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BUSINESS IN PRACTICE

ANALYSIS OF STRATEGIC ELECTRIFICATION OF MUDANCA

AND PERSONAL REFLECTION

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Abstract

This paper explores the experiences and lessons from a Business in Practice simulation, where cross-functional teams managed a fictive car manufacturer during critical technological and sustainability transitions. Key roles included Innovation, Marketing, Finance, Operations, and Human Resources, emphasizing effective decision-making and communication. The analysis covers personal development, team dynamics under pressure, and the company's performance across various functions, highlighting the interconnectivity of departments. This simulation provided valuable insights into managing an automotive company, preparing participants for future careers in the evolving and sustainable automotive industry.

Keywords

Team Dynamics, Personal Growth, Decision Making, Global Car Manufacturer, Sustainable Mobility, Electric Vehicles, Disruptive Innovation, Cross-Functional Management, ESG, Applying Theory in Practice, Business Strategy, Sustainable Production, Marketing

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1. Firm Analysis of Mudanca

1.1 Introduction

This analysis examines how the established car manufacturer Mudanca has transitioned from combustion engine technology to full electromobility, addressing the challenges faced along the way. The focus is on a comprehensive analysis of the Strategy, Marketing, and Operations functions. Each department is reviewed in detail. The analysis begins with a deep dive into Mudanca's external and internal strategy, including a depiction of its business model. Through various frameworks, the initial strategy and its implementation will be critically evaluated. The success of the intended strategy relies on continuous adaptation. Adaptive firms continuously vary how they do business by trying many novel approaches and then scaling up and exploiting the most promising before repeating the cycle (BCG 2024). An overview of the marketing function will examine Mudanca's marketing efforts, focusing on its marketing mix and 4Ps except place since it's not relevant in this case, market positioning, customer engagement, and promotional tactics on overall company's performance. The subsequent section will delve into an analysis of Mudanca's operations department by exploring its key characteristics, performance goals, factory utilization, sustainable investments, and CO2 emissions. In conclusion, I will highlight the essential insights and lessons gained for both me and future management teams in similar scenarios, emphasizing the interconnection of corporate functions and the crucial importance of ensuring strategic alignment across all departments.

1.2 Strategy of Mudanca

Strategy is the strategic initiatives a company pursues to create value for the organization and its stakeholders and gain a competitive advantage in the market (Boyles 2022). Assuming control of an existing company with a pre-defined product range generally means that the incoming leadership team will not completely overhaul the existing strategy, but rather enhance

it. Given the critical need to reduce environmental impact, transportation currently accounts for 35% of US greenhouse gas emissions, it was imperative for Mudanca to shift to electric vehicles (EPA 2022). However, this transition needed to be methodical. Revenue from fossil fuel vehicle sales remained significant, prompting Mudanca to maintain these models while innovating and developing new electric vehicles aligned with consumer preferences.

External Analysis – PESTLE and Porter’s Five Forces

PESTLE analysis (Figure 1) was conducted to understand the environment where Mudanca operates. The automotive sector is experiencing significant shifts due to various global factors. High tariffs implemented by USA and China are reshaping the dynamics of vehicle and component trade. At the same time, European nations are tightening vehicle emission policies, compelling car manufacturers to focus on developing vehicles with lower emissions (European Commission 2024). Car sales growth is expected to drop from 3.6% to 2% by 2030, driven by macroeconomic factors and the rise of mobility services like car sharing and e-hailing (McKinsey 2016). Increasing inflation has decreased customer spending (J.P.Morgan 2022). Consumer interest in electric vehicles is rising due to sustainability trends, tax breaks, and advances in battery technology that reduce costs and increase efficiency. These factors are driving the industry towards a more eco-friendly and technologically advanced future.

Porter’s Five Forces (Figure 2) are used to identify and analyze an industry's competitive forces (Gratton 2024). Threat of substitutes is low to moderate. While traditional vehicles still dominate, EVs offer significant environmental benefits and long-term cost savings that are difficult to replace. However, new mobility services like car sharing and e-hailing have slightly increased this threat. The threat of new entrants is low to moderate due to the substantial barriers to entry (Ansari 2023), such as the need for significant capital investment, economies of scale, and compliance with government regulations. Technological advancements lower

some barriers, but established brands benefit from their scale and market position. The high bargaining power of both suppliers, due to dependency on critical components like EV batteries, and buyers, who are highly informed and price-sensitive, forces manufacturers to focus on delivering high-quality products while maintaining brand loyalty. Industry rivalry stays high since many companies are transforming towards electric vehicles. Porter's Generic Strategy (Figure 3) positions Mudanca in the differentiation section, meaning targeting a broad market, offering a diverse range of electric vehicles that cater to various customer needs, emphasizing sustainability, advanced technology, and performance.

Internal Analysis - Business Model Canvas and SWOT

Business Model Canvas (Figure 4) suggests that Mudanca should emphasize a comprehensive approach by offering a broad range of electric vehicles to cater to diverse consumer needs (FasterCapital 2024). The strategy emphasizes delivering high-quality, innovative, and sustainable vehicles, while leveraging regional dealerships and digital marketing to reach a broad customer base. Mudanca aims to build strong partnerships with technology providers, suppliers, and logistics firms to ensure cost-effective production and distribution, while also targeting global markets, including the US, Europe, and China, to meet consumer preferences (Osterwalder 2013).

According to the SWOT analysis (Figure 5), Mudanca's strengths include its eco-friendly branding, strategic alliances, and optimized manufacturing processes. Competitive pricing and a diverse vehicle lineup boosted its market position. Weaknesses involved limited resources and reliance on external suppliers, creating supply chain risks. Over time, Mudanca capitalized on opportunities like technological advances and increasing consumer interest in sustainability, which helped strengthen its brand and market share (Figure 6). Despite these improvements,

Mudanca remains vigilant against threats like supply chain challenges (Shah & Hong 2021), public misconceptions about EVs, and intensified industry rivalry.

Initial Strategy

Mudanca's strategy was built on flexibility since companies must be flexible to respond rapidly to competitive and market changes (Porter 1996). In the early years (1 and 2), Mudanca focused on developing electric technology while capitalizing on profits from combustion vehicles. The company took green loans to fund sustainability and electrification, aiming for a fully electric portfolio by Q13. After electrification, Mudanca planned to expand production. In years 3 and 4, the focus was on fleet stabilization and increasing revenue by targeting multiple segments with a diverse electric vehicle lineup. By years 5 and 6, Mudanca aimed to maximize potential by optimizing vehicle pricing and maintaining a balanced inventory. It is especially important for managers and executives in any organization to agree on the basic vision that the firm strives to achieve in the long term (David 2020).

Strategy Implementation and Adaption

Mudanca's strategy proved effective, achieving full electrification by Q13. Expanding production through new factories was capital-intensive, and optimizing factory utilization and inventory days was more challenging than expected. Being first in line requires being the best on the line, and it starts with manufacturing optimization (Instrumental 2022). Mudanca shifted focus to optimizing existing factories and enhancing marketing efforts to maximize vehicle pricing. The strategy worked, as value added increased on average by 10.7% per quarter after full electrification (Figure 7). Naturally, the increase was not only due to electrification, but it also contributed to Mudanca's strategic shift. By the end of the simulation, critical metrics reflected success, including 100% employee satisfaction, 85.13% sustainability rating, 100% factory utilization, and a net operating profit of 1374 million (Figure 8).

Linking Mudanca's Strategic Approach to Industry Leaders

Tesla is a prime example of a company that has successfully implemented a comprehensive strategy centered around electrification and innovation (Aksu 2023). From its inception, Tesla focused on developing EVs that not only deliver high performance but also appeal to a broad range of consumers through cutting-edge technology and sustainability (Tesla 2024). BMW has adopted a strategy similar to Mudanca by balancing traditional combustion engine vehicles with a strong push towards electrification. Its "Power of Choice" strategy (BMW 2019) offers customers combustion, plug-in hybrids, and fully electric vehicles, catering to different segments while gradually transitioning to full electrification.

1.3 Marketing of Mudanca

The marketing department is instrumental in shaping the company's brand identity, understanding customer needs, and driving sales (Sprague 2023). Tasked with the mission to position Mudanca as a leader in the electric vehicle market, the marketing team worked closely with operations to align production with market demand and customer preferences.

Marketing Mix – Product, Pricing and Promotion

Mudanca systematically phased out its non-electric vehicle offerings, transitioning fully to a lineup that supported its strategic objectives (Novak 2024). From Q13 onwards, Mudanca was able to innovate its product portfolio (Figure 9) to exclusively electric vehicles. The most effective strategy for market share gain is product innovation (Bloom & Kotler 1975). Mudanca focused on portfolio management by utilizing the BCG matrix (Figure 10). Mudanca diversified its market approach by setting different price levels to target various customer segments. The Model F microcar, with its affordable price, attracted first-time buyers and had the highest contribution margin of over 35% (Figure 11). Meanwhile, Model T, with a 33% margin, was a key revenue driver. Mudanca's portfolio of eight vehicles allowed the company

to capture a broad market, maximizing production of best-sellers while catering to smaller segments. However, this broad approach also led to operational challenges, including surplus inventory and discounting due to demand uncertainties.

Mudanca adopted a medium-to-high-price entry strategy similar to price skimming, initially pricing its new products slightly above the nearest expensive competitor with planned price reductions over time. This strategy capitalized on early adopters willing to pay a premium (Dias 2024), later addressing more price-sensitive segments. It worked well for Mudanca, and when sales fell short, marketing efforts were increased. Vehicle pricing was monitored quarterly to align with current demand.

