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Finance from the Nova School of Business and Economics.

FUSION DYNAMICS:
A STUDY OF BRIDGING DIFFERENCES FOR COLLECTIVE EXCELLENCE AT
HUMBA MOTORS

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Abstract:

In this impactful study, I delve into practical business experience by reflecting on my time in analyzing the simulated international car manufacturing company's transition towards a fully electric sustainable future and its cross-functional dynamics by dissecting its strategic evolution and performance across diverse functions. This study draws insights from my transformative experiences during the BIP simulation to highlight the synchronization of personal growth, diverse collaboration, self-realization, and collective excellence.

Keywords:

Teamwork; Business Simulation; Strategy; Sustainability; BIP

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1. Firm Analysis

1.1 Introduction and Overview

In this comprehensive firm analysis, I deeply explore the vibrant decision-making process of Humba Motors. With a resolute mission to redefine mobility through innovation and a vision of making sustainable transportation universally accessible. This analysis dives into the symbiosis of crucial business functions and the decisions taken in each function to map out our strategic approach to achieving collective excellence through diverse collaboration and self-realization.

Amidst Humba Motors' functional departments lie the keystones of our success – Mainly Operations, Marketing, and Innovation. These integral parts advanced our overarching vision by working together with dependence and interdependence.

Operations made sure all the resources were used carefully to create amazing products while maximizing resource utilization by planning meticulously with the innovation department to understand what new production lines and resources would be necessary in the upcoming quarters, and these controls over the processes led to everything working out smoothly.

Marketing is the part that shapes how people perceive Humba Motors. From setting the correct prices and deploying the right promotions to looking at what competitors are doing in which geographies, Marketing procured data and leveraged it to create strategies with the innovation department that matched the company's mission of making sustainable transportation universally accessible.

Innovation was the final key part. It was about selecting not the highest-end features but the best customer-centric feature combinations and ensuring these selections were adaptable by our factory lines in the upcoming production cycles to ensure the earliest possible delivery of revolutionary and impactful technologies to our customers.

Humba Motors operated on a global canvas, and our commitment to accessible and eco-friendly mobility solutions guided our decisions. Hence, sustainability wasn't just a buzzword at Humba Motors—it was a cornerstone. From manufacturing processes to product innovation, we invested heavily in the greener alternative, sacrificing our short-term profits for long-term sustainability. Allegiance to the United Nations Sustainable Development Goals underscores our aspiration to create a constructive societal and environmental impact. This commitment was recognized and enforced when we won the ESG role-play prize.



Figure 1: The SDGs tackled by opting for sustainable actions and investments in the simulation.

This study closely examines how we worked together and planned for the future one quarter at a time. It uncovers how personal development, working together in different ways, realizing our potential, and always trying to improve all come together to make the company excel. We paid particular attention to each decision the business undertook to ensure it followed our primary strategy of 'Innovation First' and recorded every small decision to document how Humba Motors followed its strategic goals and held on to our beliefs.

1.2 Main Strategy: Innovation First

Embracing the ethos of “Putting Innovation First,” we materialized that the changing car industry needs significant transformations.

As we started this journey to redefine mobility, we understood quarter by quarter what we were good at and what needed change. While our legacy vehicles kept selling and making money, our innovation dashboard is where we have experimented with new ideas. We’ve learnt from what customers liked, with help from our marketing team, and then used those ideas to move forward.

Each time we improved a design, created something unique, or came up with a new idea, it all came together to shape a future where new and creative ideas are just a normal part of our work.

The two main reasons we decided to put innovation first are:

1.2.1 *Inspiration from Tesla’s Strategy:*

Like Tesla, we drew inspiration from the “Innovation First” mindset.

Tesla’s emphasis on technological disruption, relentless pursuit of efficiency, and the integration of renewable energy solutions propelled them to the forefront of the industry.

Their ability to provide customers with desired post-purchase features such as a wider charging network and better autonomous driving and intertwine those electric vehicles with rapidly evolving energy storage solutions showcases how innovation can redefine legacy industries and also attract government subsidies (McKelvey and Ljungberg 2017) by taking a page from Tesla’s playbook; we aspired to pioneer a more sustainable and innovative automotive future.

1.2.2 *Reigniting American Manufacturing:*

We couldn't overlook the cautionary tale of American manufacturing's decline. A shortsighted focus on immediate financial gains at the expense of vital long-term investments in the areas of research and development sped up the gradual erosion of this once-mighty sector (Bushee 1999)

This shift, while profitable in the short run, has drained the wellspring of innovation and research. The result? American automobile manufacturing companies that once stood as symbols of industrial might lost out to Japanese manufacturers – eventually falling behind other global competitors, devoid of the quality that defined them.

