DEVELOPING STRATEGY FOR ELECTRICAL & AUTOMATION SYSTEM INTEGRATOR COMPANY FOR FACING FUTURE BUSINESS UNCERTAINTY

(CASE STUDY OF: PT. MITRA)

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ABSTRACT

PT Mitra is a private limited company that has been around since 1996. PT Mitra specialize in electrical and automation and has many clients in state owned company like PT. Pertamina, PT Semen Indonesia, PT PLN, PT. Biofarma and private owned company like PT. British Petroleum Berau, PT Indocement, etc. In the last four years, PT. Mitra revenue has growth exponentialy. This made the company growth into a big scale company that is rated from their revenue, employee and capital. The sudden growth of PT. Mitra is supported by their cyclical revenue which can create a problem if PT. Mitra owner and management cannot manage the company well. The scenario planning method try to give some alternative vision and how should the owner and management react by developing their strategy. The scenario planning in this study is design for five years duration and the strategy will be developed using TOWS analysis to create a multiple strategy for each scenario.

Keywords : Scenario Planning; Strategic Management; Internal Analysis; External Analysis; TOWS

ABSTRAK

PT Mitra adalah perseroan terbatas swasta yang telah berdiri sejak tahun 1996. PT Mitra mengkhususkan diri dalam bidang kelistrikan dan otomasi dan memiliki banyak klien di perusahaan milik negara seperti PT. Pertamina, PT Semen Indonesia, PT PLN, PT. Biofarma dan perusahaan swasta seperti PT. British Petroleum Berau, PT Indocement, dll. Dalam empat tahun terakhir, pendapatan PT. Mitra tumbuh secara eksponensial. Hal ini membuat perusahaan tumbuh menjadi perusahaan berskala besar yang dinilai dari pendapatan, karyawan, dan modal mereka. Pertumbuhan PT. Mitra yang tiba-tiba didukung oleh pendapatan siklus mereka yang dapat menimbulkan masalah jika pemilik dan manajemen PT. Mitra tidak dapat mengelola perusahaan dengan baik. Metode SCENARIO PLANNING mencoba memberikan beberapa skenario alternatif dan bagaimana pemilik serta manajemen harus bereaksi dengan mengembangkan strategi mereka. Perencanaan skenario dalam studi ini dirancang untuk durasi lima tahun dan strategi akan dikembangkan menggunakan analisis TOWS untuk membuat strategi yang berbeda untuk setiap skenario.

Kata Kunci : Scenario Planning; Strategic Management; Internal Analysis; External Analysis; TOWS

INTRODUCTION

The integration of electrical and automation systems has become a cornerstone of modern industrial operations. As industries strive to increase productivity, improve safety, and reduce operational costs, the deployment of sophisticated control and automation technologies has become essential. Historically, automation began with simple relay-based control systems, but advances in digital technology have led to the development of complex, software-driven solutions such as PLCs, SCADA systems, and distributed control systems (DCS).

PT. Mitra is an electrical and automation system integrator that established since 1996. At first PT. Mitra is a general contractor company that partnered with some of private company (Indocement, Holcim, etc.) and State-Owned Enterprise (SOE) like PT. Pertamina, PT PLN, etc.

To understand the business situation of PT. Mitra, we need to list out the stakeholders that involved in PT. Mitra business (see Figure 1). The gap analysis of this business issue also can be seen to describe the gaps that happen in PT. Mitra Business Issue (see Figure 2).

To tackle the challenge, the study will need to know what are PT. Mitra internal factors and external factors. After PT. Mitra know their Strength and Weakness which is part of internal factors (GÜREL, 2017; Kumar C.R & K.B, 2023), the study will need to explore more about the opportunities and threat (part of external factors) that will be happen in the next 5 years. One of tools that is commonly use for predicting the future situation is scenario planning (Schoemaker, 1995), while there are many scenario planning method that can be use, in this study a 2X2 matrix scenario planning (Dean, 2019) will be use because of the intuitive and familiarity of method with the author.