Throughout the simulation, Mudanca dedicated a specific portion of each vehicle's revenue to marketing, ranging from 0% to 3%. Mudanca implemented online and TV advertising campaigns, which boosted quarterly product demand by 3.06% and 4.08%. Promotions attracted new customers, though they make non-loyal consumers more price-sensitive (Vakratsas & Ambler 1999). Marketing budgets were based on each vehicle's DOI and lifecycle stage, with increased spending for new launches to ensure strong product recognition. The average marketing expenditure per model varied between 1.25% and 2.5%. Mudanca also used partnerships, point-of-sale campaigns, and staff training to drive sales with a push/pull marketing strategy (Caramela 2024).

Ansoff Matrix

The Ansoff Matrix was instrumental in shaping Mudanca's strategy for product offerings and market share expansion. Ansoff Matrix is used for evaluating growth options (The Strategy Institute 2024). As the automotive market evolves, particularly with EVs, many manufacturers are new and still in the process of establishing their brands. Given that using batteries represents

a cutting-edge approach in the industry, adopting a product development strategy was considered most effective for Mudanca (Figure 12).

Segmentation, Targeting and Positioning

Segmentation must identify groups that matter to a company's financial performance (Yankelovich & Meer 2006). Mudanca identified four distinct market segments to target consumers who value sustainability and innovation. The first segment, "Green Budget-Conscious Customers," prioritizes affordability while showing interest in sustainable electric vehicles. The second, "Eco-Forward Innovators," consists of consumers highly committed to environmental sustainability and willing to invest in cutting-edge, pricier technologies. The third group, "Tech Enthusiasts," is drawn to innovations like autonomous driving, advanced infotainment, and superior battery tech. Finally, "Casual Consumers" are less interested in EVs and sustainability, often perceiving eco-friendly products as inferior.

Mudanca had to identify which segments are most attractive and prioritize its focus accordingly. To stand out from competitors, Mudanca needed to maintain flexibility in its approach, enabling it to serve customers across multiple segments simultaneously. This approach, known as multiple segment specialization (Pratt Lile 2024), involved Mudanca targeting "Green Budget-Conscious Customers," "Eco-Forward Innovators" and "Tech Enthusiasts" customer segments. This strategy primarily utilized product specialization, offering various vehicle categories at different price points and incorporating varying levels of technology to meet the distinct needs and preferences of each customer group. To assess the potential of each market segment, it was assumed that a significant number of consumers were drawn to sustainability, innovation, or a combination of both.

Companies must focus on the health of the industry, not just their own position (Porter 2012). Mudanca was dedicated to becoming a leader in sustainable and innovative mobility while

offering a diverse vehicle range for various market segments. Brand positioning revolves around identifying unique value that your brand can own (Daye 2023). Aiming to pioneer green mobility, Mudanca focused on being perceived as both environmentally friendly and innovative, delivering customer satisfaction through advanced, eco-friendly vehicles. By highlighting its unique features, Mudanca strengthened its brand positioning and countered competitors' early advantages. (Figure 13) Demonstrates how Mudanca is positioned compared to the other companies in the automotive industry.

Linking Mudanca's Marketing Efforts to Industry Leaders

Useful real-life examples that are similar to Mudanca are the positioning of Hyundai and Volkswagen, which have successfully offered a broad range of EVs catering to both luxury and budget-conscious customers. Hyundai's Ioniq series includes electric models like the Ioniq 5, which targets tech-savvy consumers with a focus on innovation and design, similar to Mudanca's Model X. Hyundai also offers more affordable options like the Kona Electric for first-time EV buyers, similar to Mudanca's Model F (Hyundai 2024). Correspondingly, Volkswagen's ID. series spans from the budget-friendly ID.3 to the more premium ID.4, allowing the brand to appeal to a wide customer base, which was exactly what Mudanca was after (Volkswagen 2024).

1.4 Operations of Mudanca

Operations department at Mudanca played a vital role in planning, organizing, coordinating, and managing the resources required for producing the company's car fleet. With a mission to offer an electric car for every customer, the operations team collaborated extensively with the marketing team to assess customer preferences and demand. Understanding the driving forces of the automotive industry was crucial for operational success and efficiency.

Factory Utilization and Days of Inventory

Factory utilization is assessed by how effectively the production lines are used. If they are underutilized, it indicates that production is not sufficient to cover the fixed costs of the factory. Mudanca had quite a lot of flexibility to switch the types of cars it produced, and the factory utilization was monitored quarterly with marketing department since business performance is enhanced when manufacturing and marketing work harmoniously (Hausman, Montgomery & Roth 2002). When introducing a new car to a market, production initially halted as machinery setups were adjusted, resulting in reduced utilization for that specific month. Consequently, over the course of the simulation, Mudanca's factory utilization was one of the best in the market, averaging 93% (Figure 14), while the benchmark occurred at 87%.

Mudanca's goal throughout the simulation was to maintain optimal days of inventory (DOI). We projected that the ideal range for DOI would be between 31 and 60 days, aligning with (Lotlinx 2023) standards, which suggest that inventory turnover should occur every 30 days. Falling below 30 could result in unmet demand, while exceeding 60 would indicate overproduction relative to market demand. Ultimately, our average DOI was 56.5 days (Figure 15), which was within our planned range and performed better than the market benchmark of 62.5. However, understanding how to balance DOI took time and presented significant challenges. Despite our careful planning, we made misjudgments in demand forecasting, leading us to increase production on two lines for certain vehicles and raise prices, which ultimately led to higher inventory levels and increased costs for the company. This experience underscored the importance of flexibility in operations and the need to consistently monitor and adapt to market conditions. Regularly analyzing market trends each quarter became essential, especially as (Elisa Industrix 2023) highlights the critical role of effective sales and operations planning in industries like machinery and equipment. Aligning production with

demand is crucial to avoid inventory challenges that can negatively impact both profitability and operational efficiency.

Sustainability Investments

Taking swift action is crucial to maintaining momentum in the EV market (McKinsey 2022). Therefore, a primary focus for Mudanca was pioneering both electrification and sustainability, as well as establishing a leading role in the industry. Within the operations department, we faced numerous sustainability investment decisions. Our sustainability rating at the start of the simulation was 14.5%, and by the end, we achieved an impressive 85.1%, surpassing the 80.1% benchmark (Figure 8). Our strategy aimed to complete all possible investments across the three scopes and transition fully to electric vehicles without negatively impacting our existing portfolio, which required strategic portfolio management. Effective product portfolio management is essential for selecting, evaluating, and prioritizing products (Chervenkova 2024). Mudanca's efforts to reduce CO₂ emissions focused on three different scopes. Scope 1, which we completed by Q13, included water consumption reduction, waste reduction, and EMAS certification. Scope 2 focused on energy efficiency, installing solar panels, and implementing an energy management system, all achieved by Q19. Scope 3, completed by Q18, involved offsetting supplier CO₂ emissions, sourcing sustainable suppliers, and external battery recycling. Through these investments, Mudanca achieved a CO₂ reduction of 61.72% in energy, 80.86% in production, and 45.80% in the supply chain. In addition to these tangible investments, Mudanca's commitment to sustainability extended to policy and awareness training and implementing sustainable practices company-wide (Figure 16), fostering a culture of environmental responsibility throughout the organization.

Operations Performance Objectives and 4Vs of Operations

The Operations Performance Objectives (Figure 17) emphasize the trade-offs that operations frequently encounter. Excelling in one area may require compromises in another when it comes to operational management (Annarelli & Nonino 2016). In the automotive industry, achieving the right balance among performance objectives is a delicate process. Mudanca excels in quality and flexibility, while cost efficiency remains moderate. Speed and dependability, while important, are less emphasized compared to Mudanca's focus on quality and flexibility, highlighting the company's commitment to innovation and adaptability.

The 4 Vs of operations management (volume, variety, variation, and visibility) are essential for optimizing operational efficiency (Figure 18). Mudanca operates with medium volume, balancing economies of scale and flexibility (Steenkamp 2014). The company offers high variety, catering to diverse customer segments, and adjusts to demand fluctuations with moderate to high variation. Mudanca emphasizes high visibility, focusing on transparency and real-time interaction, aligning with the rise of digital channels' importance (McKinsey 2020). This approach helps maintain customer satisfaction and operational efficiency.

Linking Mudanca's Operational Achievements to Industry Leaders

BMW's sustainability journey offers a compelling comparison to Mudanca's operational strategies. Much like Mudanca, BMW has integrated sustainability across its entire supply chain, focusing heavily on renewable energy and reducing carbon emissions in both production and supply chain processes (BMW 2024). BMW's goal of achieving carbon neutrality mirrors Mudanca's investment in the three scopes of CO₂ reduction (energy, production, and supply chain). Mudanca's average DOI of 56.5 indicates that it maintains a balance between sufficient inventory and demand. When comparing with Toyota, which boasts the lowest DOI among major carmakers at an average of 32 days in the USA (Statista, 2023), Mudanca has room for

optimization. Toyota's ability to operate with such low DOI reflects its world-class lean manufacturing principles (Toyota 2024).