We were focused on preventing this same fate from happening to Humba Motors. By anchoring ourselves in the “Innovation First” mindset, we could stick to this path of forward-thinking and the commitment to redefining the future of automotive manufacturing.

Although we prioritized innovation, we made sure that when we needed to prioritize investments in other departments to ensure harmony of functions, we would often look for the next product introduction plans, as our inability to incorporate new features into our existing car models seamlessly gave us a brief window of opportunity to not always invest in an innovation feature right when it was made available to us.

This entire strategy paid off well, as towards the final years of our simulation, our revenue growth kept increasing substantially, and we were dominating the market share for cars in each category and had our factory at 100% utilization along with <30 days of inventory for almost all of our production models.

1.3 Review of Functions

1.3.1 Review of Innovation

Our innovation decisions were based primarily on dynamic collaboration with Marketing, fusing market and consumer data with in-house strategy. We always prioritized innovation in terms of receiving funds for investment purposes and shaping the company's ethos moving forward. The simplest way to put our innovation approach would be to increase demand through the process of designing a car, keeping in mind a particular market whilst maximizing the features that would be most attractive to that segment of customers due to individual budget constraints (Kirana and Ari Bowo 2019). This core approach led our second Micro-E car model, Pikachu, to become the best seller in all categories and outperform all competitors, specifically in the Asian markets.

Year 1 unveiled a pivotal decision – the birth of the hybrid car. This strategic move focused on reducing emissions and aligned with our mission of accessible, sustainable transportation. Additionally, inspired by the real-world case study of Tesla, the electric car manufacturing company, we prioritized investments in Connectivity and Electrification, sowing seeds for future electric car desirability, as these are the core factors that influence purchasing decisions for electric cars (Nerurkar et al. 2023) primarily they consider the upsides, Connectivity features in this case, and weigh them against the downsides of giving up on a vast network of petrol/diesel refuelling centres, and this downside can be capped by sped up Electrification.

Our innovation journey blends strategy with adaptability. In Year 1, we invested in New Battery Technology (Solid State Tech), positioning for dominance and Year 2 saw the emergence of the first Electric Sports Car, reflecting customer-centricity and value-driven design; this was the first electric car in our portfolio. The reasoning behind this decision was the high margins associated with this model (Shao, Wang, and Yang 2021) and the human behavioural pattern (exactly why Tesla and Lucid started their electric journey with high-

performance electric vehicles), where early adopters in any new ecosystem tend to be risk-takers and wealthier than the average population(Ryu 2018). These early margins eventually enabled us to open more factory lines to manufacture low-margin cars with high efficiency and have later stage evolved tech features to be present on these low-margin models, making them even more desirable.

The most impactful decisions I took in the Innovation department are as follows:

Year 2: Investment in Home Charging Stations

In Year 2, we made a strategic investment that we predicted would significantly enhance user convenience and set the stage for our future success. Recognizing the growing demand for electric vehicles and the need for seamless charging solutions, we decided to prioritize investment in Home Charging Stations, as this move would not only cater to the evolving needs of our customers but also position us as a brand that prioritized user-friendly experiences, and these charging stations would provide our customers with the convenience of charging their electric vehicles at home, eliminating the need for frequent visits to public charging stations.

Year 4: Expansion of Vehicle Portfolio

By Year 4, our innovation-first strategy had laid a solid foundation, and we were ready to respond to changing consumer demands. We expanded our vehicle portfolio to include a second Micro Electric Car and a second Electric Convertible Car (second-generation electric models). This strategic move allowed us to refresh our existing model lines, ensuring we remained aligned with evolving market preferences. These additions to our product lineup were made to attract a broader range of customers and to showcase our commitment to staying ahead of market trends and our competitors. It was a pivotal year demonstrating our agility and responsiveness to the dynamic automotive landscape.

Year 6: Acquisition for Growth

In Year 6, we made a significant move by acquiring an external company.

The rationale behind this strategic acquisition was our expectation of injecting fresh perspectives and capabilities into our innovation ecosystem. Embracing external expertise was a deliberate choice to nurture growth and gain access to new market niche fulfilment (Li 2021), just like when Ford acquired Shelby Motors.

It would allow us to expand our horizons and explore uncharted territories in the electric vehicle industry. This acquisition not only reinforced our commitment to innovation but also positioned us for sustained success in the ever-changing automotive landscape.

I embodied data-driven insights and strategic foresight to present to my team why a particular investment was necessary at a point in time and not later, and they collaboratively took these decisions after taking into additional factors such as the need for financial allocation in other departments and the time needed by Operations and HR departments to adjust these changes.

Each choice shaped an ecosystem thriving on collaboration, adaptability, and customer-centricity and hence, upon noticing our inventories being at record low despite us increasing the selling price of these vehicles for multiple consecutive quarters in the final years of the simulation, we could conclude that the decisions taken for the innovation role were the most optimized in line with all the knowledge we possessed at the time of taking those decisions.

