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Bip – Personal and Business Discussion Material

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## **Abstract**

Decisions for long-term competitiveness, innovation, and sustainability in transforming diversified Grizzly into a specialized EV-manufacturer within six years, focusing on strategy, operations, and marketing. Operational expansion by increased production capacity, resource efficiency, and product life cycle optimization. Minimized China risk by implementing product-centric marketing strategy, boosting revenue and sales through economies of scale and scope. Analyzed reduction of marketing spending relative to revenue through price stability and brand building. Personal reflection based on two incidents that illustrate importance of communication, conflict resolution, and leadership in team dynamics. External feedback improved authors' performance and motivation, providing valuable insights for future professional and personal development.

## **Keywords**

Business simulation, Develop a business strategy, Automotive Industry Simulation, Sales and Revenue Growth Strategy, Leveraging Global Production Capacity, Electric Vehicle, ESG, Minimizing Marketing Cost per Revenue, Operations Decisions

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# **Part I Company Analysis**

## **A Introduction and Approach**

Initially, Grizzly, the fictitious automotive company for the simulation, was a broadly diversified automobile manufacturer without a strategic focus. Developing corporate objectives through normative management was necessary to ensure Grizzly's long-term legitimacy and viability (Rüegg-Stürm & Grand, 2019). Over the next six years, key success potentials were to be identified, necessary resources secured, and Grizzly's long-term competitiveness in the highly competitive automotive industry ensured (Barney 1991; Bieger, 2015). Grizzly must make strategic decisions that show resilience to political, cultural, and technological changes for sustained success. According to Sinek (2019), only strong and solid organizations characterized by idealism and future orientation survive in the infinite game. The company analysis aims to demonstrate the practical implementation of the strategy set out in the first section and to reflect on the decisions made in the Operations and Marketing departments during the six-year simulation and contextualize them with the developments and challenges of the automotive industry. In the final section, a critical evaluation is conducted to determine which decisions and objectives were successful and vice versa. The goal is to gain insights from Grizzly's entrepreneurial actions. The structure follows the logic that strategy can never be considered in isolation, as decisions in an organization should be made cooperatively and not viewed individually (Rüegg-Stürm & Grand, 2019).

## **B Strategy Considerations**

According to Mintzberg strategy is "a pattern in a stream of decisions or actions", it therefore encompasses not only goals but also concrete decisions and actions (Rüegg-Stürm & Grand, 2019, P. 73). Strategy shapes the prerequisites and specific initiatives necessary for future value creation (Bieger, 2015). During the trial rounds, Grizzly's strategic planning process began to set objectives and test various scenarios. The following strategy process is divided into two main questions: "Where are we?" and "Where do we want to go?" (Grünig, Kühn & Morschett, 2015). The first question includes Grizzly's mission and examines the core competencies of the automobile manufacturer and market positioning. The second question is based on industry analysis to derive specific goals from trends and challenge and explains how the decision taken fits in Grizzly's strategy. Through the assessment, Grizzly arrived at the strategy allocation, whereby decisive value factors for Marketing and Operations could be determined and implemented. This strategic approach is illustrated in Figure 1.

**2.1 Where are we?**

**a. Purpose, Core Competencies, and Motives**

Grizzly's core competencies were identified through an inside-out analysis. This was achieved by defining the fundamental purpose, value creation with perceived customer benefits, and the mission (Bieger, 2015). As an OEM, Grizzly's core competency lies in the development and production of automotive drives for passenger cars and their profitable sale. The value creation encompasses the entire performance creation process of an automotive company: from the development of sophisticated engines, body design, integration of customer needs through individual vehicle configurations, global sales, branding, consistent service, and after-sales. The focus is on customer benefits to meet mobility requirements, quality, reliability, safety, sustainability, and status, thereby achieving long-term customer satisfaction and loyalty. As an OEM, Grizzly is a primary equipment manufacturer for the entire portfolio, aiming to produce vehicles cost-effectively and increase sales figures quarterly. Growth based on economies of scale and reduced depth of production through components from suppliers is intended to maximize operating margins and profit. Revenue growth achieves Grizzly's mission to maximize profit and increase shareholder value. A success factor is the "value-add" – in addition to measuring EBIT, it invests borrowed capital in the most profitable projects to generate returns for investors (Industry Master, 2024).

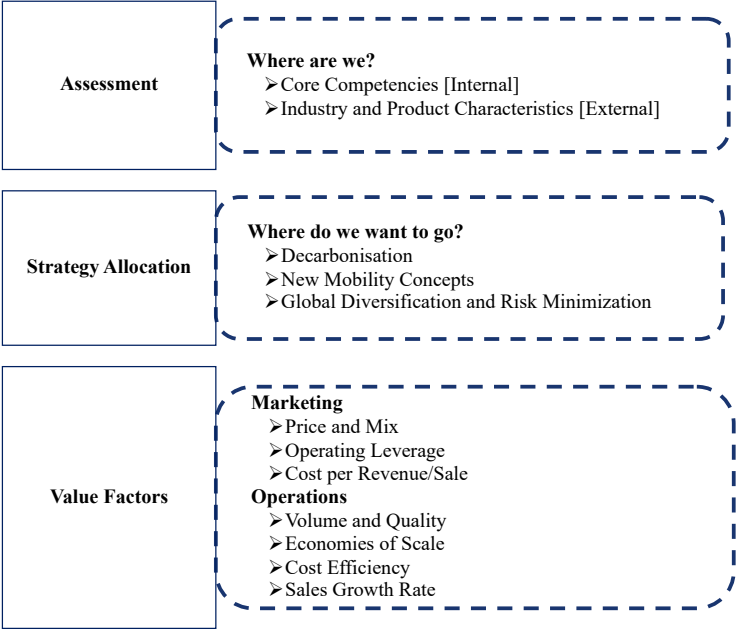


Figure 1 Holistic strategical approach (Own illustration)

**b. Competitive Dynamics in the Automotive Industry**

Through industry analysis and an outside-in perspective, competitors are identified, and Grizzly's strengths and weaknesses in the market are highlighted. This is done to determine with what mission and core competencies other automotive manufacturers meet customers'

needs, desires, expectations, and demands (Maulidna & Nidya, 2022, P. 97-100). Companies whose primary goal is to increase customer benefit have efficient competitive advantages (Kernez, 2024). According to Porter's (2008) competitive strategy matrix, there are three positioning strategies in which automotive manufacturers position themselves in the competition to achieve strategic advantage (Appendix I). According to Prof. Gomes (2024), competitive dynamics in the industry have intensified, and demand for automobiles has saturated. Traditionally, scale deals dominate, motivated by consolidation, expansion, and the acquisition of new competencies (Foucar et al., 2024). The oligopolistic tendency leads to a few large manufacturers dominating the market and uniting various car brands under one platform (Wormald & Rennick, 2019). In reality, automotive manufacturers, therefore, apply a mix of Porter's competitive strategies (Martin, 2024). The automotive market is characterized by competitive pressure, and technological and regulatory changes have a primary focus on increased sales orientation.

### **c. Interim Conclusion**

Grizzly was able to draw an interim conclusion from the analysis of core competencies and the outside-in perspective: market dynamics determine competitive behavior, and core competencies and missions within the industry differ little. Therefore, it is necessary to identify differentiated and long-term goals to position Grizzly effectively. The decisions of the next six years must fulfill customer benefits and create a sustainable competitive position. The discussion with BMW Marketing Director Carlos Martins clarified how BMW achieves its mission through long-term goals. At BMW, financial profitability is a prerequisite for a coherent and holistic action plan. CEO Oliver Zipse emphasizes, "What we announce, we implement. Consistently, steadily, and reliably. (...) To further develop mobility along the global future themes – through bold innovation leaps and responsible action" (BMW, 2024). After decades of experience in the R&D of engines and vehicles, BMW has expanded its core competence. Through investments in innovation and digitalization, the portfolio is to be electrified, making BMW a market leader in new mobility concepts such as automated driving (Martin, 2024). BMW's vehicles must evoke emotions in customers, in line with the slogan "Sheer Driving Pleasure." According to Massimo Senatore, Managing Director at BMW, this emotional component is the decisive USP of the brand, resulting in a strong market position and excellent reputation. Grizzly follows BMW's lead, focusing on customer needs and technological advancement to develop vehicles early on that transform from mere utility value to experiential value (IFRS, 2022). By setting new standards in the premium segment, BMW fulfills Porter's

product-focused differentiation strategy, which Grizzly is adopting in its product-oriented marketing strategy.

## **2.2 Where do we want to go?**

The automotive industry is profoundly changing, driven by technological, innovative, and macroeconomic developments. The following assumptions about the development of this highly volatile sector are made to reflect on which strategic decisions in the past six years have influenced Grizzly's value-add. Prof. Gomes (2024) explained how the competitive dynamics of the industry have changed due to disruptive demand trends and the high innovation speed of new competitors, leading established manufacturers to fight for market position. BCG expects that revenue and profit in the industry will rise to 8.3 trillion USD and 524 billion USD respectively by 2035, but the profitability of ICEs will decrease by more than 60% (Hagenmaier et al., 2023). Growth drivers are the segments of battery-electric vehicles, autonomous vehicles, and their components, software, and on-demand mobility (Hagenmaier, 2023).

### **a. Decarbonization**

Globally, governments are developing environmental targets to reduce the high emissions of the transport sector. Exceeding these limits results in costly penalties. The simulation fine of 60 USD per unit for exceeding emission limits was reduced from Q4's 95g/mile CO<sub>2</sub> per unit to Q6's 47.5g/mile. However, from Q12 onwards, a bonus of 20 USD is paid for each car sold with emissions below the CO<sub>2</sub> limit. Grizzly follows the example set by Galp in the Sustainability Session, focusing on decarbonizing downstream and upstream goals, and has invested approximately 1.82 billion USD in Scope 1 to 3 activities to reduce CO<sub>2</sub> emissions. Grizzly aims to internalize the external interdependencies of internal combustion engine manufacturing. Early investments in decarbonization were supported by subsidies as CO<sub>2</sub> bonus. Increased transparency in production conditions and decarbonization have boosted consumers' willingness to pay, enabling Grizzly to achieve higher sales prices in marketing. The electrification of the portfolio is a central milestone for decarbonization. Electromobility, as the future technology, is an exogenous prerequisite of the simulation. According to Simon Sinek (2019), electromobility is an unavoidable aspect of business. Grizzly had the choice of how and when to react to this. From a strategic perspective, it was decided to quickly enter the EV market and take advantage of the first-mover advantage. By entering the market early, Grizzly can establish a strong market position, achieve high brand recognition, and set market barriers, although this requires high initial investments (Mantro, 2024). From Q6 onwards, Grizzly developed its first pure EV and chose a small car. Market research indicated that small cars had the highest demand. Strategically, small cars also have the lowest consumer

requirements regarding features and motorization, which reduced Grizzly's initial investments. Grizzly aims to scale the EV segment as a platform model and upgrade the existing portfolio to EVs. By Q20, a total of 6 billion USD was invested in seven completely new EV models, fully electrifying the portfolio. This electrification has led to a significant transformation of the value chain. The production of e-drive systems increased Grizzly's workforce by 606,000 new employees. To avoid range anxiety, Grizzly established a Joint Venture charging infrastructure with an investment of 500 million. A key feature of a JV is that partners share resources and minimize risk (McKinsey, 2022). For sourcing raw materials for batteries and recycling, Grizzly invested 200 million in an in-house recycling system in Q14 instead of entering a JV. The strategic decision behind this was to keep the knowledge advantage gained through rapid EV scaling from being shared with competitors. Customer range requirements were challenging. After the small car, Grizzly decided to always build the most powerful cars equipped with the highest battery capacities. This not only builds trust with customers but also makes Grizzly less dependent on third-party charging infrastructure. Additionally, Grizzly invested early in R&D to develop the best technologies and gain a competitive advantage. From Q6 onwards, investments were made in sodium-ion batteries (SIB). Production capacities should be expanded early to manufacture EVs efficiently and cost-effectively. Grizzly chose China and Europe as locations, particularly due to the rise of China as an e-car manufacturer (White et al., 2024).

### **b. New Mobility Concepts**

New mobility concepts are growth drivers that require technological and legal adjustments from Grizzly. Communication and connectivity between vehicles, illustrated in figure 2, as well as with infrastructure demand expensive and complex software solutions, pushing the boundaries of the industry (Hagenmaier et al., 2023). However, these mobility concepts reach new target groups, increasing individual passenger mileage in the future (Bain, 2019). To transform Grizzly from an automobile manufacturer to an additional software developer, the workforce was continuously promoted, trained, and prepared for this transformation. In total, Grizzly invested 2.2 billion USD in R&D: starting from Q6, 500 million was invested in AI implementation, 400 million in Q13 in cybersecurity, and 500 million in Q18 in e-drive software. The vertical integration of technologies was crucial for Grizzly to immediately utilize capacities and resources within the company rather than paying for expensive external entities. Modern marketing and product presentations were also considered early on, with over 115 million invested in initiatives such as an augmented reality showroom.

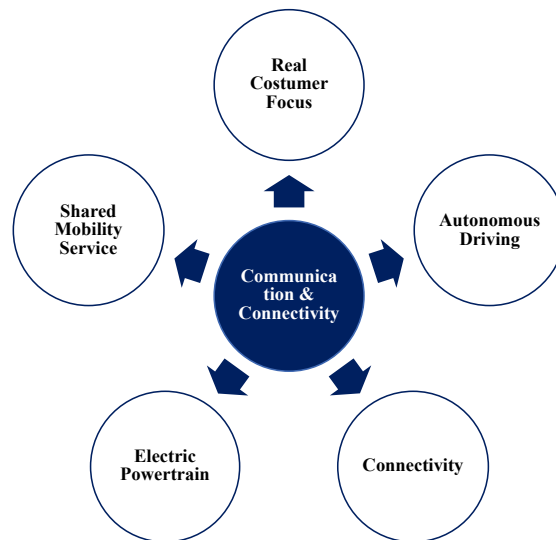


Figure 2 Communication and Connectivity for New Mobility Trends (Own illustration, based on Bain, 2024)

### c. Global Diversification and Risk Minimization

Macroeconomic and political factors had a significant impact on Grizzly's strategic objectives. Starting from Q6, the first trade dispute between the USA and China led to high tariffs and trade barriers. Additionally, the effects of the supply chain crisis caused resource shortages and more expensive production processes, leading to increased consumer prices and a decreased demand for automobiles. A global recession from Q24 also negatively affected willingness to pay, consumer behavior, and profitability. The VW Group sold around 41% to China in 2019. BMW's share of business in China was 29% in 2019 and grew to 39% in 2020 (IEA, 2019; Schönfeld, 2019). In terms of unit sales, China is therefore the most important market for all German manufacturers, although highly developed Chinese multi-brand suppliers are becoming increasingly dominant there and are squeezing out market share (IFW & Kiel Institute, 2023). Grizzly decided to diversify its production locations and reduce dependency on the Chinese market without abandoning it. This specific "China Strategy" is analyzed in the Operations section. To mitigate the effects of more expensive resources and semiconductor shortages, Grizzly improved the longevity and quality of its vehicles and optimized the product lifecycle. Classic vehicle designs were deliberately chosen for their higher acceptance among consumers. Trade tariffs were consistently monitored and implemented through regionally oriented pricing strategies based on the sales market.

### d. Interim Conclusion

In a SWOT analysis, the assumptions and objectives are summarized (Appendix II). The detailed implementation of the mentioned goals follows in the Operations and Marketing chapters, where explicit difficulties and impacts on value-add are described. Grizzly's strategic

approach follows the SMART framework, where goals must be specific, measurable, aggressive, realistic, and time-bound (Radtke, 2022, P. 69).

## **C Operations Department**

The following section discusses various operational decisions for years 1 to 4, including a diversification strategy to minimize the risk of dependence on China. Followed by the optimized operational decisions for years 5 to 6 and then a critical analysis of all year's decisions. A detailed overview of the portfolio and Grizzly's production history can be found in Appendix V.