To achieve the objectives of this study, there are four research questions that need to be answers by, as follows:

- a) How can we find out the strength, weakness, opportunity and threat of PT. Mitra?
- b) What are the scenarios that will emerge because of the business uncertainty?
- c) What is the early warning signal to monitored from for each scenario planning?
- d) What are the strategies which will be developed for PT. Mitra future?

LITERATURE REVIEW

The tools that being used in this study are VRIO and Value Chain analysis for internal analysis, PESTLE and Porter 5 Forces for external analysis, SWOT analysis to summarize the Strength, Weakness, Opportunity and Threat, 2X2 Scenario Planning method to build the future scenario narratives and TOWS analysis to build the strategy for each scenario.

VRIO

To discover company core competencies, commonly a company will be using VRIO (Valuable, Rare, Imitate and Organization). A VRIO analysis is use to find out the company resources in support of their competitive advantage. A VRIO are build from 4 variables that will support each previous variable. In this case if the company resources is not valuable, then the resources just create the competitive disadvantage for the company. While if the resources is rare, imitable and even organized, the resource can create a competitive advantage for the company (see Figure 3). The VRIO analysis begin with listing all all the tangible and intangible resources that matters (some called it RBV method) (Barney, 1991) before we begin to analyze the advantage that can be brought by the resources.

Value Chain Analysis

The value chain analysis allows the company to find how the operations of their business process work (activity). In value chain analysis we would see how the company activities related to their value creating process. There are two activities that happen in a company. Firstly, the primary activities which are involved with a product's physical creation, its sale and distribution to buyers, and its service after the sale. Secondly, the support activities that provide the assistance necessary for the primary activities to take place (Hitt et al., 2007). To see the competitive advantage of the company activities (see Figure 4), it is better if we compare the activities with other company to see how competitive the company is.

Pestle

Pestle Analysis Is A Strategic Management Tool Used To Evaluate The External Macro-Environmental factors that could impact an organization. It was first coined by Harvard Business School professor Francis J. Aguilar in 1964. The acronym PESTLE stands for Political, Economic, Social, Technological, Legal and Environmental factors.

The purpose of PESTLE analysis is to identify the issues that are outside the control of your organization, and it will have some level impact on it (Team FME, 2013).

PESTLE analysis offers an environment within which the external-macro landscape where the business usually works (Irani & Sharif, 2018). In the other hand, PESTLE analysis sometimes does not allow a detailed and objective analysis of the macro environment. PESTLE analysis mainly provides a general idea of the macro environment and the connection with the company/organization (Yüksel, 2012). In the end, by examining PESTLE analysis, businesses can gain insights into the external influences that may affect their strategies, opportunities, and risks (see Figure 5).

Porter 5 Forces

Porter's Five Forces Is A Framework Developed By Michael E. Porter First In 1979 (Porter, 2008) To Analyze The competitive environment of an industry. It helps businesses understand the factors that influence competition and profitability within their market. The framework assesses five key forces that determine the intensity of competition and the potential for profitability (see Figure 6), which are Threat of New Entrants, Bargaining Power of Suppliers, Bargaining Power of Buyers, Threat of substitute products and Industrial Rivalry (Rivalry Among Competing Firms).

SWOT Analysis

SWOT analysis is a strategic planning tool used to identify and evaluate the Strengths, Weaknesses, Opportunities, and Threats related to a business or project (see Figure 7). By conducting a SWOT analysis, organizations can gain insight into both internal and external factors that impact their performance and decision-making processes.

Scenario Planning Method

Scenario planning has been a tool that being used by managers and leaders of a company or an organization in many years (Schoemaker, 1995). The systematic use of scenario planning can be traced back to 1950s hen the US RAND (Research ANd Development) Corporation begin to study some different possible states of the world within which alternative weapons systems and military strategies would have to be employed (Kahn Herman et al., 1976). The 1960s and 1970s are also implemented by civil company such as Shell for their corporate planning procedures (Wack & Business, 1985) and publication of the Club of Rome's report that highlights the possible

environmental risks and possibilities if we go on through in our current path (Meadows et al., 1972). In scenario building or developing scenario steps we can use a 2X2 matrix tools to develop the identified trends and uncertainties into a scenario that will be put in a 2X2 scenario matrix (see Figure 8). After we put our scenarios in 2X2 scenario matrix, we can use the influence diagram tools (See Figure 9) to illustrate the interaction between factors that eventually will produce various outputs/outcomes. After we finished to elaborate the future scenario by using the tools from the previous step, we can try to elaborate some strategic options to tackle the future scenarios (see Figure 10). In this study we would like to make a strategy that integrate the strength -weakness of the company with opportunity-threat that emerge from each scenario, which will be resulted in using the TOWS analysis.