1.3.2 Review of Marketing

At Humba Motors, marketing wasn't just a department confined to advertising and promotion. We used it to shape how people perceived us, orchestrate pricing strategies, and uncover the best ways to promote our vehicles. Our mission was grand – to 'make sustainable transportation universally accessible'. But how did we achieve this mission? Through data-driven decisions and a proactive approach, which provided us with vast amounts of data on market trends, changing consumer behaviour and geo-specific pricing data for us to utilize and improve our decision-making. We gave marketing data the highest level of priority as this data reflected the consumers, and as consumers vote with their money, as there are no good products, there are just good price points for particular products (Ekeland and Guesnerie 2010), and once you have a really good product in place for the right amount, it is far easier and less expensive to draw customers to your products (Dr. S. Arokia Punitha 2022).

So, we leveraged this democratic thinking process of our customers to shape our action plan for Innovation, Operations, and Human resources for the upcoming quarters to ensure a smooth and symbiotic decision-making process.

One of the challenges we faced was aligning our strategies with the ever-changing market landscape. So, how did we predict market trends? & How did we ensure our decisions weren't mere shots in the dark? This is where data came into play, not as a tool but as our compass (Vera-Baquero et al. 2015). Instead of reacting to market trends, our marketing strategy predicted the shifting demands by considering the quarter-over-quarter total product sales by car type and by geography, so whenever we noticed a change in preferences, we first checked if we had a similar competing vehicle in our product portfolio, if so, we would adjust the pricing and marketing spends for that product, and if we didn't have that on our portfolio, we assessed how financially potent that new vehicle line is going to be and if it would be viable

for our operations department to quickly adapt to these changes, to allow us to move into the market as fast as possible, and following our primary strategy to undercut competition, we would instantly see high sales volume for these newly introduced cars, along with quarter-on-quarter increase in demand as we previously deduced.

Whenever we launched an innovative and expensive car (such as our second version of the glide), the success wasn't just by chance; it was conceived from carefully looking at data. So, we prioritized marketing from the moment of the product launch, even before it was available in the market, to create product hype and theoretically draw customers into our showroom by having their thoughts conditioned that all those top features are synonymous with our brand (Iyer et al. 2021).

Throughout the simulation, we experimented with different marketing mixes, marketing budgets and price adjustments to our vehicles to reflect the current and estimated future demand of the current and upcoming quarters, to test how the simulation reacted and modified market demand to changes in particular areas of marketing and that behaviour is evident by our varying marketing spends across quarters (Appendix A)

Our sole pursuit was gaining and retaining market share by undercutting our competitors on prices and driving them out slowly to corner the market and have a monopolistic hold over this sector (CAWLEY and KENKEL 2010), but still, we made sure it was entwined with profitability; hence, we excelled in capturing market share while delivering value. Due to our data-informed decisions, it was a delicate display of pricing strategies that bridged dominance and value delivery.

1.3.3 Review of Operations

At Humba Motors, the operations department took centre stage as the bridge between innovation and execution. Our journey was fuelled by insights from the marketing department and formed a seamless connection between the vehicle we wanted to produce and practical implementation. Guided by the overarching mission of providing accessible and sustainable transportation, operations transformed our plans into tangible reality.

At the heart of our efforts, we were committed to excellence, sustainability, speed, and cost-effectiveness. These principles intertwined, forming the backbone of our operations. This is prominent from our early allocation of financial resources in operations to achieve our goal of reducing Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions by 90% (CHINANDER 2009) by shifting to renewable energy sources and investing in supply chain sustainability, which we attained at the earliest possible timeframe as 100% of our electricity was sourced from renewable sources worldwide, and further investments were made in green supply chain innovation leading to optimized water and waste reduction and us receiving subsidies down the line (Nunes, Bennett, and Shaw 2016).

Our careful allocation of manufacturing across different geographies optimized the production lines, ensuring they work harmoniously. With an array of car models catering to diverse consumer preferences, we had to navigate the varying demands across geographies and allocate factory lines accordingly, all while ensuring maximum factory utilization and low days of inventory across all models in production guided by data from innovation and marketing, adapting to the introduction of even newer car models and responding to shifting market trends (Cleff, Grimpe, and Rammer 2015).

Within Humba Motors' operations department, we embraced a strategic framework known as the 4Vs, encompassing four critical dimensions: Volume, Variety, Variation and Visibility.

This framework was the cornerstone of our approach to operational management (Jayawardena 2020). It allowed us to effectively navigate the complex adjustment of putting individual model factory lines in various geographies to reduce the impact of import taxes on the consumer and our bottom line while ensuring that our operations remain agile and keep factory utilization as high as possible every quarter.

