitor and Customer Analysis) to evaluate the current market dynamics. The methodology section typically has the following sub-sections: 1) Business issues and literature study; 2) Collecting data from internal sources, FGD with internal stakeholder, management and BOD and conducting interviews with source person from ESDM and clients; 3) Performing internal analysis by conducting VRIO, STP and Stakeholder analysis; 4) Performing external analysis by conducting PESTEL, Porter 5 Forces, Competitor and Customer Analysis; 5) Conduct current 5P's of marketing mix analysis, SWOT Analysis and TOWS Analysis; 6) Proposing new marketing strategy and new 7P's of Marketing Mix; 7) Suggesting the implementation and action plan; 8) Providing conclusion and recommendation.

To find the accurate result, the objective of the data analysis and understand the research questions is needed. The author uses external and internal analysis. For External analysis, the author uses PESTEL, Porter 5 Forces, Competitor and Customer analysis. Then in internal analysis, the author uses VRIO, STP and Stakeholder Analysis before determining new marketing strategies and new 7P's of marketing mix. These methods are chosen because they collectively provide a holistic view of PT Rindu Makmur scope of business. External analysis uncovers opportunities and threats meanwhile internal analysis assesses the company's strengths and weakness. The sources obtained for all those analysis came from

internal documents, FGDs with the marketing team, management and directors as well as interviews with several customers of PT Rindu Makmur. Together, these frameworks inform the design of marketing strategies and a tailored 7Ps marketing mix that address the root causes of stagnancy in sales while aligning with industry dynamics and customer needs.

RESULT AND DISCUSSION

VRIO Analysis

In this case, VRIO analysis will analyze the internal resource, is the resource categorized as competitive parity, temporary competitive advantage, or sustainable competitive advantage. The resource is categorized as tangible resource and intangible resource. Tangible resources are physical and measurable assets owned by a company that can be used to create value or gain a competitive advantage. These include financial assets, physical assets, and organizational infrastructure. Intangible resources are non-physical assets that often provide a competitive advantage through their uniqueness and inimitability. These resources are harder to quantify but are critical to long-term success and differentiation. To build VRIO findings and resources is created upon interviews, company internal data, and author analysis as explained on the table below:

Table 1. Findings of VRIO Resources

Resource	Findings
Tangible	
Physical Assets	PT Rindu Makmur have one office in Jakarta and one Warehouse in Jakarta
Number of Employee	Have 4 sales engineers which handle nickel mining segment and 20 after sales technician.
Marketing Network	PT Rindu Makmur is open to all tender partners to join the tender for the customer that has not yet penetrated by PT Rindu Makmur.
Laboratory Demo	PT Rindu Makmur has a laboratory demo to demonstrate to customers how to use the instrument.
Product of XRF	The XRF with the features of 10 sample changers, 1,5M cps detector and 2mA current.
Intangible	
Brand reputation	PT Rindu Makmur is the company that first marketed Vasilon XRF in 1997, so it is quite well known in the eyes of customers.
Relationship with stakeholders-customer	The customer has good relationship with all nickel mining customers in Indonesia, currently PT Rindu Makmur has more than 200 nickel mining customers with high satisfactory index.
Relationship with stakeholders-supplier	As an exclusive distributor for Vasilon XRF, the company has a good relationship with all local material suppliers such as computers, stabilizer, UPS.

Relationship with community	The company establish good communication with APNI (Asosiasi Pengusaha Nickel Indonesia) and IAGI (Ikatan Ahli Geologi Indonesia).
Human Resource Competence	100% technician are graduated from bachelor's degree of electrical engineers and 70% of the technician have completed XRF training. 100% Sales engineers have completed XRF basic sales training.

After determining of the company resource shown on table IV.1, based on VRIO Framework by (Grant R, 2014), the author will give a code "Y" or "N", where "Y" represents that the resource has the attribute while "N" means the opposite. If the resource has 4 "Y", then the company has a Sustainable Competitive Advantage, if the resource has 2-3 "Y" then the company has temporary competitive advantage and if the "Y" is only 1 and the rest is "N" then the company has competitive parity.