TOWS Analysis

TOWS analysis is a strategic tool that helps organizations develop strategic options by combining internal and external factors identified in a SWOT analysis. Unlike SWOT, which simply categorizes internal strengths and weaknesses alongside external opportunities and threats, TOWS encourages organizations to formulate actionable strategies by matching these elements. The primary aim is to identify how strengths can be used to capitalize on opportunities and defend against threats (Weihrich, 1982). By systematically analyzing these combinations, organizations can develop proactive strategies that leverage their strengths and opportunities while addressing weaknesses and mitigating threats (see Figure 11).

RESEARCH METHODOLOGY

Method is a method of work that can be used to obtain something. While the research method can be interpreted as a work procedure in the research process, both in searching for data or disclosing existing phenomena (Zulkarnaen, W., et al., 2020). The research design are plans and the procedures for research that spam the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009). The research design for this study is commenced in four steps (see Figure 12). The four steps illustrated how the research methodology is being done by the author, each step is different and cannot be passed, this methodology show how it supports for each step to build a robust system.

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Step 1: Defining Scope, Business Issue and Time Horizon

The first step of this research will be focused on identifying the business issue. Identifying a business issue involves recognizing obstacles or challenges that hinder a company's ability to achieve its goals. In this study we focused on company's 5 symptoms, which are: the cyclical revenue and increasing fixed costs of PT. Mitra, the main clients of PT. Mitra are greatly influenced by the domestic political situation, a major client of PT. Mitra has been undergoing a major PLC system upgrade since 2019 and the system is expected to last for the next 10 years which means a potential reduction in revenue for PT. Mitra, the global situation which is very unstable will also impact with business uncertainty and the last one there would be a company succession in the next 3 years which means the company has to address a firm strategy to ensure a smooth succession. Understanding these issues is crucial for developing strategic plans that enhance competitiveness and ensure long-term success. Engaging stakeholders through surveys or focus groups can also provide valuable insights into perceived challenges, offering a comprehensive view that aids in effectively addressing business issues.

Step 2: Information Search (Data Collecting)

The information search or data collecting step, begin with the research questions and objectives which is a part of data collecting step (Creswell, 2009). The research questions and objectives as described in chapter one, are the backbone of the research. The research question started with the general question from the problem that PT. Mitra needs to solve with the final objectives that has been stated in the first chapter. The research questions and objectives generally ask about the current condition of PT. Mitra strength, weakness, opportunity and threat, the 5 years scenario for PT. Mitra, early warning signals to monitor which scenario that eventually will happen in the future and the strategy that will be use to tackle all of the scenarios challenge. The data collection stage will consist how the data of this research will be collected from stakeholders that is involved in this study. The highest hierarchy of stakeholders are possessed by the owner/shareholders (see Table 1). In this case the data collection will be focused by interviewing the owner/shareholders (which is also the management) that have the biggest interest and influence for the company.

Step 3: Data Analysis

The data analysis will be commenced after the data collection are finished. The data analysis will be using the mixed method research that has more overall strength of study that is greater than using only qualitative or quantitative data (Creswell, 2009). The use of uncertainty diagram, scenario matrix and influence diagram are also being part of the data analysis in chapter four. After finished with the scenario planning method, then the author would like to propose some strategy that align with the scenario of this study. The strategy will act as a solution and need to be discussed and approved with the owner/shareholders before commencing the implementation plan.

Step 4: Conclusion & Recommendation

The conclusion and recommendation will act as a summary of this study and will highlited all the study, bring a conclusion and suggest what need to be improved for a similar study in the future.