### **3.1 Adjustments and Developments in Years 1 – 4**

In the beginning, combustion engines made up 33% of Grizzly's portfolio, while EVs accounted for 50%, intending to build more production capacity for EVs, increase its production volume, and substitute ICEs and PHEVs in the portfolio. China's production accounted for 32% of total sales and generated nearly 4.1 billion USD in revenue. The Chinese-produced small electric car, City E, was the best-selling car with 162,000 units. Together with the EV 4x4 E and Sport E, these accounted for 59% of sales and 56% of revenue in the first year. Challenging was the production planning for the hybrid 135H, produced in Europe, which faced sales difficulties, accounting for 21% of sales and 15% of revenue. Despite reduced production volume and marketing measures, it was not possible to adjust production to the lower demand, resulting in high inventory levels, a low utilization rate (UR) at the European plant, weak margins, high write-offs, and consequently poor ROA and ROIC. Grizzly should have written off the 135H in the first year to use available resources to produce a fully electric sedan in Q9. Unfortunately, production was not discontinued until Q14, binding significant capital in the 135H inventory for a long time and consistently lowering operational margins.

Since the beginning, Grizzly's production portfolio has been characterized by clearly differentiated product categories and models tailored to customer needs. In the USA, Grizzly was the sole manufacturer of the pickup truck and produces the high-end Lux Car, both accounted for 8% of sales and 16% of revenue. Despite higher material and labor costs, Grizzly made a few changes to the quarterly production volume of 12,000 pickups and 9,000 Lux Cars at the US plant throughout the product life cycle until Q18. Both model's sales in Asia and Europe accounted for two-thirds of sales. Grizzly feared European penalties due to exceeding low emission values and high Chinese tariffs, potentially leading to significant profit losses and margin pressure on both models (ANE, 2024). As a result, operations responded with flexible production adjustments. However, sales and revenue did not decline until the fourth year,

establishing Lux and Pickup as an important cash pool firmly placed in the US plant. A questionable decision was the new production of the Turbo-H Sports Car from Q8, which replaced the all-electric Sport E, produced in the USA with favorable conditions of approximately 53-60k selling price and quarterly production volumes of 13,500 units. However, Grizzly's technological development was not yet sufficient, as all EVs so far had low levels in battery capacity, range, and self-driving capabilities. Based on market research, Grizzly moved Sport E production to the new China plant and produced the Turbo H in the USA to meet the demand for PHEVs. However, tariffs on EVs doubled the US selling price to USD 109,000, and revenue fell by 226 million.

A milestone for the electrification of the portfolio was the start of production of the small EV Mini Baby E at the beginning of the second year. As the production of the 135H was scaled back and the 4x4 E was in constant demand, previous technological investments in sodium-ion batteries and AI implementation could be utilized in Europe. The production volume of the Mini Baby E in Europe increased from 30k to 36k units. The new mass-market car was responsible for 20% of the 489k sales and 14% of the 20.5 billion revenues in the entire second year. To protect itself from the dangers of an opaque Chinese trade and location policy, Grizzly implemented a riskier strategy aiming to isolate the Chinese production site and consider China as a standalone cash center. This was due to announced high tariffs, increasing trade conflicts between the USA and China, supply chain shocks that significantly increased production costs, declining demand for automobiles, and China's state promotion of e-mobility since Q4, making access to resources and know-how cheaper and increasing Chinese consumers' trust in electric cars (White et al., 2024). In a strategy paper, the VDA (2022) warns that automotive companies have become increasingly dependent on the Chinese market and suppliers. This over-dependence entails political pressure such as market access restrictions and limited competition law in China as well as the risk of market volatility and interrupted supply chains (Ulrich, 2020). The production capacities of the Sport E and City E were increased in China, with City E establishing itself against the benchmark in the competitive small car segment. The low-cost production in China and lower equipment requirements generated high margins. Grizzly's operations team already recognized in the second year that electric cars could be produced cheaper and faster in China. Also, battery range requirements were less relevant in Chinese megacities compared to the increased demands to reduce air pollution (Wang et al., 2017). Overall, this China diversification decision proved successful in the second year: the European sales of the Mini Baby E doubled from Q9 to Q11 after the market launch, and 60% of the Baby

City E was sold in China, generating 1.9 billion in revenue. The price-sales ratio of the two small EVs was optimized in both markets, allowing Grizzly to isolate China and its associated risks while simultaneously generating significant profits in China. The new production technologies led to the write-off of the 135H, which was moved to the USA for final sale in Q13. The 135H was replaced by the electric sedan Corporate E, which started sales in Europe with a production volume of 12.5k in Q12. The EBIT margin for the second year fell to 15.45% due to this production write-off but is expected to rise in the third year, ceteris paribus, with constant labor costs, lower material costs in China, and less inventory on the balance sheet. In the US production, sales and revenues of the Turbo H increased in the second year, and the production UR of the other model was optimized to avoid high inventory levels. Through production choices, Grizzly achieved a UR of 89% in Q12, which was consistently maintained until Q17. The UR describes what percentage of capacity is used in each period and is therefore an indicator of the efficiency of production, which determines the profitability of the company through the proportion of potential capacity (Jacobs & Chase, 2013, P.110-114)

To reduce direct emissions from company-owned and controlled resources, Grizzly invested early in Production Scope 1, with water and waste projects financed through Green Bonds. The CO2 share of production fell by 74% due to investments in the second year, a significant reduction from 113k/t to 30.8k/t in just four quarters (Figure 3). Additionally, the high production of EVs led to a reduction in CO2 fleet emissions from 73.9 g/mile to 47.3 g/mile. Overall, the share of ICE sales in the second year was only 13%, but they accounted for 22% of the 20.1 billion revenues. BMW has reduced emissions per vehicle produced by 70 percent since 2006 and plans to reduce Scope 1 emissions by a further 80 percent between 2019 and 2030 (BMW, 2024).

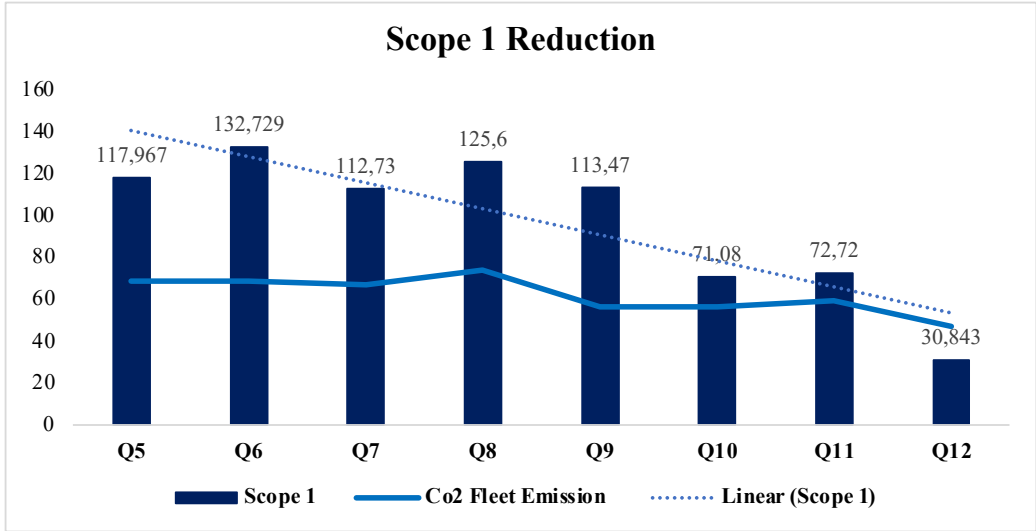


Figure 3 Scope 1 and Fleet Emission Year 2 (Own illustration)

Despite good operational metrics, the Value-Add fell from 1.36 to 1, although Grizzly performed significantly better than the benchmark and rose from 10th to 7th place in the live comparison ranking. This was due to the aging fleet of production, a significant portion of vehicles reaching the maturity level of their product life cycle, and unprofitably tied-up capital in high inventory levels. Moreover, Grizzly offered a larger product range than its competitors and continued to produce ICEs. Unlike Competitor C, whose score has continuously risen since Q7. In retrospect, Grizzly could have aggressively gained market share with a higher production volume at the launch of Corporate E. More efficient production utilization and the manufacturing of the Corporate E led Grizzly to achieve its highest NOP of 718 million USD in Q13 for the following eight quarters. The new Mini model, which was to replace the aging City E starting in Q15, was produced in China to cost-effectively utilize the more efficient battery and necessary raw materials, and to respond to the high demand for small cars. The isolated consideration of China was gradually dissolved in the third year, with Grizzly's China production accounting for 37% of sales but only 28% of revenue in the third year. The City E was produced in Europe from Q16. This decision turned out to be a mistake, it would have been better to take the model out of production earlier. Inventory levels rose to 40k with a continuing production volume of 36k, causing Grizzly to exceed the critical threshold of 101 minimum-day inventory and unnecessarily tie up capital. The share of small cars in sales was over 50% in the third year, with Grizzly now selling 79% electric cars, generating 16.4 billion in revenue (Figure 4). Since Grizzly had developed an early solution for the recycling of SIB at the beginning of the third year, this gave the company a competitive advantage. Renault is aware of the difficulties of recycling SIBs and is therefore already planning this step in the manufacturing process (Guillaume, 2024).

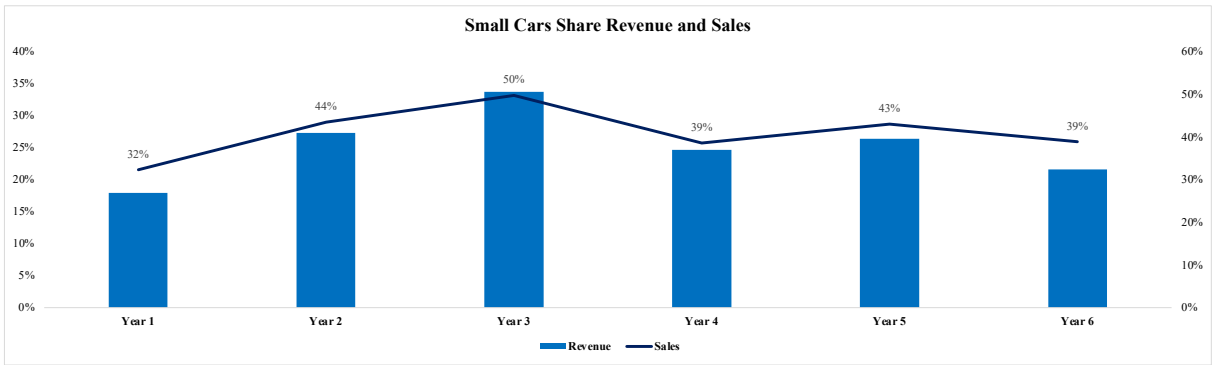


Figure 4 Sales and Revenue Share of Small Cars (Own illustration)

The score slightly increased to 1.1 in the third year. Unfortunately, no long-term trend was evident for the fourth and fifth years. Mistakes could have been avoided in the third year by expanding production for an electric mobility-oriented factory in the USA. An investment of

800 million would have been very sensible and would have reduced personnel costs by 1.5% due to organizational efficiency. The planned cars, which were to replace the outdated Pick-Up and Lux car with EVs, could have been built in high production volumes from the beginning, thus gaining massive market share. Although only half as many cars were produced in the USA as in China, these accounted for 29% of revenue in the third year. However, since they were mostly ICEs and the Sport H, Grizzly Operations had to choose between sustainability and revenue optimization at the end of the third year: in the fourth year, the share of ICEs, which had fallen to 18%, was to be drastically reduced through the introduction of new models.

### **3.2 Decisions and their Impact on Years 4 – 6**

From year 4 onwards, three new cars were produced: the Shiny E replaced the Lux in Q19, and the UPM-E replaced the Pickup in Q20, both in US production. Thus, from the fourth year onwards, no combustion engines were built. Only Sport H was not discontinued due to good sales figures, favorable production in Europe, and low emissions. Starting in Q20, the new electric sports car McQueen E was produced at the US plant, which had the highest equipment requirements for production. With its introduction, revenues increased accordingly and exceeded 6.3 billion USD in Q20. The complete electrification of the portfolio led to the highest sustainability level of 77.4% in Operations being achieved in Q20. High investments in the supply chain led to significant improvements in Scope 3. CO<sub>2</sub> emissions from upstream and downstream activities fell by 62%, from 491k/t to 183.4k/t. Additionally, CO<sub>2</sub> emissions from energy use were most significantly reduced in the fourth year, with Scope 2 decreasing by 51%. CSR reached 100% from Q17 onwards. The high share of EVs led to an infrastructure problem, requiring production adjustments due to declining demand. Moving the Baby E from the USA to Europe was a mistake, leading to lower UR and declining revenues. Production capacities in the USA did not match the significantly increased demand for the Shiny E. At the same time, too many units of the Mini E and Corporate E were produced, resulting in very high minimum-day inventories of 124 and 134, respectively. It is the critical KPI that describes the necessary safety stock required to meet production needs without interruption (Jacobs & Chase, 2013, P. 513). The EBIT margin was the worst in the fourth year at 12.2%, with a return on net assets of 11% (Figure 5). Due to product launches and simultaneous write-offs, Grizzly made detailed errors explaining why the score had not improved despite high sustainability.

In the fifth year, Grizzly achieved the second-highest sales growth of 21%, reaching quarterly sales of over 7 billion from Q21. Establishing fixed production sites achieved positive economies of scale, reducing production costs. The EBIT margin rose to 16.4%. From Q23, the

Sport H was discontinued, bringing fleet emissions to 0g. In Europe, in addition to the 4x4 E, a new SUV, Jesus-E, was produced, optimizing the UR. From Q23 onwards, Grizzly offered a diversified young portfolio of nine cars, with the Mini Baby E being the oldest car at nine quarters since its relaunch.

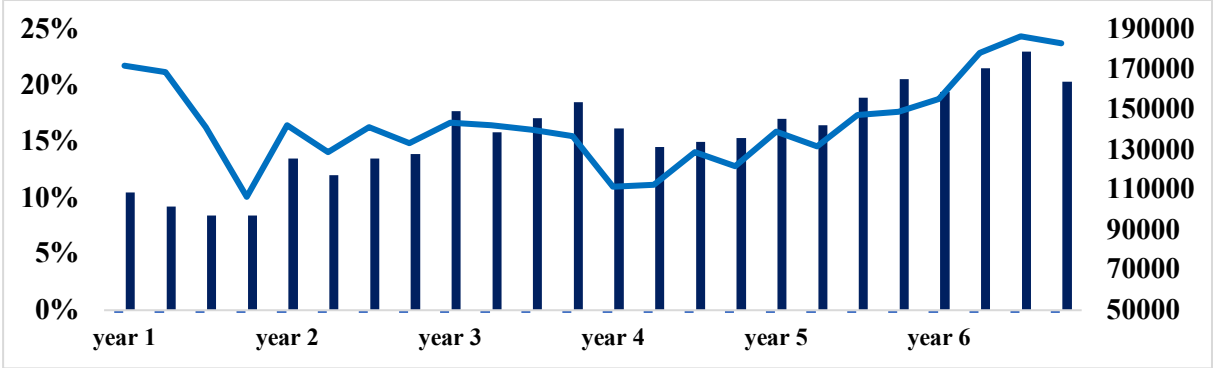


Figure 5 Sales & EBIT-Margin Growth (Own illustration)

From the fifth year onwards, the good production routine ensured that inventory levels were lower despite increased production volumes, and production was optimally aligned with the increased demand. The share of small cars was reduced to 43% (262k sales), accounting for 26% of the 7.7 billion revenues. Investment in the energy management system in Q21 further reduced Scope 2 CO2 emissions by 70% to 9.8k/t. Consequently, the score rose to 1.09k, and Grizzly significantly extended its lead over the benchmark. Since no new cars, productions, or write-offs were planned until the end of the simulation, Operations focused on optimally placing production capacities to maximize revenue growth. Normally, production planning for the next few years would have had to start in the fifth year, but this was irrelevant due to the imminent end of the simulation. In the sixth year, sales and revenues continued to rise. In Q26, a record of 179k sales with 9.1 billion in revenue was achieved, resulting in the highest net operating profit of 1.5 billion and an EBIT margin of 24.4%, requiring the highest production volumes.