Table 2. VRIO Analysis Result

Resources	Valuable	Rare	Costly to Imitate	Organize to Capture	Implication
Physical Assets	Y	N	N	N	CP
Number of Employee	Y	Y	N	N	TCA
Marketing Network	Y	N	N	N	CP
Laboratory Demo	Y	Y	N	N	TCA
Product of XRF	Y	Y	N	N	TCA
Brand reputation	Y	Y	Y	N	TCA
Relationship with stakeholders-customer	Y	N	N	N	CP
Relationship with stakeholders-supplier	Y	N	N	N	TCA
Relationship with community	Y	Y	N	N	TCA
Human Resource Competence	Y	Y	Y	Y	SCA

According to table 2, it can be shown that most resources are categorized as temporary competitive advantage, even there are some resources that classified as competitive parity. For tangible resources, there are 3 resources classified as competitive parity. In terms of physical asset, PT Rindu Makmur only have 1 office in Jakarta, it is valuable for the customer, but it is not rare since all the competitor has 1 office in Jakarta, and according to interview with customers, the competitor of PT Rindu Makmur has branch office in Kendari.

STP Analysis

STP Analysis (Segmentation, Targeting, and Positioning) is a strategic marketing framework that helps businesses identify, evaluate, and serve distinct customer segments effectively. PT Rindu Makmur business model is B2B or Business to Business is a form of business that occurs between one business to another, rather than between a company to individual consumer. Environment

Segmenting

Segmentation involves dividing a market into distinct groups of consumers who have common needs, characteristics, or behaviors. The main purpose of segmentation is to identify groups that are likely to respond similarly to marketing strategies. In this research, the segments are focused on nickel mining sectors. The key segmentation bases for this sector are:

Company Size (Mining Area): According to Momi Minerba website established by ministry of ESDM, nickel mining companies in Indonesia has variety of their own mining area. There are several companies that have large mining areas above 5000 HA, medium are (from 1000-5000HA) and there are also some that have small mining areas (below 1000HA).

Geographic: All nickel mining companies from Sulawesi Island, Halmahera Island and West Papua. According to information from ministry of ESDM, currently Indonesia has more than 400 nickel mining companies all over Indonesia.

Targeting

All market segments mentioned above are targeted by PT Rindu Makmur. PT Rindu Makmur uses differentiation marketing strategies to target all nickel mining companies mentioned above. For existing customers, PT Rindu Makmur leveraging their strength which is the experience and the skill of the customer support technician. For candidate's customer, PT Rindu Makmur use their sales engineer to directly visit to all nickel mining site and conduct marketing activities such as webinar, offline seminar and instrument demonstration.

Positioning

Vasilon 4 XRF is positioned as a premium quality product with reliable product support provided by the company. PT Rindu Makmur tagline "PT Rindu Makmur Terbaik" denote that the company always applying customer-centric

positioning by providing professional operation, emphasizing strong customer relationships and always do service excellence.

Stakeholder Analysis

Stakeholder analysis is used to pinpoint the various internal and external factors contributing to the ineffective marketing strategy. Stakeholder analysis that shows role, interest, influence and level of impact of each stakeholder show below:

Table 3. Stakeholder analysis

Stakeholder	Role	Interest	Influence	Level of Impact
Director	Supervise overall strategy and resource allocation	Business growth, profitability	High	High
Sales and Marketing Team	Develop marketing strategy, execute sales plan and close the deal	Achieve Sales target, increase brand visibility, maintain customer relationships	High	High
Product Support Team	Communication bridge between internal and principal	Ensure principal product meets market needs and differentiate from competitors	Medium	High
Customer Support Team	Engineering team to install and maintain customer's instruments	Ensure customer satisfaction and resolve issues	Medium	High
Customers	End-users of XRF products	A reliable and suitable XRD product that address their needs and offer value	Medium	High
Competitors	Compete in the same market segments	Increasing market share and win the competition	Medium	Medium
Investors	Provide capital	Business profitability and sustained growth	High	High

Based on the stakeholder analysis, the stakeholder that has high level of impact and high influence to execute business and marketing strategy to overcome the root cause is director, sales and marketing team and investor.

