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Business in Practice:

Personal and business-related insights from a dynamic experience in the automotive industry

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Abstract

The transportation sector is undergoing a seismic change as worries about sustainability grow and the internal combustion engine (ICE) continues to lose market supremacy.

This report analyzes a three-week immersive business simulation in which teams managed a multinational automaker's transition from internal combustion to electrification and automation. The paper reflects on personal experiences, highlighting two critical incidents, and evaluates the company's performance in strategy, marketing, and operations. It also examines the challenges of electrification, particularly in team management and adapting to emerging technologies. By drawing parallels with real-world automakers, this analysis offers insights into the dynamics of value-based strategies and the evolving automotive market's shift towards sustainability.

Keywords: Strategy, Marketing, Sustainability and ESG, Finance, Sustainable Finance, Automotive Industry, Apply Theory in Practice, Business Simulation, Develop a Business Strategy, Reflective Practice, Team Dynamics, Work in Teams, Reflective practice, Managing a business

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Individual Firm Analysis

The first part of this work will go through the firm analysis, and the three functions that will be presented in detail are Strategy, Operations and Marketing. They were chosen as they were the most closely related and interconnected. Throughout further analysis we are going to closely investigate how they influenced each other. Precisely, Operations and Marketing were two fundamental pillars of strategy. Mudanca's decsions-making process majorly relied on and started with Operations and Marketing directors, particularly their strategic alignment. Strategy was included in the report to focus on bigger picture of what our team was trying to achieve during the month of Business in Practice. This analysis of the company's performance is based on data from the simulation, supplemented by academic references, insights from academic sessions, and executive team notes recorded throughout the entire process. Followed by Individual personal reflection in the second part of this work, which consists of two critical incidents, events that were pivotal to myself and Mudanca team. There are some essentials challenges within the industry that we are going to review.

The automobile sector has seen substantial changes as a result of developments in three major areas: legislation, customer behavior, and technology, and most of the industry's major players, including Volvo, GM and Honda have even set a deadline for carbon neutrality and defined milestones (Capgemini, 2022). Hence, due to this changes the industry was a particularly interesting for the simulation, we will compare team Mudanca with some real companies in automotive industry. All the trends that are mentioned throughout the work were reflected in the simulation as well.

Governments and municipalities have implemented regulations and provided subsidies for electric vehicles to accelerate the shift toward sustainable mobility. Nevertheless, "becoming green" while maintaining profitability still remains a challenge. Manufacturers must balance

the need for innovation with cost-effective production strategies to remain competitive (Smith, Miller, 2006).

Additionally, the speed of implementing innovations in automotive sector dramatically increases, demanding companies to make products that are eligible for “upgradability”. More than 65% of vehicles in Europe are supposed to be electric by 2030. Over the next decade, It is predicted that entirely new business models for automotive usage and ownership will emerge. We are experiencing 4th industrial revolution. Additionally, by 2030 four disruptive and technology-driven trends are expected to take shape: diverse mobility, autonomous driving, shared mobility, electrification, and connectivity. Those trends are expected to expend revenue pool by generous 30% (McKinsey).

Finally, companies that choose to avoid expansions via M&A have to balance adaptation with impeccable strategy. The automotive industry is rapidly evolving due to sustainability, technological advancements, and shifting consumer behavior. The pandemic accelerated digitalization, leading to more resilient supply chains and manufacturing processes. Future success in the industry depends on balancing profitability with the adoption of disruptive innovations, such as electric vehicles, connected cars, and new business models. Companies must also adapt to changing customer demands and workforce needs, focusing on flexibility, innovation, and customer-centric strategies to thrive in the new mobility landscape (Forbes, 2021).

Strategy

Strategy was chosen as one of the elements for this work. A company can outperform rivals only if it can establish a difference that it can preserve (Porter M). Mudanca has managed to

develop successful strategy along the course of the simulation. Developing stable strategy is what out team has focused on during early stages, ensuring continuous adaptation. The first thing that we established was our mission "Forging paths to tomorrow, Mudanca leads with innovations in electric vehicles - crafting a future where mobility meets sustainability at every turn". This helped ensuring that all our functions would be aligned.

