

Business Strategy Formulation Based on Internal-External Matrix in an Industrial Lubricant and Specialty Chemical Company in the Automotive Manufacturing Segment

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ABSTRACT

This study aims to formulate a business strategy for an industrial lubricant and specialty chemical company serving the automotive manufacturing segment in Indonesia. The research addresses a gap in strategic management studies, where many studies discuss internal-external evaluation or portfolio analysis separately, while limited studies integrate external and internal diagnosis, strategic posture mapping, strategy prioritization, and implementation design in the context of a local B2B industrial supplier. This study applies a qualitative descriptive case study approach. Primary data were collected through semi-structured interviews with key informants, while secondary data were obtained from company documents, sales records, marketing funnel data, and industry sources. The main analytical flow includes external and internal factor evaluation through EFE and IFE matrices, strategic posture mapping using the Internal-External Matrix, strategy formulation through TOWS, strategy prioritization using QSPM, and implementation design using the Balanced Scorecard. The findings show an EFE score of 2.56 and an IFE score of 2.76, positioning the company in Cell V of the Internal-External Matrix, which indicates a hold and maintain posture. The priority strategy is strengthening after-sales services through monitoring, troubleshooting, customer training, and technical service standardization, supported by product improvement and solution-based account penetration.

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1. INTRODUCTION

The Indonesian automotive manufacturing industry has a strong linkage with the need for production support products, including industrial lubricants, cutting coolants, and specialty chemicals. Vehicle and automotive component

production activities require process fluids that not only function as lubricants or coolants but also support machine reliability, production quality, cost efficiency, and manufacturing process stability. In the context of B2B industrial suppliers, competition is no longer determined solely by the ability to provide products but also by the

ability to maintain supply continuity, quality consistency, technical responsiveness, and economic value demonstration through a total cost of ownership approach. These conditions require industrial lubricant and chemical companies to have business strategies that are not only oriented toward sales volume growth but also aligned with customer needs, competitive characteristics, and internal company capabilities [1].

The strategic problems faced by companies in this sector arise from a combination of external pressures and internal limitations. From the external side, companies face price pressure, high customer bargaining power, dominance of certain brands in technical product categories, raw material volatility risks, and increasing customer demands for after-sales services and application performance validation. From the internal side, companies must ensure that product development capabilities, technical services, solution-based sales, supply planning, and cross-functional coordination consistently support growth strategies [2]. Thus, the main problem examined in this study is how industrial lubricant and chemical companies can formulate business strategies that align with external and internal environmental conditions while translating them into measurable implementation directions in the automotive manufacturing segment [3].

Scientifically, this study is grounded in strategic management studies that position strategy as a process of alignment between the external environment, internal capabilities, strategic choices, and implementation [4]. Grant [1] explains that strategy is not only related to long-term objectives but also to the organization's ability to adapt internal capabilities to business environment dynamics to create sustainable value. David et al. [2] and Wheelen et al. [3] also emphasize that the strategy development process is generally conducted through environmental analysis, internal condition evaluation, strategic alternative formulation, strategy selection, and implementation and control. From the Industrial Organization perspective,

company competitiveness is influenced by industry structure and external competitive pressures [5]. Meanwhile, the Resource-Based View perspective emphasizes that sustainable competitive advantage is shaped by internal resources and capabilities that are valuable, rare, difficult to imitate, and effectively organizable [6]. These two perspectives provide a conceptual foundation for the concept of strategic fit, namely the alignment between external opportunities and threats with internal strengths and weaknesses [4].

A number of previous studies have used strategic analysis tools such as PESTEL, Porter's Five Forces, VRIO, value chain analysis, IFE Matrix, EFE Matrix, IE Matrix, TOWS, QSPM, BCG Matrix, and Balanced Scorecard in various organizational contexts. PESTEL analysis is used to read macro-environmental changes that affect the company's strategic space [7], while Porter's Five Forces is used to evaluate competitive structure and industry attractiveness [8]. On the internal side, VRIO helps assess the strategic quality of company resources and capabilities [9], while value chain analysis is used to identify value-creating activities and shape competitive advantage [10]. The IFE and EFE matrices integrated into the IE Matrix can help organizations determine strategic posture based on internal and external factor evaluation [11], [12]. Furthermore, TOWS and QSPM are used to formulate and prioritize strategic alternatives [13], while the Balanced Scorecard plays a role in translating strategy into objectives, indicators, and implementation initiatives [14], [15].

Although these various strategic analysis tools have been widely used, there is still a research gap regarding the integrated application of these analytical tools in a coherent manner within local B2B companies operating in the industrial lubricant and chemical sector. Some previous studies tend to discuss internal-external evaluation, portfolio analysis, or strategy selection separately [16]. Research that comprehensively connects external and internal diagnosis, strategic posture mapping through the Internal-External Matrix,

strategic alternative formulation, strategy prioritization, and implementation design in the context of lubricant and chemical suppliers in the automotive manufacturing segment remains relatively limited. Furthermore, in the context of companies with multiple product categories, portfolio analysis is often used as the primary basis for strategy. However, in this study, portfolio considerations are not positioned as the main determinant of strategy but rather as supporting input so that the formulated aggregate strategy remains relevant for all product categories managed by the company [17].

Based on this gap, this study uses the Internal-External Matrix as the main framework in business strategy formulation. The IE Matrix was chosen because it can translate the results of internal and external factor evaluations into an aggregate organizational strategic posture [2]. Thus, the formulated strategy is not directed to stand alone for each portfolio but remains a business strategy that fits the entire company's product categories. The BCG Matrix is used in a limited manner as an additional consideration to read the relative characteristics of the portfolio, not as the main basis for strategy selection [18]. Furthermore, strategic alternatives are formulated through TOWS, prioritized using QSPM, and translated into implementation design using the Balanced Scorecard [13], [14]. This approach is expected to strengthen the practical contribution of the research because the resulting strategy does not stop at the formulation stage but also has more measurable implementation directions.