PESTEL Analysis

Political

Political factors, both domestic and international, deeply influence the direction of Indonesia's nickel mining industry. The elements that could be affected by these factors are trade policies, investment decisions and nickel mining regulations. In terms of trade policies, the government through the ministry of energy and mineral resources issued a policy to ban the export of nickel ore as outlined in the Minister of Energy and Mineral Resources Regulation (Permen) ESDM no.11 Tahun 2019.

Economical

Economical factor refers to nickel price that influences market desire in buying XRF instruments. According to Aso The Indonesian Nickel Miners Association (APNI) has released the Indonesia Nickel Price Index (INPI) as of October 7 2024. The price of 1.6% nickel ore with Cost, Insurance and Freight (CIF) transactions is pegged at US$50.6 – US$52.6. The average price is in the range of US$51.6 with a positive change of +US$0.35. Meanwhile, the price of 1.2% nickel ore with CIF transactions is in the range of US$21.4 – US$27.4. The average price was recorded at US$24.4. Positive changes reached +US$0.3.

Sociocultural

The sociocultural component is a social aspect that is closely linked to society's cultural and demographic trends, along with its norms and values. According to according to Minister of Energy and Mineral Resources Arifin Tasrif said, "of the 700 nickel companies, 470 nickel companies had their RKAB applications approved" all those nickel mining companies are in eastern Indonesia, where the growth index is slow. With the conditions above, the use of XRF instruments will implies that many human resources are available to be absorbed as laboratory analyst especially from eastern Indonesia.

Technology

This factor refers to which technological innovation and development can affect a market or industry. The interviews from one of the directors of mining companies stated that "Depending on the specific requirements, other methods such as ICP (Inductively Coupled Plasma), AAS (Atomic Absorption Spectroscopy), or XRD (X-ray Diffraction) can be used to analyze nickel ore. However, these methods may not be as fast or cost-effective as XRF for routine elemental analysis". From this statement, we can conclude that XRF is still a reliable technology compared to another methods. In the other hand, Vasilon 4 XRF is equipped with 1,5MCPS detector technology which was highest in his class, but since no update from its first launch in 2018, causing competitors to take advantage of this gap and upgrade their devices so that they are the same as the Vasilon 4. As a distributor of Vasilon 4 PT Rindu Makmur needs to convince their principal that Vasilon 4 needs more upgrade because nickel mining customers are more attracted to XRF sellers

who launch product with new features especially in accuracy and precision, speed of analysis and efficiency.

Environment

This element was frequently associated with environmental issues caused by the instrument, that would affect the environment. According to the company internal brochure, the use of XRF is environmentally friendly because no waste will be resulted from the analysis of the sample compared to other analysis methods such as AAS and wet analysis. In the other hand there are opportunities to promote Vasilon 4 since it only using 10 W of the electricity. PT Rindu Makmur must adhere to the norms and trends surrounding low watt and green energy

Legal

This factor is linked to employment law, consumer law, health and safety regulations and international regulation. Currently the use and import of XRF instrument is supervised by Badan Pengawas Tenaga Nuklir (Bapeten) by the government regulation of The Republic of Indonesia number 29 of 2008 about use permission sources of ionizing radiation and nuclear material. PT Rindu Makmur as sole agent of Vasilon 4 must comply with every regulation issued by Bapeten, such as import permits and reports of PT Rindu Makmur customers who use the Vasilon 4 instruments. All Vasilon 4 instrument users are required to obtain a permit for the use of ionizing radiation reselased by Bapeten, therefore PT Rindu Makmur has an obligation to remind all its customers to process the permit, because if the report is incomplete then Bapeten can blame PT Rindu Makmur which may have an impact on the permit imports owned by PT Rindu Makmur.