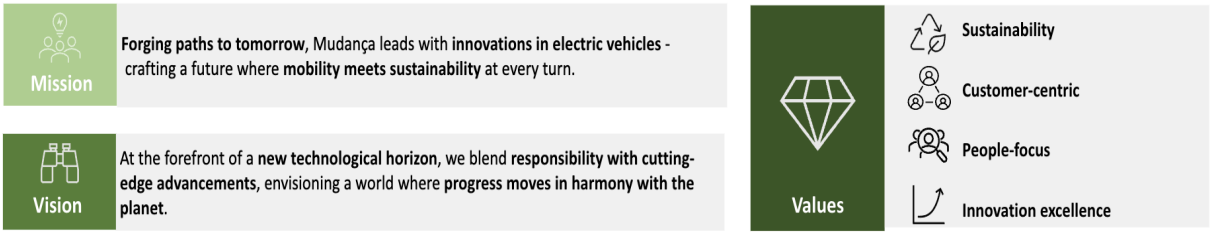

Figure 1 *Mission, Vision and Values*

At early stages we also agreed on our values: sustainability, customer-centric, people-focused and innovation excellence. Essentially, customer centric principle was reflected in "value for money" or "value based pricing" approach. Our goal was to provide above-market product, while remaining competitive price. Considering this positioning and positioning map in real life, that would put us as competitors to Ford, Hyundai and Toyota.

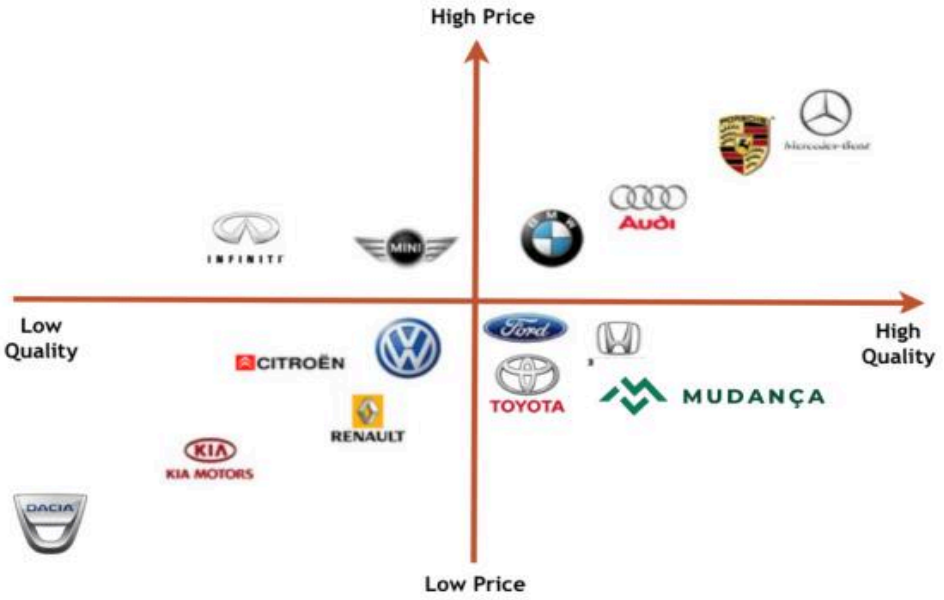

Figure 2 *Postioning map*

Our further actions were in line with the strategy we agreed on. Diffirientiation strategy was chosen. The differentiation strategy is commonly used across various industries, allowing companies to distinguish themselves by providing unique value that attracts customers and gain competitive advantage. An actual example of a company with the differentiation strategy would be electrocars company Tesla. Moreover, as key approach design-driven innovation was chosen, which integrates technology with consumer preferences, enabling firms to balance customer needs and technological advancements to create unique products (Mossarat, Farhana, 2015). Rather than targeting cost leadership, we targeted creating unique car portfolio, while still investing in new features and maintaining high margins. We made substantial investments first rounds in Innovations sector.

Mudanca had additional emphasis on HR since a lot of investments within Innovations and Marketing would not be possible without employees with needed skills. Our HR director did a brilliant job proving those departments with professionals that had enough skills of Digital Expert and Innovation Management. Round to round our strategy was tested by some

external events, for example, additional tariffs. That proved efficiency and agility of our strategy, as well as qualifications of our team to manage global car manufacturer.

Starting from the quarter 4, we invested in both Sodium-ion batteries and a new fully electric model. Furthermore, we invested $500M in AI implementation and in Next generation E-drive modules, in quarter 6 and quarter 7, respectively. Finally, we invested $200M in Vehicle-to-Vehicle communication. Aside from this investeemnt, we introduced 5 new EVs. Reflecting on this investments, we were not sure if the decision was right to take all of them. While it was in line with our strategy, it turned out to be quite excessive with regards to competitors. We assumed that the market is going to develop very fast, however our competitors were introducing straightforward and basic models. They were not investing in cars with new batteries, higher levels of autonomous drive and feature packages. It was not reasonable for us either to introduce more advance cars. We stayed in line with initial strategy of delivering “above average” models, however it would not make sense for us to introduce higher production cars. Consequently, this decisions would drive our margins low. We understood that our strategy was focused on efficiency, rather then scope. Below there is a table with the new models and their characteristics:

Final Product Portfolio Mudanca

Name	Battery	Autonomous Drive	Feature package	Factory location/ Primary market
Model N (white sedan)	Extended Li-ion	Level I	Level I	Europe
Model E (blue supermini)	Standard Li-ion	Level II	Level I	China
Model X (green sports car)	Extended Sodium-ion (NA)	Level III	Level I	Europe
Model T (pick-up truck)	Extended Sodium-ion (NA)	Level III	Level I	USA

Model F (mint citycar)	Extended Sodium-ion (NA)	Level III	Level IV	China
Model U (yellow SUV)	Extended Sodium-ion (NA)	Level II	Level II	USA
Sport E (green sports car)	Extended Li-ion	Level I	Level I	USA

The models can be strategically categorized using the BCG Matrix framework, focusing on data from the most recent quarter. In the Stars category, which includes models with both a high market growth rate and high market share, we find Model X and Model U, indicating their strong competitive position and potential for future growth. These models are expected to drive the Mudanca''s expansion in the coming quarter. In contrast, Sport E falls into the Cash Cows category, characterized by low market growth but a high market share. As a reliable revenue generator with low investment needs, Sport E plays a crucial role in funding other areas of the business. For the Question Marks category, comprising models with high growth potential but low market share, we have Model T, Model N, and Model F. These models require careful strategic decisions to determine whether further investment will allow them to become future stars or if they should be scaled back. Finally, in the Dogs category, which represents models with low market growth and low market share, we have City E and Model E. Both models are underperforming, with Model E nearing the end of its product life cycle and set to be discontinued due to market maturity. Though some models exhibited borderline values in absolute terms, there was a clear trend over the quarter, allowing for more precise classification based on their long-term potential.

As everyone, initially we had some combustion cars in our portfolio, considering them as cash cows. However, as soon as it was viable, we were dicontunuing them, replacing them with electric models. By the end of the simulation, Mudanca motors was fully aligned with initial strategy of full fleet electrification.

Furthermore, we are going to review the SWOT analysis provides a comprehensive overview of Mudanca as a dynamic player in the electric vehicle (EV) industry. As the global demand for environmentally sustainable transportation solutions continues to rise, Mudanca positions itself to capture significant market share with its innovative product offerings and strategic initiatives. This analysis explores out internal strengths and weaknesses, as well as the external opportunities and threats that the company faces in a highly competitive and rapidly evolving market. By understanding these factors, team could better navigate the challenges and leverage its strengths to achieve sustained growth and success in the EV sector:

SWOT analysis Mudanca

Category	Aspect	Description
Strengths	Carefully selected product portfolio	Mudanca offers a comprehensive range of vehicles, including compact cars, SUVs, and luxury models, to both meet diverse customer needs and not create products with no demand
	Value based Pricing	Our customer-centric company provides vehicles at competitive prices with appealing features, making them a strong option for value-conscious customers.
	Strong Environmental Advocacy	Mudanca is well-regarded for its commitment to promoting eco-friendly transportation and leading industry-wide environmental initiatives. Mudaca is aimed at achieving carbon neutrality and becoming fully green.
	Geographical diversification	Manufacturing operations in strategic locations like the US, Europe, and China help reduce logistics costs and taxes, hence improve efficiency in service delivery.
Weaknesses	Emerging Brand Identity	As a newer market player, Mudanca is still in the process of building brand recognition compared to more established competitors.
	Dependence on Suppliers	The company's reliance on external suppliers for key components introduces potential risks to its supply chain, company lacks vertical expansion.
	Limited financial and human resources	Mudanca's smaller financial and human resources compared to industry giants could limit its expansion capabilities.

Opportunities	Rising Electric Vehicle Demand	The increasing popularity of electric vehicles presents Mudança with an opportunity to expand its market share.
	Government Incentives	Available subsidies and tax benefits for electric vehicles can help lower costs and attract a broader customer base. Europe seems especially attractive, considering electrification plans by 2030.
	Innovation in Technology	Advances in battery technology and autonomous driving offer opportunities for Mudanca to enhance its product offerings.
	Growing Sustainability Awareness	Increasing consumer interest in sustainability is driving demand for Mudanca's eco-friendly vehicles.
	Expansion into New Markets	There is potential for growth in developing regions where interest in electric vehicles is on the rise.
Threats	Intensifying Competition	The focus on electric vehicles by established automakers and new entrants heightens competitive pressures on Mudança.
	Economic Instability	Fluctuations in the economy can impact consumer purchasing power and negatively affect vehicle sales. It might strongly impact international division, especially when it comes to US and China relations.
	Regulatory Compliance Costs	New emission and safety regulations could lead to increased compliance expenses for Mudanca.
	Misconceptions About EVs	Concerns and misunderstandings about electric vehicle range and charging infrastructure could slow down market adoption.
	Rapid Technological Shifts	Keeping up with fast-paced technological advancements demands continuous investment to remain competitive.