Because this study uses a qualitative descriptive case study approach, it does not formulate statistical hypotheses but uses case study propositions as the basis for analysis [18]. The first proposition (P1) is that the alignment between external and internal factors through the IE Matrix can produce a more appropriate business strategic posture for industrial lubricant and chemical companies in the automotive manufacturing segment. The second proposition (P2) is that

business strategies derived from the IE Matrix posture and prioritized through QSPM will be more implementable when translated into objectives, indicators, and initiatives through the Balanced Scorecard. Based on these propositions, this study is directed to answer two main research questions. RQ1: What is the strategic position of industrial lubricant and chemical companies based on internal and external factor evaluation through the IE Matrix? RQ2: What is the most appropriate business strategy and how should its implementation design be for the company in facing competition in the automotive manufacturing segment?

The purpose of this study is to formulate a business strategy based on the Internal-External Matrix for an industrial lubricant and chemical company in the automotive manufacturing segment. More specifically, this study aims to identify external and internal factors affecting the company's competitiveness, determine the company's strategic position through the IE Matrix, formulate strategic alternatives through TOWS, determine strategy priorities through QSPM, and develop a strategy implementation design using the Balanced Scorecard. The expected outputs of this study include an IE Matrix position map, portfolio considerations as strategic direction support, strategic alternative formulations, strategy priorities, and an implementation roadmap containing strategic objectives, performance indicators, targets, and main initiatives. Thus, this study is expected to contribute academically to the development of strategic fit-based strategy formulation studies while providing practical contributions to local B2B companies in designing more directed, realistic, and implementable business strategies.

2. LITERATURE REVIEW

Strategic management literature provides a rich foundation for understanding how organizations formulate and implement strategies to achieve competitive advantage. This section reviews key concepts and analytical tools relevant to business strategy

formulation, beginning with the fundamental concept of strategy and strategic management, followed by external and internal environment analysis tools, strategy formulation and prioritization frameworks, and finally implementation approaches. The theoretical foundation established in this section guides the integrated analytical approach employed in this study.

2.1 The Concept of Strategy and Strategic Management

Strategy has been defined in various ways by management scholars, but the common thread is the emphasis on how organizations achieve their objectives through effective resource allocation and environmental adaptation. Grant [1] defines strategy as the means by which organizations achieve their goals through the alignment of internal capabilities with external opportunities, highlighting the dynamic nature of strategy. David et al. [2] describe strategy as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable organizations to achieve their objectives. The strategic management process typically consists of three stages: strategy formulation, strategy implementation, and strategy evaluation [3]. Strategy formulation involves developing a vision and mission, identifying external opportunities and threats, determining internal strengths and weaknesses, and selecting strategies to pursue. Strategy implementation requires establishing objectives, devising policies, and allocating resources. Strategy evaluation involves reviewing factors, measuring performance, and taking corrective actions. This study primarily focuses on strategy formulation with an emphasis on implementation design to ensure formulated strategies can be operationalized.

Two dominant perspectives have shaped strategic management theory. The Industrial Organization (IO) perspective, pioneered by Porter [5], emphasizes that

competitive advantage is primarily determined by industry structure and competitive positioning. According to this view, firms must analyze the five competitive forces—threat of new entrants, bargaining power of suppliers and buyers, threat of substitutes, and intensity of rivalry—to identify attractive industry positions. The IO perspective directs attention to external factors that influence firm performance. In contrast, the Resource-Based View (RBV), advanced by Barney [6], argues that sustainable competitive advantage derives from internal resources and capabilities that are valuable, rare, imperfectly imitable, and non-substitutable (VRIO). The RBV shifts focus from external market positioning to internal organizational characteristics, emphasizing that firms with unique, difficult-to-replicate resources can achieve superior performance. These two perspectives are complementary, as modern strategic management recognizes that both external positioning and internal capabilities are essential for competitive success [4]. The concept of strategic fit bridges these perspectives by emphasizing alignment between external environmental conditions and internal organizational capabilities. This alignment concept is central to this research because the Internal-External Matrix is fundamentally designed to assess strategic fit and recommend appropriate strategic postures based on that assessment [2].

2.2 External and Internal Environment Analysis Tools

External environment analysis helps organizations identify opportunities to pursue and threats to avoid. The external environment consists of the macro-environment and the industry environment [7]. PESTEL analysis is a widely used framework for scanning the macro-environment, encompassing Political, Economic, Social, Technological, Environmental, and Legal

factors. Each dimension captures different aspects of the broader environment that can create opportunities or threats for organizations [8]. Porter's Five Forces framework is the most influential tool for analyzing industry structure and competitive dynamics. The five forces—threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitutes, and rivalry among competitors—collectively determine industry attractiveness and profitability potential [5]. By analyzing these five forces, organizations can determine whether an industry is attractive and identify strategic positions that offer protection against competitive pressures.

Internal environment analysis focuses on identifying organizational strengths and weaknesses. VRIO analysis provides a structured approach to evaluating organizational resources and capabilities [6]. The framework asks four questions about each resource or capability: Is it valuable? Is it rare? Is it costly to imitate? Is the firm organized to capture value from it? Resources meeting all four criteria are considered sources of sustained competitive advantage. Value chain analysis, introduced by Porter [9], disaggregates the firm's activities into strategically relevant components to understand sources of cost and differentiation advantage. Primary activities include inbound logistics, operations, outbound logistics, marketing and sales, and service. Support activities include procurement, technology development, human resource management, and firm infrastructure. By analyzing each activity's contribution to cost or differentiation, firms can identify competitive advantages and opportunities for improvement. In the context of B2B industrial suppliers, value chain analysis is particularly useful for understanding how technical services, supply chain management, and customer

relationships contribute to competitive differentiation [10].

2.3 *Strategy Formulation and Prioritization Tools*

Once external and internal factors have been assessed, the next step is to formulate and prioritize strategic alternatives. The Internal-External (IE) Matrix is a strategic portfolio tool that combines the results of the Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) matrices [2]. The IE Matrix positions organizations on a nine-cell grid, with the IFE total weighted score on the x-axis and the EFE total weighted score on the y-axis. The matrix is divided into three major regions: cells I, II, and IV indicate grow and build strategies; cells III, V, and VII indicate hold and maintain strategies; and cells VI, VIII, and IX indicate harvest or divest strategies. The IE Matrix provides a clear visual representation of the organization's strategic posture and offers general strategic direction based on the cell position [19]. The three regions correspond to intensive strategies (market penetration, market development, product development), integrative strategies, and defensive strategies.