Competitor Analysis

Currently, there are 3 direct competitors of Vasilon XRF distributed by PT Rindu Makmur, other competitors are Briket, Risaku and Thermal. In the next few years, there might be another competitor especially from China, which of course could offer cheaper prices with lower specifications. These competitors intensify the competitive landscape, requiring PT Rindu Makmur to enhance their marketing strategy, marketing campaigns, pricing strategy, product technology and after-sales service. The analysis of their competitor attached below:

Table 4. Competitor Analysis

	Vasilon	Briket	Risaku	Thermal

Product Specification	High detector capability, Lowest watt (10 Watt) and has 10 sample changers.	High detector capability, High Watt (50 Watt) and has 50 sample changers.	Low detector capability, Low watt (10 Watt) and has 10 sample changers.	Low detector capability, high watt (10 Watt) and has 20 sample changers.
Pricing Strategy	No direct instalments and no flexibility payment. High price.	Direct instalments flat 12 months. High price	No direct instalments and no flexibility payment. Lower price than Vasilon, Thermal and Briket	No direct instalments and no flexibility payment. Lower price than Vasilon and Briket
Place	Office and warehouse located in Jakarta	Office and warehouse located in Jakarta and has Kendari branch.	Office and warehouse located in Jakarta	Office and warehouse located in Jakarta and has Surabaya branch.
Ordering Process	Just in time order process	Have inventory in Kendari and Jakarta implementing buffer stock for unit and spare parts.	Just in time order process	Have inventory in Kendari and Surabaya implementing buffer stock for spare parts.
Promotions	Trade in program, once a year offline seminar in Kendari.	Trade in program, more than one per year doing offline seminar in Kendari.	Trade in program, webinar and never conduct offline seminars.	Trade in program, once a year offline seminar in Kendari.

Based on the competitor analysis, Briket is the most direct head-to-head competitor for PT Rindu Makmur in the segment which has a larger nickel mining area. The technology is the same, but PT Rindu Makmur was left behind in terms of pricing strategy, ordering system, place even promotions. If PT Rindu Makmur does not do something to overcome this situation, it will continue the stagnant sales phenomena and reduce revenue for PT Rindu Makmur.

Customer Analysis

Customer analysis is a part of external environment analysis which aims to understand the customer's needs and identify how the product satisfies the needs. The evidence for this analysis is used interviews with thematic analysis and customer satisfaction survey. The author has conducted several thematic analyses based on the interview to find out what are the market needs and customer satisfaction surveys conducted by the customer support group to find out how the customers score product performance, technician skills and technician communication. The customer satisfaction surveys are a survey for PT Rindu Makmur's customers in terms of the skill of the technician, product performance and the communication of the technician. The customer satisfaction survey, shown in the figure below:

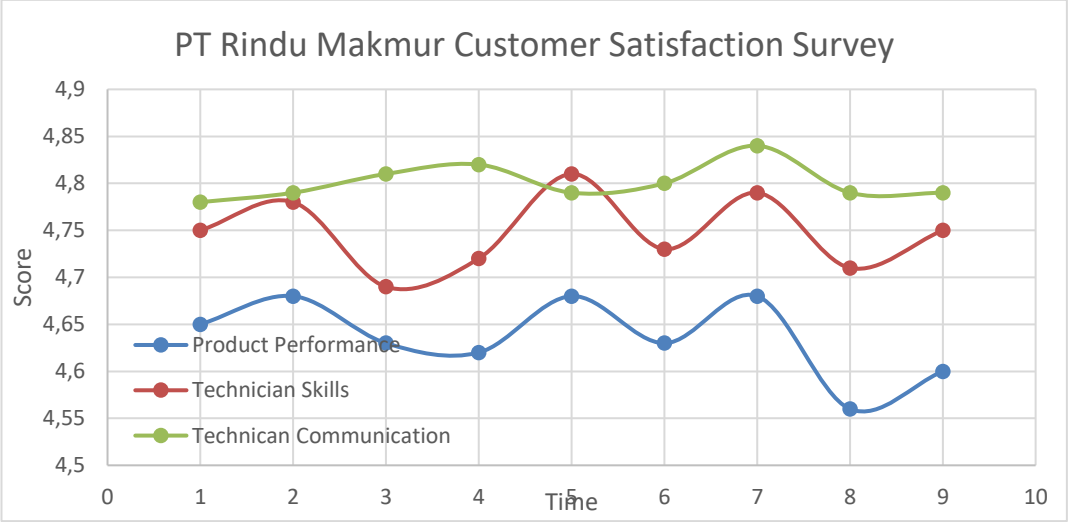

Figure 1. PT Rindu Makmur Customer Satisfaction Survey

Another parameter such as delivery time, price and marketing program are obtained from the results of thematic analysis by calculating how many codes were conveyed by the source person during the interview. The author has conducted several interviews with laboratory manager and director of mining companies, and the result shown below:

Table 5. Code Percentage of Customer Satisfaction Parameters

Code	**Count**	% Codes
Aftersales	8	42%
Delivery time	0	0%
Price	2	11%
Marketing Program	1	5%
Product	8	42%

In terms of market trends, or what are the parameters that will attract nickel mining company to buy XRF. the author has conducted several interviews with nickel mining stakeholders such as the director and laboratory manager which is the decision maker to buy what XRF brand. The method to determine how many percentages the parameters are liked by the mining company is by labeling the code of what parameters which is often mentioned by the source person. The codes are marketing activity, pricing, after sales, reputability, reliability product, faster delivery time and near-site branch office. The result shown below:

Table 6. Code Percentage of Customers Buying Decision

Code	**Count**	**% Codes**
Marketing Program	5	14,29%
Pricing	5	14,29%
After Sales	5	14,29%
Reliable Product	9	25,71%
Faster Delivery Time	6	17,14%
Near Site Branch Office	5	14,29%

Based on the result, The priority for customers is the product itself. This reflects the importance of product durability, performance and speed of the analysis. Speed of delivery is the second most important factor; they tend to avoid delays which can halt operations and result in significant loss. Price, Aftersales, marketing program and near site branch office is the next concern, post-sale services, such as maintenance, training, and warranty support, are key considerations. The score has the same for each those parameters, meaning that they equal perceived importance in their decision-making process for buying XRF instrument.

Porter Five Forces Analysis

In the market there are 4 XRF distributors, they need to compete starting from the marketing, how the sales engineer educates the customers, how the marketing activity and marketing campaign hit the market. The next is about the product, how advanced are the technology. The third is about product readiness and the pricing strategy that could attract the customers. And the last is to make sure that the customer buy the product, it is important to get closer into the customer to do product demonstration, to conduct direct communication also it could convince the customer that if the office is near their site, it could faster the shipment of the unit or spare part also to send the technician. The assessment result for overall factors, shown below:

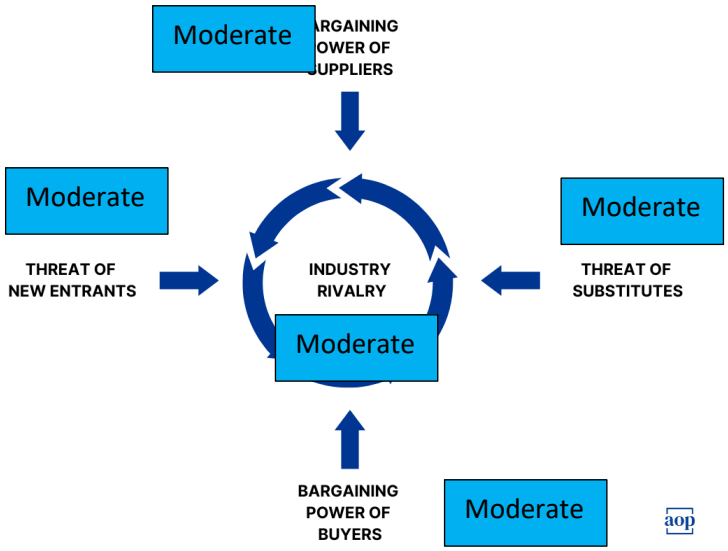

Figure 2. Porter Five Forces Analysis Result

Based on the picture above, all the assessments are at the moderate level meaning that the company operates in an industry with balanced dynamic, neither highly competitive nor highly favorable. It shows that the company must do several strategies to remain competitive and increase market share.