Overall, in my opinion, Mudanca did a meticulous job adapting to the simulations landscape, embedding agility and electrfication to the core of the company. We used SWOT analysis as a method to gain overview of the situation we operate in. We have previously touched on the topic of the selected product portfolio as well as full fleet electrification strategy.

Besides, Mudanca has capitalized on factors related to technologies and EV's. Over the course of the simulation we made substantial investments that were oriented towards long-term success.

Marketing

Marketing embedded strategic pricnciples that Mudanca was trying to pursue. Marketing tends to be quite specific in the industry, as the car is msot likely a very substantial expense for a houseld, in line with real estate. Understanding consumer expenses on cars is critical, as vehicle ownership is one of the largest financial commitments for households. For instance, German research highlights various dimensions of car costs, including both private and social expenditures. A comprehensive analysis of lifetime costs for car ownership in Germany shows that the full financial burden is often underestimated by consumers and policymakers alike, with the total cost ranging from €599,082 to €956,798, depending on the car model (Gössling et al., 2022).

The decision-making process has always started with marketing. Portfolio was carefully created and curated, based in competitor's and market demands. During each round Mudanca adapted prices and marketing investments. Round to round, we managed to maintain solid profit margin, while providing the customer with a good value. Research has expanded the traditional economic interpretation of value, incorporating psychological, emotional, social, and ecological dimensions. This broadened perspective allows firms to craft more nuanced value propositions that resonate deeply with consumers and stakeholders alike (Marinov, 2019).

As was mentioned within the strategy part, Mudanca main value was to be customer-centric. That aligned with out value-based pricing strategy. Our strategy placed marketing at the

center, guiding actions based on market insights. This department, with the most comprehensive understanding of market trends, required effective data management and communication. Consequently, every round of decision making began with Marketing director overview. We went over each car, adjusting sales price and marketing percentage. When making those decisions we took into account several factors. We noticed substantial correlation between car maturity and demand, so whenever we knew car is going to reach 120% maturity we straightforward decreased price and increased marketing, however we always had a 40% target on margin in mind and some delays in direct correlation. At the last stages as we refined our strategy we kept the range from 30-40%.

Pricing is a key part of the marketing mix, known as the 4Ps: Price, Product, Promotion, and Place (Kotler and Dubois, 1984). The product aspect focuses on aligning features with market needs and future consumer demands, shaping its value proposition. In our simulation, marketing helped guide Innovation department and played a vital role in new cars introduction.

The Place aspect mainly involves operational decisions, where marketing insights help optimize production locations to maximize profit margins, especially considering tariffs. For instance, in the simulation we did not make crucial decisions about distribution places per se except for Training/ Service in marketing mix.

Promotion is critical in the competitive automotive industry, where brand image plays a significant role. While some car buyers show brand loyalty, others are undecided, making a strong brand message essential. Companies focus on generating publicity through press releases, media lounges, and digital tools like websites and social media. Some companies also arranged pre-show events, such as facility visits, to engage journalists and create anticipation. Depending on a brand's focus, the message might highlight innovation,

enjoyment, or style. Automotive communication usually blends rational messaging with emotional appeal (Tafesse et al., 2014).

To establish our “above average” perception, we invested quite heavily in marketing, starting with 4Ps (marketing mix) investments. In Quarter 4 we increased budget up to 10% for Marketing Mix Customer Promotions / POS, Marketing Mix Training / Service, Marketing Mix Online Campaign, Marketing Mix Online Campaign. In Quarter 9 Mudanca did a bold move, increasing marketing mix components up to 30% and Training/ Service up to 40%. However, that did not result in significant growth of sales volume, so we reduced components tp 10% after 2 rounds, prioritizing margins. Finally, we stayed within 30-40% range till the end of the simulation. That percentage was the most efficient, generating additional sales and not driving margins too low. Starting from Quarter 17 we found the balance between marketing investments and EBIT margin, keeping it within 22-26% range.

