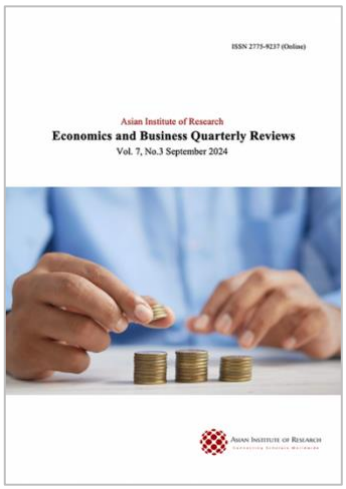

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Evaluation of OEM Prioritization to Support the Growth Strategy of PT. Sulzer Indonesia in the >400MW Steam Turbine Product Line

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Abstract
This study presents a comprehensive strategy for PT Sulzer Indonesia to expand its presence in the >400MW Steam Turbine market in Indonesia. Employing a mixed-method approach, the research combines qualitative interviews with six industry experts and quantitative Analytic Hierarchy Process (AHP) analysis to identify key success factors and prioritize Original Equipment Manufacturers (OEMs) for strategic marketing focus. The findings highlight the critical importance of market viability, particularly market accessibility, along with competitive advantages such as technological fit and strong engineering capabilities. The AHP analysis reveals Mitsubishi Hitachi Power Systems, Toshiba Energy Systems and Solutions, and GE Vernova as the top-ranked OEMs as potential focused market. A 12-month implementation plan is proposed, structured into six phases: preparation and assessment, planning and design, initial implementation, expansion, and refinement, further implementation, and evaluation and optimization. This plan emphasizes continuous learning, adaptability, and strategic alignment, drawing on established management theories and industry best practices. The study concludes that by focusing on these prioritized OEMs and following the proposed implementation plan, PT Sulzer Indonesia can effectively capitalize on the growing opportunities in the >400MW Steam Turbine market, leveraging its strengths while addressing challenges in resource alignment and market penetration. This research provides PT Sulzer Indonesia with a theoretically grounded and practically applicable roadmap for achieving sustainable growth and competitive advantage in this critical market segment.

Keywords: Original Equipment Manufacturers (OEMs), Analytic Hierarchy Process (AHP), Market Viability, Competitive Advantage, Strategic Partnerships, Implementation Plan, Market Penetration

1. Introduction

Steam turbines are integral to power generation, efficiently converting thermal energy from steam into mechanical energy (Gu et al., 2020). The >400MW steam turbine category, designed for large-scale power generation, represents a critical segment in the expanding global energy market. Projections indicate substantial growth in this sector, with the steam turbine market for power generation expected to increase from USD 15.45 billion in 2024 to USD 18.34 billion by 2029, at a compound annual growth rate (CAGR) of 3.49% (Mordor Intelligence, 2020). This growth trajectory underscores significant opportunities for businesses to expand into advanced steam turbine technologies. However, such expansion requires careful consideration of factors like absorptive capacity (Zahra & George, 2002), expansion speed (Hashai et al., 2018), and the impact of market orientation on innovation and new product performance (Carbonell & Rodríguez Escudero, 2010).

PT. Sulzer Indonesia, established in 1994, has positioned itself as a leading Maintenance, Repair, and Overhaul (MRO) company specializing in servicing rotating industrial machinery. With advanced facilities in Purwakarta and Balikpapan, the company offers comprehensive shop and field engineering services across diverse industrial sectors, including power generation, oil and gas, and mining. These services encompass the re-manufacturing, repair, upgrading, and reconditioning of various equipment, from combustion turbines to electrical motors (Sulzer, 2021, 2022, 2023). Despite its strong reputation and diverse capabilities, PT. Sulzer Indonesia has faced challenges in recent years, evidenced by fluctuating revenues and a notable decline in its steam turbine product line, particularly from 2022 to 2023.