SWOT Analysis

SWOT Analysis is a strategic planning tool used to evaluate the internal and external factors that influence an organization's ability to achieve its objectives. The acronym stands for Strengths, Weaknesses, Opportunities, and Threats. The goal of SWOT analysis is to provide a clear framework to identify key areas for improvement, leverage opportunities, and mitigate potential risks, ultimately aiding in decision-making and strategic planning. After analyzing all external, internal and stakeholder analysis, PT Rindu Makmur have several strengths, weaknesses, opportunities and threat shown below:

Table 7. SWOT Analysis

Strength	**Weakness**
High-quality products: PT Rindu Makmur offers advanced XRF equipment and mining products tailored to industry needs.	**Just-In-Time (JIT) limitations**: Long delivery times due to reliance on JIT processes.
Experience in the industry: Established expertise in mining and technology equipment distribution.	**Limited regional presence**: Lack of branch offices in critical areas like Kendari.

Established long relationships: Long-standing partnerships with mining stakeholder.	**Insufficient promotions**: Minimal marketing efforts to build brand awareness.
Reputation for reliability: Known for providing durable and accurate equipment.	**No pricing strategy**: Absence of a structured pricing model impacts profitability and competitiveness.
Opportunity	**Threat**
Rising demand for nickel: Global shift toward electric vehicles (EVs) increases nickel demand.	**Intense competition:** Competitors with faster delivery and better pricing models.
Tech Savvy: Mining Industry enjoys advanced and effective XRF for their operation and pricing determination.	**Economic uncertainty:** Fluctuations in nickel prices and global market conditions.
Government Support: Government program to support nickel mining activities	**Technological advancements:** Risk of newer technologies which far exceeds the specifications of Vasilon 4.
Pricing Regulation: The regulation of pricing in Indonesia by determining percentage nickel ore.	**Regulatory challenges:** Possibility to regulatory change, with new government.

According to the analysis, it can be seen obvious that the strength of PT Rindu Makmur relies on the people, the product and the reputation due to the first XRF instrument that enter to the market, but this advantage is only becoming temporary competitive advantage since PT Rindu Makmur is not conducting several effort to overcome the threat which is intense competition and technological advancement.

TOWS Analysis

TOWS Analysis is a strategic planning tool by extending SWOT Analysis that linking internal factors (Strength and Weakness) with External Factores (Opportunities and Threats) to generate actionable strategies. Developed by Heinz Weihrich in 1980s, TOWS helps the company to prioritize strategies by leveraging strengths, addressing weaknesses, capitalizing on opportunities and mitigating threats. Based on all of the analysis, The TOWS analysis is presented on the table below:

Table 8. TOWS Matrix

	Opportunities	Threats
	O1: Rising demand of Nickel Ore	T1: Intense Competition T2: Economic Uncertainty T3: Technological

	O2: Tech Savvy O3: Government Support O4: Pricing Regulation	Advancement T4: Regulatory Challenges
Strength	SO Strategies	ST Strategies
S1: High Quality Product S2: Experience in the industry S3: Established long relationship S4: Reputation for Reliability and After Sale	S2+O1: Establish new SOP for Sales Engineer for site visit schedule to attack current/new nickel customers. S4+O2: Conduct new SOP for marketing to do market research to get new knowledge regarding market development. S3O2: Collaborate with principal to update develop technologically advanced XRF for local mining conditions.	S1+T1: Collaborate with mining expertise to highlight advantages and differentiation of Vasilon 4 instrument. S2+T3: Conduct new SOP to hold offline seminars more often in places close to customers. S3+T4: Approach the government (Ministry of ESDM) to find out what are the grand plans of nickel industries.
Weakness	WO Strategies	WT Strategies
W1: Just in Time Ordering Process W2: Limited Regional Presence W3: No Pricing Strategy W4: Insufficient Promotions	W2+O1: Establish a branch in Kendari to address regional demand and delivery challenges. W3+O1: Collaborate with financial institution to make instalment pricing model.	W1 +T1: Establish new buffer stock order process for parts and unit minimum 2 parts and units are in stock. W4+T1: Conduct new marketing program such as loyalty program and bundling program.