RESULTS AND DISCUSSION

VRIO Analysis

The VRIO analysis is being analysed using the primary data from interview with the internal stakeholder of the company. The objective of the interview is to find the current strength and weakness using the resources and capabilities factors of PT. Mitra. The interview is conducted using zoom and being recorded for further analysis and documentation (see Table 2).

Value Chain Analysis

The Value chain analysis is analysed by categorized some activities that are included in value chain analysis method by porter that involved primary and supporting activities (Porter, 1985). There are 19 key factors that involved in this research. The weight factors and 19 key factors come from discussion with the President Director of PT. Mitra, these factors are subjective with PT. Mitra President Director needs and in subject to compare with other company to analyse the competitive strength (see Table 3).

PESTLE Analysis

In PESTLE analysis we analyse the external factors from macro environment situation, which is represented from the Politics, Economics, Social, Technological,

Legal and Environmental. The purpose of this analysis is to find out the opportunities and threat which comes with the macro situation (see Table 4).

5 Porter Forces Analysis

In 5 porter forces analysis the author would like to analyse the industrial environment of PT. Mitra. In this analysis the author also uses the rating scale from Low (1) to High (3). The lower strength of forces means that the threat of PT. Mitra industry is low which is good for PT. Mitra, meanwhile if the higher strength of forces means the threat of PT. Mitra industry is high which is not good for PT. Mitra (see Table 5).

SWOT Analysis

SWOT analysis combines all the internal analysis and external analysis which have been discussed before in Table 2, 3, 4. We can list the Strength, Weakness, Opportunity and Threats from each analysis and 1 we can summarize the SWOT of PT. Mitra by decoding all the results into new code (see Figure 13). By using the data from Figure 13 then we can construct the scenario planning using opportunity and threat as the scenario trends that will happen for the next five years. The opportunity and threat in SWOT analysis will be put in trend and uncertainty analysis as a part of scenario planning method.

Trend and Uncertainty Analysis

Before we can put the opportunity and threat in trend and uncertainty analysis, there are another questionare which need to be filled by the internal stakeholder of PT. Mitra (see Table 6). By using table 6, we can see how the internal stakeholder sees the opportunity and threat for PT. Mitra by using the impact level and uncertainty level. The weight of each shareholder is being use to calculate the weight of each impact and uncertainty for each theme (see Table 7). The summary for impact and uncertainty of each theme then will be use in trend and uncertainty grid (see Figure 14). The results of Critical Uncertainties are O1, O2, T1 and T3 (see Figure 13).

By using the results of Critical Uncertainties, we need to explore the possible exploration scenario (see Table 8) before put the results in 2X2 scenario matrix.

2X2 Scenario Matrix

The scenario building started with building the 2X2 matrixes that will explore 4 possiblities of scenarios, which range from stability of global politics and the rise or decline of green energy initiatives (see Figure 15).

Influence Diagram

By using this scenario matrix, we can see what kind of futures will be faced by PT. Mitra. To face this challenge, an influence diagram to consider the future evolution need to be build (Dean, 2019; Schwenker & Wulf, 2013). The influence diagram can be use as a basis to inform the strategic action. An early warning signals can also being derived from the influence diagram (see Figure 16).

Strategy Using TOWS Analysis

After we provide the scenario situation and early warning comparison we can make the company strategy by define the opportunity and threat for each scenario. The Strategy for each scenario will be depend with the opportunity and threat for each scenario (see Table 9,10, 11 and 12).

CONCLUSION

To answers the Strength, Weakness, Opportunity and Threat factors that affect PT. Mitra, we can use the VRIO and Value Chain analysis tools for the internal factors and PESTLE and Porter Five Forces analysis for the external factors. This tools (Hitt et al., 2007; Porter, 1985, 2008).

- Strength: Have a strong financial resources, Good organizational process and culture, Good human resources & management team, Have more than 10 years Reputation, Have a good supplier relationship with some of it have a special agreement with PT. Mitra, Have a good operation and engineering team, Have a good logistics team which can deliver item as clients request, Have a good marketing & sales support and The procurement team have a good negotiation skills and can also sourcing specialized product.
- Weakness: Does not have a firm strategy, especially for long term strategy, Physical resources that can be easily immitate by competitors, Does not have concern with R&D, innovation and technological research, Need to improve the inventory management system, Have not maximize the branding and reputation potential, Need to improve the service quality.