**3.3 Effectiveness of the Decisions Made and Possible Improvements**

The successful profitability increases between years 2 and 4 was driven by the “China strategy”. Grizzly was able to utilize production sites and markets in isolation. Through the Sport H and Mini Baby E in Europe, dependency on the China-produced City E and Sport E was minimized. At the same time, the Chinese market share was expanded, and demand and knowledge advantages were utilized without becoming dependent. As tariffs were reduced, the supply chain diversified, and Grizzly's small car share decreased, China became attractive for further production capacities (White et al., 2024). It wasn't always possible to adjust production volume to demand, especially the high inventory levels of the 135H reduced margins, caused a poor

utilization rate, and tied up capital on the balance sheet. The score fell in the first year, dropping the EBIT margin, which averaged 17.35%, from 21% to 8%. Poor site selection, such as for the Baby E, and overproduction, like with the Mini E and Corporate E, led to inefficient production, lowering the score in the first four years. Toyota's production system demonstrates how lean management can improve efficiencies. Coordinating activities, avoiding waste, integrating pull factors, and proactive demand management are success factors Grizzly still needs to optimize (Liker, 2006). To avoid production bottlenecks, minimum inventory levels should not be exceeded, as happened in the fourth year. Despite learning effects that reduced production costs, the large production breadth led to a worse score in the second year. The electrification of the portfolio and investments in Scope 1 to 3 significantly reduced CO2 emissions, achieving the intended sustainability goals in operations. The replacement of ICEs with Shiny E, UMP-E, and McQueen E led to the highest sustainability level and net operating profits of 1.5 billion USD with a 24.5% EBIT margin in Q26. An early investment in another US plant focused on electromobility would have been sensible to gain market share and benefit from lower labor costs and economies of scale. The score improved by 165% to 3.12k in the last year, establishing Grizzly as the most successful company, significantly ahead of competitors.

## **D Marketing Department**

The following analysis examines the implementation of Grizzly's corporate strategy through marketing. Grizzly aimed to create a coherent, holistic action plan focusing on sales policy to increase sales and revenue. Marketing is needed to ensure sufficient sales with adequately high average prices that at least cover costs and ideally include high-profit margins for future growth.

### **4.1 Brand Building through Product Focus**

Grizzly's goal was to establish itself as a high-quality EV manufacturer within six years. Brands are among the most valuable assets of a company (Brady, 2020). A strong brand significantly influences stakeholder behavior, impacting economic targets (Bieger, 2015). Companies with strong brands find it easier to retain customers (Vestil, 2023). This was crucial for Grizzly, as many new competitors with innovative EVs and new mobility concepts have emerged, displacing potential customers of established car brands, and increasing customer acquisition costs in the industry. For example, the relatively young company BYD became the EV market leader through Chinese subsidies in battery R&D and the Chinese state strategy for aggressive pricing and predatory pricing against European competitors (White et al., 2024). Grizzly aimed to follow BMW's successful example of retaining customers and encouraging repeat purchases by transitioning from ICE to upgraded EV models (Emarsys, 2023). Grizzly's brand building focused on product design, aligning the cars with customer needs to create customer benefits.

As a platform manufacturer, Grizzly could cost-effectively integrate all EV performance components into various vehicle types. This allowed the company to clearly differentiate the cars in its portfolio and position them according to customers' specific needs. Marketing emphasized that each new vehicle model from Grizzly should stand out distinctly from existing products in the portfolio. Ideally, there was only one product type per vehicle class, such as the 4x4 E or the Corporate-E sedan. Grizzly waited until technological developments allowed high-demand vehicles, like luxury cars and pickups, to be replaced by EV models Shiny E and UPM-E in Q19 and Q20. Due to the relevance of product features, introducing new models was easier, as the vehicle types were known for their unique characteristics. When the first all-electric sedan, Corporate E, was introduced in Q12, sales increased by 104% in Q13 without increased marketing efforts. The sales of the pickup successor UPM-E in Q20 increased by 101% in Q21, doubling UPM-E revenue from Q20 to Q22 by 770 million without marketing expenses. By focusing on product features, marketing avoided costly promotional campaigns, allowing the vehicles to speak for themselves. Grizzly had lower marketing expenses compared to competitors. For the pickup, 158 million was invested in marketing, averaging 1030 USD per vehicle, accounting for 2% of revenue. The successor UPM had average marketing costs of 1840 USD per vehicle, making it one of Grizzly's highest marketing expenses at 2.5% of revenue. For this strategy to succeed, it was important to understand market trends and competitors' positions to select appropriate target markets. For example, the Sport H was developed based on market research, as customers in Europe and the USA initially preferred PHEVs over EVs.

In the competitive small car segment, the product-focused strategy was challenging, making it difficult to differentiate small cars from each other. Here, the focus was on sales-driven marketing measures driven by the "China Strategy" (see Operations). Grizzly had the highest average marketing expenses relative to revenue for small cars: 3.75% for City E, 2.71% for Baby E, and 3.22% for Mini Baby E, with Mini Baby E having the highest costs per vehicle sold at 979 USD (Figure 6). Overall, Grizzly spent 1.1 billion on small car marketing and generated 39.924 billion in revenue, equating to marketing costs of nearly 2.75%.

	<b>City E</b>	<b>Baby E</b>	<b>Mini Baby E</b>
Average sell-price (USD)	23.847	29.154	29.211
Total Marketing expenditures (Mio)	225	479	402
Average Marketing expenditures per car sold (USD)	641	796	979
Average Marketing expenditures to revenue (%)	3,75%	2,71%	3,22%

Figure 6 Marketing Expenditures for Small Cars (Own illustration)

### 4.2 Sales Policy through Price Focus

Prices are crucial for realizing high profits, as well as increasing revenue and volume growth. High prices dampen sales growth but increase profitability, while low prices boost sales volume and market share but reduce profitability (Simon Kucher, 2024). Grizzly's pricing policy aims to reflect product quality in higher prices while also responding to dynamic sales changes. Grizzly utilizes Porter's market strategy options (Appendix I), where companies choose between performance attributes or price competition. Grizzly's superior performance offering allows for higher prices based on perceived product advantages. According to the price-quality relationship in behavioral theory, customers tend to perceive higher quality in higher-priced products, correlating with their experiences with other products (Tomczak, Reinecke & Kuss, 2014, P. 208). Grizzly leverages this anchoring effect to implement higher prices and adjust them by categories and sustainability levels. While the pickup's average price ranged between 49-65k, Grizzly significantly increased the price of its successor, UPM-E, to 91-105k to capture willingness to pay for electromobility. Grizzly managed to maintain stable prices despite simulation dynamics (Figure 7). Market penetration and sales growth sometimes required quarterly price reductions to match demand, with single-digit percentage changes, except for exogenous tariffs doubling prices. This prevented significant price fluctuations that could unsettle customers (Tomczak, Reinecke & Kuss, 2014).

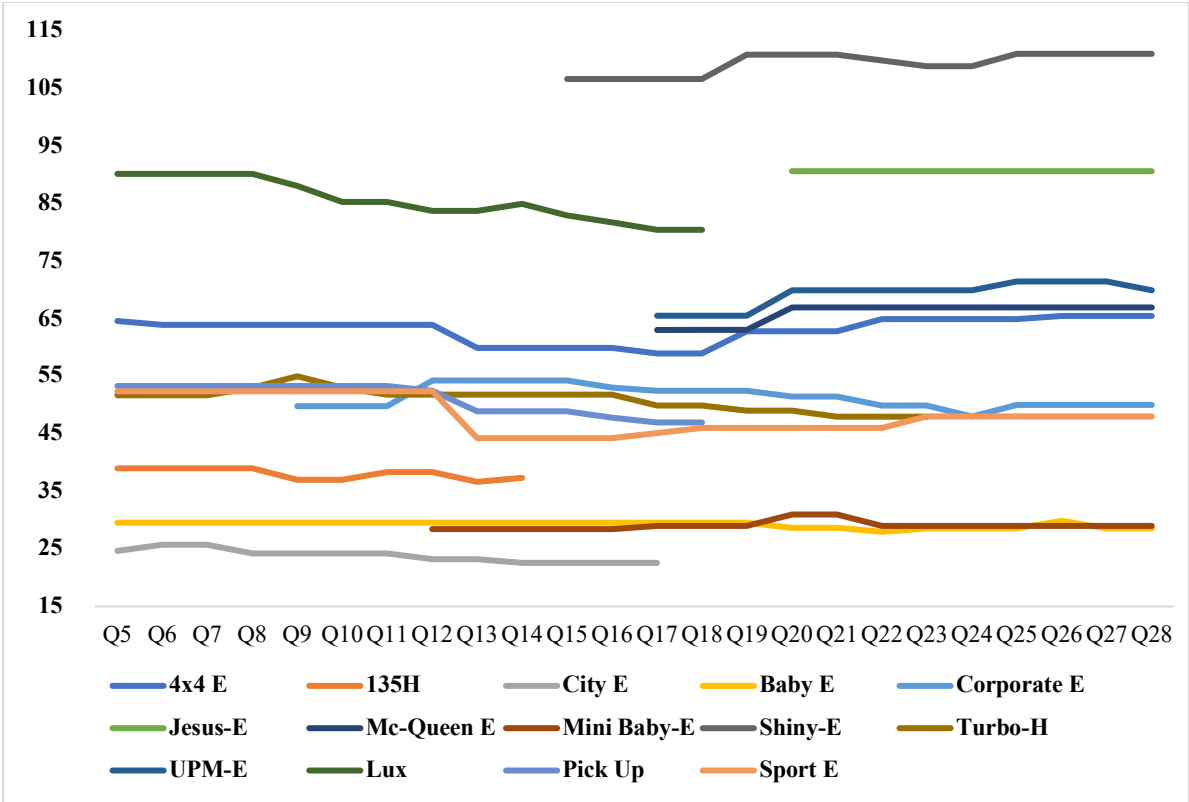


Figure 7 Sales Development (Own illustration)

The "China Strategy" required price adjustments between the China-produced City E and the similar European Baby E and later Mini Baby E to prevent arbitrage and isolate the market, despite higher production costs in Europe. The volume-driven pricing strategy was highly profitable due to increased production volume. Instead of expensive investments in new vehicles, Grizzly optimized the product lifecycle of its portfolio. There are five different phases, from introduction to decline, describing a product's development and requiring different marketing tools (Kopp, 2024). In the maturity phase, the growth rate declines amid intense competition, profit peaks are exceeded, and price management is necessary for further growth (Bieger, 2015, P. 47). Grizzly lowered prices for each phase of the product lifecycle. Upon exceeding the maturity level, a model relaunch was conducted, costing nearly 1.5 billion for seven models. The 4x4 was relaunched in Q11 after 3.75 years and in Q26, each costing 218 million. The Corporate E introduced in Q12 was updated with modern technologies for 160 million after 3 years of life in Q24. Grizzly's portfolio fleet age was significantly younger, averaging 2.6 years and 10.3 quarters old, compared to competitors.

#### **4.3 Reflection Applied Marketing Mix**

Through the product focus, Grizzly won a customer in Q9 through a sales pitch that generated 1.92 billion USD in revenue over four quarters. The high-quality image presented by marketing led to a perceived low purchase risk, emphasizing a successful product focus. Constant prices were supplemented by marketing campaigns such as TV promotions, online marketing, and customer promotions. Unfortunately, the sales promotion before model depreciation did not achieve the desired effect. The 135H limousine and hybrid cars relied too long on demand trends. However, differentiation between sales markets was successful: market shares increased in all regions, and dependency on China was reduced. Optimizing the product lifecycle and model relaunch avoided high investments, positively impacting FCF and NOP. Negative effects from the announced recession in Q24 were mitigated by price reductions and promotional campaigns. Overall, Grizzly's marketing was highly successful. With the lowest marketing expenses relative to revenue, the team won first place in this category.

#### **E Integrative Overall Overview**

The strategic decisions led to significant growth, high profitability, and a strong market position for Grizzly. Over six years, the value creation process was transformed from a diversified, traditionally oriented OEM into a highly modern EV manufacturer. This shift pushed industry boundaries and resulted in the hiring of over 606,000 new specialized workers. This enabled Grizzly to achieve sustainable profitability and continuous improvements, leading to a successful 165% score increase in the simulation (Figure 8).

The following is a brief overview of the key decisions. Grizzly's value creation could only be achieved through collaborative efforts. Initially, normative management and Sinek's concept of the "infinite game" were used to ensure Grizzly's long-term competitiveness. The goal was to identify critical success factors early on and invest in the necessary resources. Given the highly competitive and consolidated industry, the industry analysis showed that all automakers possess similar core competencies. Only through innovation and early steps in the EV sector could Grizzly secure long-term market share. Various market studies revealed that this technology proved to be highly profitable, explaining the strong revenue growth. Grizzly opted for a product-oriented marketing strategy, inspired by BMW's focus on long-term goals, innovation, and emotional customer experiences. Grizzly's strength lies in developing and producing automotive drives, with a clear focus on value creation, customer satisfaction, and loyalty through quality, reliability, and sustainability.

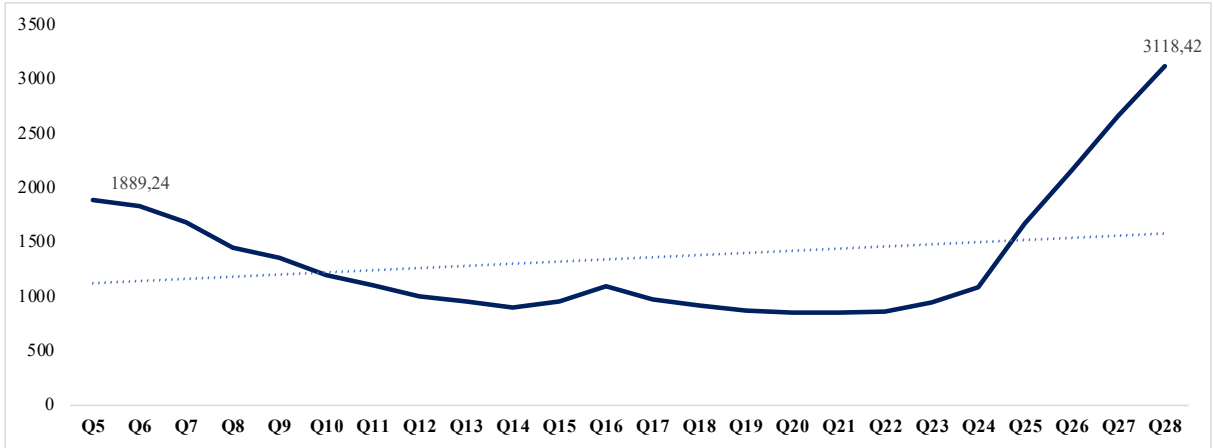


Figure 8 Value Added increase by 165% (Own illustration)

In Operations, the primary goal of decarbonization was implemented with a focus on electrifying the portfolio. Grizzly transitioned from internal combustion engines to electric vehicles, significantly reducing CO2 emissions and investing in Scope-1, Scope-2, and Scope-3 activities, driven by R&D and sustainability initiatives. Strategically, initial investments were made in small EVs, upgrading the existing portfolio from IC and PHEV to EV to minimize development costs and leverage synergies from established customer relationships. Operational efficiency was achieved through improved utilization rates, lower inventory levels, and an optimized product lifecycle. Overall, production capacities in Europe and China were expanded. All models were replaced with EVs, and seven new models were introduced within six years. The dynamic market challenges arising from globalization were addressed through a China strategy, where China was isolated as a production hub, and the advantages of lower costs and high demand were utilized. Later, as the market situation stabilized, Grizzly achieved a diversified market position. The brand image of a high-quality EV manufacturer was built

through a product-differentiated, customer-oriented marketing strategy. The goal of Marketing was to position the vehicles as unique selling points tailored to customer needs while minimizing marketing expenses relative to revenue. The priority was to implement a volume-driven pricing strategy to increase revenue growth and quarterly sales. A well-chosen price-quality relationship enabled stable prices, allowing dynamic market conditions such as tariffs and environmental regulations to be adjusted without significant fluctuations. The marketing mix allowed the product lifecycle of the portfolio to be maximized and development costs reduced. Challenges arose from the coordinated division of labor, leading to operational missteps such as overproduction, poor utilization rates, and suboptimal site selection. The focus on EVs and R&D led to temporary declines in EBIT margins and costly write-offs due to high investments. However, overall, the reliable cooperation between departments was successfully institutionalized, enabling a dependable spatial and temporal distribution of value creation. Grizzly emerged as a leading company in the automotive industry, with a well-executed strategy that balanced innovation, sustainability, and profitability.

## **Part II Personal Reflection**

In the following section, I will reflect on my personal experiences during the intensive three-week team project using two critical incidents. I selected these incidents because they best represent my personality and experience in group work and provided valuable insights into my behavior. The goal of this critical reflection is to analyze how I can positively influence my behavior, based on the simulation experience, in personal and professional contexts in the future. Each critical incident and my reaction to it will be briefly described, theoretically and practically analyzed, followed by a reflection, and learning for the future.