The steam turbine aftermarket in Indonesia presents a substantial opportunity, with an estimated size of USD 270 million (YCP Solidiance Research and Analysis, 2022). Within this, the high-capacity segment, which includes >400MW steam turbines, constitutes USD 158 million, with promising growth figures of 6.0% and 1.1% in the Independent Power Producer (IPP) and state-owned power generation company (PLN) segments, respectively. Currently, PT. Sulzer Indonesia's steam turbine services are predominantly focused on units below 400MW, which have seen declining sales. This concentration on a declining segment underscores the need for strategic diversification to ensure future growth and mitigate risks. The company is thus considering expanding its product line to include servicing >400MW steam turbines, a move that aligns with market trends and growth potential.

In the Indonesian market, there are 34 units of >400MW steam turbines installed and operational, with the top 5 Original Equipment Manufacturers (OEMs) constituting 79% of the population. This market concentration presents both opportunities and challenges for PT. Sulzer Indonesia as it looks to penetrate this market segment. The company must carefully assess various factors, including OEM relationships, customer dynamics, and its own capabilities, to develop an effective strategy for entering and growing in the >400MW steam turbine category. This assessment should consider the complex ecosystem of manufacturing and maintenance in the steam turbine industry (Ding & Sheng, 2010; Emonts et al., 2022), the importance of partnerships with OEMs and other MRO providers (Vieira & Loures, 2016), and the strategic implications of OEM agreements and private-label supplying (Caldieraro, 2016).

This research aims to address key questions regarding PT. Sulzer Indonesia's expansion into the >400MW steam turbine market. These include identifying criteria for prioritizing target OEMs, developing strategies to gain market share and drive revenue growth, and outlining key initiatives for penetrating and growing within specific OEMs in the Indonesian market. The study will consider various factors in OEM selection and prioritization, including technological advancements, competitive offerings (Debo et al., 2005; Örsdemir et al., 2014), social compliance standards, lead-time efficiency, product reliability (E. Lee, 2006), and reputation (Manello & Calabrese, 2019). By addressing these questions, the study seeks to establish a list of target OEMs and develop tailored marketing implementation plans for prioritized OEMs in the context of the Indonesian market. This strategic approach aims to enhance PT. Sulzer Indonesia's competitive positioning and leverage the benefits of collaboration to drive growth in the dynamic >400MW steam turbine market.

2. Literature Review

2.1 Market Segmentation and Penetration

Customer segmentation is a powerful analytical tool used in formulating marketing strategies, focusing on historical data to understand the existing customer base (Storbacka, 1997). It involves dividing the market into distinct subsets of customers with similar characteristics and behaviors (Fonseca & Cardoso, 2007). This practice enables businesses to identify and target profitable segments, offering tailored products and services to meet their common, yet dynamic needs. Behavioral segmentation, which involves dividing a market based on consumer behavior such as search patterns and benefits sought, is particularly effective in mature industrial markets (Hsu et al., 2006; Rangan et al., 1992).

Market penetration is a key strategy for companies aiming to expand their market share and reach. It involves tactics such as penetration pricing, product enhancements, and effective promotional activities (Suder et al., 2022).

The success of market penetration strategies can be influenced by factors including demographics, pricing strategies, product differentiation, and the competitive landscape (Ganesan-Lim et al., 2008). Research indicates that the effects of market penetration can vary under different circumstances, with high market penetration of certain products potentially encouraging increased adoption of similar products or reducing adoption of competing products (Heutel & Muehlegger, 2015).

2.2 Strategic Fit and Resource-Based View

Strategic fit refers to the extent to which an organization's strategy matches its internal capabilities and external environment (Rashidirad, Soltani, & Salimian, 2015). The concept of strategic fit has been emphasized by numerous authors, with Schilling (2017) arguing that a company's success depends on its ability to create a unique and valuable position based on a set of activities that fit together and reinforce each other. Eckardt and Skaggs (2018) suggest that strategic fit is a dynamic concept requiring continuous adaptation to changes in the environment.