- Opportunities: With social and technological trends, comes some opportunity to upgrade the current system into more automated system, A potential opportunity that comes from government regulations especially environmental regulation is very likely possible because of global warming and green energy initiatives, The low threat of new entrants and subtitutes, makes the industry is more favourable for the existing player.
- Threat: There is a big threat especially for 5 years in global politics that can cause an instability in global and domestic economic, The threat of supplier bargaining power, especially from large suppliers, needs to be considered by the procurement team, Threats from buyers' bargaining power because PT. Mitra too much relies on certain clients, Industrial competition is getting tighter due to the niche market, some tried to cut their price (competitors try to do the price war).

The 4 different scenarios that derived from 2X2 scenario matrix, which are:

- The Rise of Fossil Energy: The US government with their new President is supporting more projects in oil and gas industry, the middle east and OPEC try to increase the production. The results is the more stable of oil price but declining green energy projects.
- Global Green Initiatives: The Government of Indonesia try to initiate more green energy projects, with foreign and domestic funding. The stable situation of global politics make the global currency and supply chain effect supporting the new projects initiatives.
- Middle East and Tarrif War Crisis: The middle east politics instability and tarrifs war between US and China are mounting up, it created the rise of oil price and delay of more global initiatives including the green energy initiatives.
- Indonesia Rise on Green Energy Intiatives: Indonesia who tried to be a global player
 in green energy intiatives, worked out to manage some Foreign Direct investment
 which resulted into more projects in Sustainable Energy, Energy efficiencies and EV
 (Electric Vehicle) infrastructure.

The early warning signals of this scenario planning can be derived from the influence diagram that analyze the connection from each critical factors that connecting into produce some different outcome. The early warning signals situations will be divided into 4 scenarios that have 5 categories each. The

categories that being use for each scenario are: green financial commitment, oil price, global politics, economic situations and electric vehicle usage (see Table 13).

With the help of TOWS analysis (Weihrich, 1982), the strategy for each scenario can be developed with 7 important categories which are: Marketing & Sales, Management Team, Investment, Financial, Procurement and HR (see Table 14)

REFERENCES

- 6W Research. (2024, April). Indonesia System Integrator Market (2024-2030).
- AC Ventures. (2023). Indonesia's Electric Vehicle Outlook SUPERCHARGING TOMORROW'S MOBILITY.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*.
- Creswell, J. W. (2009). Research Design: Qualitative, Quantitative & Mixed Mode Approaches. Sage.
- Dean, M. (2019). *Scenario Planning: A Literature Review*. https://doi.org/10.13140/RG.2.2.12629.24802
- Development Bank, A. (2023). Asian Economic Integration Report 2023: Trade, Investment, and Climate Change in Asia and the Pacific. www.adb.org
- Glass, M., Burgess, M., & Tomisawa, A. (2025). *Strategists See Stronger Yen, Weaker Asian Stocks on Tariff Plan.* https://www.bloomberg.com/news/articles/2025-04-02/asian-assets-seen-taking-a-pounding-from-higher-us-tariffs?embedded-checkout=true
- GÜREL, E. (2017). SWOT ANALYSIS: A THEORETICAL REVIEW. *Journal of International Social Research*, 10(51), 994–1006. https://doi.org/10.17719/jisr.2017.1832
- Hitt, M. A. ., Ireland, R. Duane., & Hoskisson, R. E. . (2007). *Strategic Management : Competitiveness and Globalization*. Thomson/South-Western.
- Hooker, L., & Haslett, E. (2025). *How the attacks on Iran could affect oil prices and energy bills.* https://www.bbc.com/news/articles/cg5vr2rvzg4o
- Hu, S. (2025). *Paris Climate Agreement: Everything You Need to Know*. Nrdc.Org. https://www.nrdc.org/stories/paris-climate-agreement-everything-you-need-know
- Irani, Z., & Sharif, A. M. (2018). Food security across the enterprise: a puzzle, problem or mess for a circular economy? *Journal of Enterprise Information Management*, 31(1), 2–9. https://doi.org/10.1108/JEIM-03-2017-0045
- Ivani S, O., & Puspitalova, A. T. (2025). Rencana Pabrik Otomotif BYD Dibangun di Subang Smartpolitan. Tempo.Co.Id.
- Kahn Herman, Brown William, & Martel Leon. (1976). The Next 200 Years. Hudson Institute.
- Kosow, H. (2008). *Methods of Future and Scenario Analysis. Overview, Assessment, and Selection Criteria*. https://www.researchgate.net/publication/258510126
- Kumar C.R, S., & K.B, P. (2023). SWOT ANALYSIS. *International Journal of Advanced Research*, 11(09), 744–748. https://doi.org/10.21474/IJAR01/17584
- Meadows, D. H., Meadows, D. L., Rgen, J. •, William, R., & Behrens III, W. (1972). *The Limits to Growth*.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis* (Second). Sage Publications.