1.5 Integrated View Across Functions

The analysis of Mudanca's performance revealed a strong interconnection between all departments, with sustainability at the heart of the company. When different departments pool their resources and knowledge, they can achieve greater efficiency and effectiveness (Wrike 2023). Functions were highly interconnected in a way that strategy served as the overarching framework, marketing functions as a key instrument, and operations supported the outcomes of all initiatives (Figure 19). Operations supports other functions with tools such as the DOI and factory utilization, which are crucial indicators of the impacts of strategic roadmaps and marketing actions. Operations address sustainable practices, including investments in different scopes, by positioning sustainability as an attractive operational incentive, thereby ensuring long-term operational success and stability. Marketing, on the other hand, manages both demand and supply by conducting market analyses to identify customer segments, ideal products, and target markets for sales. This includes evaluating EV readiness, understanding customer demands, and addressing their concerns. With sustainability becoming an increasingly important market trend, Mudanca integrated this into its product mix with electrification to meet growing demand. A robust marketing strategy, alongside insights into operational performance, was essential. There is a positive relationship between organizational effectiveness and comprehensiveness in decision-making, according to (Papadakis, Lioukas & Chambers 1998). Mudanca's strategy played a guiding role in decision-making, focusing on long-term objectives such as the electrification roadmap while considering sustainability, competition, and profitability, with insights provided by operations and marketing. Sustainability was central, particularly in the pursuit of electrification. Effective collaboration across these three functions was vital for the company's success. At Mudanca, it was evident

that strategy, marketing approaches, and operational outcomes are closely aligned, and these integrated functions working as one were the key to the company's achievements.

1.6 Conclusion and Main Learnings

Mudanca successfully achieved its long-term goal of transitioning into a fully electric car manufacturer, becoming a more sustainable company in the process. This six-year journey was marked by both successes and setbacks. The company faced numerous challenges and had to recover from mistakes but maintained steady growth throughout. The application of the 4 Vs of operations was evident in Mudanca's strategies and the operational challenges it faced. This framework proved particularly valuable during periods of rapid growth and later when the portfolio was streamlined. It helped the company manage factory utilization efficiently, minimizing idle production lines, and allowed for quicker adaptation to market fluctuations. Mudanca's Operations department successfully implemented sustainable practices across production, energy consumption, and the supply chain, making significant investments to address all three scopes of the protocol. In terms of pricing strategy, Mudanca favored medium to high entry prices, which allowed the company to quickly recoup early investments, capture different levels of customer willingness to pay, and manage its limited manufacturing capabilities during new product launches. The marketing department followed a similar approach, acknowledging the diminishing returns on marketing expenditure over a product's life cycle. Mudanca's pricing and marketing strategies offered valuable lessons in responding to market dynamics and managing the different stages of a product's life cycle. Throughout the simulation, I gained deep insights into the complexities of managing a company.

The key lesson learned was the critical importance of each department's role. For success in the BiP, it was essential that every department was aligned and contributed equally. When one department was out of sync with the others, it led to problems. This became apparent in the

early and mid-stages of the simulation, where minor misalignments between operations and marketing occurred. Our lack of understanding of the "sweet spot" for DOI resulted in high inventory levels due to inflated prices and a failure to grasp market preferences, which ultimately led to lost revenue and profits. These challenges provided valuable learning experiences for me as the head of operations, as well as for other departments. It became clear that a thorough understanding of even the smallest details was crucial to performing well in this competitive market. The second major insight emphasized the power of teamwork. For the company to thrive, every team member needed to commit to the shared goal, aligning their attitudes and efforts towards collective success. Once this mindset was established, the interconnectedness of the departments became clearer, allowing for more strategic actions. Success depends on seamless collaboration. BiP emphasized the importance of foresight in decision-making, stressing the need to consider the long-term implications of decisions rather than focusing solely on immediate outcomes. Moreover, the experience underscored both the value and challenges of market research. While historical data provides a useful foundation, relying solely on past trends can be risky in a constantly evolving market. A balanced approach that combines historical analysis with a forward-looking perspective is essential for navigating the complexities of a dynamic market environment. Adapting our strategy proved equally vital, as staying agile and responsive to market shifts was crucial for maintaining competitive advantage and ensuring continued growth. The fast-paced nature of the market meant that reacting swiftly to changing conditions was essential to protect our position and capitalize on new opportunities. A proactive approach to strategy allowed us to adjust quickly to emerging trends, keeping us ahead of competitors and ensuring steady progress even as the market evolved. Completing this project brought together much of the theoretical knowledge I had acquired during my university studies, giving me a comprehensive understanding and better preparing me for my future career.

2. Individual Personal Reflection

2.1 Introduction

This section offers a personal reflection on my role in the Business in Practice (BiP) experience. During the simulation, two significant incidents occurred within our team, and I will describe both incidents, assess the internal response, analyze, and reflect on my role in these situations. Additionally, I will explore how the BiP experience contributed to my personal growth, particularly in terms of business skills and teamwork abilities. I was pleased to find that our team of seven was highly diverse, with each member coming from a different country. Diversity can help your team become more agile and be better equipped to pivot and adapt as necessary to remain competitive (Carucci 2024).

The first critical incident occurred during Year 4 when we faced the decision of whether to build a new factory. As the head of operations, I strongly believed that expanding our production capacity with a new factory would allow us to scale up our business, increase revenue, and ultimately lead to higher profits in the long run. However, the finance department had a different perspective, expressing concern about the significant cost of the factory and pointing out that we were already in Year 4 of the simulation, making it a risky investment. Both sides presented well-reasoned arguments, with finance focused on the cost and timing, while I emphasized the operational benefits. In the end, we voted on the matter as a team, staying true to the democratic principles outlined in our team charter.

The second critical incident happened during the client retention meeting. Despite extensive preparation, our whole team became nervous as the client's tone turned aggressive and confrontational. This caused me to almost freeze, and while I managed to contribute a few points, I didn't perform as well as I had hoped. After the meeting, our team felt uncertain about

retaining the client, and I was deeply dissatisfied with my own performance, feeling as though I had let the team down.

2.2 First Incident “Factory Investment”

Description

At the start of Year 4, I proposed building a new factory with a projected cost of \$800 million and a 4-quarter-long construction period, which caused a conflict within the team. Initially, the construction was deferred to focus on substantial investments in sustainability, marketing, and the development of new car models. Aiming to strengthen the brand and market position before committing to the large capital expenditure. However, as we now considered the factory investment, the tensions began between the operations and finance departments. There will rarely be a major situation in which each team member independently arrives at the same conclusion (Joosr 2015). As head of operations, I highlighted the factory's benefits, including increased production flexibility and scalability, which would allow us to better meet market demand and drive long-term profit growth. The factory was critical for generating revenue in the final eight quarters of the simulation. On the other hand, finance expressed concerns over the factory's cost and whether it would generate sufficient returns, given the short timeline to recoup the \$800 million investment.

The core of the conflict lied between the strategic operational benefits of building the factory and the financial prudence concerns regarding the return on investment. Although the factory would destabilize the immediate financial constraints with the long-term strategic benefits. Both departments needed to collaboratively assess detailed financial projections, market trends, and risk mitigation strategies to reach a consensus on this investment. As Ford and Sullivan (2004) suggest, project quality improves when teams clearly distinguish between idea generation and implementation, this was reflected in how we as a team managed this incident.

Internal Response

After extensive discussions and presentations from both the finance and operations departments, as well as input from the wider team, we reached a decision in accordance with our team charter (Figure 20), which emphasized democracy as one of our core values. The final vote was 4-3 in favor of proceeding with the factory investment. While not everyone was entirely satisfied with the outcome, as opinions remained divided, democracy had spoken, and we respected the process. As one of the primary advocates for this investment, I underscored the operational advantages, particularly how the new factory would provide us with greater flexibility to produce different models and meet shifting market demand. Transparency during decision-making is crucial, even for smaller changes (Newman & Ford 2021), and this approach ensured all voices were heard, even if the result didn't align with everyone's preferences.

To optimize our approach during the four-quarter construction period, we focused on increasing our margins. A key part of the decision involved selecting the location for the new factory, with options between the USA and Asia. Although Asia showed slightly higher market potential, we operated three models across three factories in the USA. A factory in the USA would provide more flexibility to shift between models depending on demand. While I was open to the idea of placing it in Asia, I reasoned that the USA would better allow us to double down on top-performing models, as we already had two factories in Asia producing the same model. Ultimately, the decision was made to place the new factory in the USA.

Analysis

Following our team charter to hold a democratic vote was crucial in ensuring everyone's opinion was heard, even though not everyone was satisfied with the outcome. At that point in our simulation, our factory utilization was high, and we had a clear vision to grow further and

gain more market share. Building a new factory, though costly and with only eight quarters to benefit from it, was a necessary step toward scaling up production. From my perspective, the investment was essential, providing flexibility to meet market demands more effectively. However, the finance department was skeptical due to the factory's cost and the potential risk of not recouping the investment in such a short time frame. As (Toegel & Barsoux 2016) suggest, teams need to align on risk tolerance and shifting priorities, and while I saw little risk, I understood why the finance department had concerns.

The 360-degree feedback (Future of Global HR 2024) process revealed that I may have been overly assertive in advocating for the factory, though the final decision was reached democratically. Transparency during decision-making is crucial, even for smaller changes (Newman and Ford 2021). The decision to invest in the factory was a turning point in our strategy, as it would not only help us scale production but also boost our long-term revenue potential. Trust, built on competence, character, and caring (Sweeney 2003), played a significant role in keeping the team together during this period of disagreement.

Once the factory became operational in Q20, our value added doubled by Q28, largely due to the flexibility it offered in producing top-performing vehicles. The finance department's initial concerns about underutilizing the factory proved to be unfounded, as factory utilization remained consistently high. This experience highlighted how conflict, when managed properly, can be a powerful tool for team growth. Research by (Campbell 2014) underscores conflict isn't always bad. In fact, psychologically, it can be extremely positive. The open dialogue we developed following this conflict fostered greater confidence in each team member, making it easier for everyone to express their ideas. As a result, our team grew stronger, more cohesive, and more competitive, with a renewed sense of trust and collaboration.