The Resource-Based View (RBV) is a significant framework in strategic management that emphasizes the critical role of a firm's internal capabilities and resources in securing a sustainable competitive advantage (Barney, 2001). The RBV posits that firms can achieve sustainable competitive advantage by possessing resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN) (Barney, 1991). This perspective has been widely applied across various business strategies and contexts, including marketing, supply chain management, and overall business strategy formulation (Peng, 2001). In the context of product development, the RBV highlights the impact of functional and integrative capabilities on process efficiency and product effectiveness (Verona, 1999).

2.3 Market-Based View and Decision-Making Theory

The Market-Based View (MBV) emphasizes the importance of external market conditions and industry factors as primary influencers of a firm's competitive advantage and overall performance. This "outside-in" perspective prioritizes the analysis of competitive environments and market trends, guiding firms to align their strategies accordingly. At the core of MBV is the concept of market orientation, which posits that a firm's ability to gather, disseminate, and respond to market information constitutes a significant competitive edge.

Decision Making Theory is crucial in understanding how organizations navigate complex strategic choices in a competitive environment. It elucidates the cognitive and rational processes involved in selecting optimal strategies to achieve organizational goals. Decision Theory explores rationality in risk situations, focusing on three main areas: the normative status of the subjective expected utility model, dynamic decision making, and its importance in game theory (Conitzer et al., 2021). The theory can be applied in various forms - normative, descriptive, and prescriptive - each offering different insights into the decision-making process (Hansson & Grüne-Yanoff, 2018). By considering insights from these various perspectives on Decision Making Theory, organizations can develop a more holistic and evidence-based approach to evaluating and selecting the most suitable strategies for their needs and objectives.

3. Method

3.1 Research Design

This study employs a mixed-method approach, combining qualitative and quantitative data collection and analysis techniques. The research design incorporates problem identification through SWOT analysis and Porter's Five Forces, followed by data collection using interviews, focus group discussions, and an Analytic Hierarchy Process (AHP) survey. This comprehensive approach allows for a thorough examination of the factors influencing PT. Sulzer Indonesia's strategy in the >400MW Steam Turbine category. The qualitative phase involves gathering insights from stakeholders to understand the market dynamics and identify key criteria for OEM selection. The quantitative phase utilizes the AHP methodology to prioritize these criteria and evaluate potential OEM targets.

This mixed-method design enables a robust analysis of the complex decision-making process involved in expanding PT. Sulzer Indonesia's product line and market share.