### **A Critical Incident Nr. 1**

#### **1.1 Description and Reaction**

My teammate and I disagreed about continuing the production of the 135H limousine at the end of the first year. The team wanted to keep producing the vehicle at the same volume and location and wait to see what happens. However, I argued that we should immediately discontinue the vehicle and use the available resources for new vehicle productions to aggressively gain market share and stay ahead of competitors. I pointed out that we had tried various scenarios for the model in the early stages, and the score had significantly dropped each time, putting Grizzly in an even more difficult position. Despite my arguments, my teammate did not want to take this drastic step and preferred to wait. Although I disagreed with him, the other team members sided with him. We had previously decided that in case of disagreements, the better arguments should

count and be evaluated impartially. Despite my articulated concerns, I followed the team's decision to avoid conflict and further discussion.

The result was poor: the value score promptly fell and continued to worsen each quarter, with the problems with the vehicle increasing, as I had anticipated. I was frustrated that my warning had not been heeded. At the end of the second year, a similar decision arose: to continue an expensive model and block the production site instead of writing it off. This time I argued again but felt unheard and unappreciated. This led to my passive behavior, communicating less with the team, and not actively participating in discussions to avoid conflict. Although I still had many thoughts on the strategy, I contributed little. My passivity was noticed by a team member who openly confronted me, accusing me of not contributing much to the teamwork. To avoid conflict, I did not respond and remained reserved. The team member was right; I should have used the moment to address the conflict. Instead, my frustration took over. During the test rounds in preparation for the simulation, I noticed the passivity and poor communication of the other team members negatively, and I condemned this behavior. Now I did the same to avoid conflicts, and I was ashamed because I could not contribute to the success. I had always strongly criticized this behavior before, so it was hypocritical of me to do it now.

## **1.2 Analysis**

Successful team communication is crucial for success. Effective communication can prevent conflict potential early and lead to decisions with broad acceptance (Robbins & Judge, 2018, P. 167). However, engaged members are necessary, ready to communicate their skills and resources clearly to achieve common goals (Katzenbach & Smith, 2015). Unfortunately, my passivity and poor communication, intended to prevent conflict, actually triggered a conflict in the team. As mentioned in the article "The Secrets of Great Teamwork" (Haas & Mortensen, 2016), my closed communication significantly impaired active and supportive collaboration, preventing the team from making productive decisions. From the perspective of other team members, my passivity suggested lower motivation for team success, unintentionally maneuvering myself into an outsider role and triggering an escalation spiral. I was unaware that lower communication could be interpreted by others as lower participation (Rajkumar, 2010). The Self-Determination Theory by Edward Deci and Richard Ryan explains how motivation manifests in communication (Figure 9). According to SDT, the three basic needs of autonomy, competence, and social relatedness must be met for team members to have intrinsic motivation to communicate (Ryan & Deci, 2017, P. 80). If these needs are not met, motivation decreases. The background is that team members do not feel secure enough to express their opinions due to low autonomy or assume their contributions are insignificant or of low competence (O'Hara,

2017). These factors led to my isolation and resulted in lower participation. Indeed, the perceived low autonomy prevented me from communicating openly, even though I believed my competencies could contribute to success and I was very interested in the simulation and had many thoughts on the strategy and decisions to be made. The peer evaluation shows that my self- and peer assessment in the area of "Relevant Knowledge, Skills and Abilities" are consistently high (Appendix III). In contrast, I rated myself below average in the category "Contributing to the Team". This signals that I did not feel free in my autonomy to express my opinions and ideas. This significantly affected my motivation to communicate and led to a low peer rating in the category "Contributing to the Team". It is important to understand why I behaved passively. The avoidance of a conflict, as described above, triggered my passive behavior. By trying to avoid confrontation, I chose passivity over communication. Patrick Lencioni (2002, P. 188-190) describes the "Fear of Conflict" as the second of five dysfunctions of a team. Conflict is avoided out of fear of disagreements, leading to different perspectives not being addressed (Lencioni, 2019). The lack of conflict readiness is based on the first dysfunction, "Absence of Trust", where team members are afraid to speak openly with each other. Both negatively affect decision-making as such teams do not seek better solutions. Without conflict readiness, no potential can arise (Reynolds, 2022). There are constructive conflicts aimed at finding a solution beneficial for all involved (Ebong, 2017). However, according to Morton Deutsch's conflict theory, there are also destructive conflicts based on injuries, leading to deteriorated relationships and team performance (Deutsch, Coleman & Marcus, 2006, P. 29). Since I did not know this distinction, I generally avoided conflicts and felt restricted in my autonomy. My team members then perceived this as lower participation. Additionally, my professional and academic career had previously been shaped by hierarchical decisions, where clear instructions were followed, and there was little conflict potential and few individual leeway's for differing opinions.

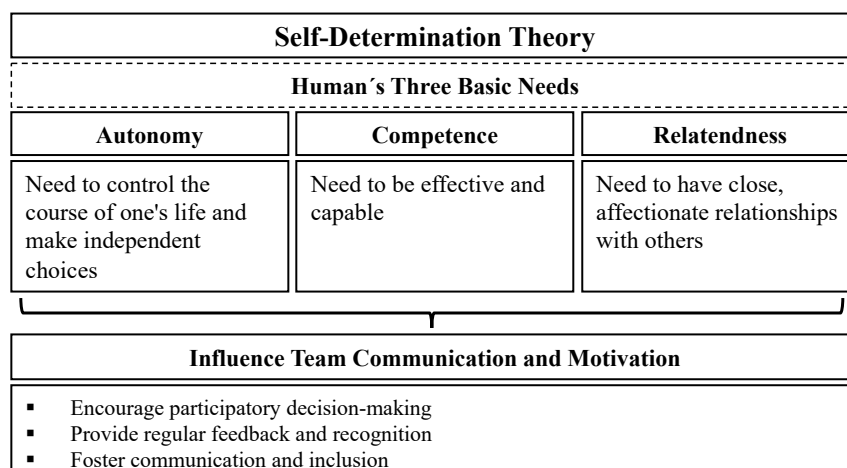


Figure 9 Self-Determination Theory (Own illustration, based on Ackerman, 2018)

Unfortunately, I made the second crucial mistake when I rejected my teammate's offer for a conversation. He openly asked me why I was contributing less to success and communicating with the team and if there was a problem on my part. In hindsight, this offer would have been the perfect moment to face the conflict and communicate my standpoint. In the incident described above, I felt hurt because my teammates did not consider my viewpoint. Therefore, I remained silent and chose not to speak. I regret rejecting this offer for a conversation. The dialogue could have immediately served as a positive turning point. As William Isaacs (2008, P. 263) describes, dialogue provides an opportunity to move away from defending one's viewpoints, achieve mutual understanding, and establish a basis for future thinking and action. Dialogue consists of collaboration and mutual understanding, solving, and resolving problems in the best way possible (Isaacs, 2008). This could have defused the impending escalation spiral and strengthened my trust in the team, as my concerns would have been accepted and considered. It was only later, when I reflected on my colleague's remark about my passivity and further analyzed the peer feedback, that it led to critical self-reflection. Eventually, this led to avoiding the continuation of my negative behavior in the third year, during which I communicated more clearly with the team and recognized constructive conflicts through increased conflict readiness. This assumes that I noticed my own emotions and their effects and thus analyzed my strengths and weaknesses and then regulated them through self-management to take responsibility for my actions, as Fernandes (2024, P. 21) explained in the Lead-Yourself academic session. This adaptability is called emotional intelligence: "Non-cognitive skills, abilities, and competencies that help a person successfully cope with the demands and stresses of the environment" (Mayer, Salovey & Caruso, 1999). My changed behavior was quickly positively perceived by the team and reflected in a significant improvement in the score, indicating better team decision-making.

### **1.3 Learnings and Reflection**

I realized that my avoidance of conflicts was the cause of my subsequent passivity, which could have been avoided if I had expressed my opinion more clearly and constructively and faced the conflict immediately. My goal for the future is to communicate more openly from the beginning and face conflicts. This increases my intrinsic motivation for communication, perceived by others as positive participation and engagement. Only in this way can a team make effective decisions. If I had communicated my feelings about the situation and the perceived misjudgments from my perspective from the beginning, the escalation spiral could have been avoided. The team could have understood what I was feeling and going through and possibly

helped me navigate those emotions. Additionally, I plan to respond to offers for conversations in the future, even if I initially perceive them as potentially negative conflicts.

## **B Critical incident Nr. 2**

### **2.1 Description and Reaction**

Despite high motivation, my team and I could not achieve significant progress by the end of the third year. We visibly stagnated and could not achieve success. Over the years, I increasingly relied on the other team members, believing they knew what they were doing and that their decisions considered the "Big Picture." Unfortunately, this led to more discussions about minor decisions while neglecting overall goal achievement. Consequently, our value-add decreased, causing uncertainty and concern for me. I also felt that the lack of success negatively impacted my motivation.

A turning point was the BIP-Clinic with Bryan Rimmer after the third year. Bryan asked us critical questions about our previous decisions and questioned whether we were following a clear vision. The discussion revealed that we focused more on individual KPIs than on understanding the factors leading to long-term success. Bryan, drawing on his experience, managed to show us that we were fundamentally on the right track and what adjustments were needed to achieve measurable success without demotivating us. This coaching session generated enthusiasm within me and the team. My uncertainty about potential misjudgments disappeared, and I focused more on the future. The entire team, filled with motivation, convened immediately after the session, and spent the whole afternoon developing a stringent plan for the final three years. I felt that everyone now understood their roles and departments better, and Bryan's external perspective helped us pursue a common vision and support each other in keeping the "Big Picture" in mind during all decisions. The enthusiasm and new drive also measurably reflected in our success, as our value-add significantly increased by the end of the fourth year.

### **2.2 Analysis**

The lack of success in the first three years led to increasing uncertainty and negatively impacted my motivation. I increasingly relied on other team members to pursue overarching goals with their decisions, assuming they would keep long-term success in mind. Unfortunately, this led to a more isolated view, where I mainly focused on quarterly KPI changes. I observed the same phenomenon in the others, explaining the lack of success. We lacked bold steps and real change for further development. McKinsey describes this behavior, where team members work mechanically rather than dynamically, as detrimental because it leads to failure in the long term (Dewar, Hirt & Keller, 2019). Mechanical behavior involves merely executing management

processes, driven mainly by performance metrics. It lacks dynamic, intangible social elements that enable free, cognitively unbiased decision-making necessary for development (Dewar, Hirt & Keller, 2019). I felt that both I and the team settled for mediocrity due to this mechanical behavior. Mediocrity in a team manifests through complacency and conformity, which, according to Rigby (2017), is one of the fundamental errors in team development. For me, it was due to a lack of perspective and perceived responsibility. Lencioni's model (2002, P. 188-190) describes the "fear of accountability" as the fourth dysfunction of a team. According to Lencioni, this can be explained by the isolated view of team members who focus on their specialties, working alone, and seeing issues in the established system as given (Michelmann, 2008). Consequently, I noticed my dependence on others increased. Tasks and decisions were delegated to other team members, creating an "excuse" for the lack of success instead of taking responsibility myself. To end this lack of responsibility and perspective, the conversation with Bryan during the BIP-Coaching was very valuable. Bryan's external role allowed him to ask critical questions with an objective and unbiased perspective, addressing blind spots and weaknesses (Ancona & Bresman, 2022). His perspective made it clear that we had no long-term vision for Grizzly. Bryan encouraged me to leave my isolated "Operations Department" perspective and act more dynamically. He did the same for the others. He explained the critical factors and measures to be implemented, significantly boosting my motivation. Previously, for example, I had never exceeded the minimum inventory, leading to quarterly mechanical reactions without enabling long-term production development in Operations. Bryan's advice to focus less on this KPI and consider where, when, and with which products we could develop economies of scale gave me a completely new perspective I had never considered before.

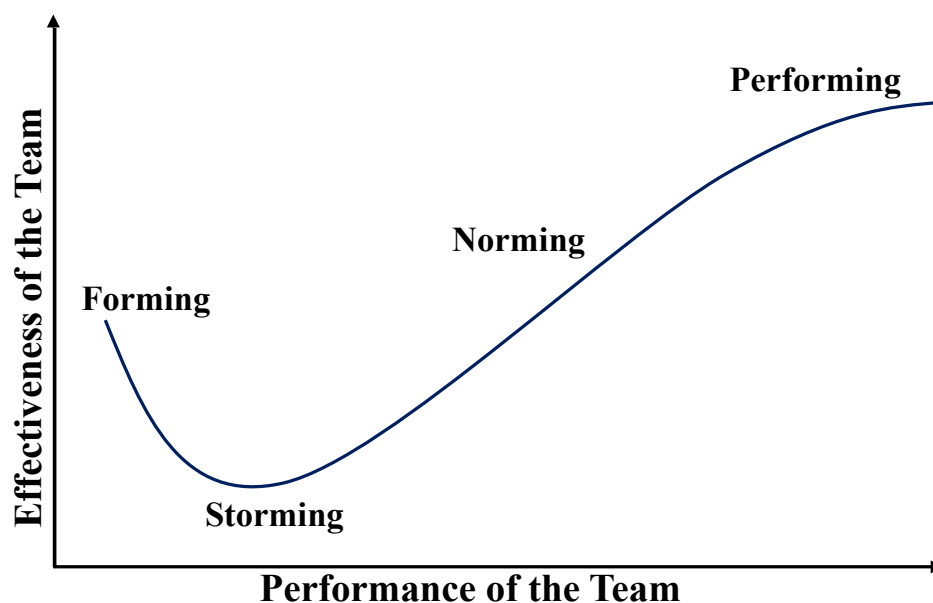


Figure 10 Tuckman's Team & Group Development Model (Own illustration, based on Batheories, 2022)

Before the conversation with Bryan, the team was in the Storming phase (Figure 10), characterized by conflicts, uncertainty, and little progress, according to Tuckman's model (Myers & Anderson, 2008, P. 94-97). Bryan helped motivate me to try new ideas and explained our individual responsibilities in shaping our goals and strategies. This allowed my team to work constructively together. Immediately after the conversation, we developed a detailed plan on where and when to produce which car and what crucial investments were needed to improve our competitive position. I noticed this was the meeting where I had the highest attention and was highly motivated. This plan led to measurable progress: our value-add consistently increased after the fourth year. This organizing phase is called Norming in Tuckman's model (Myers & Anderson, 2008, P. 94-97). The external consultation was the catalyst that made us focus on a better vision. Norming leads to increased team performance and motivation (Liddle, 2017, P. 42-43). I could feel this in my increased engagement and noticed that the others were more productive in thinking about the "Big Picture" and discussing critical decisions necessary to achieve the vision. An MIT study explains the rise in motivation after external consultation by stating that members come immediately together to discuss what they have learned and what it means for the task, team design, and team culture (Ancona & Bresman, 2022). The external conversation was important for me because I have a personality that requires a leadership figure to motivate and support me in reaching my full potential. This aligns with the psychometric model "Insight Discovery," developed by The Insights Group to understand and describe personality types (The Insights Group, 2009). I have traits associated with the color blue (Appendix IV), which means I tend towards introverted thinking. These traits manifest in my precise, analytical, and cautious approach (The Insights Group, 2009). This explains why my behavior was strongly influenced by a leadership role like Bryan's. With the color blue, I have the personality type that seeks a leadership figure to provide structure and clear instructions. Such a leader helps me by offering logical explanations and guiding my decision-making process. In the absence of a leadership role, it is important that the team environment fosters collaboration through clear structures and established decision-making processes (Robbins & Judge, 2018, p. 217). This ensures that there are structures in place for debates and discussions, even without leadership figures.