- Mohd, S. A., Sazali, N., Jamaludin, A. S., & Misdan, N. (2023). IOT-Based Energy Monitoring System for Energy Conservation. *E3S Web of Conferences*, 437. https://doi.org/10.1051/e3sconf/202343704006
- Nordho, J. (2022). Climate of Compromises_ How Climate Finance Commitments Slow SDG Progress SDG Knowledge Hub. Iisd.Org.
- Porter, M. E. (1985). Competitive Advantage Creating and Sustaining Superior Performance (First). The Free Press.
- Porter, M. E. (2008). The Five Competitive Forces That Shape Strategy. www.hbrreprints.org
- Ravitch, S. M., & Carl, N. M. (2021). *Qualitative Research: Bridging the Conceptual, Theoretical, and Methodological 2ed.* Sage.
- Ravitch, S. M., & Riggan, M. (2017). Reason & Rigor: How Conceptual Frameworks Guide Research, 2nd Edition (2017) (Issue 4). Informa UK Limited. https://doi.org/10.1080/07380577.2017.1360538
- Renewable Energy Agency, I. (2023). Socio-economic footprint of the energy transition: Indonesia. www.irena.org
- Rudolph, A. (2025). Oil Prices Plunge As Middle East Ceasefire Eases Supply Fears. Ig.Com.
- Schoemaker, P. (1995). *Scenario Planning: A Tool for Strategic Thinking*. https://www.researchgate.net/publication/220042263
- Schwenker, B., & Wulf, T. (2013). SCENARIO-BASED STRATEGIC PLANNING. Springer Gabler.
- Shih, W. C. (2020). Global Supply Chains in a Post-Pandemic World.
- Shih, W. C., & Chua, V. (2025). The Tariff Wars Just Upended Your Supply Chain. Here's How to Adapt. *Harvard Business Review*.
- Syofiadi, R. (2024). Gandeng ACWA Power, PLN Siap Lebarkan Pemanfaatan Energi Bersih di Indonesia PT PLN (Persero). Pln.Co.Id.
- Team FME. (2013). *Strategy Skills PESTLE Analysis*. www.free-management-ebooks.com www.free-management-ebooks.com
- unfcc.int. (2016). What is the Paris Agreement? Https://Unfccc.Int/Process-and-Meetings/the-Paris-Agreement.
- Van Notten, P. (2006). A Typology of Approaches.
- Wack, P., & Business, H. (1985). Scenarios: Uncharted Waters Ahead.
- Weihrich, H. (1982). The TOWS Matrix-A Tool for Situational Analysis. Long Range Planning, 15(2).
- Yüksel, I. (2012). Developing a Multi-Criteria Decision Making Model for PESTEL Analysis. International Journal of Business and Management, 7(24). https://doi.org/10.5539/ijbm.v7n24p52
- Zulkarnaen, W., Fitriani, I., & Yuningsih, N. (2020). Development of Supply Chain Management in the Management of Election Logistics Distribution that is More Appropriate in Type, Quantity and Timely Based on Human Resources Competency Development at KPU West Java. MEA Scientific Journal (Management, Economics, & Accounting), 4(2), 222-243. https://doi.org/10.31955/mea.vol4.iss2.pp222-243.