The Strengths Weaknesses Opportunities Threats (SWOT) framework, also known as TOWS Matrix, is used to generate strategic alternatives by matching internal and external factors [3]. The TOWS Matrix has four quadrants: SO-strategies use strengths to capitalize on opportunities; WO strategies overcome weaknesses by exploiting opportunities; ST strategies use strengths to avoid threats; and WT strategies aim to minimize weaknesses and avoid threats. This systematic matching process ensures that generated strategies are grounded in the organization's actual situation. The Quantitative Strategic Planning Matrix (QSPM) is used to prioritize alternative strategies objectively [2]. QSPM evaluates strategic alternatives against key internal and external factors, assigning each factor

a weight and an attractiveness score. The total attractiveness score (TAS) for each strategy is calculated by multiplying the factor weight by the attractiveness score and summing across all factors. The strategy with the highest total attractiveness score is considered the priority. QSPM makes the selection process explicit and traceable, reducing the risk of subjective decisions [13].

2.4 Strategy Implementation Frameworks and Previous Research

Strategy formulation is only meaningful if the resulting strategies can be effectively implemented. The Balanced Scorecard (BSC), introduced by Kaplan and Norton [14], provides a comprehensive framework for translating strategy into operational terms. The BSC measures organizational performance from four perspectives: financial, customer, internal business processes, and learning and growth [15]. The financial perspective addresses how the organization creates value for shareholders. The customer perspective identifies the value propositions that drive business success. The internal business processes perspective focuses on critical processes that deliver customer and financial value. The learning and growth perspective addresses the infrastructure—skills, systems, and culture—needed to sustain improvement and innovation. The BSC provides several benefits for strategy implementation. It clarifies and translates strategy into specific objectives, measures, targets, and initiatives. It communicates strategy throughout the organization through strategic maps showing cause-and-effect relationships. It aligns individual and departmental goals with organizational strategy and provides a feedback mechanism through regular performance reviews [17].

Previous studies have applied strategic management tools in various organizational contexts. Several studies have used the IE Matrix and QSPM for

strategy formulation in manufacturing companies [11]. Other studies have applied value chain analysis to identify competitive advantage sources in industrial contexts [10]. Research has also combined TOWS and QSPM for strategic priority setting in B2B companies [13]. The Balanced Scorecard has been widely studied as an implementation framework, with recent research focusing on its integration with other management systems [9]. Despite this extensive body of research, there remains a gap regarding the integrated application of these analytical tools in a coherent and sequential manner within local B2B companies in the industrial lubricant and specialty chemical sector. Most previous studies treat internal-external evaluation, portfolio analysis, or strategy selection as separate topics, rather than as linked stages in a unified process [16]. Research that combines strategic posture mapping through the IE Matrix, alternative generation through TOWS, priority determination through QSPM, and implementation design through the Balanced Scorecard within a single study remains limited. This study addresses these gaps by applying the IE Matrix as the main framework for business strategy formulation in an industrial lubricant and chemical company serving the automotive manufacturing segment, with the BCG Matrix used as an additional consideration to understand portfolio characteristics [20].

3. METHODS

This study uses a case study method with a qualitative descriptive approach. The case study approach was chosen because the research focuses on business strategy formulation in a single industrial lubricant and specialty chemical company serving the automotive manufacturing segment, requiring an in-depth understanding of organizational context, competitive dynamics, customer needs, and internal capabilities [19]. This research is applied in

nature because the expected outcomes include not only strategic condition mapping but also strategy recommendations and implementation design that can serve as a basis for managerial decision-making. Although the primary approach is qualitative, this study employs quantification techniques at the evaluation and prioritization stages through the EFE Matrix, IFE Matrix, Internal-External Matrix, and QSPM [2]. These quantification techniques are used as decision-making aids, not as inferential statistical testing.

The research object is the business strategy of an industrial lubricant and specialty chemical company in the automotive manufacturing segment. The market scope is limited to priority accounts that have been mapped by the company, including OEM companies and tier 1 and tier 2 suppliers in the automotive manufacturing supply chain. The product scope includes industrial lubricants, cutting coolants, and specialty chemicals. These three categories are treated as a single business unit managed by the company, rather than as independent strategic business units [3]. Therefore, the Internal-External Matrix is used as the primary basis for determining the company's aggregate strategic posture, while portfolio analysis is used as an additional consideration in reading the characteristics of each product category so that the formulated strategy remains relevant for the entire portfolio [9].

Research data consists of primary and secondary data. Primary data were obtained through semi-structured interviews with key informants selected purposively based on their involvement, knowledge, and authority in business development, strategic decision-making, sales activities, technical services, financial management, and customer relationships [21]. Key informants include top management/director, Head of Business Development Department, Section Head Sales Engineer, finance manager, Technical & Development Supervisor, and key customer representatives. Secondary data were obtained from internal company documents, sales reports, marketing funnel data, priority

account needs maps, competitor data, job profile documents, accounts receivable data, technical service activity information, industry sources, and academic literature related to strategic management.

The interview instrument was developed as a semi-structured guide [22]. Interview themes were grouped according to analytical needs. First, the strategic direction theme covers vision, mission, growth targets, business priorities, strategic risks, and implementation indicators. Second, the external theme covers PESTEL factors, competitive structure, customer bargaining power, supplier bargaining power, threat of new entrants, threat of substitutes, and competitive intensity. Third, the customer and market theme covers customer needs, trial processes, supplier success factors, switching barriers, service expectations, and demand trends for 2026–2028. Fourth, the internal theme covers Technical & Development capabilities, Sales Engineer experience, after-sales services, blending processes, quality control, supply planning, organizational capacity, information systems, and accounts receivable control. Fifth, the strategy formulation theme covers strategic alternatives, implementation feasibility, strategy priorities, and performance indicators. Interview questions are open-ended to allow informants to explain contexts, case examples, decision rationales, and relevant supporting evidence [23].