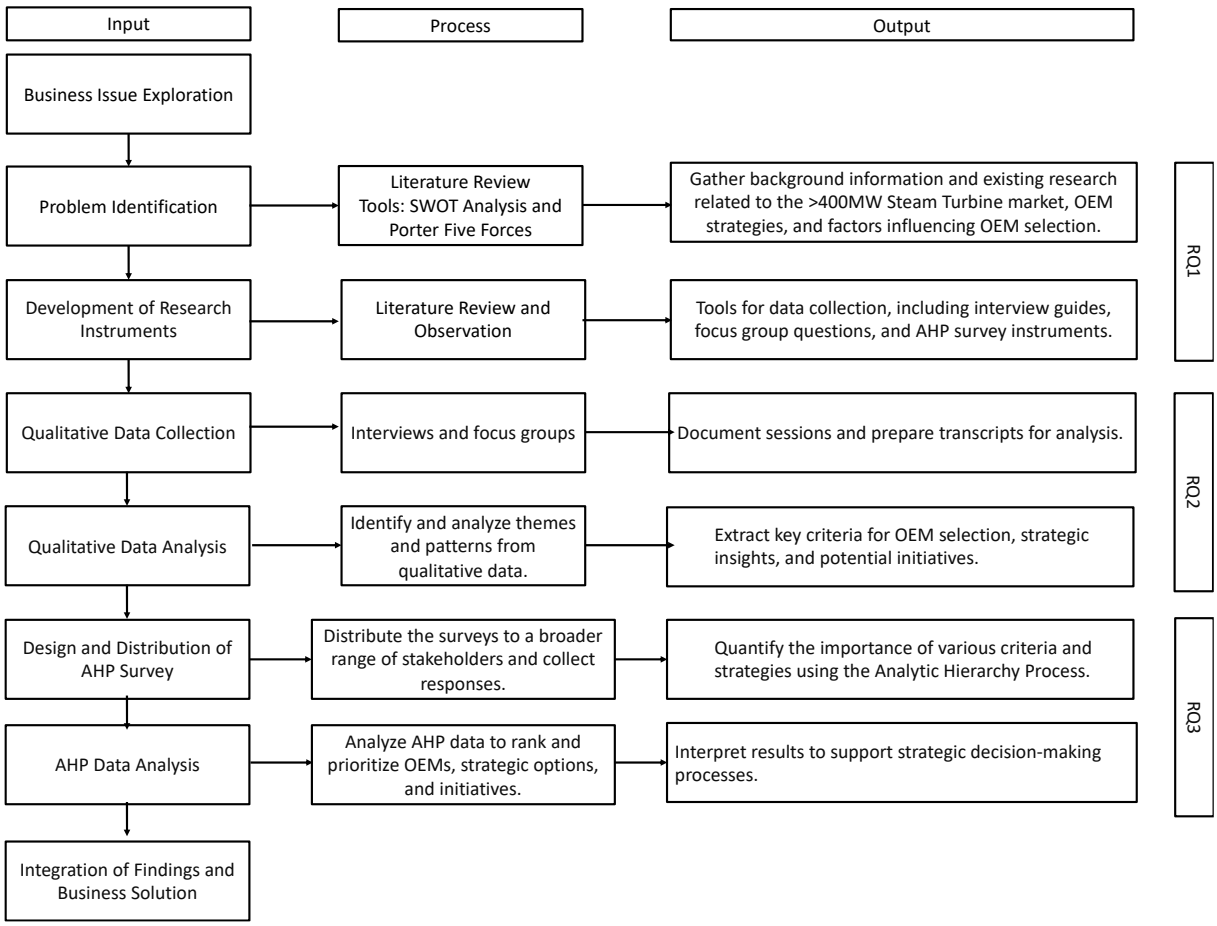

Figure 1: Research Design

3.2 Data Collection

Data collection for this study occurs between June 1, 2024, and July 31, 2024, utilizing various methods to ensure comprehensive coverage of the research objectives. Qualitative data collection includes semi-structured interviews with key stakeholders, lasting 45-60 minutes each; non-participant observations at the company premises, conducted in two-week intervals; and document analysis of relevant company reports, memos, and meeting minutes. Quantitative data collection focuses on the AHP survey, which involves distribution of AHP questionnaires to a panel of experts in the field, a two-week period in June for questionnaire completion, followed by a one-week follow-up period in July for clarifications, and consistency checks on the completed AHP questionnaires to ensure validity of the judgments. This multi-faceted data collection approach ensures a rich dataset for analysis, combining in-depth qualitative insights with quantifiable AHP data.

3.3 Data Analysis

The data analysis process is divided into qualitative and quantitative components. For qualitative analysis, thematic analysis is employed to identify, analyze, and report patterns within the qualitative data. This process follows six phases as outlined by Braun & Clarke (2006): familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Strategies such as triangulation, member checking, and reflexivity are used to ensure the trustworthiness and credibility of the findings. The quantitative analysis (AHP) involves structuring the decision problem into a hierarchical model, making pair-wise

comparisons and obtaining the judgmental matrix, computing local weights and checking the consistency of comparisons, and aggregating local weights to determine final weights of decision alternatives. The AHP analysis focuses on evaluating OEMs based on criteria including Market Viability, Competitive Advantage, Strategic Alignment, and Resource Alignment, with each criterion further divided into sub-criteria to provide a comprehensive evaluation framework. This combined analysis approach allows for a thorough examination of both qualitative insights and quantitative priorities, supporting PT. Sulzer Indonesia in making informed decisions regarding OEM targeting and market expansion strategies.