### **2.3 Learnings and Reflection**

I realized how Bryan's external help boosted our team performance. I learned that without a clear leadership role, I find it difficult to take on higher goals beyond my task horizon independently. A lack of leadership negatively impacts my motivation and leads to uncertain decisions with less success. Therefore, it is important for me to actively seek advice and include

different perspectives in my actions. Bryan encouraged me to adopt a more dynamic perspective and made clear the importance of individual responsibilities in shaping goals and strategies for the team. This led to higher performance, which further motivated me. Due to my personality type, I have learned that leadership roles positively influence and motivate me. This insight also helps me work on my flexibility and build the necessary structures to develop myself, even without leadership roles. This is particularly important in the context of the increasing trend toward fluid teams, where work and project groups frequently change. As a result, there are few established structures, since they are continually adjusted according to the competencies needed to achieve goals. (Aghina et al., 2021)

### **C Conclusion**

In today's dynamic and competitive business world, high-performance teams are becoming increasingly important (Keller, 2017). These teams are characterized by consistently meeting set expectations, effectively setting goals, clearly communicating decisions, managing conflicts, and solving problems (Blanke & Rieger, 2022). The simulation accurately reflected realistic configurations and demands placed on a high-performance team. The two critical incidents highlighted several of the team dysfunctions, described by Lencioni (2002, P. 188-190), which explains why I had difficulty becoming part of a high-performance team. However, the analyzed critical incidents also coherently illustrate that without mutual trust, there can be no conducive conflict readiness, preventing team members from growing beyond their individual responsibilities. I learned that open communication is necessary for trust and that I should not be afraid of conflicts. Conflicts can be beneficial, but it is also necessary that I am willing to engage in conflicts. By responding to my team members more quickly and actively clearly communicating my standpoint, I can participate more actively in the team and promote the success of the team. I noticed that passivity, caused by little autonomy and low trust in others, leads to a negative escalation spiral, making it increasingly difficult to be perceived as a positive team member by others. I also learned that external advice is important, especially when work processes become too routine, mechanical, and team members increasingly rely on the work of others. An external perspective can then strongly influence the dynamics and productivity of a team and strengthen individual responsibility for the team's development and success. By considering these aspects in the future, I can better meet the requirements of a high-performance team and be perceived as a valued team member. BiP has greatly helped me understand the current demands on team members and workers, enabling me to better position my skills for the requirements in the competitive job market of the future.

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## **List of Abbreviations**

CO2	Carbon Dioxide
CSR	Corporate Social Responsibility
EBIT	Earnings Before Interest and Taxes
EV	Electric Vehicle
FCF	Free Cash Flow
ICE	Internal Combustion Engines, Gasoline cars, Combustion engines
KPI	Key Performance Indicator
NOA	Net Operating Assets
NOP	Net Operating Profit
PEV	Plug-in Electric Vehicle
PHEV	Plug-in Hybrid Electric Vehicle
ROA	Return on Assets
ROIC	Return on Invested Capital
SIB	Sodium-Ion Battery
UR	Utilization Rate
OEM	Original Equipment Manufacturer
PC	Passenger Car

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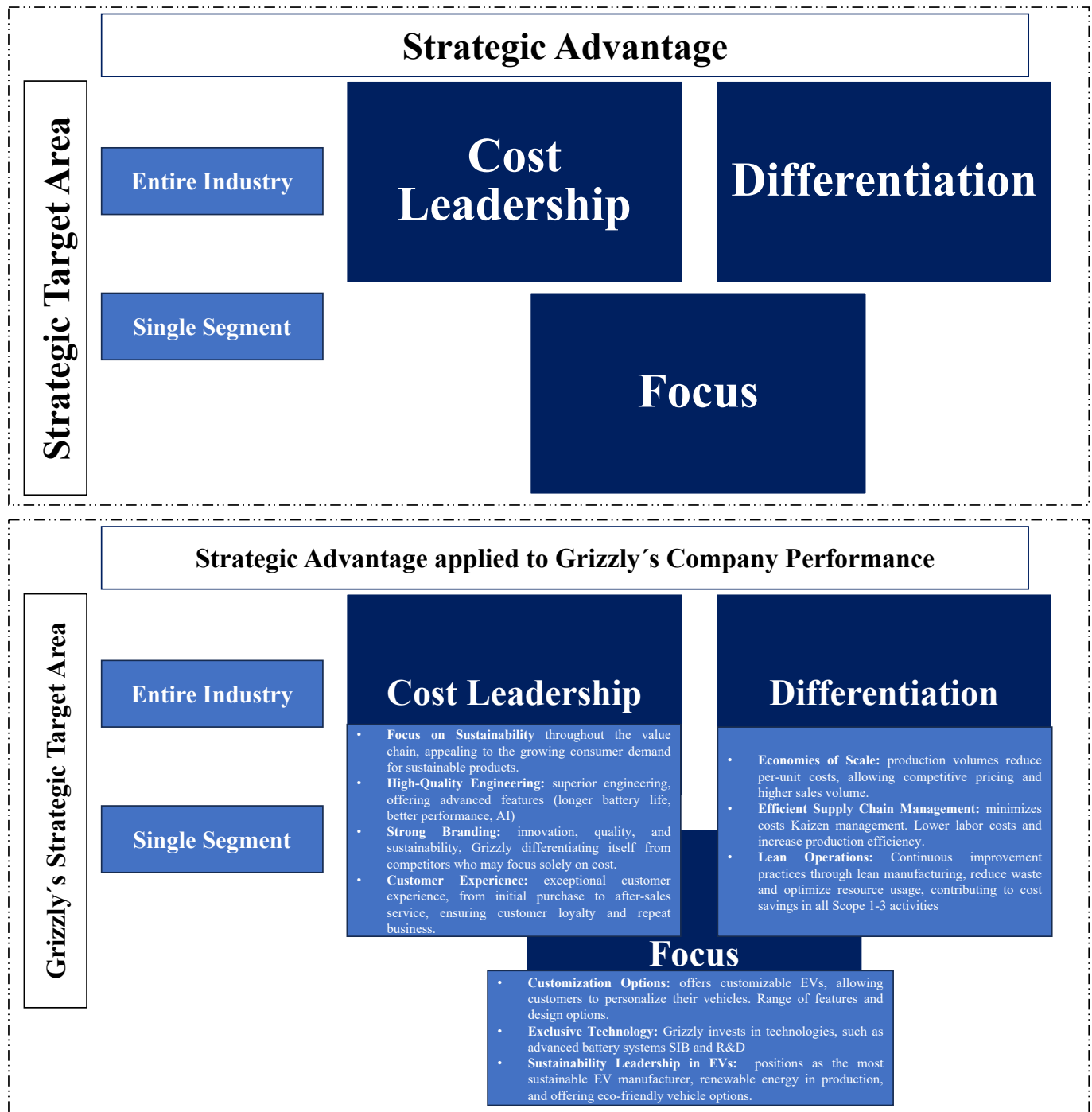
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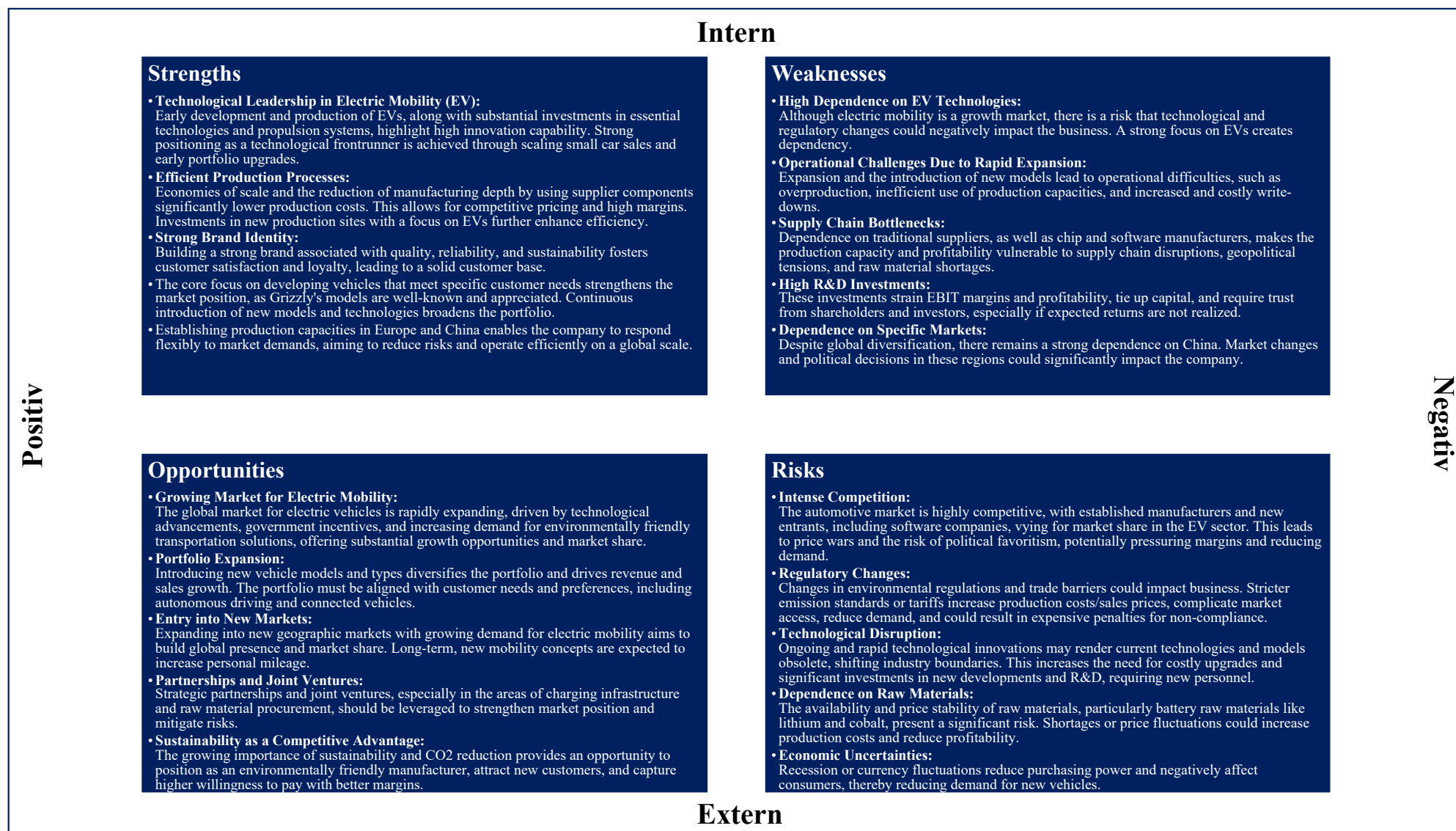
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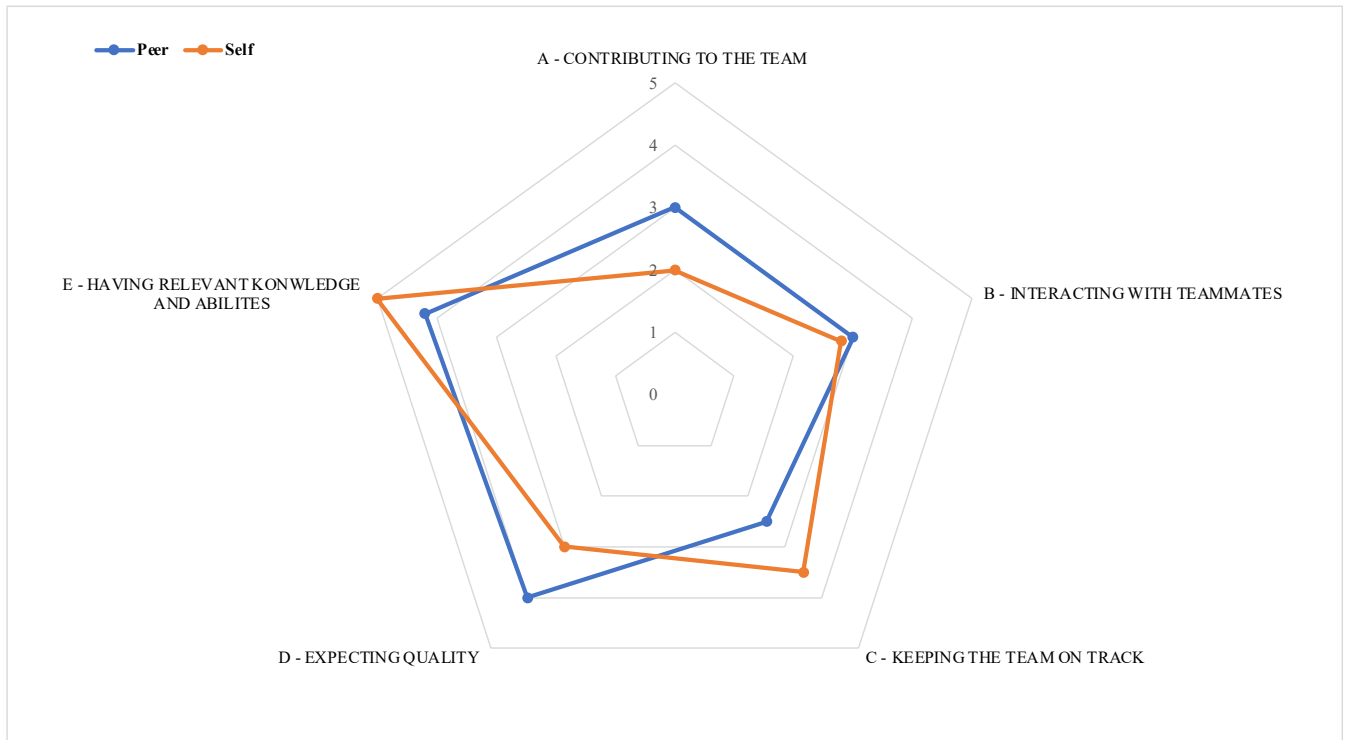
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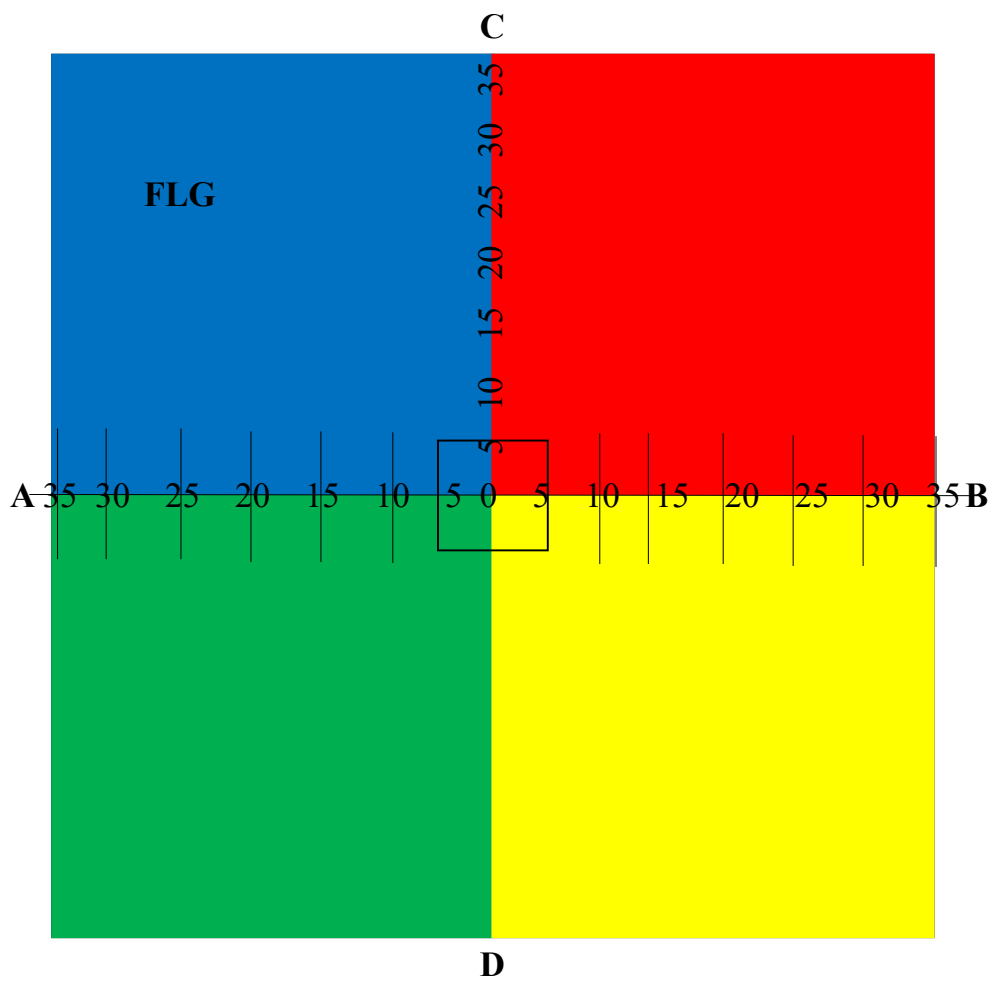
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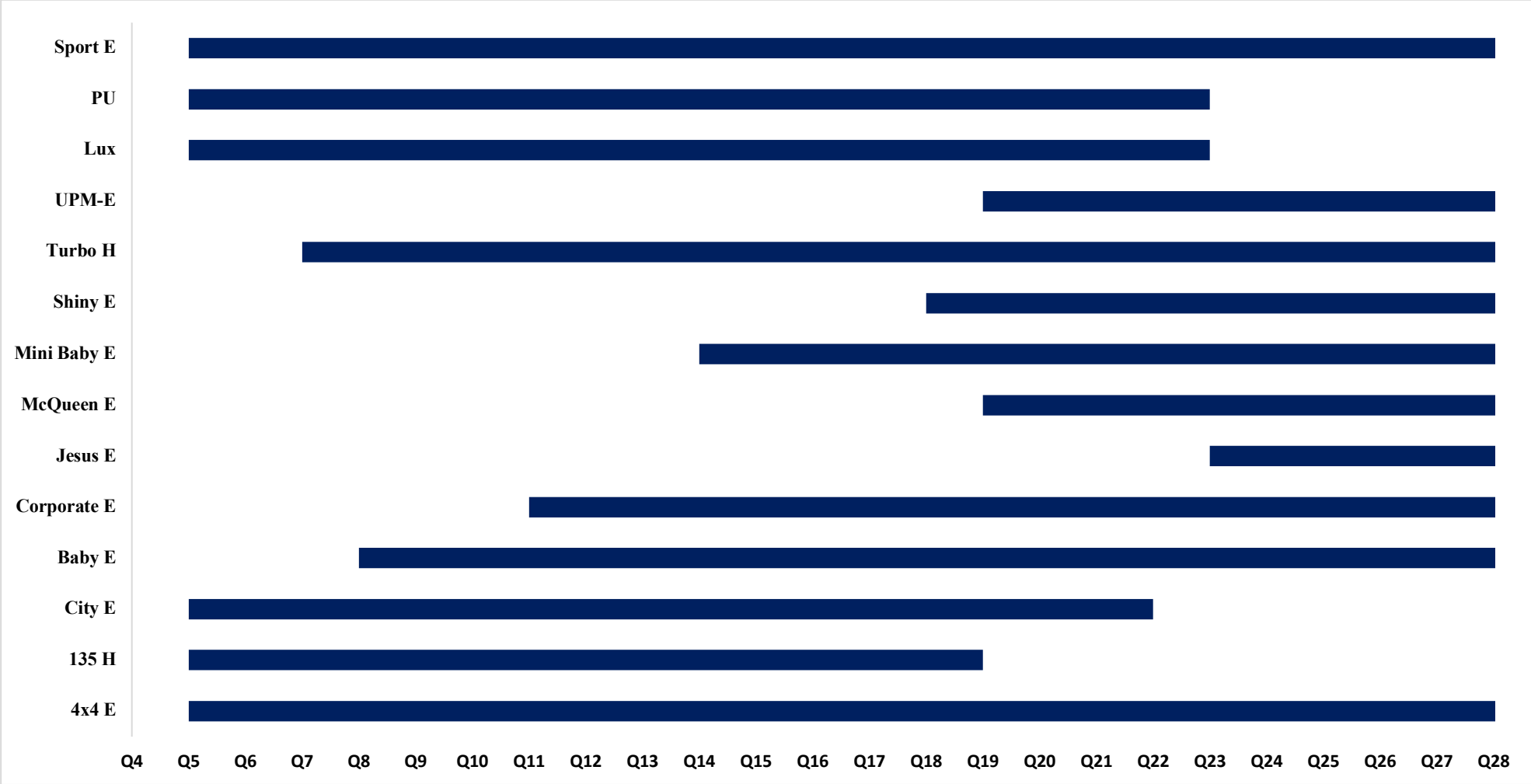