Operational definitions in this study are structured based on the strategic analysis dimensions used [1]. External factors are defined as opportunities and threats originating from the macro and industry environments, identified through PESTEL and Porter's Five Forces [5]. Internal factors are defined as the company's strengths and weaknesses originating from resources, capabilities, value chain activities, and relative position against competitors, analyzed through VRIO, value chain analysis, and Competitive Profile Matrix [6]. Strategic posture is defined as the company's position in the Internal-External Matrix based on the total scores of the IFE and EFE matrices.

Strategic alternatives are defined as strategy formulations generated from matching internal and external factors through TOWS [3]. Strategy priority is defined as the strategy with the highest relative attractiveness based on QSPM [13]. Implementation design is defined as the translation of the selected strategy into strategic objectives, performance indicators, targets, and initiatives through the Balanced Scorecard [14].

The data analysis process was conducted in stages [24]. The first stage is content analysis of interview data and internal documents to obtain an overview of business conditions, strategic issues, and competitive context. The second stage is external environment analysis using PESTEL and Porter's Five Forces to identify opportunities and threats [7]. The third stage is internal environment analysis using VRIO, value chain analysis, and Competitive Profile Matrix to identify strengths and weaknesses [9]. The fourth stage is the preparation of the EFE and IFE matrices through the determination of weights, ratings, and weighted scores for each strategic factor [11]. The fifth stage is mapping the company's position in the Internal-External Matrix to determine the aggregate strategic posture [20]. The sixth stage is the use of portfolio analysis as an additional consideration in reading product category characteristics. The seventh stage is the formulation of strategic alternatives through TOWS, strategy prioritization through QSPM, and preparation of implementation design through the Balanced Scorecard [14].

Weight, rating, and attractiveness score determination were conducted through expert judgement and consensus discussions with key informants who understand the company's conditions, market, customers, and competitors [25]. This process begins with compiling a list of strategic factors based on PESTEL, Porter's Five Forces, VRIO, value chain analysis, CPM, interviews, and supporting documents. Factors with similar substance are combined to avoid duplication. Subsequently, each factor is assigned a weight based on its importance to the success of the

company's business strategy. The total weight in the EFE and IFE matrices is set at 1.00 each. Ratings in the EFE Matrix indicate the company's ability to respond to opportunities or threats, while ratings in the IFE Matrix indicate the condition of the company's internal strengths or weaknesses. This study does not use formal AHP or Delphi but uses weighting based on expert judgement, focused discussion, and managerial consensus validated with company documents and interview findings.

The rating scale used in the EFE and IFE matrices is 1 to 4 [2]. In the EFE Matrix, rating 1 indicates a weak company response to external factors, rating 2 indicates a limited response, rating 3 indicates a fairly good response, and rating 4 indicates a strong response. In the IFE Matrix, rating 1 indicates a major weakness, rating 2 indicates a minor weakness, rating 3 indicates a minor strength, and rating 4 indicates a major strength. Weighted scores are obtained by multiplying the weight and rating for each factor. All weighted scores are then summed to obtain the total EFE and IFE scores.

In the QSPM stage, strategic alternatives derived from TOWS are assessed using attractiveness scores on a scale of 1 to 4 [13]. Score 1 indicates that the strategy has low attractiveness in responding to a particular factor, while score 4 indicates very high attractiveness. The total attractiveness score (TAS) is obtained by multiplying the factor weight by the attractiveness score. The strategy with the highest total value is selected as the priority because it is considered most appropriate for the external and internal strategic factors identified. Thus, QSPM is used to improve the traceability of the strategy selection process, so that decisions are not merely intuitive but have explicit weighting and argumentation [13].

Data validation was conducted through source triangulation, method triangulation, and member checks [26]. Source triangulation was performed by comparing information from top management, business development functions, sales functions, technical functions,

finance functions, and customers. Method triangulation was performed by comparing interview results with internal documents, sales data, marketing funnels, competitor documents, and industry sources. Member checks were conducted by reconfirming main interpretations, strategic factors, weights, ratings, and strategic alternatives to key informants so that analysis results do not deviate from the company's actual context. Additionally, consistency among analytical tools is maintained by ensuring that opportunity and threat factors in the EFE Matrix originate from PESTEL and Porter's Five Forces results, while strength and weakness factors in the IFE Matrix originate from VRIO, value chain analysis, CPM, and interviews. The total EFE and IFE scores are then used directly as the basis for Internal-External Matrix mapping.

The final outcomes of this analytical method are the company's strategic position map in the Internal-External Matrix, portfolio considerations as supporting input, strategic alternatives formulated through TOWS, strategy priorities determined through QSPM, and implementation design through the Balanced Scorecard [15]. With this flow, this study maintains the linkage between external and internal diagnosis, aggregate strategic posture, strategy selection, and implementation plans. This approach is expected to produce a business strategy that is not only appropriate for the company's conditions but also measurable in execution in the automotive manufacturing segment.

4. RESULTS AND DISCUSSION

This section presents the results of business strategy analysis based on the Internal-External Matrix for an industrial lubricant and specialty chemical company in the automotive manufacturing segment. The discussion follows the research flow, namely business condition reading, external and internal factor evaluation, IE Matrix position mapping, portfolio considerations, strategy formulation and prioritization, and implementation design. Data used come from internal company sales reports for 2021–2025, marketing funnel data and identified demand for 2025, company profile documents, semi-structured interview results, and expert judgement synthesis. Data presentation is conducted in tables and figures to ensure the relationship between data, strategic position, and strategy recommendations can be clearly traced.

4.1 Business Performance Trends and Initial Strategic Implications

Sales performance shows that the company has an ongoing business base across three product categories. In terms of volume, total sales increased from 1,745,560 liters in 2021 to 2,532,908 liters in 2025. This increase was mainly supported by industrial lubricants as the largest volume contributor, while cutting coolant showed the highest growth acceleration despite starting from a smaller base. In terms of revenue, total revenue across the three categories increased from IDR 87.47 billion in 2023 to IDR 105.39 billion in 2025. This increase indicates a relatively stable market base but also shows that growth space is uneven across product categories [27].