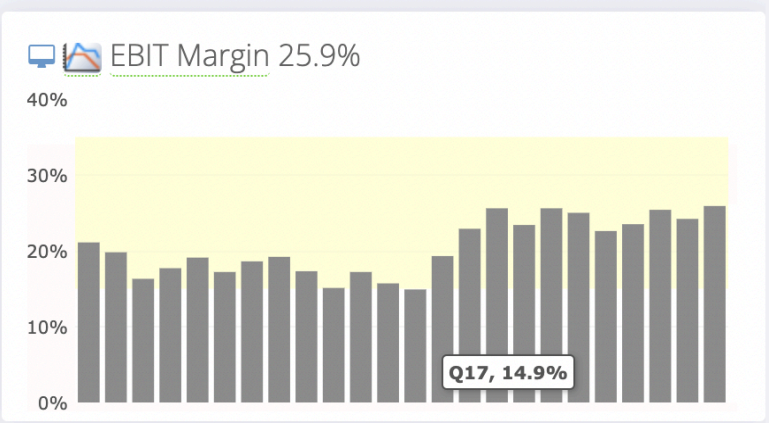

Figure 3 *Ebit margin evolution*

Additionally, we have done all the marketing investments, quite soon as well due to highly-effective skill acquisition by HR department. Those were Social media influencer partnership for $15M, Data-driven markeign analytics for $30M, Electric vehicle branding campaign for $20M that we repeated every two quarters, Augmented Reality showroom experience for $50M and Car for everyone for $100M.

The car's lifecycle, another key marketing responsibility, involves managing a model's progression from introduction to maturity. Worldwide companies face challenges that companies face due to fast product obsolescence and the pressure to develop new products quickly, automotive industries is not an exclusion (Xu , Yan, 2022). To extend a model's appeal during its lifecycle, restyling is common, refreshing its appearance and incorporating new technology. As was mentioned before, we carefully monitored when car was reaching 120% to make sure to either update or replace it,thus balancing the portfolio.

In summary, our marketing strategy aligned with our goal of positioning our brand as a "value for money" manufacturer, in simple words we had a carefully curated portfolio, where each car provided above average value for a reasonable price. The department's ability to handle information and collaborate across teams was key to achieving our objectives.

Operations

Throughout the simulation Operation department was tasked with deciding when and where to open or close production lines, guided by factors such as product maturity, market demand, and efficiency. The main goals of Operations in the inudustry are to reduce waste, enhance process efficiency, and maintain low inventory levels, thus enabling manufacturers to respond more agilely to market demands (Juneja, 2024). The function was closely related to Marketing. Marketing and Operations determined the main course of Mudanca motors. Roles of our two directors involved optimizing economies of scale by determining which vehicle lines should be produced at specific facilities in Europe, the USA, or China. They also analyzed production, inventory, and control data to make decisions on expanding or downsizing production lines.

Additionally, department focused on investing in carbon-related greenhouse gas (GHG) improvements across Scopes 1, 2, and 3 — covering production, energy, and supply chain investments — to enhance the company's ESG performance and enable investments in green bonds. Environmental, Social, and Governance (ESG) strategies play a critical role in shaping the operations of automotive companies, influencing their sustainability, profitability, and corporate value. Recent studies highlight how leading automotive firms like Renault and Volkswagen are integrating ESG strategies into their operations, focusing on reducing CO2 emissions, expanding electric vehicle lineups, and improving energy efficiency (Bezerra et al., 2024). By Quarter 28 we managed to minimize CO2 emissions witin all scopes.

We noticed direct correlation between the value added score (EVA) and the effectiveness of inventory management. Consequently, the primary challenge was to manage factories and production lines effectively. Decisions were influenced by a few critical factors, including the utilization rate, which needed to be as close to 100% as possible to ensure efficiency without overburdening staff.

Moreover, maintaining a healthy contribution margin was essential to succesfully execute differentiation strategy, particularly by leveraging an EV portfolio, which allowed for higher pricing and reduced production costs through economies of scale. We soon realised that EV's are not only aligned with our strategic goals, but also are more profitable. That discovery was related to Innovations statistics, in particular CO2 adjusted profit margin. That strengthened our focus on becoming fully electric company and adjusting Operations accordingly. Hence, the function was closely working with marketing department. Another key factor was the days of inventory (DOI), a crucial indicator of business and sales performance that is closely tied to production rates. Our team made a lot of mistakes with regards to estimation of proper DOI. We prioritized factory efficiency and ensured that production lines operated at

maximum, optimal capacity. However, it took a while to find proper balance. For instance, during the first half of the simulation before we consulated BiP management we assumed that optimal DOI is 30 days. It was not factual due to quarterly cycles, consequently it meant that there is unsatisfied demand.

After building the last factory, we faced substantial problem of inventory. Every round we had couple of models that were produced at two lines, we immediately had the problem of too much inventory for this model in two round. By the end of the simulation we discontinued a lot of models due to maturity, so we ended up with producing three models in two lines. We understood that we made a mistake of not coming up with another model for a new factory, but at that point, it was quite late to make this investment.

The efficiency of inventory management often improved with an increase in workforce size, highlighting the importance of balancing employee numbers with production demands. Input from both internal sources and teammates also played a role in shaping these decisions.