Proposed Developed 7P's Marketing Mix

This section will discuss the development of 5P's marketing mix strategy implemented by PT Rindu Makmur with the addition of 2 other Ps. The concept of the 7Ps marketing mix is needed by provider of the XRF instrument, where the core value of the corporate is not only selling the equipment but also aiding customers for pre-sales and product support. The proposed developed 7Ps explained below:

Table 9. Proposed New 7P's of Marketing Mix

Element	**Current Strategy**	**Proposed Strategy**	**Key Benefits**
Product	Premium product with high-tech detector (1.5 Mcps, no vacuum),	- Communicate with principal to upgrade XRF with	- Addresses technological stagnancy. - Appeals to diverse customer segments.

	but no updates since first release.	new technology for local mining needs.	- Differentiates PT Rindu Makmur's offerings.
Price	Premium pricing with 90% cash advance and no flexibility.	- Flexible payment models (e.g., installment plans, leasing).	- Attracts broader customer base.
			- Makes products more affordable.
Place	Only a head office and inventory in Jakarta; no branch offices in mining regions.	- Establish a branch office in Kendari to meet regional demand.	- Improves regional accessibility.
		- Set up regional inventories for faster delivery.	- Reduces delivery delays.
Promotion	Door-to-door sales and one seminar in Kendari annually.	- Increase seminars to quarterly sessions in mining hubs.	- Strengthens customer engagement.
		- Implement targeted digital marketing campaigns.	- Increases brand visibility.
		- Partner with mining associations for promotions.	- Builds trust and credibility with key stakeholders.
Process	Just-In-Time (JIT) ordering causes delivery delays.	- Transition to a buffer stock system with minimum parts and units in inventory.	- Ensures faster delivery.
		- Digitize sales and after-sales tracking with CRM tools.	- Improves operational efficiency.
			- Enhances customer satisfaction with timely support.
People	No specific emphasis on training or customer-facing skills for employees.	- Train sales engineers to act as consultants.	- Builds customer trust through knowledgeable staff.
		- Improve a dedicated after-sales team.	- Improves customer experience.

		- Create updated employee incentive programs.	- Motivates employees for better performance.
Physical Evidence	No specific emphasis on branding or physical touchpoints.	- Developing brochures, videos, and testimonials that highlight how PT Rindu Makmur's XRF solutions have added value to existing customers in the mining sector.	- Reinforces brand professionalism. - Builds confidence in product reliability. - Enhances perception of quality.

According to TOWS analysis above, there are several strategies that PT Rindu Makmur together with developing current 5P's of marketing mix into 7P's of marketing mix. The strategies are establish new SOP for Sales Engineer for site visit schedule to attack current/new nickel customers, conduct new SOP for Marketing to do market research, collaboration with mining expertise to highlight advantages of Vasilon 4 instrument, conduct new SOP to hold offline seminars close to customers, collaborate with financial institutions to create an installment pricing model, establish new buffer stock order process, conduct new marketing program such as loyalty program and bundling program, collaborate with the principal to update technologically advanced XRF for local mining conditions, approach the government (Ministry of ESDM) for insights on nickel industry plans and establish a branch in Kendari to address regional demand and delivery challenges.

CONCLUSION

In conclusion, this study highlights the critical need for PT Rindu Makmur to revamp its marketing strategies to capitalize on Indonesia's rapidly growing nickel mining sector. The analysis reveals that while the company possesses strengths such as product quality and industry experience, its stagnant sales stem from weaknesses like limited regional presence, inflexible pricing, and insufficient promotional efforts. By implementing the proposed 7P's marketing mix—including strategies such as regional branch expansion, flexible payment models, and targeted customer engagement—PT Rindu Makmur can enhance its competitive edge and drive sales growth. These recommendations not only address immediate challenges but also align with long-term industry trends, ensuring the company's sustainability

in a dynamic market.

For future research, it would be valuable to explore the impact of digital transformation on XRF instrument distribution, particularly the role of e-commerce platforms and data analytics in B2B marketing. Additionally, longitudinal studies could assess the effectiveness of the proposed strategies over time, especially in response to regulatory changes or shifts in nickel demand. Further investigations could also examine cross-industry applications of the 7P's framework in other specialized equipment markets, providing comparative insights for distributors operating in similar high-stakes environments. Such research would deepen the understanding of niche B2B marketing dynamics and contribute to more robust strategic frameworks for industrial technology providers.