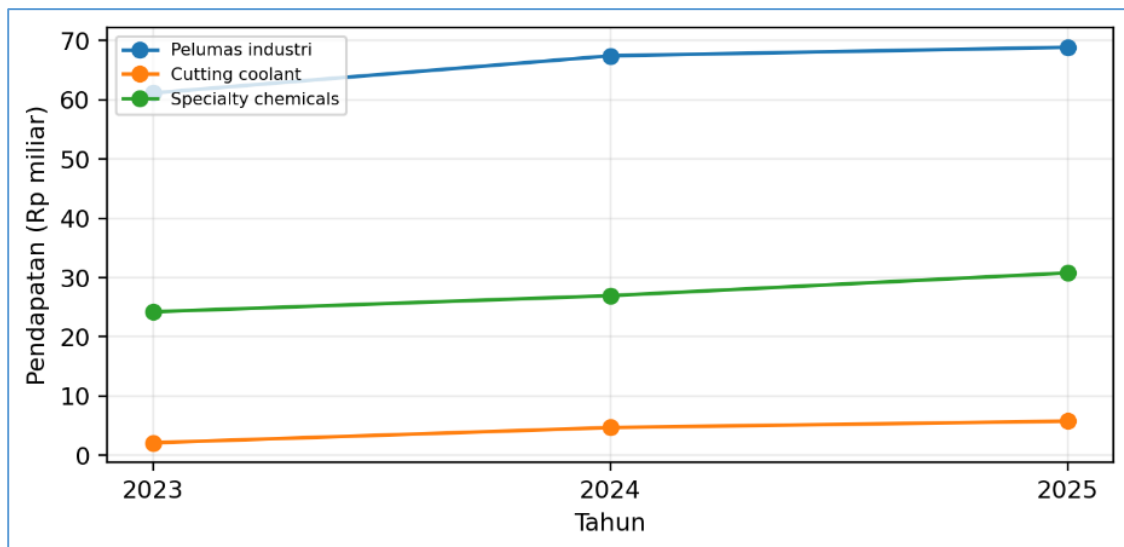


Figure 1. Revenue trends of industrial lubricants, cutting coolant, and specialty chemicals 2023–2025

Source: processed by the author based on Liqtro and Whizol Sales Reports 2023–2025. Revenue in IDR billion

Table 1. Summary of volume and revenue performance by category

Category	Volume 2025 (L)	Revenue 2025 (IDR billion)	Revenue Growth 2023–2025
Industrial Lubricants	1,776,133	68.83	12.61%
Cutting Coolant	132,120	5.78	170.85%
Specialty Chemicals	624,655	30.78	27.08%
Total	2,532,908	105,39	20,49%

Source: processed by the author based on Liqtro and Whizol Sales Reports 2021–2025 and detailed revenue data 2023–2025.

These initial findings show that strategy cannot be formulated based solely on sales volume. Industrial lubricants have the largest contribution but are in a more mature and price-sensitive market. Conversely, cutting coolant has a small volume contribution but shows the highest growth and demands stronger technical capabilities. Specialty chemicals fall between the two, offering opportunities to strengthen margins and customer relationships but still requiring quality stability and application support [28]. Therefore, the following analysis does not use portfolio as the primary basis for strategy but as supporting consideration after the aggregate strategic posture is determined through the IE Matrix [3].

4.2 External and Internal Factor Evaluation

External factor evaluation shows that the company faces opportunities from the large cutting coolant market space, shifts in customer needs toward efficiency and total cost of ownership, increasing product improvement needs, additive technology development, focus on after-sales services, and customer needs for suppliers capable of providing various industrial lubricant and chemical needs. At the same time, the company faces threats from base oil, solvent, and additive supply and price volatility, counterfeit or second-grade product risks, price wars in industrial lubricants, Japanese brand dominance in cutting coolants, long and costly trials, and cash flow risks due to term of payment pressures [29]. The EFE score of 2.56 indicates that the company's response to

the external environment is slightly above the midpoint, so opportunities can be utilized, but responses to several key threats still need strengthening [2].

Internal factor evaluation shows that the company's main strengths lie in Technical & Development capabilities, Sales Engineer experience, active after-sales services, blending support from a sister company, and improving accounts receivable control. The main weaknesses lie in limited technical service capacity, human resource regeneration, warehouse

and storage tank capacity, forecasting accuracy, and information system integration [30]. The IFE score of 2.76 indicates that the company's internal condition is relatively strong but not yet fully ready for aggressive expansion. Thus, conceptually, the EFE and IFE results support proposition P1 that the appropriate strategy needs to be built through alignment between external opportunities and threats with internal strengths and weaknesses [1].

Table 2. Summary of EFE, IFE results, and IE Matrix implications

Matrix	Total Score	Dominant Factors	Strategic Meaning
EFE	2.56	Opportunities: after-sales service, TCO, product improvement; Threats: raw material volatility, price wars, Japanese player dominance, long trials	External response is adequate but needs strengthening in supply resilience, technical differentiation, and service cost control
IFE	2.76	Strengths: Technical & Development, Sales Engineer, after-sales, blending; Weaknesses: technical service, forecasting, capacity, information systems	Internal condition is relatively strong but requires process standardization and organizational capacity strengthening
IE Matrix	IFE 2.76; EFE 2.56	Position in Cell V	Hold and maintain posture with market penetration and product development direction

Source: processed by the author based on EFE Matrix, IFE Matrix results, interviews, and expert judgement, 2026.