Singhal et al. (2005) review the challenges faced by operations management in integrating sustainability, particularly through triple bottom line reporting, which balances profit, people, and the planet. Mudanca perfectly aligned with that on the stage of strategic planning and executing. Their work also highlights the need for closed-loop supply chains and green product design.

Another key aspect of Operations in the simulation was the strategic decision to invest in Scopes 1, 2, and 3, which address both direct and indirect emissions across all company processes. Scope 1 investments address those reporting directly to the company. Scope 2 investments are related indirect ones, purchased electricity, steam, heating and cooling for own use. Finally, Scope 3 investments are related to indirect upstream and downstream activities. We have completed all the investments within scopes by Quarter 19. Those

included: water consumption reduction, waste reductions, ISO 14001/ EMAS Certificates, Energy Efficiency Investment, Install Solar Panels, Energy Management System, Offset Supplier CO2, Sustainable Suppliers, External Battery Recycling. In total, we made investments for almost $1.9B. These emissions significantly contribute to the automotive sector's status as one of the most polluting industries globally. We also committed to gradually reducing and improving GHG emissions in relation to our green fully electric strategy by Quarter 13.

Conclusion

In conclusion, Mudanca Motors successfully navigated the complexities of the simulation by aligning its strategy, operations, and marketing with the overarching goal of electrification and sustainability. By leveraging SWOT analysis, Mudanca identified key strengths like a carefully curated product portfolio, strong environmental advocacy, and strategic collaborations. However, challenges such as brand identity development and reliance on external suppliers remain areas of improvement.

Mudanca's strategic investments in electric vehicle technologies, including Sodium-ion batteries and autonomous driving features, demonstrated a long-term vision for innovation and market relevance. However, over-investments in high-tech features led to challenges in maintaining competitive margins. Through adjustments, Mudanca maintained a focus on differentiation by offering "above average" vehicles while refining its approach to production and sales strategies. The marketing department played a critical role by employing value-based pricing, understanding market demands, and ensuring effective communication across teams. They successfully positioned the brand as a provider of "value for money" vehicles, balancing competitive pricing with premium features. Operations, meanwhile,

effectively managed production lines, inventory, and carbon emissions, all aligned with the company's green strategy. Despite some missteps, particularly in factory expansion and inventory management, Mudanca's commitment to sustainability, continuous innovation, and market adaptation positioned it for future success in the evolving electric vehicle landscape.

Individual Personal Reflection

In this part of the work I am gonna discuss two episodes that occurred throughout the simulation. The First critcal incident will be dedicated to reccuring problem of decision making and the overall team dinamica and decision-making. The Second critical incident is dedicated to a pivotal event of failed ESG report. We are going to reflect on how this events impacted a simulation, a team and myself. I am going to interpret them with regards to my future personal and career development.

The First Critical Incident

The first critical incident in our car simulation project was not a single event but rather a recurring challenge that surfaced multiple times during the simulation process. This challenge revolved around the intricacies of making investment decisions, which became a central theme throughout our project. The incident significantly influenced our team's decision-making process and the overall atmosphere within our group.

At the core of this challenge was the difficulty of finding the right balance between investing in the development of a new car model and managing the operational and financial constraints that came with it. This was not a straightforward task, as every decision had to consider various factors such as market demand, the maturity of our existing car models, and the resources available to us.

To provide a clearer picture, conflicts usually emerged at specific stages in our decision-making process. Successful teams share key traits that drive collaboration, innovation, and effectiveness across sectors like healthcare, hospitality, and innovative projects. These traits include clear communication, trust, inclusivity, and emotional intelligence, which help teams navigate complex environments. Effective teams adapt to changes while maintaining stability and performance. Establishing team charters and performance strategies fosters shared goals, accountability, and focus. Psychological safety and team chemistry allow members to express ideas and take risks, promoting innovation and continuous improvement. Finally, the ability to learn from successes and failures in real-time is essential for sustaining high performance (Johnson, 2021). As a team, we had established a structured approach to making decisions, which generally worked well. The process typically began with a detailed review of each car model, led by myself in the role of Marketing Director. During this phase, Marketing would carefully examine and present various aspects of each model, including its maturity, sales performance, the percentage of budget allocated to marketing, pricing strategy, and other relevant factors. This review was crucial because it set the stage for the discussions that followed, providing a comprehensive overview that informed the team's subsequent decisions.

At the same time, the operations team played a pivotal role in the decision-making process. Their input was essential, particularly when it came to managing inventory, which we identified as one of our key success factors. Effective inventory management was critical to ensuring that we could meet market demand without overproducing or underproducing our vehicles, both of which could have significant financial implications.