4. Results

4.1 Qualitative Result

The qualitative analysis conducted for PT Sulzer Indonesia's strategy in the >400MW Steam Turbine category was based on in-depth interviews with six key industry experts. These interviews provided valuable insights across five main themes: OEM Brand Selection, Market Viability, Competitive Advantage, Resource Alignment, and Strategic Alignment. The analysis revealed the importance of focusing on high-volume OEM brands like Mitsubishi and Toshiba, prioritizing non-Chinese OEMs due to supply chain considerations, and targeting older units with higher repair potential. Key competitive advantages identified include flexibility, fast response times, and strong engineering capabilities. The experts emphasized the need for continuous customer engagement, investment in advanced equipment, and development of specialized technical advisors. Strategic recommendations included partnering with O&M companies, leveraging Sulzer's global network, and adopting a phased approach to building customer trust. These findings provide a comprehensive foundation for PT Sulzer Indonesia to refine its strategy and expand its market share in the >400MW Steam Turbine segment.

Table 1: Interview Result (One of the Samples)

Main Theme	Key Variables	Sub-variables	Quotation Example
OEM Brand Selection	Relationships	Good relationships with OEMs and end-users	"With my good relationship with Mr. Giyanto, who represents Paiton and POMI, I get more information and they are more open."
	Market Accessibility	Direct access to customers	"The most important thing is market accessibility. We need access to customers and we need to play there."
		Focus on high-volume brands	"First, we need to consider population. There are only 34 large machines, and two brands (Toshiba and Mitsubishi) account for over 50% of them."
Market Viability	Technological Fit	Adaptability of technology across OEMs	"No issues generally, but extensive repairs for Chinese OEMs can be more challenging."
	Supply Chain	Challenges with Chinese OEMs	"The challenge is in the supply chain for Chinese OEMs."
	Strategic Targeting	Prioritize non-Chinese OEMs	"Non-Chinese OEMs might be more feasible to target initially."
		Target older units	"When the unit is more than 15 years old, more than 20 years, there is a greater potential for repair compared to a unit that is only 2 years old."
Competitive Advantage	Customer Engagement	Building trust through continuous contact	"Customers need to be confident in our capabilities. Continuous engagement is essential to build this confidence."
	Competitive Strategy	Flexibility and fast response	"Flexibility and fast response are key competitive advantages."
		Strong engineering capabilities	"Strong engineering capabilities and global network support are crucial."

Main Theme	Key Variables	Sub-variables	Quotation Example
	Branding	Enhancing reputation through market penetration	"Brand reputation improves through precise market penetration. Regular contact with customers instills trust and brand recall."
Resource Alignment	Equipment Investment	Investing in advanced tools and portable equipment	"Investment in portable equipment and tooling can enhance service delivery."
	Market Segmentation	Targeting based on regional characteristics	"Understanding customer characteristics by region (e.g., cost sensitivity in Vietnam vs. quality focus in Australia) is crucial."
	Talent Management	Developing Technical Field Advisors	"We need to develop a pool of Technical Field Advisors (TFAs) from the market who are experienced with the specific OEM brands we target."
		Retaining skilled employees	"Employee retention is crucial as competitors may try to poach skilled workers."
Strategic Alignment	Collaborative Strategy	Partnering with O&M companies	"Partnering with O&M companies can facilitate market entry."
		Leveraging global network	"If necessary, we can get support from our global network."
		Phased approach to building trust	"Building trust with customers by gradually supplying consumables before moving on to capital parts."

4.2 AHP Results

Based on the AHP analysis for OEM selection in the >400MW steam turbine category, Market Viability emerged as the most critical factor with a weight of 38.2%, followed by Competitive Advantage (28.3%), Resource Alignment (23.9%), and Strategic Alignment (9.6%). Within Market Viability, Market Accessibility (56.9%) was identified as the most crucial sub-criterion. For Competitive Advantage, Technology Fit (41.3%) received the highest priority. Strategic Alignment emphasized Potential for Strategic Partnership (67.7%), while Resource Alignment heavily prioritized Resource Availability (81.8%). These results demonstrate a high group consensus (85.5%) with a Consistency Ratio of 1.2%, indicating reliable and consistent evaluations. This prioritization provides a clear framework for PT Sulzer Indonesia in determining and targeting the most promising OEMs for the >400MW steam turbine product line, with a primary focus on market accessibility, technological fit, and resource availability.