FIGURE AND TABLE

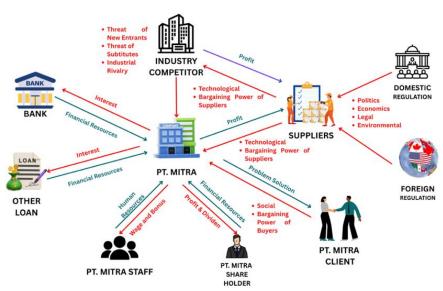


Figure 1 Rich Picture of PT. Mitra Business Issue Source: author's elaboration (2025)

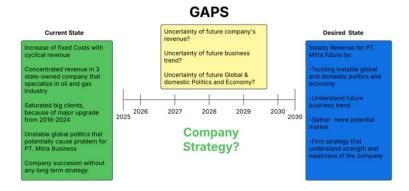


Figure 2 Gap Analysis Source: author's elaboration (2025)

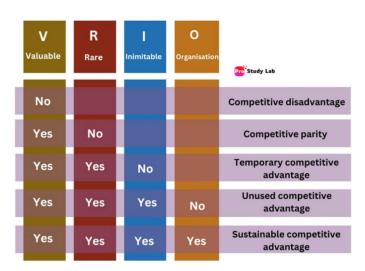


Figure 3 VRIO Analysis Source: prostudylab (2025)

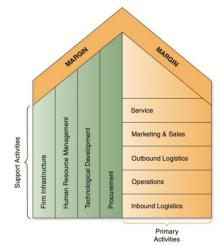


Figure 4 Value Chain Analysis Source: Hitt et al (2007)



Figure 5 PESTLE Analysis Source: https://consulterce.com/ (2024)



Figure 6 PORTER FIVE FORCES Analysis Source: Hitt et al (2007)

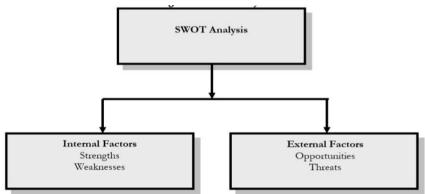


Figure 7 SWOT Analysis Source: Gurel (2017)

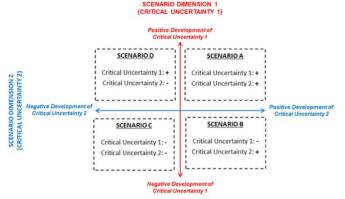


Figure 8 2X2 Scenario Matrix Source: Dean (2019)

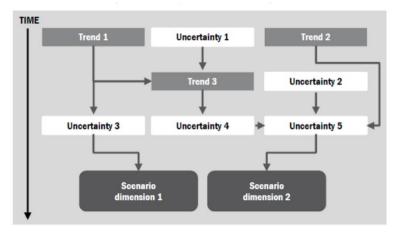
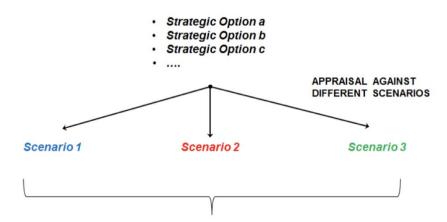


Figure 9 Influence Diagram Source: Dean (2019)



IDENTIFICATION OF THE MOST FLEXIBLE AND ROBUST OPTION WHICH PERFORMS RELATIVELY WELL AGAINST ALL THE DIFFERENT INVESTIGATED SCENARIOS

Figure 10 Strategy Definition Diagram for Future Scenario Source: Dean (2019)