After the marketing and operations reviews, we would move on to discussions about innovation, which was often the most challenging part of the process. These discussions

typically involved lengthy debates about which new models to add to our product portfolio. The decisions made at this stage were far from simple, as they required us to carefully weigh market demand against the maturity of our existing models. We also had to consider the long-term implications of our choices, including how they would impact our company's position in the market and our ability to compete with other teams in the simulation.

One particularly challenging aspect of these discussions was the decision about where to produce our new models. This involved selecting the right country and factory location, which was a complex decision with many variables to consider. In the early stages of the simulation, our team took a conservative approach to inventory management. We aimed for a 30-day inventory cycle, which we wrongly believed was an ideal balance that would allow us to meet market demand without tying up too much capital in unsold stock. This cautious approach reflected our reluctance to overproduce or introduce too many new models too quickly, as we wanted to avoid the risks associated with excess inventory.

However, this conservative strategy also had its drawbacks. Our Finance Directors were particularly strict about how much we could invest in new models and production facilities. Their focus on maintaining tight control over our budget meant that we had to be extremely strategic and persuasive when proposing any new investments. Every proposal had to be thoroughly justified, and we needed to demonstrate that it would provide a solid return on investment.

As we progressed through the simulation, our approach began to evolve. After the first few rounds and our experience at the simulation clinic, our team grew more confident and assertive in our decision-making. This shift was partly driven by the competitive pressure we felt from other teams, particularly the Emotion team, which was one of our strongest competitors. Mudanca Motors, our company, consistently achieved one of the highest profit

margins among all the competitors, which reinforced our position near the top of the rankings.

Despite our success, the increasing complexity of the decisions we faced became more apparent as the simulation neared its conclusion. One of the most challenging decisions involved whether to build an additional factory, we had to face “Efficiency vs Scale” question. In the automotive industry, efficiency and scale are key to a car manufacturer's performance and competitiveness. Research using Data Envelopment Analysis (DEA) on Chinese automotive companies shows that larger manufacturers are generally more efficient due to economies of scale and better technical capabilities, which drive innovation and productivity. The study indicates that China's automotive sector suffers from underproduction and fragmented manufacturing, reducing overall efficiency (Fei, Li, 2018). This decision was particularly difficult because it required a substantial investment, and there were significant concerns about the potential impact on factory capacity. We had to carefully consider whether the benefits of building a new factory would outweigh the risks and costs involved.

After much debate, we held a vote on whether to proceed with the construction of the new factory. The decision was not unanimous, but the majority ultimately decided in favor of building the factory. Unfortunately, this decision led to unforeseen inventory management issues. We found ourselves caught in a cycle of overproduction, where cars were being assigned to multiple production lines only to be removed later due to excess inventory. This inefficiency had a negative impact on our operational profits, as it created bottlenecks and increased costs. Mudanca was not ready to cope with scaling the proudction. Looking back, one factory most likely was not enough to put the team “on the pole”.

Finally, we were unable to resolve this issue by introducing new car models, as our portfolio was already full. This situation highlighted the challenges of managing a complex product

portfolio and the importance of making strategic decisions that consider both short-term and long-term implications.

Over the course, I realized that I am quite indecisive when it comes to team decisions, and I wish i was more assertive about scaling the production. I felt really responsible and scared for the results. It is something I have not previously felt before. When it comes to making my own decisions that impact mostly me, I feel confident and bold. However, the responsibility for the succes of a lot of people scared me. It is something that I am currently trying to improve within my work as a teammate.

The Second Critical Incident

The second critical incident that had a profound impact on our team occurred during the final stage of the simulation when we were tasked with preparing an ESG (Environmental, Social, and Governance) report. Throughout the simulation, our team had consistently focused on the strategy centered around green and all-electric future. This commitment to sustainability was a core principle of our overall strategy, and we dedicated significant effort to producing a high-quality ESG report. The automotive industry's focus on ESG practices is becoming a key part of its strategic direction, with major impacts on sustainability and company value. Companies like Renault and Volkswagen have adopted strong ESG strategies that align with the Sustainable Development Goals (SDGs), emphasizing CO2 reduction, energy efficiency, and social initiatives such as diversity and community development. For example, Renault is broadening its electric vehicle range, while Volkswagen plans to achieve 100% renewable energy usage by 2025, demonstrating their commitment to environmental sustainability. Additionally, their governance practices are rigorous, ensuring transparency and ethical behavior (Bezerra, 2024).

We believed that our focus on sustainability would be a strong differentiator and that it would be rewarded in the final assessment. However, when we received our scores, we were disappointed to find that our report did not earn sufficient points, particularly missing only one point. This outcome was especially tough for us because we had invested so much time and effort into ensuring that our report reflected our commitment to sustainability and the environment.