### Appendix IV The Insight Group Discovery Insight



**Appendix V Operations Department**

**V.I Product Portfolio Introduction and Lifecycle**



## V. II Operation Year 1

															year 1									
Quarter 4					Quarter 5					Quarter 6					Quarter 7					Quarter 8				
	Europe	Buyers	Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue					
Hybrid	135H	Americas	43218	6831	269	39028	8691	339	42854	6800	254	42854	6290	245	42854	5968	233	42854	5968	233				
Hybrid	135H	Europe	40598	9286	366	39028	8637	337	40245	9075	354	40245	8500	332	40245	7888	308	40245	7888	308				
Hybrid	135H	Asia	48489	5557	219	39418	8599	339	48531	5274	208	48083	4961	194	48083	4619	180	48083	4619	180				
	<b>Total</b>		<b>21674</b>	<b>854</b>		<b>25927</b>	<b>1015</b>		<b>21149</b>	<b>816</b>		<b>19751</b>	<b>771</b>		<b>18475</b>	<b>721</b>		<b>18475</b>	<b>721</b>					
Electric	4x4 E	Americas	70094	3796	245	70094	4130	267	69419	4626	296	63991	5120	328	69419	4116	263	69419	4116	263				
Electric	4x4 E	Europe	66292	4827	312	66292	5407	350	65637	5938	380	63991	4929	315	65637	5220	334	65637	5220	334				
Electric	4x4 E	Asia	78556	3373	218	79300	3324	217	78539	3634	235	63991	5145	329	77803	3246	208	77803	3246	208				
	<b>Total</b>		<b>11996</b>	<b>775</b>		<b>12861</b>	<b>834</b>		<b>14198</b>	<b>911</b>		<b>15194</b>	<b>972</b>		<b>12582</b>	<b>805</b>		<b>12582</b>	<b>805</b>					
	China	Buyers	Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue					
Electric	City E	Americas	35761	6816	174	34645	7401	183	42372	5925	153	55242	3356	86,13	52250	3508	85	52250	3508	85				
Electric	City E	Europe	30634	8814	225	29731	9729	240	30868	9082	234	30868	8681	223	29222	9183	223	29222	9183	223				
Electric	City E	Asia	26447	17479	446	25873	18705	467	26917	17799	463	26660	17131	441	25164	18524	449	25164	18524	449				
	<b>Total</b>		<b>33109</b>	<b>845</b>		<b>35835</b>	<b>890</b>		<b>32806</b>	<b>850</b>		<b>29168</b>	<b>750,13</b>		<b>31215</b>	<b>757</b>		<b>31215</b>	<b>757</b>					
Electric	Sport E	Americas													109460	1517	80	109460	1517	80				
Electric	Sport E	Europe													60857	3287	172	60857	3287	172				
Electric	Sport E	Asia													53690	5880	308	53690	5880	308				
	<b>Total</b>														<b>10684</b>	<b>560</b>		<b>10684</b>	<b>560</b>					
	USA	Buyers	Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue		Consumer Pr Sales	Revenue					
Electric	Sport E	Americas	53690	5692	298	53690	5746	301	53690	5776	303	53689	5834	306										
Electric	Sport E	Europe	60329	3912	205	60329	3966	208	60329	3893	204	60329	3917	205										
Electric	Sport E	Asia	64902	3895	204	65505	3789	201	65505	3830	203	64902	3742	196										
	<b>Total</b>		<b>13499</b>	<b>707</b>		<b>13501</b>	<b>710</b>		<b>13499</b>	<b>710</b>		<b>13493</b>	<b>707</b>							<b>0</b>				
Gasoline	Pick Up	Americas	54074	5073	267	54785	5198	277	54785	5440	290	54785	5559	297	54785	5435	290	54785	5435	290				
Gasoline	Pick Up	Europe	61030	3428	180	61812	3500	187	61812	3327	177	61812	3233	172	61812	3014	161	61812	3014	161				
Gasoline	Pick Up	Asia	63397	3497	184	64766	3301	178	64766	3220	173	65179	3133	167	64179	2935	157	64179	2935	157				
	<b>Total</b>		<b>11998</b>	<b>631</b>		<b>11999</b>	<b>642</b>		<b>11987</b>	<b>640</b>		<b>11925</b>	<b>636</b>		<b>11384</b>	<b>608</b>		<b>11384</b>	<b>608</b>					
Gasoline	Lux	Americas	92083	3896	352	92083	3937	355	92083	3781	341	92083	3543	320	92083	3395	306	92083	3395	306				
Gasoline	Lux	Europe	102967	2291	207	102967	2318	209	102967	2160	195	102967	2042	184	102967	1908	172	102967	1908	172				
Gasoline	Lux	Asia	105571	2299	207	106563	2229	203	106563	2132	194	105751	2026	183	105571	1904	172	105571	1904	172				
	<b>Gasoline Total</b>		<b>8486</b>	<b>766</b>		<b>8484</b>	<b>767</b>		<b>8073</b>	<b>730</b>		<b>7611</b>	<b>687</b>		<b>7207</b>	<b>650</b>		<b>7207</b>	<b>650</b>					
	<b>Sum</b>		<b>100762</b>	<b>4578</b>		<b>108607</b>	<b>4858</b>		<b>101712</b>	<b>4657</b>		<b>97142</b>	<b>4523,13</b>		<b>91547</b>	<b>4101</b>		<b>91547</b>	<b>4101</b>					

## V.II Operation Year 2

year 2

		Quarter 9			Quarter 10			Quarter 11			Quarter 12			
	Europe	Buyers	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue
Hybrid	135H	Americas	34341,81	7769	282	40088,06	5076	184	41420,96	5025	189	38852,88	7048	265
Hybrid	135H	Europe	37083,48	7317	271	38300,48	6314	234	39629,96	6397	246	44900,36	3839	147
Hybrid	135H	Asia	37083,48	7888	293	45847	4406	163	7365,55	4108	158	46912,36	3978	153
	<b>Total</b>			<b>22974</b>	<b>846</b>		<b>15796</b>	<b>581</b>		<b>15530</b>	<b>593</b>		<b>14865</b>	<b>565</b>
Electric	Baby E	Americas	31982,61	4625	134	31982,61	8671	251	31982,61	9201	266	31982,61	9087	263
Electric	Baby E	Europe	30518,84	5834	172	30518,84	11145	329	30518,84	11728	347	30518,84	11612	343
Electric	Baby E	Asia	36585,47	4048	120	36585,47	7102	210	36585,47	7500	222	36585,47	7606	225
	<b>Total</b>			<b>14507</b>	<b>426</b>		<b>26918</b>	<b>790</b>		<b>28429</b>	<b>835</b>		<b>28305</b>	<b>831</b>
Electric	Corporate E	Americas										57782,92	2411	128
Electric	Corporate E	Europe										55709,2	2864	156
Electric	Corporate E	Asia										66017,88	2115	115
	<b>Total</b>												<b>7390</b>	<b>399</b>
Electric	4x4 E	Americas	68100,72	3865	242	62711,38	4564	286	62711,38	3979	250	68100,72	3226	202
Electric	4x4 E	Europe	65637,2	4882	312	63991,2	4250	272	63991,2	3692	236	56370,2	3861	247
Electric	4x4 E	Asia	77802,88	3148	201	63991,2	4687	300	63991,2	4106	263	77802,88	2907	186
	<b>Total</b>			<b>11895</b>	<b>755</b>		<b>13501</b>	<b>858</b>		<b>11777</b>	<b>749</b>		<b>9994</b>	<b>635</b>
	China	Buyers	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue
Electric	City E	Americas	23759,12	12940	307	51280,24	2353	55,91	51280,24	3209	76,24	49339,84	3005	68,48
Electric	City E	Europe	24244	12777	309	29222,4	5930	144	29222,4	8247	200	28133,4	8121	189
Electric	City E	Asia	24244	13877	336	25164	12316	299	25164	17500	424	24174	17914	417
	<b>Total</b>			<b>39594</b>	<b>952</b>		<b>20599</b>	<b>498,91</b>		<b>28956</b>	<b>700,24</b>		<b>29040</b>	<b>674,48</b>
Electric	Sport E	Americas	107363,34	1494	76,75	107363,34	1497	76,91	107363,34	1493	76,7	107363,34	1385	71,15
Electric	Sport E	Europe	60856,76	3723	195	60856,76	3652	191	60856,76	3545	186	60856,76	3257	171
Electric	Sport E	Asia	53689,6	7263	381	53689,6	7191	377	53689,6	7028	368	53689,6	6650	349
	<b>Total</b>			<b>12480</b>	<b>652,75</b>		<b>12340</b>	<b>644,91</b>		<b>12066</b>	<b>630,7</b>		<b>11292</b>	<b>591,15</b>
	USA	Buyers	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue	Consumer P	Sales	Revenue
Gasoline	Pick Up	Americas	53718,2	5030	263	53718,2	5024	263	53718,2	4815	252	52934,1	4459	230
Gasoline	Pick Up	Europe	61812	2766	148	61812	2745	146	61812	2608	139	60931,89	2409	127
Gasoline	Pick Up	Asia	64179	2789	149	64179	2804	150	64179	2696	144	63298,89	2569	135
	<b>Total</b>			<b>10585</b>	<b>560</b>		<b>10573</b>	<b>559</b>		<b>10119</b>	<b>535</b>		<b>9437</b>	<b>492</b>
Gasoline	Lux	Americas	88187,46	314	286	85424,44	3517	294	83562,44	2721	227	84006,6	3096	254
Gasoline	Lux	Europe	100619,92	1840	162	97518,58	1934	165	85267,8	2468	210	96926	1686	141
Gasoline	Lux	Asia	103223,92	1897	67	100122,58	2016	172	85267,8	2753	235	98530	1835	154
	<b>Total</b>			<b>4051</b>	<b>515</b>		<b>7467</b>	<b>631</b>		<b>7942</b>	<b>672</b>		<b>6617</b>	<b>549</b>
Hybeid	Turbo H	Americas	55151,06	4418	238	53167,32	4757	247	51967,85	5144	261	50746,85	3655	185
Hybeid	Turbo H	Europe	63024,75	2536	140	60798,1	2695	143	59451,75	2855	148	51782,5	3369	174
Hybeid	Turbo H	Asia	64799,75	2575	142	62573,1	2767	147	61226,75	2957	153	51782,5	3823	198
	<b>Total</b>			<b>9529</b>	<b>520</b>		<b>10219</b>	<b>537</b>		<b>10956</b>	<b>562</b>		<b>10847</b>	<b>557</b>
<b>Sum</b>				<b>125615</b>	<b>5226,75</b>		<b>117413</b>	<b>5099,82</b>		<b>125775</b>	<b>5276,94</b>		<b>127787</b>	<b>5293,63</b>