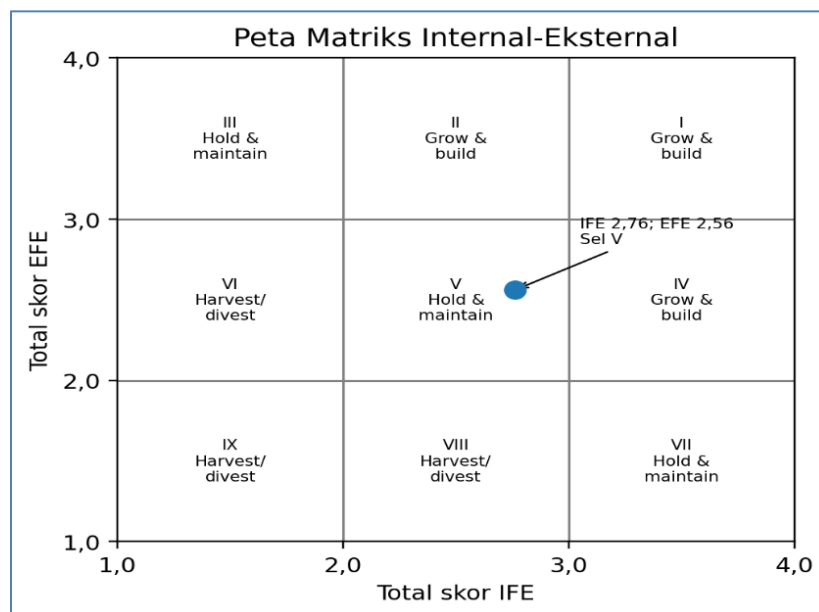


Figure 2. Company position in the Internal-External Matrix

Source: processed by the author based on IFE Matrix score of 2.76 and EFE Matrix score of 2.56, 2026.

The company's position in Cell V indicates a hold and maintain posture [3]. The implication of this position is that the company is not in a condition that requires harvest or divest, but also not yet in a condition strong enough for aggressive expansion across all lines. The most relevant strategies are market penetration and selective product development [31]. Market penetration is understood as efforts to deepen control over priority accounts that have been mapped through customer retention, increasing share of wallet, accelerating trial conversion, and strengthening the sales funnel. Product development is understood as strengthening existing portfolio products through product improvement, formulation development, technical validation, and performance adjustment to customer application needs [9].

4.3 Portfolio Considerations as Supporting Aggregate Strategy

Portfolio analysis is used as supporting input to read the relative characteristics of each product category. The BCG Matrix results show that industrial lubricants are in the dog quadrant, while cutting coolant and specialty chemicals are in the question mark quadrant [32]. These findings are not used to formulate independent strategies for each portfolio but to clarify the implementation intensity of the aggregate strategy determined through the IE Matrix. With this approach, the portfolio does not dominate the strategic direction but helps ensure that the hold and maintain strategy can be translated more realistically according to the characteristics of each category [33].

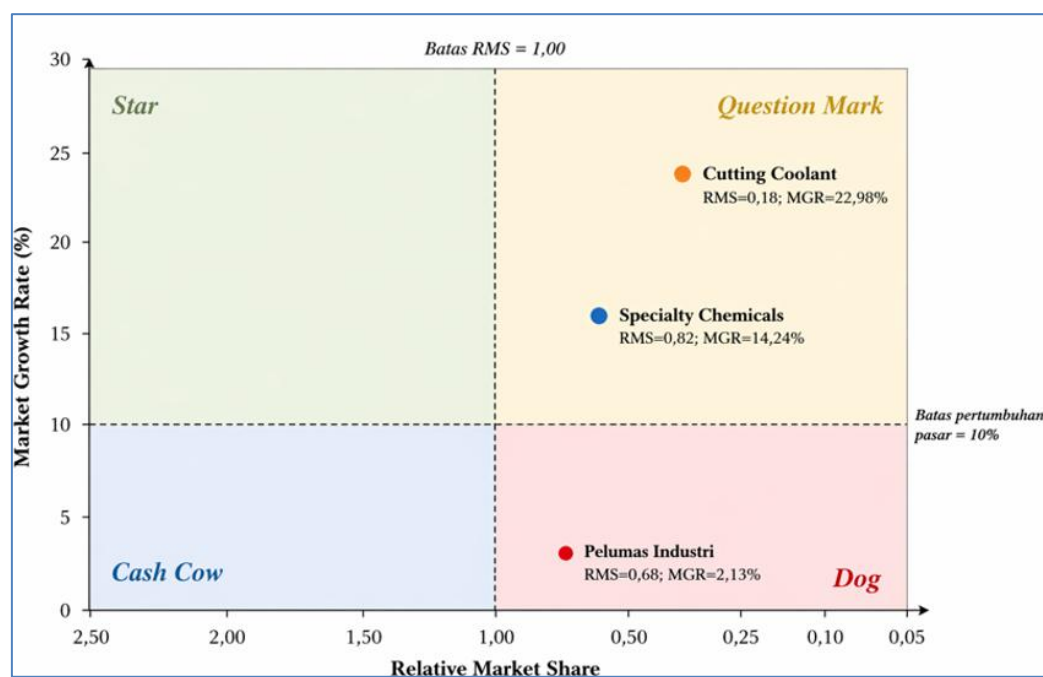


Figure 3. BCG Matrix results for Industrial Lubricants, Cutting Coolant, and Specialty Chemicals product portfolios

Source: processed by the author based on BCG Matrix calculation results, 2026

4.4 Strategy Formulation and Prioritization

Based on the IE Matrix results and portfolio considerations, strategic alternatives were developed through TOWS and then prioritized using QSPM, in accordance with QSPM's function as a

strategy prioritization tool based on the relative attractiveness of internal and external factors [13]. Strategic alternatives remain within the hold and maintain corridor, namely strengthening market penetration and product development in

selected business spaces. The QSPM results show that the strategy with the highest Total Attractiveness Score is strengthening after-sales services based on monitoring, troubleshooting, training, and technical service standardization.

This strategy obtained a TAS value of 4.54 and became the top priority because it has the strongest relationship with external opportunities, internal strengths, and KSFs in the automotive manufacturing segment [34].

Table 3. Summary of strategy priorities based on QSPM

Code	Strategy Formulation	IE Direction	Total TAS	Rank
AS2	Strengthen after-sales services based on monitoring, troubleshooting, training, and technical service standardization	Market Penetration	4.54	1
AS1	Strengthen formulation development, product improvement, and trial governance	Product Development	4.08	2
AS3	Increase priority account penetration through solution-based selling and total cost of ownership proof	Market Penetration	3.97	3
AS6	Strengthen organizational capability through sales, technical service, and technical development competency development	Supporting	3.49	4
AS5	Improve supply resilience and operational execution quality through forecasting, inventory control, and blending coordination	Supporting	3.25	5
AS4	Strengthen commercial efficiency and account retention through price discipline, margin control, and customer relationship management	Market Penetration (defensive)	2.92	6

Source: processed by the author based on TOWS results, EFE Matrix, IFE Matrix, and expert judgement, 2026. TAS definition: sum of strategic factor weights multiplied by attractiveness score for each strategic alternative.