Reflection

I was convinced that the factory investment was vital for the company's growth, which led to a degree of tunnel vision. Although I listened to opposing viewpoints, I didn't fully appreciate them at the time. (Toegel & Barsoux 2016) suggest that colleagues often make fast judgments, and I found myself falling into this pattern as well. This experience has been an invaluable learning opportunity, demonstrating the importance of truly engaging with all perspectives for professional success. My strong will towards the factory might have reflected in the self-evaluation versus peer-evaluation graph (Figure 21). It revealed an important learning experience. While I rated myself a 5 in contribution and interaction, my peers gave me an average of 4 across all categories. This gap highlighted that my self-expectations were higher than others' perceptions of my performance. It taught me to be more self-aware and adjust my expectations to align better with the team's perspective. I realized that to unlock a team's full potential, it is critical to listen to and consider everyone's input to make the most informed decisions.

Looking at Birkman's personality colors, I fall between the yellow and red section (Figure 22), indicating that I am an analyzer, which was evident in this situation. I thoroughly analyzed the situation before sharing my opinion, and because I had already worked through it in my mind, I was certain about the decision. In the end, we even joked about the conflict, underscoring the strong team dynamics. One of our key strengths was our team spirit and mutual support. Over the three-week period, I felt this was one of the best teams I had ever been part of, and I believe my teammates felt the same. This challenge offered a valuable lesson, helping me fully grasp the importance of teamwork and leadership. I learned that recognizing my colleagues' ideas doesn't diminish my success, but rather enhances it. The conflict ultimately brought us closer, improving our internal chemistry and boosting team effectiveness (DeVevo 2019).

2.3 Second Incident “Client Retention Meeting”

Description

Our meeting team of four, composed of two women and two men from diverse backgrounds, diligently prepared for a crucial client retention meeting, recognizing the significance of retaining this client. We divided roles and formulated a plan, my responsibility with another colleague being to address the client's questions and needs, relying on a dynamic approach to gauge and respond effectively. The meeting did not start as planned because from the start the clients began posing challenging questions aimed at derailing us. One of my colleagues, who played a prominent role, adeptly managed the situation, addressing inquiries about our company's sustainability. Despite our thorough preparation, the meeting quickly diverged from our expectations. When asked about our future sustainability efforts, I provided a comprehensive overview, highlighting our current and upcoming ESG projects and overall employee satisfaction. Although my response was broader, the client quickly answered that people are not equal to sustainability, which was correct, but she completely ignored everything else regarding sustainability that I had stated. After I was about to open my mouth and give a more specific answer, my colleague interjected before I could refine my answer, which might have been more precise. She was able to answer it quite well, but I felt that I would have had more to say regarding that topic. The client kept firing us with tough questions, which led to a few awkward silences as we navigated complex, unanticipated questions.

Another critical moment in the meeting was when the client pressured us for an immediate commitment to increased sustainability investment, threatening to switch to a competitor. We collectively decided to defer this decision to our CEO, promising a quick follow-up. Overall, the aggressive questioning left us feeling overwhelmed and doubtful about the meeting's

outcome. Nevertheless, one colleague's exceptional handling of the discussion provided a silver lining, despite our collective post-meeting sentiment of likely losing the client.

Internal Response

Before any important meeting, it's essential to define clear objectives and goals (Microsoft 2024). On the morning of our team clinics, we carefully considered what topics we needed to address and set focused objectives. Given how well our team worked together, I didn't initially think we required external help. Our company was performing well, and the client retention meeting was vital to maintaining our ongoing success.

However, after the meeting, we all felt it hadn't gone as planned. There were some awkward silences, and the client posed challenging questions that threw us off. I was particularly disappointed in myself, feeling that I had let the team down by not performing as well as I should have. Everyone on our team felt they had underperformed in their respective roles. Thankfully, one of our colleagues remained composed throughout and, in a way, "saved" the meeting with her responses. Although we didn't perform perfectly, we stuck to our strategy and didn't overpromise in response to client demands, which could have compromised our position.

My personality type is Consul (ESJT-T) (Figure 23) therefore, I tried to maintain a positive outlook. There was no point to focus on the negatives, so I highlighted the fact that we didn't cave under pressure, which I felt was key in this situation. While I was somewhat optimistic that we hadn't lost the client entirely, the rest of the team was initially skeptical. When we explained what had happened, the feedback from our other teammates was incredibly encouraging. Their positivity helped uplift our spirits and brought us closer as a team. Their supportive attitude reminded me that setbacks can also foster stronger connections and resilience in a group.

Analysis

We encountered some minor conflicts when assigning roles for the client retention meeting, as two of us needed to take on larger responsibilities. I was ultimately chosen as one of them. According to (Knight 2015), teams that successfully navigate task conflicts early on tend to exhibit high levels of positive morale later. After roles were determined, we all felt confident and optimistic about our respective parts. The meeting had three possible outcomes: losing the client entirely, losing half of the customer accounts, or retaining the client. These outcomes underscored the importance of the meeting, as any negative result would have negatively impacted our performance.

Despite our best preparations, the team dynamics didn't work exactly as expected during the meeting. However, it was still "good enough," as we managed to stay aligned on all key points. (Haas & Mortensen 2016) emphasize that teams need the right mix and number of members. While our team didn't necessarily have the ideal mix, as none of us were particularly experienced in this area, our strong team spirit compensated for that. The biggest challenge we faced was ensuring our answers flowed smoothly from one person to the next. One of our colleagues took on a leadership role during the meeting, confidently answering the trickier questions. This left the rest of us with a smaller role, but her strong performance made up for it.

Ultimately, we surprisingly retained the client. I attribute this success to our aligned and honest responses, avoiding any overpromising. We were pleased with the outcome, as we all expected that we would lose at least part of the clients' accounts. Our thorough preparation had paid off. Our team stayed consistent and united throughout, leading to a positive result. Composed of top students, our team took the meeting much harder than necessary. We were used to getting top grades and found ourselves expecting flawless execution in every task. For perfectionists, "good enough" doesn't seem like an option (Kent 2023). (Knight 2019) explains that managing

perfectionism involves recognizing when efforts reach the point of diminishing returns and learning to recalibrate standards after reflecting on progress.

Reflection

This incident was a significant learning curve for me. Reflecting on my performance during the meeting, I realized I wasn't entirely satisfied with how I handled the situation. However, I quickly understood that, despite my personal shortcomings, our team had put in a solid effort. Team results are always a collective outcome, but this experience showed me that not everyone has to perform perfectly for the team to succeed. This realization was new to me, as I've always believed in giving 100% to everything I do. After receiving the results, I felt both relieved and happy because we achieved the best possible outcome.

Feedback can be uncomfortable for many people, regardless of whether you are on the giving or receiving end (Corbett 2022). At that crucial moment, I realized the importance of delivering honest feedback to my team, but I missed the chance to do so. Instead, I opted for a more supportive approach, which is often the right course of action. However, in this case, providing constructive criticism—especially to those teammates who didn't perform at their best—would have been more beneficial. This would have allowed us all to reflect on the situation and grow from the experience, ultimately helping the team to improve and move forward together. I have also realized through this process that I tend to become stressed when things don't go as planned. Although it wasn't a major issue in this case, keeping a calmer, more composed demeanor during the meeting would have certainly helped.

Throughout the BiP experience, I've learned that I need to be more vocal in challenging situations. This incident taught me that strategy plays a pivotal role in shaping outcomes, even if everything doesn't go perfectly (Hannagan 2002). Although we didn't excel in the meeting, our aligned strategy allowed us to achieve strong results. Additionally, I've come to realize that I tend to hold back in unfamiliar settings, despite knowing that I have the capability to add

value. Moving forward, I aim to be braver in uncomfortable situations, trusting more in my abilities and knowledge.

2.4 Conclusion of Personal Reflection

Reflecting on both incidents, I gained valuable insights into managing team dynamics and working as a team effectively. To gauge my personal growth, I used the emotional intelligence model. Throughout the simulation, I was able to strengthen my skills (Figure 24). My abilities in empathy, self-control, and maintaining a positive outlook remained consistently strong. Following the incidents, I promptly addressed any negative behaviors, adopting a more optimistic approach and treating everyone with greater respect. I also enhanced my conflict management, organizational awareness, and adaptability. The challenges of decision-making within the team taught me the importance of reflecting on each situation and adjusting my actions in future disagreements. I identified inspirational leadership as an area where I needed to improve. This highlights the situational shyness that has been a part of me throughout my life. During the BiP experience, I made significant progress in overcoming this challenge. I realized that building trust-based relationships is crucial for effective collaboration, which involves getting to know each team member and sharing both strengths and weaknesses. After the simulation ended, our team held a peer feedback session. While my feedback was largely positive, a couple of team members highlighted a common area for improvement. I tend to become stressed in challenging and high-pressure situations. I recognize the validity of this observation, and it's something I'm actively working on improving in my daily life. Overall, the BiP experience equipped me with essential management and communication skills, taught me how to work effectively within a diverse team, and encouraged me to step outside of my comfort zones.