One situation in which we felt that operations could have done better is by having another factory open in our starting years, but because of the heavy investment associated with opening a factory line, we decided to continue putting innovation spending on priority 1; however, this in our final quarters came back to haunt us, as we reached factory utilization of 100% (Appendix B) and every car model we had had very low days of inventory, so we experimented (Phongpetra and Johri 2011) with increasing prices, which saw no drop in demand. Thus, we could conclude that by not investing in a new factory line earlier, we lost all the revenue we could have extracted from that extra line.

Our failure in the first sales pitch was another factor that put us at a massive financial disadvantage and led us to decide not to open new factory lines in the earlier years of production. As we struggled to maximize our factory utilization in the middle years of production, the idea of opening extra factory lines wasn't our top priority.

Overall operation was the department, which was constantly active in fetching data from across multiple departments and making their decisions not individually but after everyone had decided their piece of the puzzle so that operations could fit them together perfectly.

1.4 Conclusion and Cross-functional view of the organization

In this analysis, we've embarked through the decision-making process of Humba Motors, as we committed to redefining mobility through innovation while making sustainable transportation universally accessible, and this has illuminated the symbiotic relationship between crucial business functions, highlighting the strategic approach taken to achieve collective excellence through collaboration and self-realization. At the heart of Humba Motors' success was a harmonious interplay between Operations, Marketing, Finance, HR, and Innovation, with each department contributing uniquely to our success.

Although I haven't discussed the HR and Finance departments individually in my report, they were also crucial throughout our journey. HR has hired the right people for the right positions and maintained a near-perfect employee satisfaction rate while giving them the right training to succeed in their roles and stay relevant in the upcoming quarters (Bond and McCracken 2005). And Finance because they enabled us to maintain tight margins in the earlier quarters so that we could continue investing in making better cars.

The core focus of my report and their conclusions are as follows:

Operations: Positioned as the bridge between innovation and execution, our operations department played a pivotal role in transforming visionary concepts into tangible reality. We ensured the careful allocation of resources to optimize production lines. We navigated the complexities of automotive manufacturing by embracing the 4Vs framework (Volume, Variety, Variation, and Visibility). This approach allowed us to adapt swiftly to market dynamics while maintaining operational efficiency and addressing the challenge of high inventory and low factory utilization, culminating in a significant reduction in greenhouse gas emissions through renewable energy adoption and sustainable supply chain practices.

Marketing: Beyond traditional advertising, our mission to make sustainable transportation universally accessible relied on data-driven decisions and proactive approaches. Consumer data was our compass, guiding decisions across the organization. By predicting market shifts and adjusting strategies based on changing consumer preferences, we maintained a delicate balance between market dominance and value delivery, capturing market share while ensuring profitability. Data-driven pricing strategies have not only kept us at the top of the market share but have also contributed to our economic growth over time (Schlosser and Richly 2019).

Innovation: Embracing the ethos of “Innovation First,” we’ve drawn inspiration from industry leaders like Tesla. Our innovation decisions are driven by dynamic collaboration with Marketing, combining market and consumer data with in-house strategy. Key investments in areas such as New Battery Technology, Electric Sports Cars, Connectivity, and Electrification have propelled us forward. Our innovation journey focused extensively on strategy while leaving wiggle room for future adaptability.

Furthermore, Humba Motors’ unwavering commitment to sustainability and innovation reflects our strategic vision of ensuring the economic, environmental, and social sustainability of both our car production processes and the vehicles we offer. This overarching objective has served as a compass for all our departmental decisions, resulting in remarkable achievements in sustainability and profound positive impacts on the environment and society.

Our journey towards sustainability and innovation has been characterized by a collaborative spirit, adaptability, and a relentless focus on our customers’ needs. These core principles have not only driven our innovation initiatives but have also optimized decision-making across the organization, allowing us to excel in this ever-changing automotive simulation.

Despite initially encountering challenges in the sales role-play, one compelling example of our transformation is our victory in the Client Retention and ESG (Environmental, Social, and Governance) role-play. This success is a testament to the significant improvement in cross-departmental communication and collaboration that has taken place within our organization. It highlights our ability to learn from setbacks, adapt, and achieve outstanding results.

In conclusion, our journey at Humba Motors has been marked by challenges that have propelled us towards personal growth and success. The initial hurdles of working together across functions were swiftly overcome by implementing a well-defined information-sharing plan (Safra et al. 2021). As a result, our team became a thriving example of innovation, sustainability, and effective cross-functional collaboration, ready to meet the evolving demands of the automotive industry.