The strategy sequence shows that the priority strategy is not direct volume expansion but strengthening service value as a basis for market penetration [35]. In the B2B automotive manufacturing market, customers assess suppliers based on their ability to maintain application stability, accelerate problem resolution, provide technical education, and prove cost efficiency during product use. Therefore, after-sales service becomes the meeting point between external opportunities in the form of customer needs for technical services and internal strengths in the form of Technical & Development capabilities and Sales Engineer experience [36]. Strategies AS1 and AS3 become direct supporters of AS2 because product improvement and solution-based selling strengthen performance

evidence and customer reasons for repeat orders [6].

4.5 Theoretical Rationale for Strategies

The theoretical rationale for strategies is presented to show the relationship between empirical findings and strategic management concepts. Thus, the recommended strategies are not merely the result of QSPM scoring but also have a clear conceptual basis. The after-sales service strategy relates to KSFs because technical services, trial quality, and customer response are determining factors for success in the OEM and tier 1 and tier 2 segments [37]. The product improvement strategy relates to the resource-based view and dynamic capabilities because the company needs to transform technical knowledge, trial results, and field learning into repeated formulation improvements [6]. The solution-based account penetration

strategy relates to the strategic fit concept because it connects external opportunities in the form of efficiency and TCO needs with the company's internal capabilities [1]. The supply resilience and cashflow control strategy relates to working capital management because businesses based on imported raw materials, inventory, trials, and term of payment require a balance between stock availability, receivables, and service costs [38]. Competency

strengthening and SOP relate to organizational capability because strategies can only be executed when processes, knowledge, and cross-functional coordination are standardized. Strategic cooperation with additive principals and sister companies can be positioned as supporting collaborative mechanisms to strengthen resource orchestration and organizational learning speed [39].

Table 4. Theoretical rationale per strategy

Strategy	Key Empirical Findings	Related Concepts	Theoretical Rationale
AS2 – After-Sales Service	Customers require monitoring, troubleshooting, training, and rapid technical responses.	KSF, service value chain, customer intimacy	After-sales service serves as a differentiator that strengthens customer retention and reduces customer price sensitivity.
AS1 – Product Improvement and Trial	Cutting coolant requires performance validation and a trial process before approval.	RBV, dynamic capabilities, product development	Technical capabilities should be transformed into continuous learning and iterative product improvement processes.
AS3 – Solution-Based Account Penetration	Priority accounts evaluate suppliers based on TCO, efficiency, and evidence of performance.	Strategic fit, market penetration, consultative selling	Market penetration is more effective when the value proposition is tailored to customers' application needs.
AS5 – Supply Resilience and Forecasting	Volatility in base oil, additives, and solvents increases cost and lead-time risks.	Supply chain resilience, working capital management	Inventory, receivables, and cash flow must be managed to prevent service strategies from undermining profitability.
AS6 – Competency, SOPs, and Knowledge Sharing	Technical service resources are limited, while workforce regeneration remains weak.	Organizational capability, Balanced Scorecard learning and growth	Service excellence must be standardized so that it does not depend on specific individuals.
Supporting Strategic Partnerships	Learning from additive principals and blending support from sister companies strengthens strategy execution.	Strategic alliances and resource orchestration	Collaboration with suppliers, principals, or sister companies can serve as a supporting mechanism rather than a standalone core strategy.

Source: processed by the author based on research findings and strategic management theory synthesis.

This discussion shows that proposition P2 is supported by the research findings. Strategies derived from the IE Matrix posture and prioritized through QSPM become more implementable when translated into the

Balanced Scorecard [14]. Without an implementation design, the after-sales service strategy risks remaining a general direction. Through the Balanced Scorecard, the strategy is translated into financial, customer, internal business

process, and learning and growth objectives. Thus, the strategy not only answers "what needs to be done" but also "how the strategy is executed and measured"[15].

4.6 Strategy Implementation Design

The implementation design is structured based on the priority strategy AS2 and supporting strategies AS1, AS3, AS5, and AS6. The main implementation theme is strengthening customer intimacy through standardized technical services, application performance proof, and cross-functional execution control. In the financial perspective, implementation is

directed at increasing revenue, EBITDA margin, strategic program ROI, and cost efficiency. In the customer perspective, the focus is on account acquisition, trial increase, approval conversion, retention, and reference case strengthening. In the internal business process perspective, the main focus is supply resilience, product improvement, monitoring, and troubleshooting. In the learning and growth perspective, the focus is on competency development, technical database, SOP, and cross-functional knowledge sharing [17].

Table 5. Summary of strategy implementation targets 2026–2028

Perspective	Main Objective	Key KPI	Target 2026	Target 2027	Target 2028	Main Initiatives
Financial	Profit and revenue increase	EBITDA margin; Revenue; Strategic program ROI	EBITDA 15%; Revenue IDR 88B; ROI 18%	EBITDA 15.5%; Revenue IDR 94B; ROI 20%	EBITDA 16%; Revenue IDR 100B; ROI 22%	Monthly margin evaluation, trial selection based on margin potential, cost-to-serve control
Customer	Priority account acquisition and retention	New accounts; New trials; Approval conversion; Retention rate	12 new accounts; 20 trials; conversion min. 60%; retention min. 95%	14 new accounts; 24 trials; conversion min. 60%; retention min. 95%	17 new accounts; 28 trials; conversion min. 60%; retention min. 95%	Solution-based sales funnel, trial SOP, routine visits, reference cases
Internal Business Process	Technical service and supply resilience increase	SLA; Forecast accuracy; Monitoring; Response time	SLA max. 3 days; forecast min. 90%; response 48 hours	SLA max. 3 days; forecast min. 90%; response 24 hours	SLA max. 3 days; forecast min. 90%; response 24 hours	Sales-warehouse-purchasing-LOBP coordination, monthly monitoring, root cause analysis

Source: processed by the author based on QSPM results, strategy map, internal company data, and Balanced Scorecard design, 2026. Note: ROI is strategic program ROI, not overall corporate ROI.