## V.II Operation Year 3

year 3

		Quarter 13				Quarter 14				Quarter 15				Quarter 16			
	Europe	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue			
Electric	Baby E	Americas	32591,37	10538	311	32591,37	10878	321	32591,37	10381	307	29550,84	12389	366			
Electric	Baby E	Europe	30518,84	13464	398	30518,84	13849	409	30518,84	13168	389	29550,84	11296	334			
Electric	Baby E	Asia	36585,47	8729	258	36585,47	9077	268	36585,47	8748	259	29550,84	13407	396			
	<b>Total</b>		<b>32731</b>	<b>967</b>		<b>33804</b>	<b>998</b>		<b>32297</b>	<b>955</b>		<b>37092</b>	<b>1096</b>				
Electric	Corporate E	Americas	58905,14	4988	271	58905,14	4932	268	58905,14	4965	270	57552,75	5029	267			
Electric	Corporate E	Europe	55709,2	5788	314	55709,2	5820	216	55709,2	5974	325	54396,2	5808	308			
Electric	Corporate E	Asia	66017,88	4324	235	66017,88	4215	229	66017,88	4086	222	64507,93	4171	221			
	<b>Total</b>		<b>15100</b>	<b>820</b>		<b>14967</b>	<b>713</b>		<b>15025</b>	<b>817</b>		<b>15008</b>	<b>796</b>				
		Americas										25376,82	6804	154			
		Europe										23514	9845	222			
		Asia										28537,1	7002	158			
	<b>Total</b>												<b>23651</b>	<b>534</b>			
Electric	4x4 E	Americas	65257,32	3867	232	65257,32	3895	234	65257,32	3960	237	65257,32	3959	237			
Electric	4x4 E	Europe	61596,8	4552	273	61596,8	4567	274	61596,8	4574	274	61596,8	4594	275			
Electric	4x4 E	Asia	73156,42	3587	215	73156,42	3531	212	73156,42	3471	208	73156,42	3445	207			
	<b>Total</b>		<b>12006</b>	<b>720</b>		<b>11993</b>	<b>720</b>		<b>12005</b>	<b>719</b>		<b>11998</b>	<b>719</b>				
	China	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue			
Electric	City E	Americas	50270	3404	79,16	48950	3345	76	22594	8472	191	25376,82	6804	154			
Electric	City E	Europe	28133,4	8644	201	27407,4	8580	194	22594	9175	207	23514	9845	222			
Electric	City E	Asia	24174	18885	439	23514	19085	431	22594	10940	247	28537,1	7002	158			
	<b>Total</b>		<b>30933</b>	<b>719,16</b>		<b>31010</b>	<b>701</b>		<b>28587</b>	<b>645</b>		<b>23651</b>	<b>534</b>				
Electric	Mini E	Americas							60339,4	1872	53	60339,4	2839	80,8			
Electric	Mini E	Europe							33648,12	4550	129	33648,12	7449	212			
Electric	Mini E	Asia							29343,2	9583	273	29343,2	16576	472			
	<b>Total</b>								<b>16005</b>	<b>455</b>		<b>26864</b>	<b>764,8</b>				
Electric	Sport E	Americas	93167	1944	86,07	93167	1902	84	93167	1635	72	93167	1615	71,5			
Electric	Sport E	Europe	51895	4805	213	51895,5	4643	206	51895,5	4013	78	51895,5	3956	175			
Electric	Sport E	Asia	45543	10058	445	45543	9871	437	45543	7977	353	45543	7887	349			
	<b>Total</b>		<b>16807</b>	<b>744,07</b>		<b>16416</b>	<b>727</b>		<b>13625</b>	<b>503</b>		<b>13458</b>	<b>595,5</b>				
	USA	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue			
Gasoline	Pick Up	Americas	50340	5866	287	50340	5769	282	50340	5176	253	49317,65	4727	226			
Gasoline	Pick Up	Europe	56922,5	3121	153	56922,5	3042	149	56922,5	2700	132	55797,92	2473	118			
Gasoline	Pick Up	Asia	59289,5	3282	160	59289,5	3252	159	59289,5	2952	144	58164,92	2679	128			
	<b>Total</b>		<b>12269</b>	<b>600</b>		<b>12063</b>	<b>590</b>		<b>10828</b>	<b>529</b>		<b>9879</b>	<b>472</b>				
Gasoline	Lux	Americas	85682	3521	295	86825	3293	280	84920	3171	63	83700,8	2880	236			
Gasoline	Lux	Europe	95926	1912	160	97183,3	1776	151	95087,8	1687	140	93746,68	1537	126			
Gasoline	Lux	Asia	98530	2071	174	99787,3	1959	166	97691,8	1899	158	96350,68	1716	140			
	<b>Total</b>		<b>7504</b>	<b>629</b>		<b>7028</b>	<b>597</b>		<b>6757</b>	<b>361</b>		<b>6133</b>	<b>502</b>				
Hybrid	135H	Americas	36680	4011	147												
Hybrid	135H	Europe	36680	3765	138												
Hybrid	135H	Asia	36680	4334	159												
	<b>Total</b>		<b>12110</b>	<b>444</b>													
Hybrid	Sport H	Americas	53003,5	4573	237	53003,5	5373	278	53003,5	5006	259	53003,5	4535	235			
Hybrid	Sport H	Europe	59451,75	2558	132	59451,75	2928	152	59451,75	2690	139	59451,75	2444	127			
Hybrid	Sport H	Asia	61226,75	2728	141	61226,75	3171	164	61226,75	2980	54	61226,75	2686	139			
	<b>Total</b>		<b>9859</b>	<b>510</b>		<b>11472</b>	<b>594</b>		<b>10676</b>	<b>452</b>		<b>9665</b>	<b>501</b>				
<b>Sum</b>			<b>149319</b>	<b>6153,23</b>		<b>138753</b>	<b>5640</b>		<b>145805</b>	<b>5436</b>		<b>177399</b>	<b>6514,3</b>				

## V.II Operation Year 4

year 4

		Quarter 17				Quarter 18				Quarter 19				Quarter 20			
		Europe	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
Electric	Grizzly Baby E	Americas										31679,07	10873	312			
Electric	Grizzly Turbo E	Europe										29633,12	13679	392			
Electric	Grizzly Baby E	Asia										35566,89	9606	275			
	<b>Total</b>													<b>34158</b>	<b>979</b>		
Electric	Grizzly Corporate E	Americas	57039,76	5689	299	57039,76	6432	338	57039,76	6445	338	55957,85	6626	341			
Electric	Grizzly Corporate E	Europe	53898,16	6911	363	53898,16	7866	413	53898,16	8063	423	52847,76	8133	419			
Electric	Grizzly Corporate E	Asia	63935,18	5120	269	63935,18	5644	296	63935,18	5958	313	62727,22	5813	299			
	<b>Total</b>			<b>17720</b>	<b>931</b>		<b>19942</b>	<b>1047</b>		<b>20466</b>	<b>1074</b>			<b>20572</b>	<b>1059</b>		
Electric	City E	Americas	22594	3647	82,4												
Electric	City E	Europe	22594	3917	88,5												
Electric	City E	Asia	22594	4784	108												
	<b>Total</b>			<b>12348</b>	<b>278,9</b>												
Hybrid	Grizzly Turbo-H	Americas				53984,46	2977	149	52966,23	3205	157	52966,23	2916	143			
Hybrid	Grizzly Turbo-H	Europe				51214,65	3571	179	50226,08	3987	195	50226,08	3545	174			
Hybrid	Grizzly Turbo-H	Asia				60463,7	2650	132	59326,84	2948	144	59326,84	2556	125			
	<b>Total</b>						<b>9198</b>	<b>460</b>		<b>10140</b>	<b>496</b>			<b>9017</b>	<b>442</b>		
Electric	4x4 E	Americas	64301,28	4247	251	64301,28	4466	264	67956,75	3931	246	62571,6	4271	267			
Electric	4x4 E	Europe	60668,6	5447	321	60668,6	5750	339	64217,6	4877	305	62571,6	3823	239			
Electric	4x4 E	Asia	72088,99	4082	241	72088,99	4206	248	76170,34	3753	235	62571,6	4916	308			
	<b>Total</b>			<b>13776</b>	<b>813</b>		<b>14422</b>	<b>851</b>		<b>12561</b>	<b>786</b>			<b>13010</b>	<b>814</b>		
		China	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
Electric	Mini	Americas	61426	3024	87,7	61426,02	3099	89,88	29002,51	13377	388	65515,8	2639	81,93			
Electric	Mini	Europe	34245,76	7928	230	34245,76	8228	239	29002,51	12218	354	36494,04	7130	221			
Electric	Mini	Asia	29886,51	18423	534	29886,51	19702	571	29002,51	16018	465	31930,4	17046	529			
	<b>Total</b>			<b>29375</b>	<b>851,7</b>		<b>31029</b>	<b>899,88</b>		<b>41613</b>	<b>1207</b>			<b>26815</b>	<b>831,93</b>		
Electric	Sport E	Americas	94938	1643	74,2	96709	1640	75,52	96709	1571	72,34	96709	1510	69,53			
Electric	Sport E	Europe	52869,55	3958	79	53843,6	3866	178	53843,6	3828	176	53843,6	3662	169			
Electric	Sport E	Asia	46428,5	7942	359	47314	7984	368	47314	8775	404	47314	8588	395			
	<b>Total</b>			<b>13543</b>	<b>512,2</b>		<b>13490</b>	<b>621,52</b>		<b>14174</b>	<b>652,34</b>			<b>13760</b>	<b>633,53</b>		
		USA	Buyers														
Gasoline	Pick Up	Americas	48473,1	5055	238	47029	3956	186									
Gasoline	Pick Up	Europe	54868,91	2626	123	47029	3513	165									
Gasoline	Pick Up	Asia	57235,91	1966	139	47029	4462	210									
	<b>Total</b>			<b>9647</b>	<b>500</b>		<b>11931</b>	<b>561</b>									
Gasoline	Lux	Americas	80924,4	2473	200												
Gasoline	Lux	Europe	80924,4	2220	180												
Gasoline	Lux	Asia	80924,4	2753	223												
	<b>Total</b>			<b>7446</b>	<b>603</b>												
Electric	Grizzly Baby E	Americas	30518,84	13723	406	30518,84	16650	492	30518,84	16212	479	31679,07	10873	312			
Electric	Grizzly Baby E	Europe	34659,92	7365	218	34659,92	8593	254	34659,92	8523	252	29633,12	13679	392			
Electric	Grizzly Baby E	Asia	45181,18	5612	166	45181,18	6258	185	45181,18	6406	189	35566,89	9606	275			
	<b>Turbo</b>			<b>26700</b>	<b>790</b>		<b>31501</b>	<b>931</b>		<b>31141</b>	<b>920</b>			<b>34158</b>	<b>979</b>		
Electric	UPM-E	Americas										71751	2677	187			
Electric	UPM-E	Europe										80659	1504	105			
Electric	UPM-E	Asia										104331	1278	89,5			
	<b>Total</b>													<b>5459</b>	<b>381,5</b>		
Electric	McQueen E	Americas										68401,32	2909	195			
Electric	McQueen E	Europe										76498,55	1648	110			
Electric	McQueen E	Asia										98551,25	1406	94,21			
	<b>Total</b>													<b>5963</b>	<b>399,21</b>		
Electric	Shiny-E	Americas							113210,88	1891	210	113210,88	3721	413			
Electric	Shiny-E	Europe							126426,97	1089	121	126426,97	1999	222			
Electric	Shiny-E	Asia							162682,23	937	104	162682,23	1527	169			
	<b>Total</b>									<b>3917</b>	<b>435</b>			<b>7247</b>	<b>804</b>		
Hybrid	Grizzly Turbo-H	Americas	49993,65	3348	167												
Hybrid	Grizzly Turbo-H	Europe	49993,65	3028	151												
Hybrid	Grizzly Turbo-H	Asia	49993,65	3702	185												
	<b>Total</b>			<b>10078</b>	<b>503</b>												
<b>Sum</b>				<b>140633</b>	<b>5782,8</b>		<b>131513</b>	<b>5371,4</b>		<b>134012</b>	<b>5570,34</b>			<b>136001</b>	<b>6344</b>		

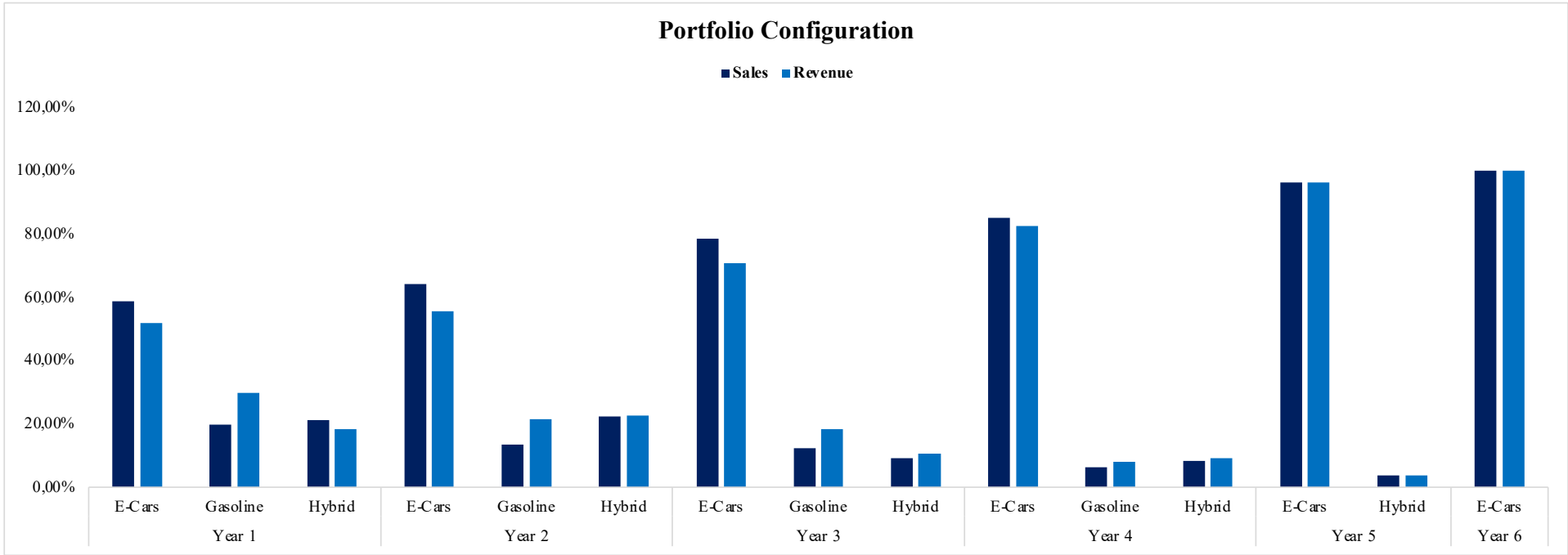
## V.II Operation Year 5

		year 5											
		Quarter 21			Quarter 22			Quarter 23			Quarter 24		
Europe	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
135H	Americas												
135H	Europe												
135H	Asia												
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
Grizzly Baby	Americas	31679	10088	289	30987,94	10284	288	31568,49	10943	313	31568,49	11298	323
Grizzly Baby	Europe	29633	12989	372	28962,12	13175	369	29525,76	13698	391	29525,76	14379	411
Grizzly Baby	Asia	35566,89	9166	263	34795,24	306	261	35443,42	9420	269	35443,42	10324	295
<b>Total</b>		<b>32243</b>	<b>924</b>	<b>23765</b>	<b>918</b>	<b>34061</b>	<b>973</b>	<b>36001</b>	<b>1029</b>	<b>36001</b>	<b>1029</b>	<b>36001</b>	<b>1029</b>
Grizzly Corp	Americas	51469,76	7822	403	54428,24	6860	343	54428,24	7024	351	52422,98	7613	366
Grizzly Corp	Europe	51469,76	7157	368	51362,7	8604	430	51362,7	8601	430	49415,84	9504	457
Grizzly Corp	Asia	51469,76	9177	472	61019,41	6124	306	61019,41	5991	299	58780,52	6887	331
<b>Total</b>		<b>24156</b>	<b>1243</b>	<b>21588</b>	<b>1079</b>	<b>21616</b>	<b>1080</b>	<b>24004</b>	<b>1154</b>	<b>24004</b>	<b>1154</b>	<b>24004</b>	<b>1154</b>
City E	Americas												
City E	Europe												
City E	Asia												
<b>Total</b>													
Grizzly Turbc	Americas	52190,44	2655	128	48251,88	2894	140	48251,88	2043	98,58			
Grizzly Turbc	Europe	49472,88	3308	160	48251,88	2635	127	48251,88	1821	87,87			
Grizzly Turbc	Asia	58460,66	2391	115	48251,88	3363	162	48251,88	2286	110			
<b>Total</b>		<b>8354</b>	<b>403</b>	<b>8892</b>	<b>429</b>	<b>6150</b>	<b>296,45</b>						
Jesus-E	Americas										97198,32	1742	158
Jesus-E	Europe										92614,6	2055	186
Jesus-E	Asia										108786,19	1685	153
<b>Total</b>											<b>5482</b>	<b>497</b>	
4x4 E	Americas	67956,75	3260	204	65028,6	3466	225	65028,6	3481	226	65028,6	2171	141
4x4 E	Europe	64217,6	4034	252	65028,6	3161	206	65028,6	3099	202	65028,6	1952	127
4x4 E	Asia	76170,34	3071	192	65028,6	4071	265	65028,6	3906	254	65028,6	2564	167
<b>Total</b>		<b>10365</b>	<b>648</b>	<b>10698</b>	<b>696</b>	<b>10486</b>	<b>682</b>				<b>6687</b>	<b>435</b>	
China	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
City E	Americas												
City E	Europe												
City E	Asia												
<b>Total</b>													
Mini	Americas	65513,8	2571	79,82	61426	2950	85,56	61426	3088	89,56	29002,51	13776	400
Mini	Europe	36494	7227	224	34245,76	8613	250	34245	8926	259	29002,51	12397	260
Mini	Asia	31930,4	17566	545	29886,51	21292	618	29886,51	21646	628	29002,51	16247	471
<b>Total</b>		<b>27364</b>	<b>848,82</b>	<b>32855</b>	<b>953,56</b>	<b>33660</b>	<b>976,56</b>				<b>42420</b>	<b>1131</b>	
Sport E	Americas	96709	1446	66,58	96709	1468	67,6	100782	1668	80,2	100782,3	1694	81,45
Sport E	Europe	53843,6	3593	165	53843,6	3618	167	56083	4619	222	56083,92	4828	232
Sport E	Asia	47314	8430	388	47314	8488	391	49350,65	10910	525	49350,65	11987	576
<b>Total</b>		<b>13469</b>	<b>619,58</b>	<b>13574</b>	<b>625,6</b>	<b>17197</b>	<b>827,2</b>				<b>18509</b>	<b>889,45</b>	
USA	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
UPM-E	Americas	71751	5417	379	71751	5641	395	71751	6093	427	71751	6426	450
UPM-E	Europe	80659	2951	207	80659	3047	213	80659	3202	224	659	413	239
UPM-E	Asia	104331	2253	158	104331	2318	162	104331	2359	265	104331	2610	183
<b>Total</b>		<b>10621</b>	<b>744</b>	<b>11006</b>	<b>770</b>	<b>11654</b>	<b>916</b>				<b>9449</b>	<b>872</b>	
McQueen E	Americas	68401	5867	393	68401,32	6111	409	68401,32	6608	443	68401,32	6975	467
McQueen E	Europe	76498,55	3221	216	76498,55	3329	223	76498,55	3501	235	76498,55	3738	50
McQueen E	Asia	98551,25	2460	165	98551,25	2533	170	98551,25	2582	173	98551,25	2859	192
<b>Total</b>		<b>11548</b>	<b>774</b>	<b>11973</b>	<b>802</b>	<b>12691</b>	<b>851</b>				<b>13572</b>	<b>709</b>	
Shiny-E	Americas	113210,88	3669	407	112143,66	3993	439	111173,46	4401	480	111173,46	4649	507
Shiny-E	Europe	126426,97	2015	224	125253,03	2170	239	124185,81	2324	253	124185,81	2485	271
Shiny-E	Asia	162682,23	1532	170	161188,12	1632	179	159829,84	1692	184	159829,84	1878	205
<b>Total</b>		<b>7216</b>	<b>801</b>	<b>7795</b>	<b>857</b>	<b>8417</b>	<b>917</b>				<b>9012</b>	<b>983</b>	
Grizzly Turbc	Americas												
Grizzly Turbc	Europe												
Grizzly Turbc	Asia												
<b>Total</b>													
<b>Sum</b>		<b>145336</b>	<b>7005,4</b>	<b>142146</b>	<b>7130,16</b>	<b>155932</b>	<b>7519,21</b>	<b>165136</b>	<b>7699,45</b>	<b>165136</b>	<b>7699,45</b>	<b>165136</b>	<b>7699,45</b>