2. Individual Personal Reflection

During the BIP in June 2023, I experienced running an immersive and simulated electric car business. Our team consisted of seven members, none of whom I had any prior conversational or professional exchanges with, and it was notably diverse in terms of philosophies, nationalities, backgrounds, and personalities. Although 6 out of 7 members in our group got the 'Red' personality type, they have been the most agreeable and considerate people I have ever worked with in a group setting, and this further focuses on the fact that we perceive ourselves to be vastly different than we actually are (Douglas and Sutton 2004).

When we emphasize diversity in the team, we often attribute only positive qualities to it; however, having a diverse group means differences in perspective, differences in opinion and differences in beliefs on what should be prioritized as we advance (Stanley et al. 2019), hence, what truly stood for me wasn't the diversity aspect of it which focused on our differences, but the one common feature I found in my team-members, that being "Agreement through Negotiations". This one particular feature made everything a bit more complex and lengthy in terms of decision making, but because I needed to convince my entire team of a way to move forward and then have them professionally negotiate with me why that isn't the best approach and vice versa, we could come to a conclusion which was enforced by the best decision making abilities of everyone combined, regardless of our differences. Now, that is what I call teamwork.

Thus, gradually, our team developed a strong rapport, and most interactions were intense but positive. Nevertheless, two significant incidents challenged my perspectives and forced me to adapt and learn.

The first incident occurred in the initial weeks after the first sales role-play, which was crucial in earning a substantial reward that would turn out to be a hefty advantage.

We lost it due to our team's newness to the experience and communication issues. The second incident happened much later, during the final years of the sim, when we needed to make a critical strategic decision before year 5.

These incidents are worth examining in detail as they occurred at different stages throughout the program, one at the start and one at the end, and they underscore the importance of trust, self-confidence, communication, and interactions among diverse personality types.

The following sections will provide a detailed account of these incidents to illustrate how they compelled me to challenge my thought processes and, at times, even my ego. This process allowed me to learn and evolve as an individual and a team worker.

The Business in Practice program spanned three weeks, providing ample time to explore various topics. The initial week and a half were very informative, as we focused on various essential aspects of a company's life, spanning from Sales to ESG. We also covered a wide range of subjects related to business operations and had the opportunity to engage with professionals experienced in these areas. During this phase, our team primarily focused on getting to know one another better, understanding each other's roles, how these roles are interconnected, decision-making strategy and formulating a flexible yet impactful company strategy.

This program has been the most immersive and interactive experience I have had in my academic career, and I made more personal connections with all my colleagues in the entire program in a month than I had in the last year on campus; the excitement was visible on people, and the notion of people talking about the simulation even at the end of the day after 7-8 hours of intense session further reinforces the fun learning experience everyone experienced.

2.1 Critical Incident #1

2.1.1 The Event

We encountered a significant challenge during the deliberations at the onset of the business simulation on whether to introduce a new factory line in our early stages. Our finance department expressed concerns about potential money shortages if we proceeded with the expansion. This cautionary advice was rooted in financial prudence and a desire to maintain a balanced financial position.

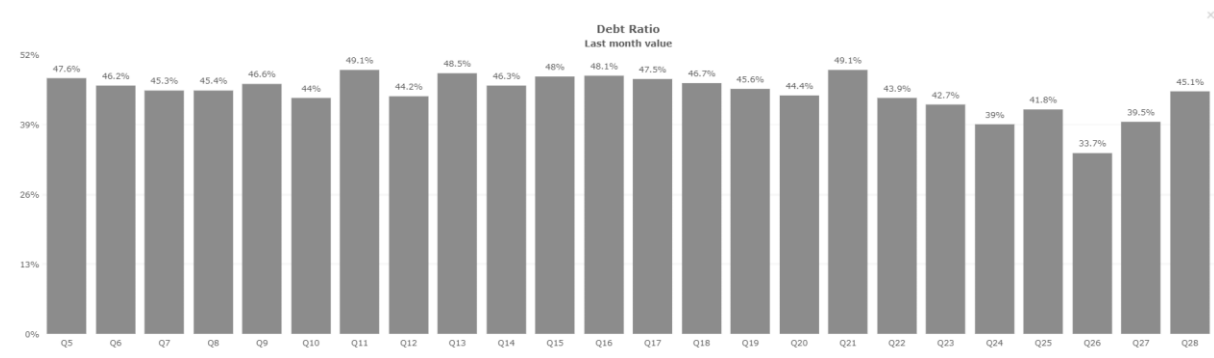


Figure 2: Equity to debt ratio (conservative compared to traditional car manufacturing companies)

At that time, our debt-to-equity ratio stood at nearly 1:1, which is not considered highly leveraged in the context of capital-intensive car manufacturing. Maintaining a relatively high debt-to-equity ratio could be strategically advantageous (Sunaryo and Lestari 2021). I argued that leveraging more debt could secure the necessary funds to finance our factory expansion. The rationale behind this was that investing early in expanding our production capacity could position us as a market leader in the near future.