	Internal Strengths: 1. Strong R & D and Engineering 2. Strong Sales and Service Network 3. Efficient Production/Automation Capabilities	Internal Weaknesses: 1. Heavy Reliance on One Product (Although Several Less Successful Models were Introduced) 2. Rising Costs in Germany 3. No Experience With U.S. Labor Unions if Building Plant in the U.S.		
External Opportunities: (Also Consider Risks) 1. Growing Affluent Market Demands More Luxurious Cars with Many Options 2. Attractive Offers to Build an Assembly Plant in U.S. 3. Chrysler and American Motors Need Small Engines	SO: 1. Develop and Produce Multiproduct Line with Many Options, in Different Price Classes (Dasher, Scirocco, Rabbit, Audi Line) (O; S; S;) 2. Build Assembly Plant Using R & D, Engineering, and Production/Automation Experience (O ₂ S; S;) 3. Build Engines for Chrysler and AMC (O ₃ S ₃)	WQ: 1. Develop Compatible Models for Different Price Levels (Ranging from Rabbit to Audi Line) (O, W ₁) 2. To Cope with Rising Costs in Germany, Build Plant in U.S., Hiring U.S. Managers with Experience in Dealing with U.S. Labor Unions (O ₂ W ₂ W ₃)		
External Threats: 1. Exchange Rate: Devaluation of Dollar in Relation to Deutshe Mark (DM) 2. Competition from Japanese and U.S. Automakers 3. Fuel Shortage and Price	ST: 1. Reduce Effect of Exchange Rate by Building a Plant in the U.S. (T ₁ T ₂ S ₁ S ₂) 2. Meet Competition with Advanced Design Technology - e.g. Rabbit (T ₂ T ₃ S ₃ S ₃) 3. Improve Fuel Consumption Through Fuel Injection and Develop Fuel Efficient Diesel Engines (T ₃ S ₁)	WT: A. Overcome Weaknesses by Making Them Strengths (Move Toward OS Strategy) 1. Reduce Threat of Competition by Developing Flexible Product Line (T ₂ W ₁) B. Possible Options not Exercised by VW: 1. Engage in Joint Operation with Chrysler or AMC 2. Withdraw From U.S. Market		

Figure 11 Example of TOWS Matrix for VW Source: Weihrich H (1982)

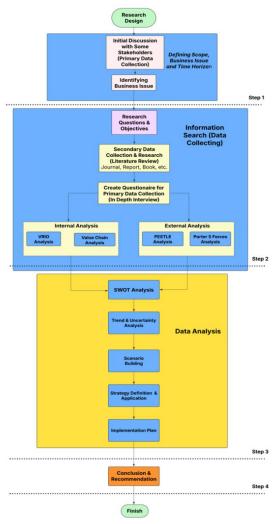


Figure 12 Ilustration on Research Design Source: author's elaboration (2025)

Figure 13 SWOT Table 2X2 Source: author's elaboration (2025)



Figure 14 Trend and Uncertainty Grid Source: author's elaboration (2025)

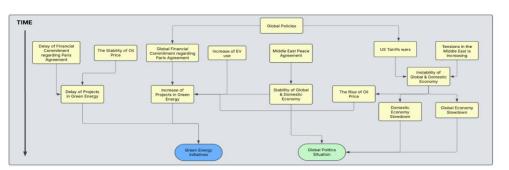


Figure 15 2X2 Future Scenario

Figur 16 Influence Diagram Source: author's elaboration (2025)

Table 1 Stakeholder Concern/Expectation

No	Stakeholders	Main Concern/Expectation	Role	Power	Interest	Priority	Note
1	Owner/Shareholder	Sustainability of business & profitability	Approval	н	н	Н	Leading
2	Management & Staff of PT. Mitra	Periodically salary & bonus increase	Supporting	Н	М	М	Supportive
3	PT. Mitra Client	The reliability and solutions of their (PT. Mitra Client) problems	Approval	Н	М	M	Neutral
4	Indonesia Government	Stability of indonesia economy	Regulator	Н	L	L	Neutral
5	Global Government & Environment	Stability of their country politics & economy	Regulator	н	L	7	Neutral
6	PT. Mitra Supplier	Profitability & stability of global and domestic politics-economy	Partnership	М	М	М	Supportive
7	Industry Competitor	Profitability for their company	Partnership/Competitor	М	L	L	Competitor
8	Capital Provider	Profitability and performing loans	Supporting	М	М	М	Supportive

Table 2 Summary of VRIO Analysis