Table 2: Pairwise Comparison of Criteria and Sub-Criteria

Decision Hierarchy			
Level 0	**Level 1**	**Level 2**	**Glb Prio.**
OEM Selection Brand	Market Viability 0.382	Market Size 0.285	10.9%
		Market Growth 0.147	5.6%
		Market Accessibility 0.569	21.7%
	Competitive Advantage 0.283	Technology Fit 0.413	11.7%
		Innovative Capability 0.194	5.5%

		Competitive Position 0.393	11.1%
	Strategic Alignment 0.096	Alignment with Long-Term Goals 0.323	3.1%
		Potential for Strategic Partnership 0.677	6.5%
	Resource Alignment 0.239	Resource Availability 0.818	19.6%
		Scalability 0.182	4.3%
			1.0

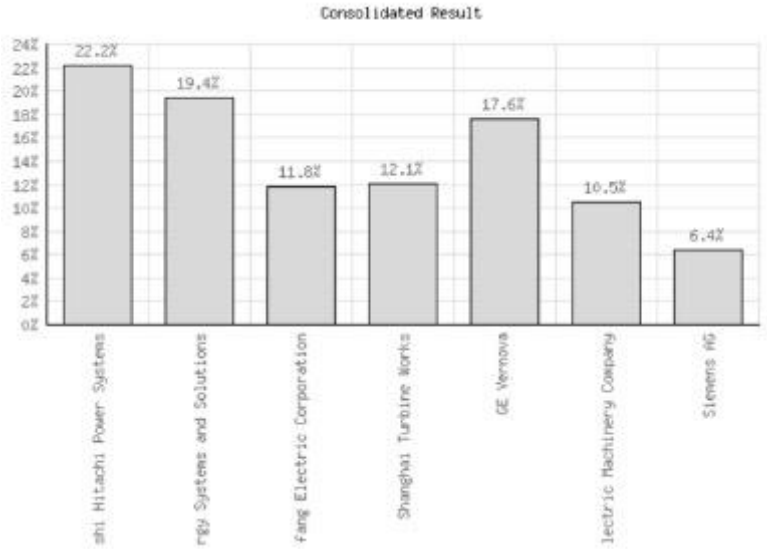

Figure 2: OEMs Consolidated Result

Based on the AHP analysis for OEM selection in the >400MW steam turbine category in Indonesia, Mitsubishi Hitachi Power Systems (MHPS) emerged as the top candidate with a total priority score of 22.2%. MHPS excels particularly in Market Viability, leading in both Market Size (0.325) and Market Growth (0.243). Its strong market presence is complemented by significant technological strengths, as indicated by high scores in Technology Fit (0.236) and Innovative Capability (0.235). MHPS also demonstrates solid Resource Availability (0.203), ensuring the capability to support extensive projects. The company's strong position is further reinforced by its growing number of >400MW Steam Turbines in Indonesia, including recently commissioned units and established relationships with key players like Paiton Energy.

Toshiba Energy Systems and Solutions ranks second with a priority score of 19.4%, showing substantial potential particularly in Resource Availability (0.279) and market strength (Market Size: 0.249, Market Growth: 0.232). Toshiba has been expanding its >400MW installed base in Indonesia with newly commissioned units and established installations. PT Sulzer Indonesia's recent success with Toshiba steam turbines in Vietnam and its experience with 43 Toshiba steam turbines since inception provide a strong foundation for further engagement with this OEM.