I saw the factory expansion as an expense and an investment that could turn into a cash machine. The logic was that by increasing our production capabilities early on, we could cater to a growing demand for our cars, capitalize on economies of scale, and ultimately boost

profitability—this viewpoint aligned with our car company’s long-term vision, emphasizing the importance of strategic investments.

However, the finance department’s concerns prevailed in the group’s decision-making process, and we opted for a more conservative approach. Looking back, this incident reinforced the significance of balancing ambition with financial prudence in leadership roles, as over time, the Finance department evolved to become this narrow neck of an hourglass through which all information passes, and since all departments require money, the finance dept almost always has the final call to make (Engelen 2011). It highlighted the need to consider diverse perspectives within a team and make informed decisions that align with both short-term stability and long-term growth objectives.

2.1.2 My Response

Initially, I was very vocal about introducing a new factory line. My reasoning was rooted in the belief that expanding our production capacity early would give us a competitive edge (Van Mieghem and Dada 1999). I argued that it would allow us to meet potential demand surges and maintain optimal factory utilization. Also, my past experiences from participating in Innovation Hackathons taught me to be vocal about my own opinions while having a solid explanation for why I am being so vocal and yet not clinging to that idea.

However, as the team engaged in discussions and disagreements emerged, I found myself in a position where I needed to reconsider my stance, as some team members raised valid concerns about the financial implications and risk associated with such a significant investment. A spirited debate unfolded, and the group eventually rejected the proposal, opting for a more cautious approach. I complied with what the group wanted to avoid conflicts even though I firmly believed in the potential benefits of expanding the factory lines; I recognized the importance of maintaining harmony within the team and understood that pushing too hard

for my viewpoint could lead to friction and hinder effective collaboration. In essence, I chose to prioritize group cohesion over my personal preference. Furthermore, I listened to my teammates because I realized I wanted to be listened to in the future. Leadership is a two-way street, and it involves not only expressing one's ideas but also valuing the insights of others. By actively listening and respecting my team's decisions, I hoped to foster an environment where my opinions would be considered and valued.

2.1.3 Reflections and Learnings

Upon reflecting on the event and my response, I've gained valuable insights into the dynamics of group decision-making and the nuances of personal and group leadership.

Looking back, my response was driven by a desire to avoid confrontation and promote unity within the team. While this decision contributed to a harmonious group dynamic, it also led to adopting a more conservative approach, which came back to bite us in the future. It taught me that leadership entails a delicate balance between asserting one's ideas and valuing the team's collective wisdom (McKimm and Vogan 2020).

In retrospect, I wonder if a more assertive advocacy for the factory expansion, combined with a thoughtful presentation of the potential benefits and risk mitigation strategies, could have swayed the group's decision towards a more ambitious direction. This realization underscores the importance of effective communication and persuasion skills in leadership roles and shifts the blame to my shortcomings.

My experience in this critical incident has highlighted that effective leadership involves continuous self-improvement and adaptability. It's not solely about adhering to a specific leadership approach but tailoring one's style to the context and needs of the team. I'm committed to honing my leadership abilities, recognizing that each experience contributes to my growth as a leader, whether a success or a challenge.

2.2 Critical Incident #2

2.2.1 The Event

Throughout the simulation experience, one of the central challenges was the necessity to accurately forecast future demand for certain types of electric cars and then further having distinguished specifications and futures. This challenge was magnified by the automotive industry's intricate and time-consuming nature in developing new features, their integration into vehicle designs, the manufacturing process, and, ultimately, bringing these cars to the market. This uncertainty was further compounded by two primary issues that consistently surfaced during the company's journey.

Core Issue 1: The Inability to Retrofit Features to Existing Cars

A pivotal issue I confronted was the inability to seamlessly incorporate new features into existing car models. Instead, introducing innovative functionalities necessitated the lengthy journey of creating entirely new car models from the ground up. This constraint significantly hindered agility and adaptability in responding to rapidly evolving market dynamics. I found myself constrained by the requirement to develop a new car model each time I aimed to introduce cutting-edge features, resulting in time delays and the potential loss of competitive advantages.

Core Issue 2: Innovation Investment Timing

The second central issue revolved around the timing of innovation investments. In the simulation environment, I realized that the system predominantly incentivized investment in innovative features right before a new car model was planned and developed. While this approach had its merits, it also brought forth certain drawbacks. It limited motivation to invest in innovation at various product development life cycle stages. The focus primarily shifted towards ensuring that the innovation features were primed for implementation by the time I

initiated car development—this skewed innovation strategy towards periodic bursts of investment rather than continuous investment into improvement and adaptability.