The lack of recognition for our efforts had a significant impact on team morale. It is not a surprising finding, a research using a path analysis approach confirmed that rewards and recognition directly influence employee motivation, which subsequently boosts job performance (Meena, 2019). We felt that our hard work was not accurately reflected in the grading, and this led to a sense of frustration and disillusionment within the team. Despite our best attempts to negotiate and provide additional reasoning to the assessors, it was made clear that no changes could be made to the simulation results at this stage. The team felt that the grading process was biased and did not accurately reflect our performance or the values we had prioritized throughout the simulation.

This disappointment had a noticeable impact on our motivation. After consistently ranking among the top teams throughout most of the simulation, we suddenly found ourselves slipping in the standings. The realization that we were no longer in contention for victory led to a drop in our enthusiasm and effort. The team's focus shifted from striving for success to simply completing the remaining tasks, as we no longer believed that our efforts would be fairly recognized.

Reflecting on this situation, I now see that our reaction may not have been the most constructive. While it was natural to feel disappointed, we should have maintained a positive attitude and continued to do our best, even after the setback. This would have been a more

professional and resilient approach, demonstrating our ability to handle challenges and setbacks in a positive way. However, at the time, it was difficult to move past the disappointment, and this affected our performance in the final stages of the simulation.

The impact of this incident was further compounded by the results of our peer evaluations, which I received shortly before the end of the simulation. The feedback from my teammates was unexpected and led me to question my own abilities and my role within the team. My values on contributing to the team, interacting with teammates, keeping the team on track, expecting quality and having the right skills were all within 2,5 to 3,5 range. That was very disappointing to me, especially the evaluation of my hard skills. I had hoped that we would have an open discussion about the evaluations that we did before as well for Team dynamics, but one of the team leaders chose not to share the results. This decision left me with unresolved doubts and a sense of uncertainty about my performance.

In retrospect, I believe with regards to other factors that cultural differences may have played a role in the feedback I received. Coming from an Eastern European background, I tend to be direct and straightforward in my communication, which may have been perceived differently by my European teammates. In many European contexts, there is a greater emphasis on positivity and softening feedback, which contrasts with my more direct approach. This difference in communication styles likely contributed to some of the misunderstandings and tensions within the team.

Overall, these two critical incidents provided valuable learning experiences. They highlighted the importance of balancing different aspects of decision-making, including the need to consider both short-term and long-term implications, as well as the importance of effective communication and teamwork. While the outcomes were not always what we hoped for, the

experience has given me a deeper understanding of the complexities involved in managing a business simulation and the skills needed to navigate such challenges successfully.

Conclusion

Navigating complexity and ambiguity is a fundamental aspect of leadership and team success, especially in environments where strategic decisions carry significant weight. Throughout the car simulation project, our team faced significant challenges that highlighted the importance of informed decision-making, adaptability, clear communication, and awareness of our own weakneses.

The first critical incident involved balancing investment in new car models with managing operational and financial constraints. This led to conflicts over resource allocation and revealed the complexity of decision-making in a dynamic environment. Our conservative approach to scaling eventually resulted in unforeseen inventory issues adn inability to grow in EVA, underscoring the risks of scaling without fully understanding the operational impacts.

The second incident focused on our commitment to sustainability through an ESG report, which, despite our efforts, was not recognized in the final assessment. This disappointment affected team morale and highlighted the importance of resilience and focus, even when external validation is lacking.

The BiP simulation taught us the necessity of embracing uncertainty, engaging in proactive problem-solving, and fostering open communication within the team. These experiences deepened my understanding of effective leadership, emphasizing the need for self-awareness and the ability to manage emotions. The lessons from this project will guide my future

leadership efforts, equipping me to handle better the uncertainties. I realised that there is a lot more work, especially on my soft skills, that has to be done on orfer for me to be able to succeed in an international team.

Unfortunately our team did not manage to end as a leader in the simulation, our final value addedscore was 3332.5, putting Mudanca at 8th place. However we maintained top position throughout most of the quarters. To be precise, up to the point of ESG report that was described in the Second critical incident, we had second place. Several key insights have emerged about company and personal analysis: clear communication between all departments within a company is essential to maintaining efficiency, solving new challenges, and providing support when necessary. External input also plays a vital role in decision-making processes. A successful company isn't made up of isolated departments but rather of individuals working together toward a shared goal, each contributing through different roles. Nevertheless, Business in Practice was an incredible and memorable experince that brought a lot of value to our personal and professional development. It was an incredible opportunity to finish Masters degree with the possibility to apply what we learned within the industry I am very passionate about. I am really thankful to all participants, creators of BiP and my team Mudanca.

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