GE Vernova secured the third position with a total priority score of 17.6%, demonstrating strength in Strategic Partnership (0.334). While GE Vernova has fewer >400MW steam turbines in Indonesia compared to Mitsubishi and Toshiba, PT. Sulzer Indonesia’s relationship with Paiton Energy and the aging of existing units present

opportunities for PT Sulzer Indonesia. The company's experience with Toshiba steam turbines, which share design similarities with GE units, positions PT Sulzer Indonesia well to address the GE >400MW steam turbine market. Other OEMs, including Shanghai Turbine Works, Dongfang Electric Corporation, Harbin Electric Machinery Company, and Siemens AG, received lower priority scores but each present unique strengths and opportunities for strategic partnerships or market entry strategies.

4. Discussion

Table 3: Implementation Plan

Phase	Activity	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Preparation and Assessment	Establish steering committee												
	Conduct detailed market analysis												
	Review market analysis results												
	Develop prioritization framework												
Planning and Design	Design tailored engagement strategies												
	Develop marketing and branding plans												
	Select CRM system												
	Finalize strategic partnership strategies												
	Design technical training programs												
Initial Implementation	Roll out new organizational structure												
	Launch Center of Excellence												
	Implement project management software												
	Start first round of technical training												
	Initiate leadership development program												
	Pilot matrix structure in selected departments												
	Launch e-learning platform												
Expansion and Refinement	Extend new organizational structure												
	Launch cross-functional teams												
	Implement digital collaboration tools												
	Start second round of technical training												
	Introduce mentoring and job rotation programs												
	Implement performance tracking system												
	Conduct first review of organizational changes												
Continued Implementation	Launch innovation initiatives												
	Start advanced project management and leadership training												
	Begin professional development initiatives												
	Start data center operations training												
	Form Diversity and Inclusion committee												
	Implement knowledge-sharing platform												
	Start third round of technical training												
Evaluation and Optimization	Conduct thorough evaluation of implemented changes												
	Gather feedback and analyze performance metrics												
	Develop optimization plan based on evaluation results												
	Refine organizational structures and programs												
	Plan next phase of competency development initiatives												
	Hold celebration to honor key contributors												

The implementation plan for PT Sulzer Indonesia's strategy to target the >400MW Steam Turbine market is structured as a comprehensive, phased approach over 12 months. The initial phase, spanning the first two months, focuses on preparation and assessment. This critical stage involves establishing a dedicated steering committee to oversee the project and ensure alignment with strategic objectives, a practice recommended by Kotter (1995) for successful organizational change. Concurrently, detailed market analyses will be conducted for each targeted OEM, particularly focusing on major players like Mitsubishi Hitachi Power Systems and Toshiba Energy Systems and Solutions. This thorough market analysis aligns with Porter's (1980) emphasis on understanding industry structure and competitive forces. The results will be used to develop a prioritization framework for OEM targets, based on market feasibility, competitive advantage, resource alignment, and strategic alignment, reflecting the multi-dimensional approach suggested by Barney (1991) in his resource-based view of the firm.

The subsequent two months will be dedicated to planning and design, shifting focus to strategic planning and engagement strategies. This phase includes developing customer engagement strategies for top-ranked OEMs, enhancing marketing and branding efforts, and selecting a customer relationship management (CRM) system. The importance of such strategic planning is underscored by Mintzberg (1994), who argues that strategic thinking is essential for organizational success. Additionally, strategies for building partnerships with key Operations and Maintenance (O&M) companies and suppliers will be finalized, reflecting the importance of strategic alliances in competitive markets (Doz & Hamel, 1998). A detailed training and technical development program will also be designed, focusing on expertise related to Mitsubishi and Toshiba units, aligning with the concept of developing core competencies as advocated by Prahalad and Hamel (1990).

The fifth and sixth months mark the beginning of initial implementation. This phase includes rolling out a new organizational structure, launching a Center of Excellence, and implementing project management software. These actions align with Galbraith's (2014) star model, which emphasizes the importance of aligning organizational structure with strategy. The first round of technical training programs will commence, focusing on mechanical and electrical systems, reflecting the importance of continuous learning in maintaining competitive advantage (Senge, 1990). A leadership development program will also be initiated, and a matrix structure will be piloted in selected departments, an approach that can enhance organizational flexibility and responsiveness (Davis & Lawrence, 1977).