Adding to the complexity of this situation was the fact that the entire simulation operated within a black box, and I had no knowledge about the precise factors and their weights programmed into the simulation, making it parallel to predicting consumer/human behaviour, which can often be unpredictable and volatile (Lim et al. 2023). This inherent uncertainty added an extra layer of complexity to my decision-making processes, forcing me to adapt and strategize in a dynamic and uncertain environment.

2.2.2 My Response

In response to this intricate challenge, I underwent a significant shift in my mindset.

Recognizing the multifaceted nature of the problem, I understood that our approach needed to evolve and realized that it required not just individual effort but the cultivation of a culture of creativity and collaboration within the team (Barczak, Lassk, and Mulki 2010).

Moreover, I learned a crucial lesson about decision-making during this experience; while my perspective and insights held validity, I understood that making these decisions in isolation would be detrimental. Our diverse team possessed a wealth of knowledge and perspectives, each offering a unique lens through which to view the challenge, and it became clear that a more inclusive approach, one that valued the collective wisdom of the team, was essential. So, I started seeking everyone's opinions, averaging them out, and even persuaded them to resort to democratic decision-making through voting. This collaborative approach not only took into consideration the strengths of my team members but also enriched the decision-making processes.

Furthermore, my journey in tackling this challenge displayed the power of leveraging marketing research data to spot evolving demand trends because I observed that whenever a

new car emerged at the bottom of the best-seller list (Total sales by product) in the market, it signalled shifting consumer preferences. Armed with this insight, I devised a strategy to replicate these successful features while adapting them to suit our target demographics' specific needs and preferences. I also tried to undercut our competition in pricing. A clever operational tactic followed this strategic move – I promptly communicated our production plans to the operations department, directing them to manufacture these cars in parallel geographies. This approach effectively nullified the impact of import taxes and ensured that our products reached consumers with maximum affordability and accessibility.

2.2.3 Reflections and Learnings

Upon reflection, this challenge was a turning point for both personal and team growth. It showed me the profound impact of a change in mindset and fostering a collaborative team culture. I learned that no one person has all the answers, and our strength lies in diverse perspectives and working together to find better solutions.

Additionally, this experience highlighted the importance of using data to make informed decisions instead of just guessing, especially in recognizing market trends and tailoring our strategies accordingly, as it makes more sense to sell what the customer wants or would want in the future, but unaware of it now (Goldberg 2011) rather than make what I want to sell.

While we as a team remained committed to our innovation-first strategy, this challenge taught me the value of flexibility as I realized and conveyed that even minor short-term changes could significantly impact our long-term success; hence, it is crucial to put similar levels of effort in making even small day-to-day decisions which are non-recurring in nature.

As a result, we as a team became more adaptable, always ready to adjust our approach when needed, all while staying true to our innovation-driven mission.

2.3 Peer Evaluation

During the simulation, we were asked to do a peer evaluation survey, which involved rating team members on five key criteria: contribution to the team, interactions with teammates, adherence to project timelines, quality expectations, and relevant knowledge, skills, and abilities. Interestingly, I observed a noteworthy trend in my self-assessment compared to how my peers evaluated me.

While my peers gave me a slightly lower score compared to what I gave myself in 3 categories, there was the exception of “Contribution to the team” and “Expecting Quality,” where peer evaluation had a higher average than what I gave myself (Appendix C).

Recognizing this divergence between self-perception and external evaluation prompted me to reflect on my strengths and weaknesses more thoroughly, and now I firmly believe that fostering self-awareness is pivotal for both personal and professional growth and understanding our actual impact, as opposed to our perceived impact, is crucial for success, whether in personal or professional matters.

This experience also reinforced the idea that self-awareness should not be underestimated.

It’s a reminder that the version of ourselves that we think we are may not always align with how others perceive us (Prabhakararao Sampathirao 2016)—a critical lesson in self-awareness and personal development.

2.4 Conclusion of Individual Reflection

In conclusion, the Business in Practice experience has been a transformative journey, allowing me to bridge the gap between theory and real-world application. It was an invaluable platform for honing my teamwork and business skills concurrently, and I not only deepened my understanding of my capabilities but also cultivated emotional intelligence to shape my ideal professional persona.

Moreover, the critical incidents I encountered during the simulation unveiled areas of improvement. They highlighted my tendency to be receptive to others' suggestions rather than taking the lead in finding optimal solutions. By implementing more precise structures to facilitate information flow, our team's performance gradually improved, and we found a more cohesive approach to tackling the simulation's complex challenges.

This reflection has been a journey of self-discovery, growth, and adaptation. It has reaffirmed the significance of fostering creativity, embracing diverse perspectives, and employing data-driven decision-making in addressing complex issues.

This experience has expanded my understanding of leadership, teamwork, and problem-solving, both individually and within a group context. It underscores the power of self-awareness and the value of collective wisdom in achieving our goals. This holistic perspective has enriched my personal growth and contributed to our team's success throughout the program, which will continue to influence my decision-making in the future.