The implementation targets in Table 5 show cause-and-effect relationships across perspectives. Competency, SOP, and technical database strengthening are expected to improve internal process quality, especially monitoring, troubleshooting, and trials. Internal process improvements then increase acquisition, approval conversion, retention, and customer reference cases. Ultimately, customer perspective improvements are

expected to drive revenue, EBITDA margin, and strategic program ROI increases. With this logic, the Balanced Scorecard functions as a bridge between strategy formulation and implementation control, so that priority strategies from QSPM results can be translated into more measurable targets [17].

4.7 Discussion of Research Questions and Propositions

RQ1 asked about the company's strategic position based on internal and external factor evaluation through the IE Matrix. The research results show that the IFE score of 2.76 and EFE score of 2.56 place the company in Cell V, namely hold and maintain [3]. This position indicates that the company has a sufficiently strong internal foundation and adequate external response but needs to maintain implementation discipline to avoid overly broad expansion. Thus, the suggested strategies are selective market penetration and product development in automotive manufacturing priority accounts [31].

RQ2 asked about the most appropriate business strategy and its implementation design. The QSPM results show that the priority strategy is strengthening after-sales services based on monitoring, troubleshooting, training, and technical service standardization [13]. This strategy is supported by product improvement, solution-based account penetration, supply resilience, and organizational capability strengthening. These findings align with the strategic fit concept because the recommended strategy connects market opportunities, customer needs, competitive pressures, and internal company capabilities [1]. These findings also show that after-sales service is not merely a supporting activity but part of the value proposition that determines supplier success in the B2B automotive manufacturing segment [37].

Thus, P1 is supported by the research findings because the IE Matrix is able to provide an aggregate strategic posture that matches the company's internal and external conditions [2]. P2 is also supported because strategies prioritized through QSPM become more implementable after being translated through the Balanced Scorecard [14]. Academically, these results show that the integration of EFE, IFE, IE Matrix, TOWS, QSPM, and Balanced Scorecard can be

used coherently to bridge diagnosis, formulation, prioritization, and strategy implementation in the context of local B2B companies [40]. Practically, these results confirm that local supplier advantages do not always have to be built through the lowest price but can be strengthened through technical services, product development, response speed, and execution discipline [16].

5. CONCLUSION

This study formulates a business strategy based on the Internal-External Matrix for an industrial lubricant and specialty chemical company in the automotive manufacturing segment. The company faces growth opportunities in cutting coolant and specialty chemicals, but also faces external pressures from raw material volatility, industrial lubricant commoditization, high buyer bargaining power, dominant players, and lengthy trial processes. Internally, the company possesses strengths in Technical & Development capabilities, Sales Engineer experience, after-sales services, blending support, and accounts receivable control, while weaknesses remain in technical service capacity, human resource regeneration, forecasting, storage capacity, and information system integration [1], [2], [5], [6].

The EFE score of 2.56 and IFE score of 2.76 place the company in Cell V of the Internal-External Matrix, indicating a hold and maintain posture with strategic directions of market penetration and selective product development [3]. The BCG Matrix shows industrial lubricants in the dog quadrant, while cutting coolant and specialty chemicals are in the question mark quadrant [32]. This implies selective implementation: industrial lubricants focused on retention and margin control, cutting coolant on growth through trials and technical services, and specialty chemicals on margin and account loyalty strengthening [33].

The QSPM prioritizes strengthening after-sales services through monitoring, troubleshooting, customer training, and technical service standardization [13]. This

strategy is supported by product improvement, solution-based selling, supply resilience, and organizational capability enhancement [6], [31], [39]. This approach demonstrates strategic fit between customer needs for service efficiency and total cost of ownership with the company's internal capabilities in product development, technical services, and customer relationship management [1], [4]. Thus, competitive advantage should be built through service and technical solution differentiation rather than price competition alone [16].

5.1 Managerial Recommendations

Management should prioritize after-sales service strengthening as the main agenda for 2026–2028. First, develop SOPs for trials, monitoring, troubleshooting, customer training, and technical reporting to ensure service consistency. Second, strengthen coordination across Sales Engineer, Technical & Development, Finance, warehouse, purchasing, and blending facilities to accelerate trial processes, order fulfillment, and complaint resolution. Third, establish account and trial selection mechanisms based on volume potential, margin, technical risk, service needs, and customer payment capability to achieve growth without sacrificing profitability and cashflow [35].

The company should also strengthen product improvement in cutting coolant and specialty chemicals, supported by trial documentation, application performance parameters, customer case reports, and a technical database for the sales function [34]. Additionally, strengthen working capital management through inventory control,

forecasting accuracy, term of payment discipline, and service cost evaluation [38]. Strategic cooperation with additive suppliers, principals, and sister companies can serve as supporting mechanisms for supply resilience and technical learning [39].

5.2 Limitations and Future Research

This study has several limitations. First, the market scope is limited to identified demand for priority automotive manufacturing accounts, not the total national market [27], [28]. Second, the case study approach on a single company limits generalizability [19]. Third, weighting and rating in the EFE, IFE, and QSPM rely on expert judgement and managerial consensus, which contain subjective elements despite triangulation and member checks [2], [25], [26]. Fourth, portfolio data uses identified demand and competitor estimates, not fully independent national market data [30].

Future research should expand the scope by comparing multiple industrial lubricant companies or metalworking fluid suppliers across different manufacturing segments. Mixed methods, AHP, Delphi, or sensitivity analysis could strengthen strategy prioritization [25]. Longitudinal studies evaluating Balanced Scorecard implementation effectiveness—particularly on trial conversion rate, retention rate, EBITDA margin, strategic program ROI, forecast accuracy, and technical service response—would further develop research contributions from formulation toward implementation evaluation [14], [15], [17].

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