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Appendix

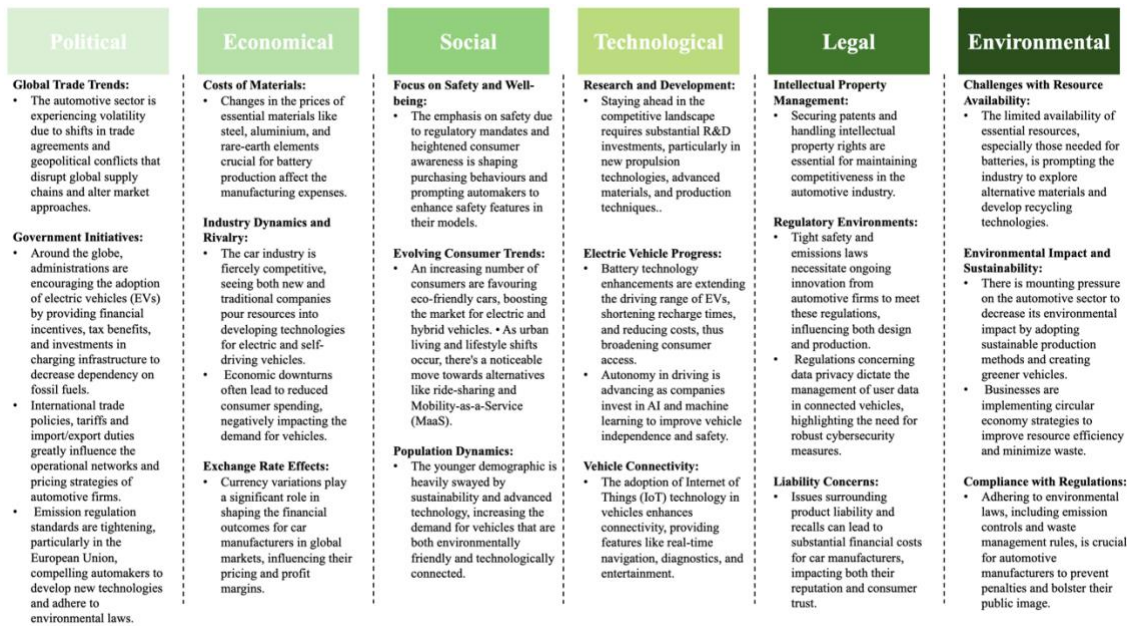


Figure 1: PESTLE Analysis (Own illustration 2024)

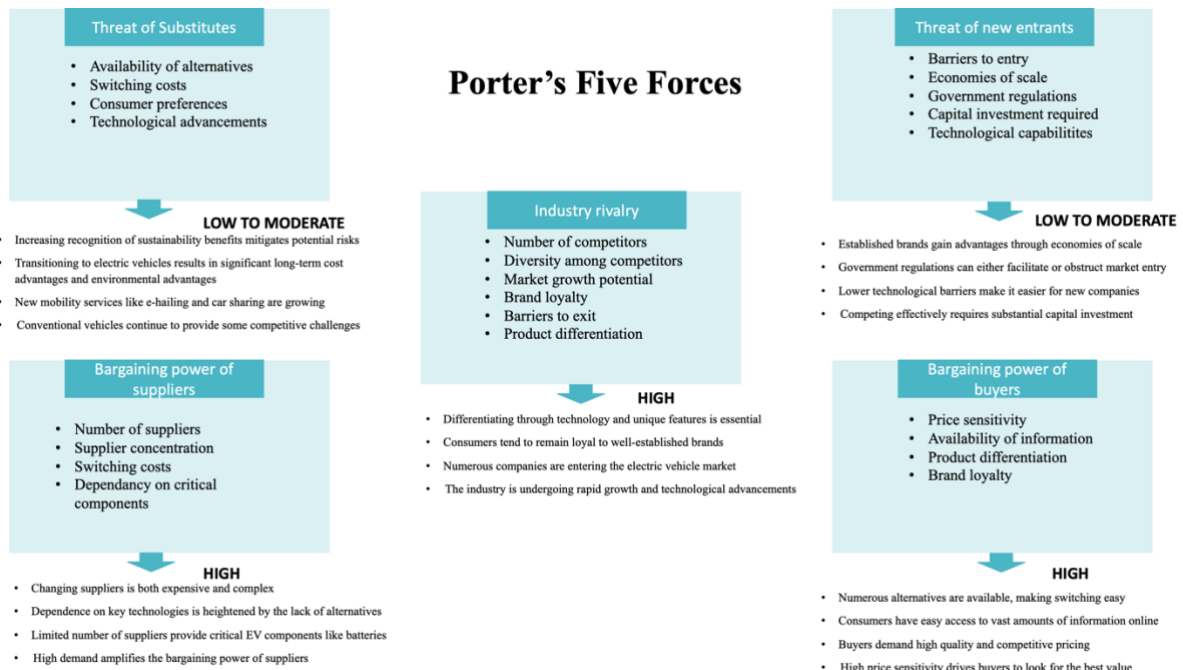


Figure 2: Porter's Five Forces Analysis (Own illustration 2024)

Porter's Generic Strategy



Figure 3: Porter's Generic Strategy (Crystal Lean Solution 2023)

<p>Key Partners</p> <ul style="list-style-type: none"> Dealerships: Partner with high-volume dealerships to enhance market access and distribution effectiveness. Logistics and Distribution: Develop relationships with logistics companies to streamline supply chain management and lower operational costs. Government and NGOs: Work with governmental and non-governmental organizations to secure support for EV infrastructure and incentives. Suppliers: Collaborate with cost-efficient suppliers to acquire reliable batteries and components. Technology Providers: Team up with technology companies to integrate vital EV technologies at competitive prices. 	<p>Key Activities</p> <ul style="list-style-type: none"> Product Development: Improve vehicle features to increase consumer value without substantial cost hikes. Strategic Marketing: Create marketing initiatives that emphasize Mudança's unique value and the advantages of electric vehicles. Efficient Production: Adopt cost-effective manufacturing methods to ensure affordability while maintaining quality. Market Research: Continuously analyze market trends and competitive offerings. <p>Key Resources</p> <ul style="list-style-type: none"> Brand Reputation: Recognized as a dependable source of economical electric vehicles. Proprietary Technology: Exclusive technologies that enable cost-efficient electric vehicle solutions. Production Sites: Factories located in the US, Europe, and China to facilitate local manufacturing. Talented Team: Skilled professionals committed to innovating electric vehicle design and production. Financial Resources: Funding available to support research and development as well as market expansion. 	<p>Value Propositions</p> <ul style="list-style-type: none"> Prioritize Customer Requirements: Constantly refine technology and design to address the changing demands of consumers, ensuring dependable and practical solutions. Commitment to sustainability: Emphasize Mudança's commitment to minimizing carbon footprints and advancing a sustainable future. Pioneering the Transition: Position Mudança's vehicles as catalysts for change, helping consumers move from traditional combustion engines to eco-friendly alternatives, thereby enhancing sustainability. Value and Quality: Offer vehicles equipped with advanced features like extended range and improved safety, all at competitive prices that appeal to a wide audience. A vehicle to Suit Every Taste: Mudança presents a diverse selection of electric vehicles, ranging from compact cars to SUVs and luxury models, catering to every consumer's needs. 	<p>Customer Relationships</p> <ul style="list-style-type: none"> Wide Consumer Reach: Formulate tactics to attract diverse consumers, from budget-minded individuals to luxury seekers. Community Connection: Foster a brand community via events and online platforms. Feedback Integration: Utilize customer feedback to enhance products and services. Customized Assistance: Provide personalized customer service and comprehensive after-sales support. <p>Channels</p> <ul style="list-style-type: none"> Local Dealerships: Use dealership networks to enhance market reach and provide support. Educational Resources: Offer content that helps new buyers understand and transition to electric vehicles. Online Sales Platform: Employ digital channels for direct sales and customer interaction. Social Media Marketing: Use social media platforms to promote brand values and engage with customers. 	<p>Customer Segments</p> <ul style="list-style-type: none"> International Presence: Concentrate on catering to diverse demographics in regions like the US, Europe, and China, ensuring products are tailored to meet different consumer preferences and requirements. Wide market: Aim to attract a diverse audience, including families, young professionals, and eco-conscious consumers. Corporate Fleets: Approach businesses and organizations looking for sustainable fleet management options.
<p>Cost Structure</p> <p>Partnership Stewardship: Efficiently handle costs associated with crucial partnerships.</p> <p>Marketing Efficiency: Distribute budgets wisely to achieve extensive market coverage.</p> <p>Manufacturing Optimization: Reduce production expenses while upholding quality standards.</p> <p>Innovation Investment: Channel funds into research and development for affordable innovations.</p>		<p>Revenue Streams</p> <p>Government Subsidies: Financial gains from government incentives aimed at encouraging EV adoption.</p> <p>Service Revenue: Income generated through maintenance services and extended warranty plans.</p> <p>Licensing and Alliances: Profits from strategic partnerships and licensing of technology.</p> <p>Vehicle Revenue: Earnings from the sale of competitively priced electric vehicles.</p>		

Figure 4: Business Model Canvas (Own illustration 2024)