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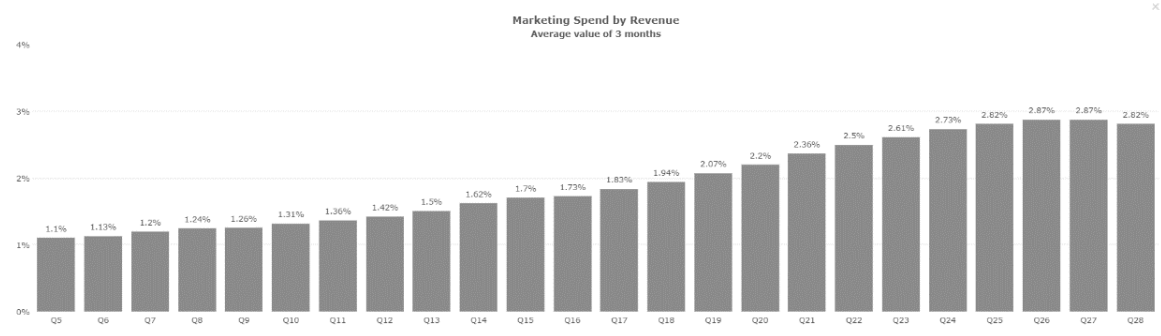
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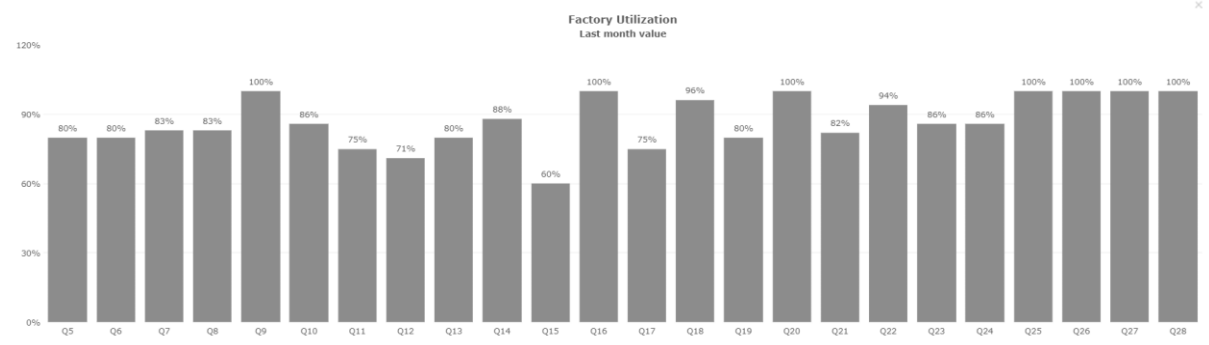
4. Appendices

Appendix A:



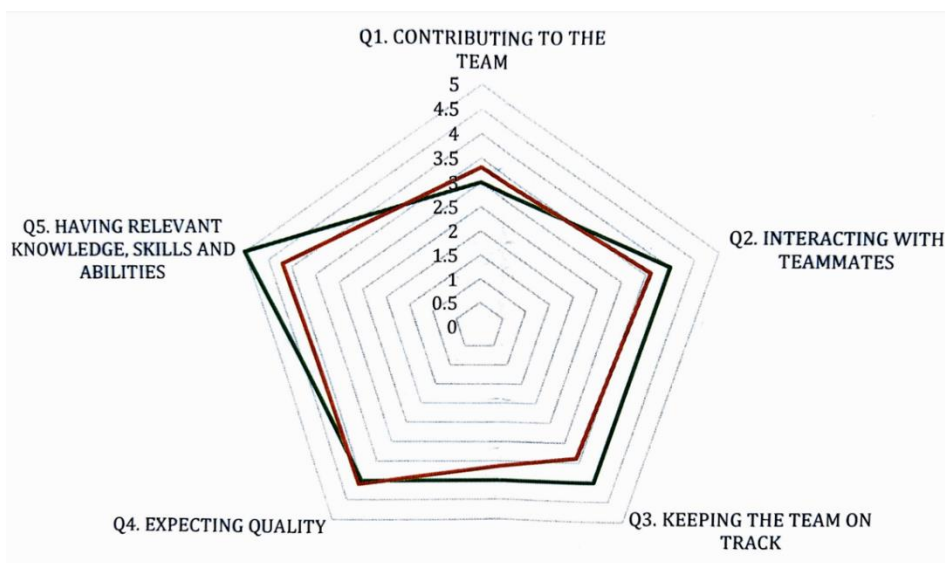
Marketing spends by revenue graph, to represent the various percentages we tested for

Appendix B:



Factory Utilization throughout the simulation divided by quarters

Appendix C:



Peer and self-evaluation results