Months seven and eight will focus on expansion and refinement, building on the initial implementation efforts. The new organizational structure will be extended to all departments, and cross-functional teams for key projects will be launched, aligning with the concept of horizontal organization proposed by Ostroff (1999). Digital collaboration tools will be implemented across the company, reflecting the growing importance of digital transformation in modern organizations (Westerman et al., 2014). A second round of technical training will begin, focusing on control systems and water management. Mentoring and job rotation programs will be introduced, and a performance tracking system for new competencies will be implemented, aligning with best practices in talent management and development (Cappelli, 2008).

The ninth and tenth months will concentrate on further implementation and embedding new practices. This phase includes launching innovation initiatives through the Centre of Excellence and initiating advanced project management and leadership training programs. These actions align with the concept of creating a learning organization (Garvin, 1993) and fostering innovation culture (Christensen, 1997). A Diversity and Inclusion committee will be formed, reflecting the growing recognition of the importance of diversity in driving organizational performance (Hunt et al., 2015). A knowledge-sharing platform will be implemented, and a third round of technical training will begin, focusing on rotating equipment and instrumentation, further reinforcing the company's commitment to continuous learning and improvement.

The final two months will be dedicated to evaluation and optimization. This phase involves a thorough evaluation of all implemented changes, including gathering feedback from employees and analyzing performance metrics. This aligns with the concept of double-loop learning proposed by Argyris (1977), which emphasizes the importance of questioning underlying assumptions and strategies. An optimization plan will be developed based on the evaluation results, and the organization's structure and programs will be refined. This continuous

improvement approach reflects the principles of Total Quality Management (Deming, 1986) and the importance of adaptability in dynamic business environments (Teece et al., 1997). The implementation plan concludes with planning the next phase of competency development initiatives and celebrating the transformation, recognizing the importance of both continuous improvement and acknowledging achievements in organizational change efforts (Kotter & Schlesinger, 2008).

5. Conclusion

In conclusion, this study provides a comprehensive strategy for PT Sulzer Indonesia to expand its presence in the >400MW Steam Turbine market in Indonesia. Through a mixed-method approach combining qualitative interviews and quantitative AHP analysis, the research identified key factors for success in this market segment. The findings highlight the importance of market viability, particularly market accessibility, as well as competitive advantages such as technological fit and strong engineering capabilities. The study recommends prioritizing its marketing plan to focus on top-ranked OEMs, specifically Mitsubishi Hitachi Power Systems and Toshiba Energy Systems and Solutions, while also considering strategic opportunities on GE Vernova installed base. The proposed 12-month implementation plan provides a structured approach to realizing these strategies, emphasizing the need for continuous learning, adaptability, and strategic alignment. By following this plan, PT Sulzer Indonesia can position itself to capitalize on the growing opportunities in the >400MW Steam Turbine market, leveraging its strengths in engineering and customer relationships while addressing challenges in resource alignment and market penetration. This strategic approach, grounded in both theoretical frameworks and practical industry insights, offers PT Sulzer Indonesia a roadmap for sustainable growth and competitive advantage in this critical market segment.

Author Contributions: Jonatan Hutahaean conceptualized the study, developed the methodology, conducted the formal analysis, and wrote the original draft of the manuscript. Pri Hermawan supervised the research, provided critical review and contributed to the validation of results. Both authors were involved in the investigation process, data curation, and the interpretation of findings. Jonatan Hutahaean was responsible for project administration and the visualization of data. Both authors reviewed and approved the final version of the manuscript. The research was conducted under the auspices of the School of Business and Management, Institut Teknologi Bandung, Indonesia, with Jonatan Hutahaean serving as the corresponding author for this study.

Conflicts of Interest: The authors declare no conflict of interest

Informed Consent Statement/Ethics approval: All participants have fully informed if the anonymity is assured, why the research is being conducted, how their data will be used and if there are any risks associated.

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