S (Strengths)	W (Weaknesses)	O (Opportunities)	T (Threats)
<ul style="list-style-type: none"> Eco-Friendly Branding: Mudança is recognized for its commitment to environmentally sustainable transportation and for being a catalyst for change in the automotive sector. Strategic Alliances: Mudança's partnerships with leading suppliers and tech firms ensure access to cutting-edge technologies and high-quality components. Optimized Manufacturing: With production facilities strategically located in the US, Europe, and China, Mudança cuts down on logistics costs and enhances service efficiency. Competitive Pricing: Mudança offers vehicles at appealing prices with robust features, attracting budget-conscious consumers. Vehicle Variety: Mudança features a diverse lineup of vehicles, such as compact cars, SUVs, and luxury models, catering to various customer tastes. 	<ul style="list-style-type: none"> Consumer Education: There is a substantial need for Mudança to undertake efforts to educate the public on the advantages of electric vehicles and to clarify common misconceptions. Resource Limitations: With more limited financial and human resources than larger companies in the industry, Mudança may face constraints in its expansion efforts. Technological Adaptation: To remain competitive, Mudança must continuously invest in adapting to rapid technological changes within the automotive sector. Emerging Brand Recognition: As a newer entity, Mudança is in the process of building its brand recognition, which currently lags behind more established automotive companies. Dependence on Suppliers: Mudança's heavy reliance on external suppliers for crucial components presents potential vulnerabilities within its supply chain. 	<ul style="list-style-type: none"> Market Expansion Potential: There's significant growth potential in emerging markets, where interest in electric vehicles continues to rise. Technological Developments: Innovations in battery technology and autonomous driving capabilities present opportunities for enhancing Mudança's products. Sustainability Interest: The rising consumer focus on sustainability fuels demand for Mudança's eco-friendly vehicles. Increasing EV Popularity: The growing interest in electric vehicles offers an opportunity for Mudança to expand its market share. Government Support: A range of government subsidies and tax incentives for electric vehicles could lower costs and draw in more customers. 	<ul style="list-style-type: none"> Supply Chain Challenges: Worldwide supply chain complications, including component shortages, may affect production timelines and delivery schedules. Public Perceptions: Misconceptions regarding the range of electric vehicles and the availability of charging infrastructure could hinder adoption rates. Fierce Rivalry: Both established car manufacturers and newcomers are intensifying their efforts in the electric vehicle market, leading to heightened competition. Economic Volatility: Shifts in the economy may affect consumer spending power and influence vehicle sales. Regulatory Shifts: Newly introduced emissions and safety standards could increase compliance costs.

Figure 5: SWOT Analysis (Own illustration 2024)



Figure 6: Market Shares (BiP Simulation 2024)

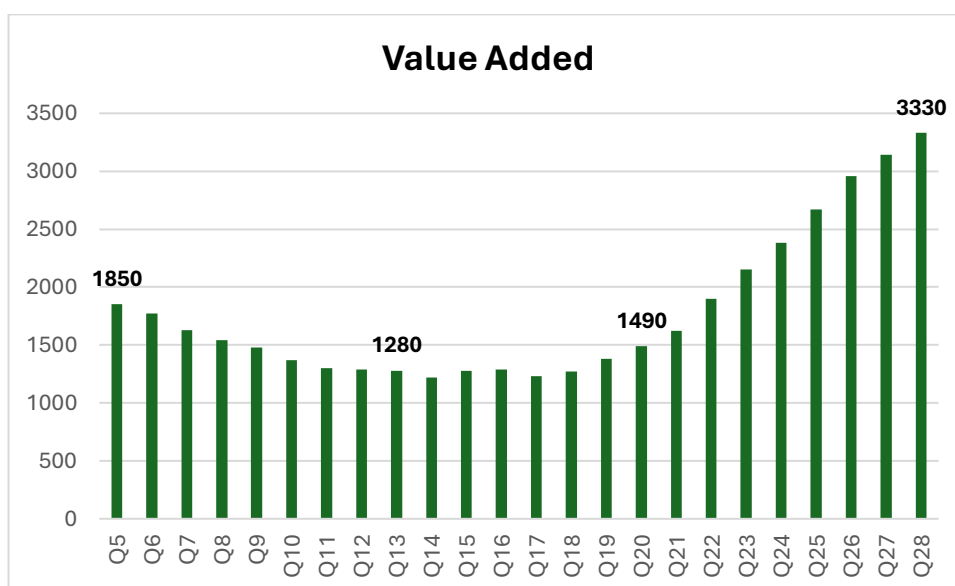


Figure 7: Value Added (BiP Simulation 2024)

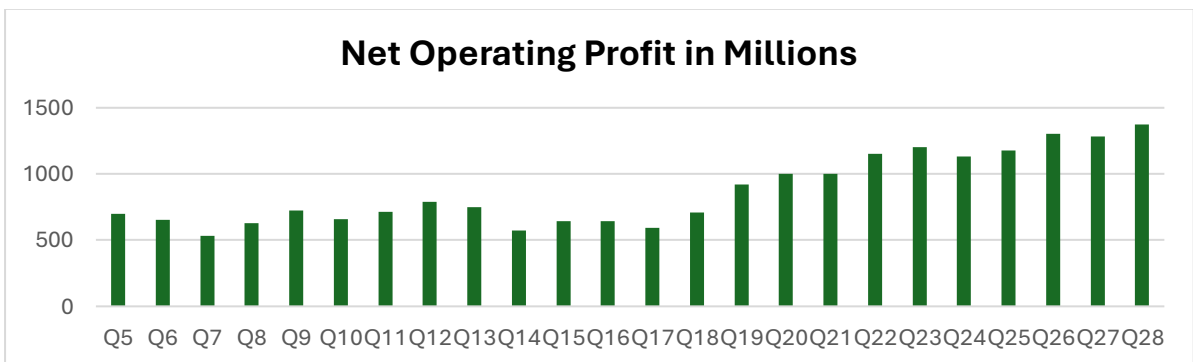
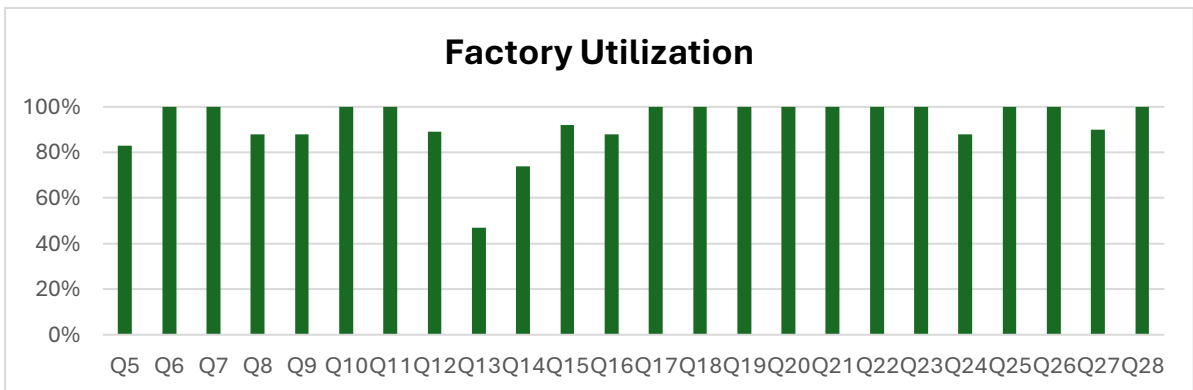
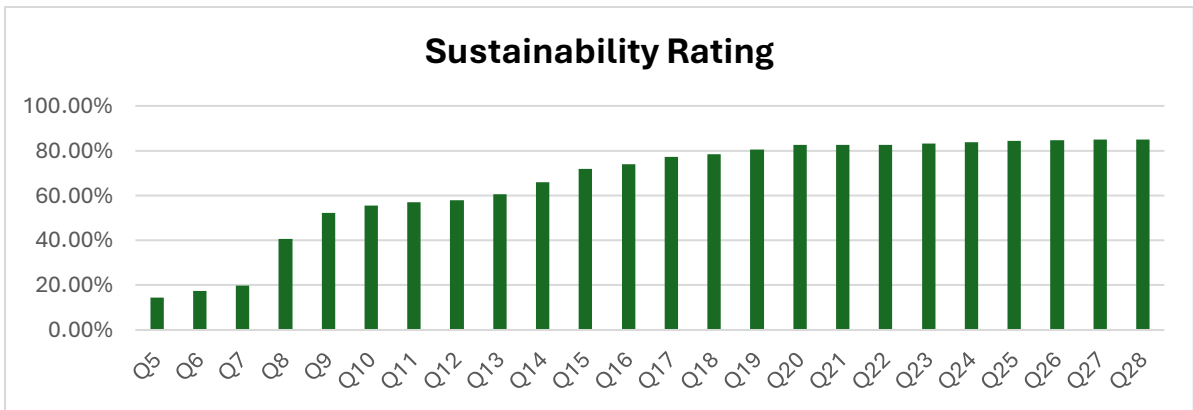
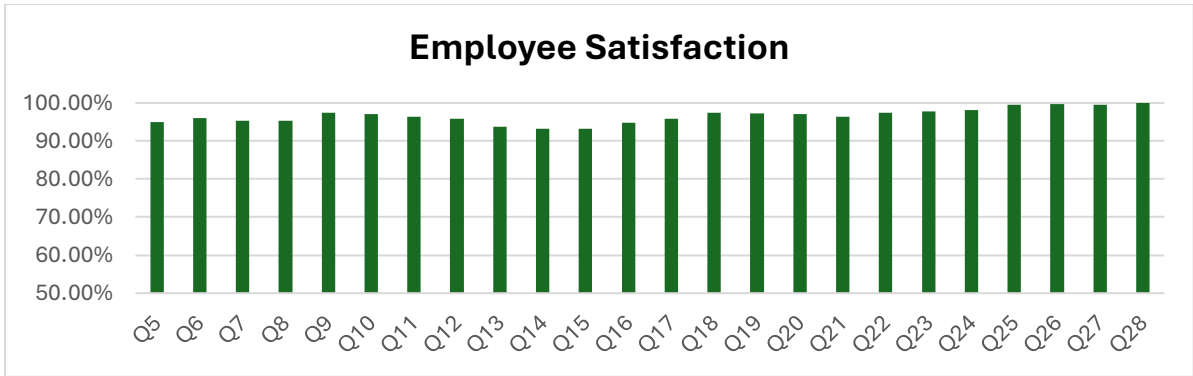