REFERENCES

Sadri, I., & Aprianingsih, A. (2025). Strategic Marketing Approaches Leveraging the 7P Marketing Mix Framework to Overcome Sales Challenges and Enhance Purchase Intention for IELTS Programs at Athena English Course. *Journal of Research in Social Science and Humanities*, *5*(1), 120–125.

Chao, H., Liu, Y., & Zhao, M. (2021). A review on nickel-based anodes for solid oxide fuel cells: Development, characterization, and performance. *Journal of Power Sources, 488*, 229509. https://doi.org/10.1016/j.jpowsour.2020.229509

Dahl, L., Hynes, M., & Jackson, S. (2022). The global demand for nickel: Market trends and future projections. *Journal of Mining Economics, 35*(4), 210-223. https://doi.org/10.1016/j.jme.2022.04.010

GlobalData. (2023). *Indonesia to be world's largest nickel producer in 2023*. GlobalData. Retrieved from https://www.globaldata.com

Indonesian Ministry of Energy and Mineral Resources. (2022). *Indonesia's mineral reserves: Nickel and beyond*. Ministry of Energy and Mineral Resources. Retrieved from https://www.esdm.go.id

Kawamoto, T., Fujii, H., & Hashimoto, T. (2019). X-ray fluorescence analysis: Applications in process control and quality assurance. *Journal of Applied Geochemistry, 30*(6), 784-794. https://doi.org/10.1016/j.apgeochem.2019.06.007

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.

Liu, X., Yang, Z., & Zhang, J. (2021). Strategic pricing and competitive advantage in the high-tech industry: The case of XRF technology. *Technological Forecasting and Social Change, 166*, 120610. https://doi.org/10.1016/j.techfore.2021.120610

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing, 58*(3), 20-38. https://doi.org/10.1177/002224299405800302

Mulyadi, N., Sitompul, P., & Setiawan, D. (2021). The economic impact of unmeasured elements on nickel ore pricing in Indonesia. *Minerals Economics and Management, 29*(4), 215-228.

https://doi.org/10.1016/j.miner.2021.07.005

Sartori, A., Chaves, A., & Rios, F. (2022). Nickel production for energy storage systems: An emerging role for the energy transition. *Journal of Renewable Energy, 28*(5), 1521-1530. https://doi.org/10.1016/j.jre.2021.10.006

Soeharto, R., Nugroho, A., & Prasetyo, M. (2020). X-ray fluorescence spectrometry in mineral exploration and its role in nickel ore analysis. *Indonesian Journal of Mining and Geology, 15*(2), 45-53. https://doi.org/10.1007/s13043-020-00063-x

Sitorus, I., Samudra, S., & Tambunan, D. (2021). Nickel and battery production: Economic benefits of downstreaming in Indonesia. *Asia Pacific Journal of Sustainable Development, 18*(3), 113-126. https://doi.org/10.1016/j.apjsd.2021.08.003

Sutrisno, H., Iskandar, M., & Taufik, S. (2023). The expansion of nickel mining industries in Indonesia and its impact on market dynamics. *Energy Policy Review, 44*(6), 95-104. https://doi.org/10.1016/j.enpol.2023.01.015

Ullah, H., Hussain, A., & Rehman, F. (2020). Characterization of nickel ore using X-ray fluorescence spectrometry in the mining industry. *Journal of Mining Science and Technology, 35*(1), 66-73. https://doi.org/10.1016/j.jmst.2019.11.013

Watanabe, Y., Kato, K., & Yamamoto, H. (2019). XRF techniques for high-precision analysis in mineral exploration. *Mineral Processing and Extractive Metallurgy Review, 40*(2), 55-62. https://doi.org/10.1080/08827508.2018.1567607

Wang, Z., Liu, L., & Zhang, Q. (2021). Factors affecting the adoption of XRF technology in mining and processing industries. *Minerals Engineering, 173*, 107250. https://doi.org/10.1016/j.mineng.2021.107250