Figure 8: Employee Satisfaction, Sustainability Rating, Factory Utilization and Net Operating Profit in Millions (BiP Simulation 2024)









Product	Age	Emissions	DOI	Revenue	Sales Price	Market Share	Contribution Margin
 Model E	9 Quarters	0 g/mile	30 days	\$499M	\$27,720	13.4%	36.2%
 Model T	9 Quarters	0 g/mile	79 days ↑	\$1,105M ↑	\$64,848	100.0%	37.9%
 Model N	10 Quarters	0 g/mile	30 days ↓	\$791M ↓	\$39,777	38.5%	30.2% ↓
 Model U	11 Quarters	0 g/mile	39 days ↓	\$1,237M ↑	\$81,684	48.2%	35.6% ↓
 Model X	11 Quarters	0 g/mile	69 days ↑	\$1,366M ↑	\$100,716	48.9%	34.1%
 City E	12 Quarters	0 g/mile	30 days	\$475M	\$26,378	12.7%	28.0% ↓
 Model F	13 Quarters	0 g/mile	52 days ↓	\$1,213M ↓	\$29,216	39.2%	38.5% ↓
 Sport E	13 Quarters	0 g/mile	39 days ↓	\$1,037M	\$45,426	43.7%	21.9% ↓

Figure 9: Overview of Product Portfolio Q28 (BiP Simulation 2024)

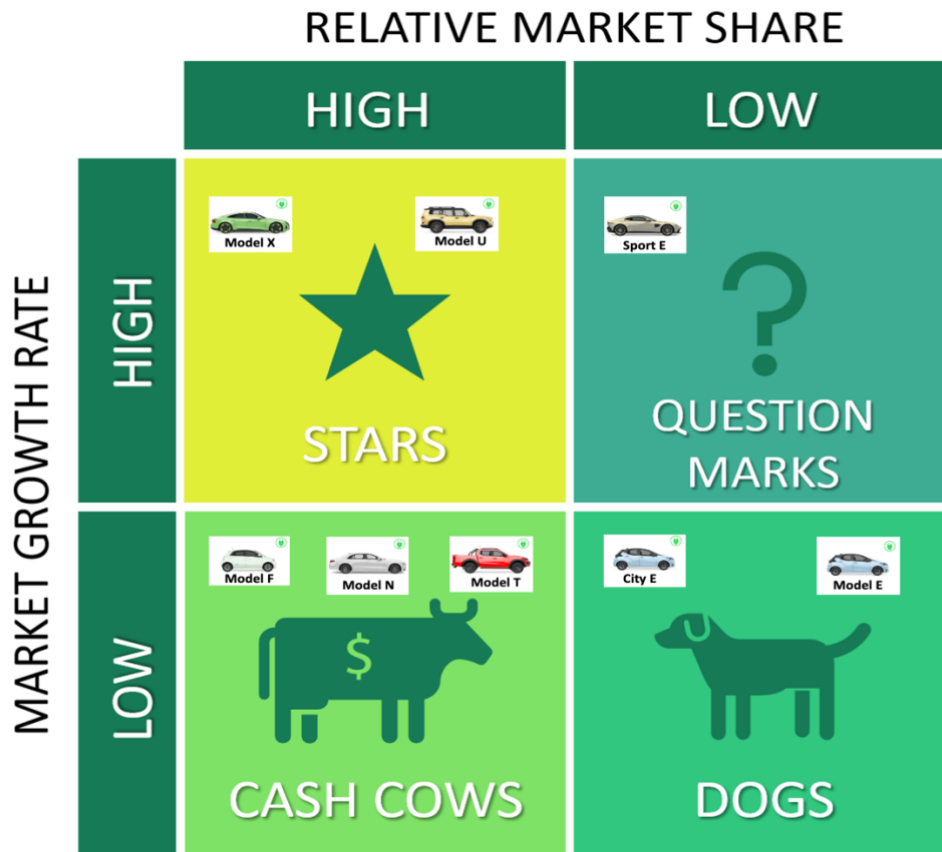


Figure 10: BCG Matrix (Own illustration 2024)

Model F

	Simulation Average
Revenue	929,42
Contribution Margin	35,36
Days of Inventory	57,42
Marketing expenses (%)	2,19

Figure 11: Model F Statistics (BiP Simulation 2024)

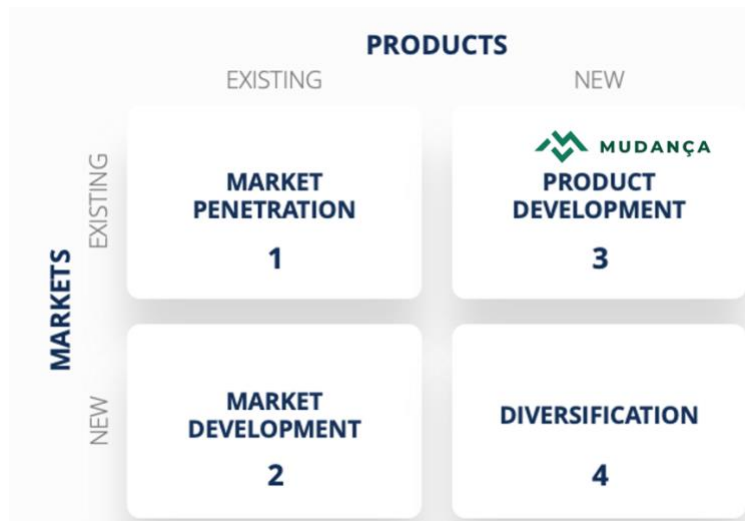


Figure 12: Ansoff Matrix (Corporate Finance Institute 2024)



Figure 13: Mudanca Positioning Map (Own illustration 2024)

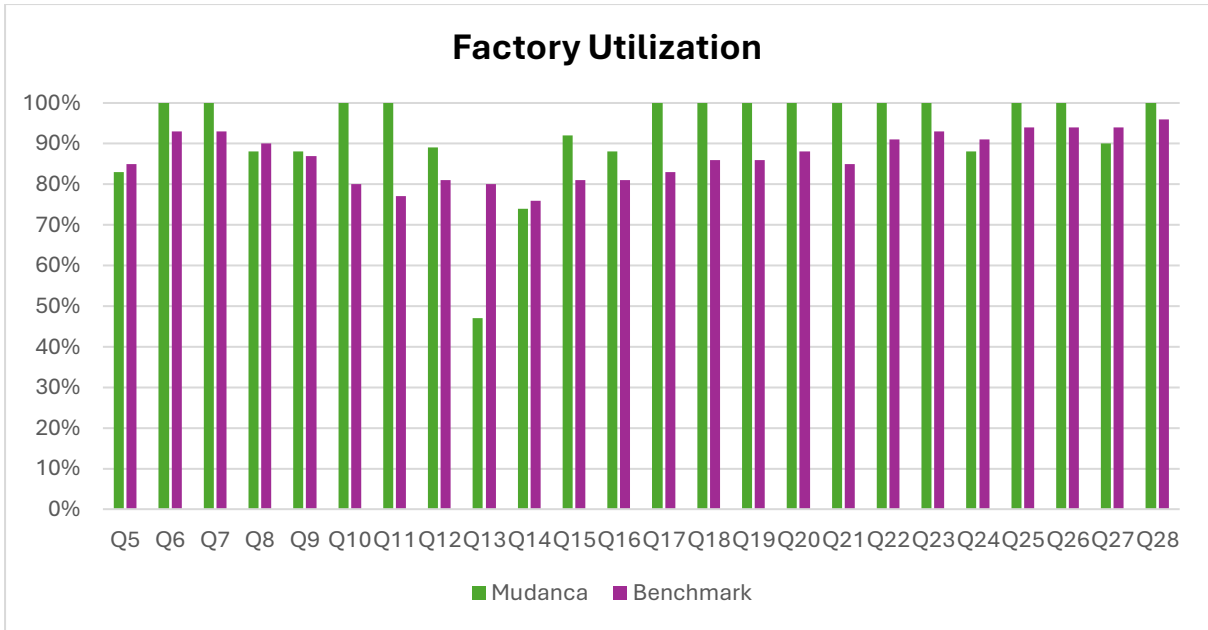


Figure 14: Factory Utilization, Mudanca Compared to Benchmark (BiP Simulation 2024)

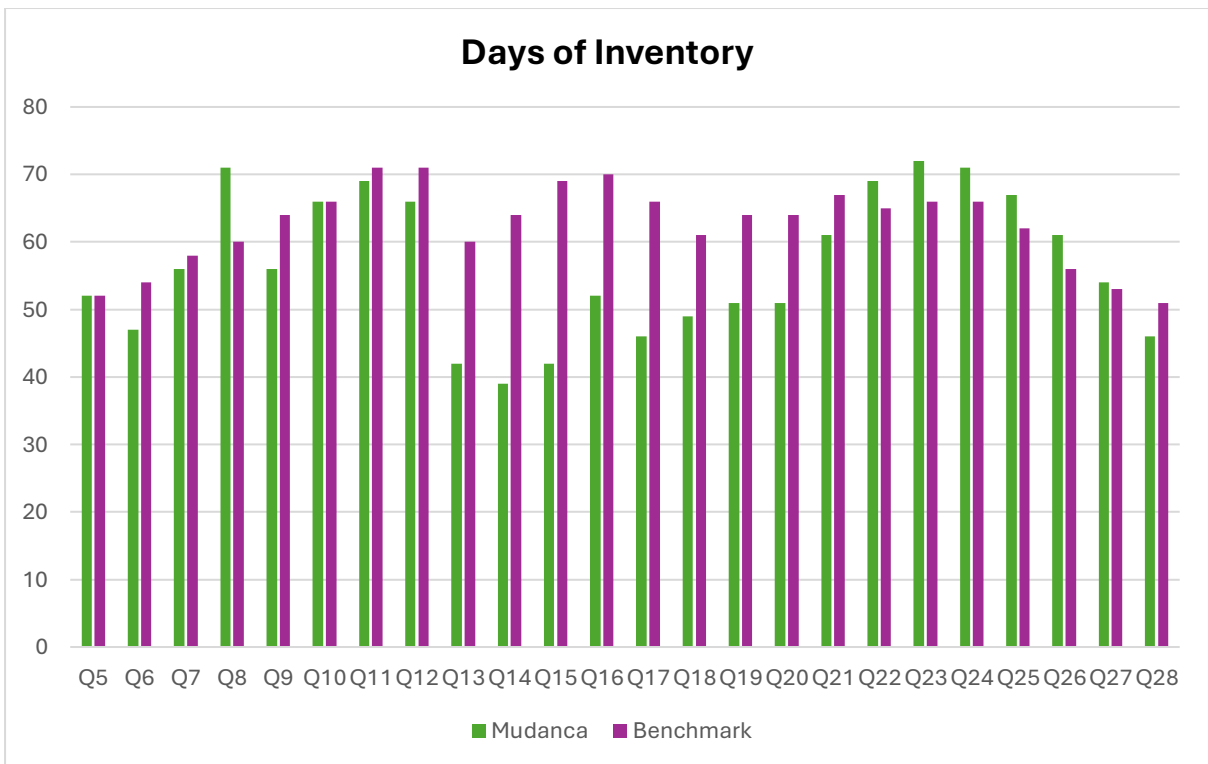


Figure 15: Days of Inventory, Mudanca Compared to Benchmark (BiP Simulation 2024)

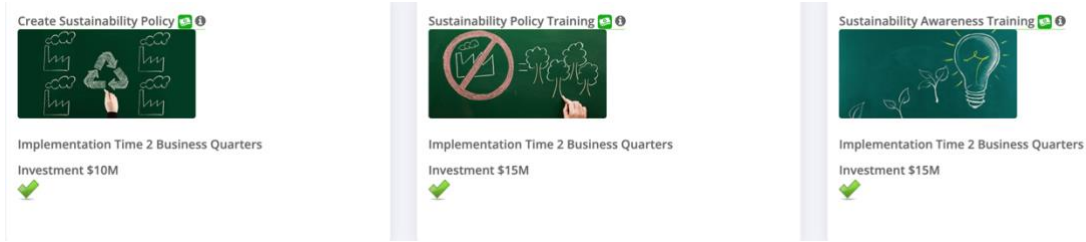


Figure 16: Sustainability Trainings (BiP Simulation 2024)



Figure 17: Operations Performance Objectives Polar Diagram (own illustration 2024)

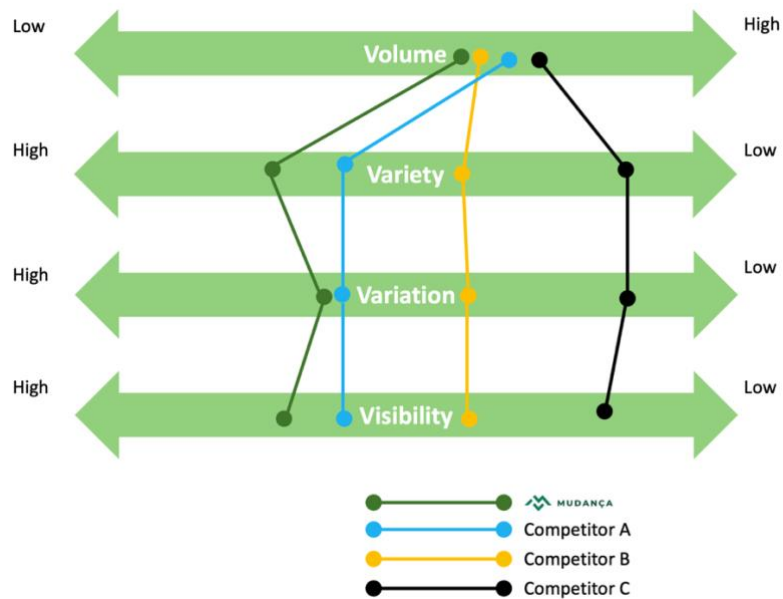


Figure 18: 4Vs of Operations (own illustration 2024)



Figure 19: Connection of Departments (own illustration 2024)

Team Charter			
Team Values		How to handle Hurdles / Challenges	
Punctuality	Collaboration	Cultural differences (Different communication styles/interpretations) • Solution: Address communication accordingly, acknowledging different styles with open communication & feedback.	
Kindness	Participation	Controlling / dominance • Solution: Open communication, team decisions (democracy)	
Open-mindedness	Attention to detail	Working in silos • Solution: Stimulate communication	
Democracy	Fun	Handling mistakes • Solution: Analyze the mistake without blaming and improve together	
		Different working paces in stressful times • Solution: Time management & Reminder of deadlines (Hester)	
Guardian Angels		Learnings	
Alex for Michal Arina for Hester Hester for Olga João for Alex Leevi for João Michal for Leevi Olga for Arina		Keep Opinion Rounds: Before making important decisions, everyone's opinion is heard, and then educated decisions are made. This stimulates collaboration and participation while avoiding freeriding. Keep our methodological approach for decision-making: Having a structure for a set border in which decision-making is discussed improves collaborations and time keeping and management	
Roles			
Alex:	Motivation Manager		
Arina:	Creativity curator		
Hester:	Project Manager		
João:	Quality Manager		
Leevi:	Democracy Manager		
Michal:	Chief Fun Officer (CFO)		
Olga:	Happiness Manager		

Figure 20: Mudanca's Team Charter (Own illustration 2024)

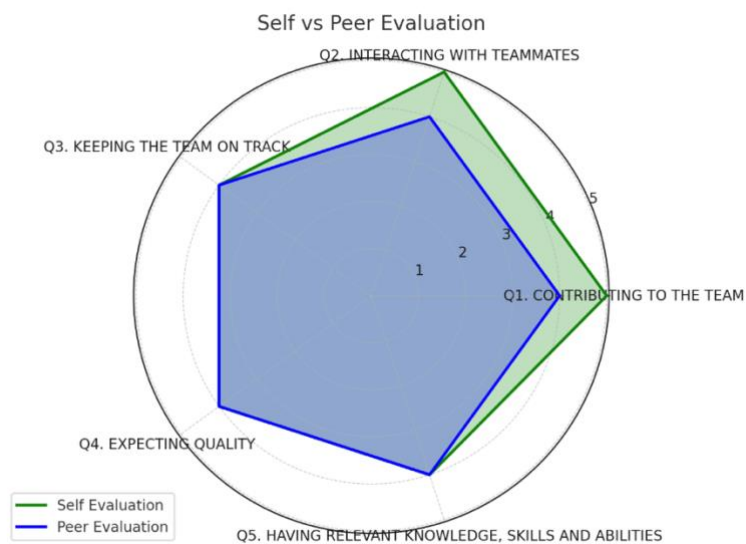


Figure 21: Self-Evaluation vs Peer-Evaluation Leevi Lokio (Own illustration based on evaluations done during BiP 2024)

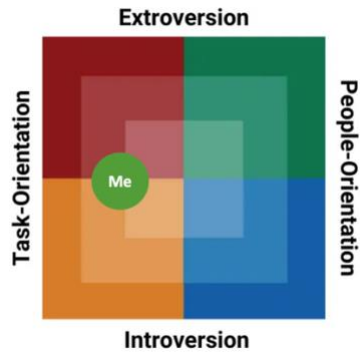


Figure 22: Birkman's Personality Colors (Own illustration 2024)



Figure 23: Personality Type Test (16 Personalities 2024)

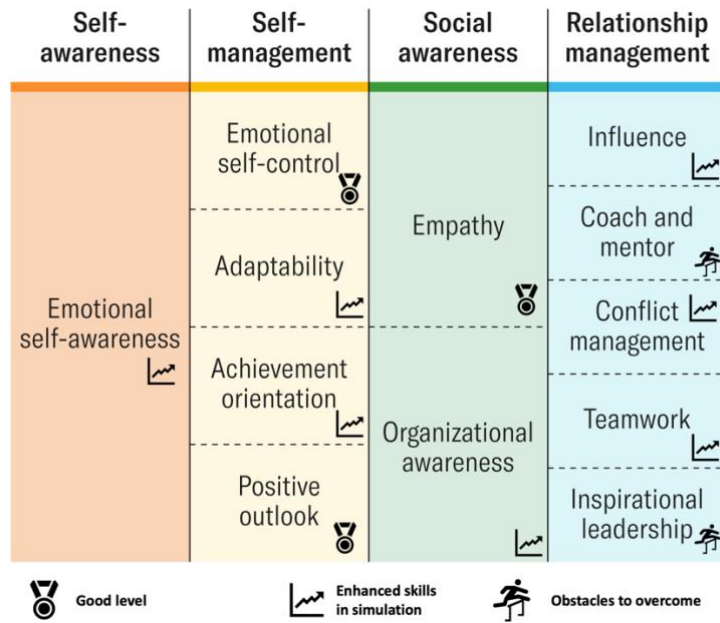


Figure 24: Emotional Intelligence Domains and Competencies (Own illustration 2024)