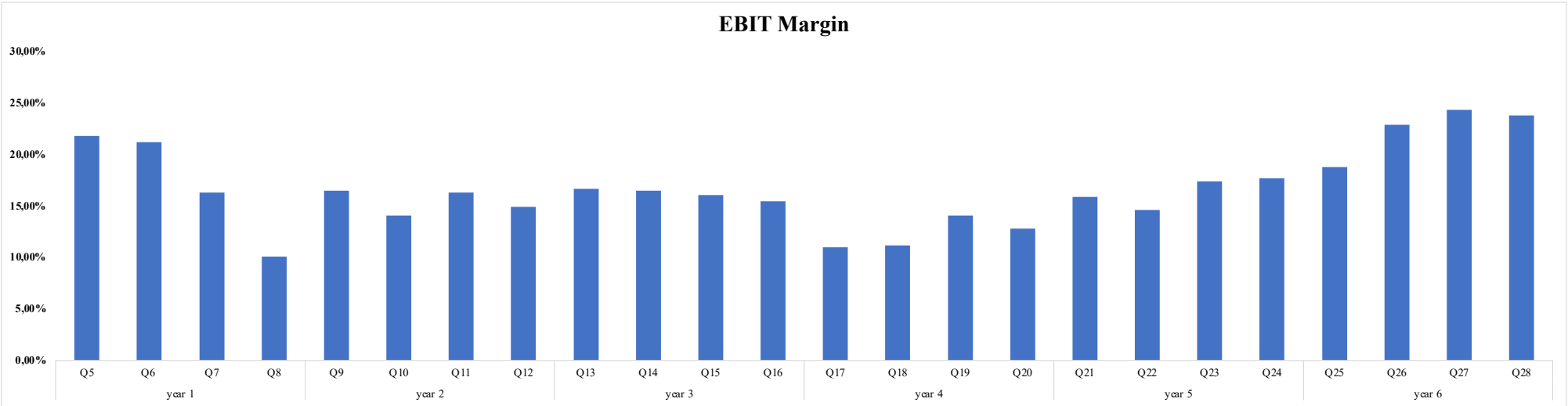
## V.II Operation Year 6

year 6													
		Quarter 25			Quarter 26			Quarter 27			Quarter 28		
Europe	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
Grizzly Baby E	Americas	30686,06	11649	323	31568,49	9048	265	31568,49	11509	329	31568,49	7775	222
Grizzly Baby E	Europe	8954,6	13986	391	28954,6	11181	328	28954,6	14705	412	28954,6	9369	262
Grizzly Baby E	Asia	34786,59	10491	294	24786,59	8213	241	24786,59	10589	296	34786,59	7614	213
<b>Total</b>			<b>36126</b>	<b>1008</b>		<b>28442</b>	<b>834</b>		<b>36803</b>	<b>1037</b>		<b>24758</b>	<b>697</b>
Grizzly Corporate E	Americas	52928,95	661	372	49029,38	8553	468	54474,88	7591	380	54474,88	8076	404
Grizzly Corporate E	Europe	50407,38	9176	450	49029,38	8553	419	50407,38	9513	466	50407,38	10100	495
Grizzly Corporate E	Asia	59920,79	6660	327	49029,38	11017	540	59920,79	6924	339	59920,79	7358	361
<b>Total</b>			<b>16497</b>	<b>1149</b>		<b>28123</b>	<b>1427</b>		<b>24028</b>	<b>1185</b>		<b>25534</b>	<b>1260</b>
Jesus-E	Americas	94395,98	3540	311	95330,09	3604	320	97198,32	3684	334	97198,32	4143	376
Jesus-E	Europe	800,79	4114	366	90800,79	4335	385	90800,79	4481	398	90900,79	5041	48
Jesus-E	Asia	106700,31	3132	278	106700,31	3212	285	106700,31	3402	302	106700,31	3809	339
<b>Total</b>			<b>10786</b>	<b>955</b>		<b>11151</b>	<b>990</b>		<b>11567</b>	<b>1034</b>		<b>12993</b>	<b>763</b>
4x4 E	Americas	68478	2672	169	69643,89	3006	193	65520	4714	309	70993,6	3688	242
4x4 E	Europe	65374	3066	195	65855,6	3615	232	64209,6	4275	274	65855,6	4178	268
4x4 E	Asia	7500	2529	161	78054,04	2812	181	64209	5688	365	78054,04	3756	241
<b>Total</b>			<b>8267</b>	<b>525</b>		<b>9433</b>	<b>606</b>		<b>14677</b>	<b>948</b>		<b>11622</b>	<b>751</b>
China	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
Mini	Americas	59685,88	3198	89,97	60265,92	3184	90,5	61426,02	3108	90,14	61426,02	3222	93,45
Mini	Europe	33607,71	8015	228	33607,71	9439	268	33607,71	9086	258	33607,71	8641	246
Mini	Asia	29306,46	19893	565	29306,46	23615	671	29306,46	23348	664	29306,46	21330	606
<b>Total</b>			<b>31106</b>	<b>882,97</b>		<b>36238</b>	<b>1029,5</b>		<b>35542</b>	<b>1012,14</b>		<b>33193</b>	<b>945,45</b>
Sport E	Americas	97897,34	1767	82,41	98859	1750	82,46	100789,3	1724	82,89	100782,3	1809	86,98
Sport E	Europe	55026,1	4960	234	55026,1	5053	238	55026,1	4934	232	55026,1	5099	240
Sport E	Asia	48389	12405	585	48389	12345	582	48389	12292	579	48389	12793	603
<b>Total</b>			<b>19132</b>	<b>901,41</b>		<b>19148</b>	<b>902,46</b>		<b>18950</b>	<b>893,89</b>		<b>19701</b>	<b>929,98</b>
USA	Buyers	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue	Consumer Pr Sales	Revenue		
UPM-E	Americas	71095,4	6847	475	71810,6	6997	490	73241	6081	435	71751	5713	400
UPM-E	Europe	80724,56	3474	243	80724,56	3673	257	80724,56	3530	247	79118,34	3287	226
UPM-E	Asia	104414,44	2635	185	104414,44	2701	189	104414,44	2821	198	102370,16	3050	209
<b>Total</b>			<b>12956</b>	<b>903</b>		<b>13371</b>	<b>936</b>		<b>12432</b>	<b>880</b>		<b>12050</b>	<b>835</b>
McQueen E	Americas	66391,25	7749	504	67061,27	7949	522	68401,32	7848	526	68401,32	6572	440
McQueen E	Europe	75024,5	3957	260	75024,5	4190	275	75024,5	4282	281	75024,5	3805	250
McQueen E	Asia	96675,18	2992	196	96675,18	3072	202	96675,18	3213	211	96675,18	3366	221
<b>Total</b>			<b>14698</b>	<b>960</b>		<b>15211</b>	<b>999</b>		<b>15343</b>	<b>1018</b>		<b>13743</b>	<b>911</b>
Shiny-E	Americas	109975,26	4928	531	111086,14	5015	546	113307,9	5023	558	1113307,9	5412	601
Shiny-E	Europe	124089,75	2516	274	124089,75	2646	288	124089,75	2680	292	124089,75	2880	314
Shiny-E	Asia	159707,6	1889	206	159707,6	1929	210	159707,6	2005	218	159707,6	2151	234
<b>Total</b>			<b>9333</b>	<b>1011</b>		<b>9590</b>	<b>1044</b>		<b>9708</b>	<b>1068</b>		<b>10443</b>	<b>1149</b>
<b>Sum</b>			<b>158901</b>	<b>8295,38</b>		<b>170707</b>	<b>8767,96</b>		<b>179050</b>	<b>9076,03</b>		<b>164037</b>	<b>8241,43</b>

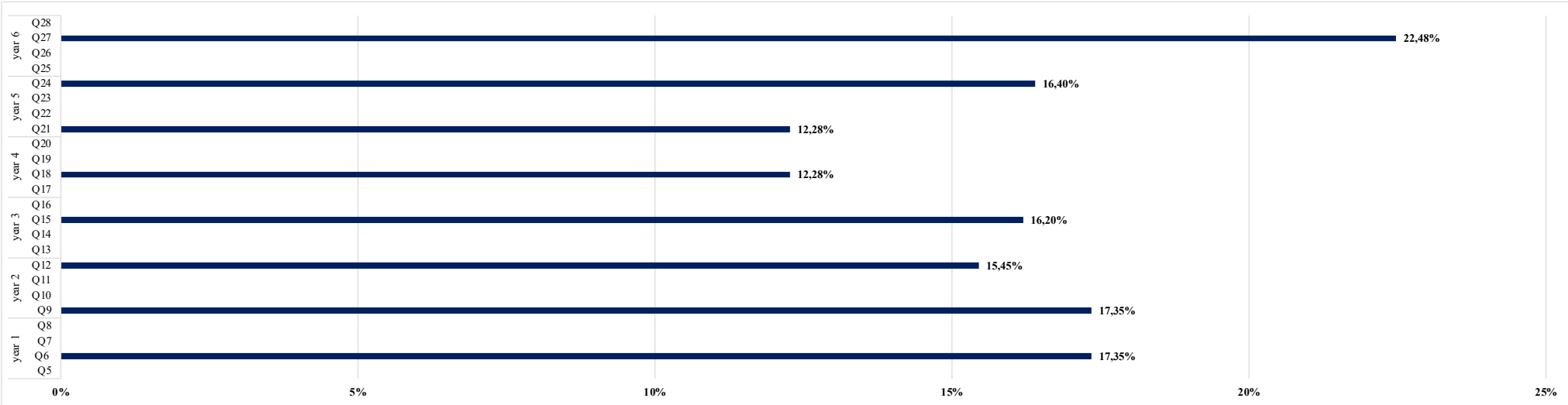
**V.III Portfolio Configuration**



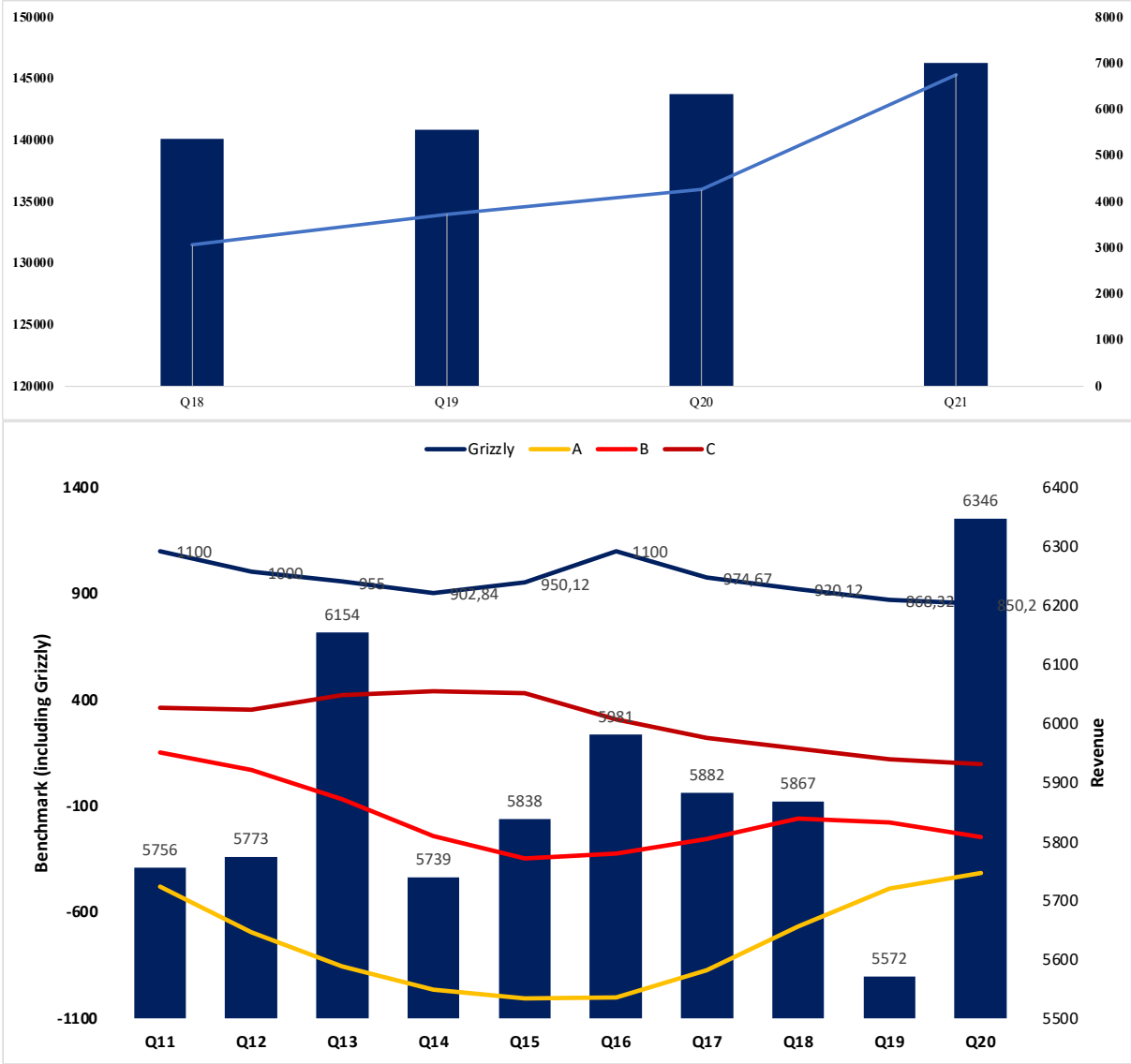
### V.IX EBIT Margin



### V.V EBIT Margin Growth

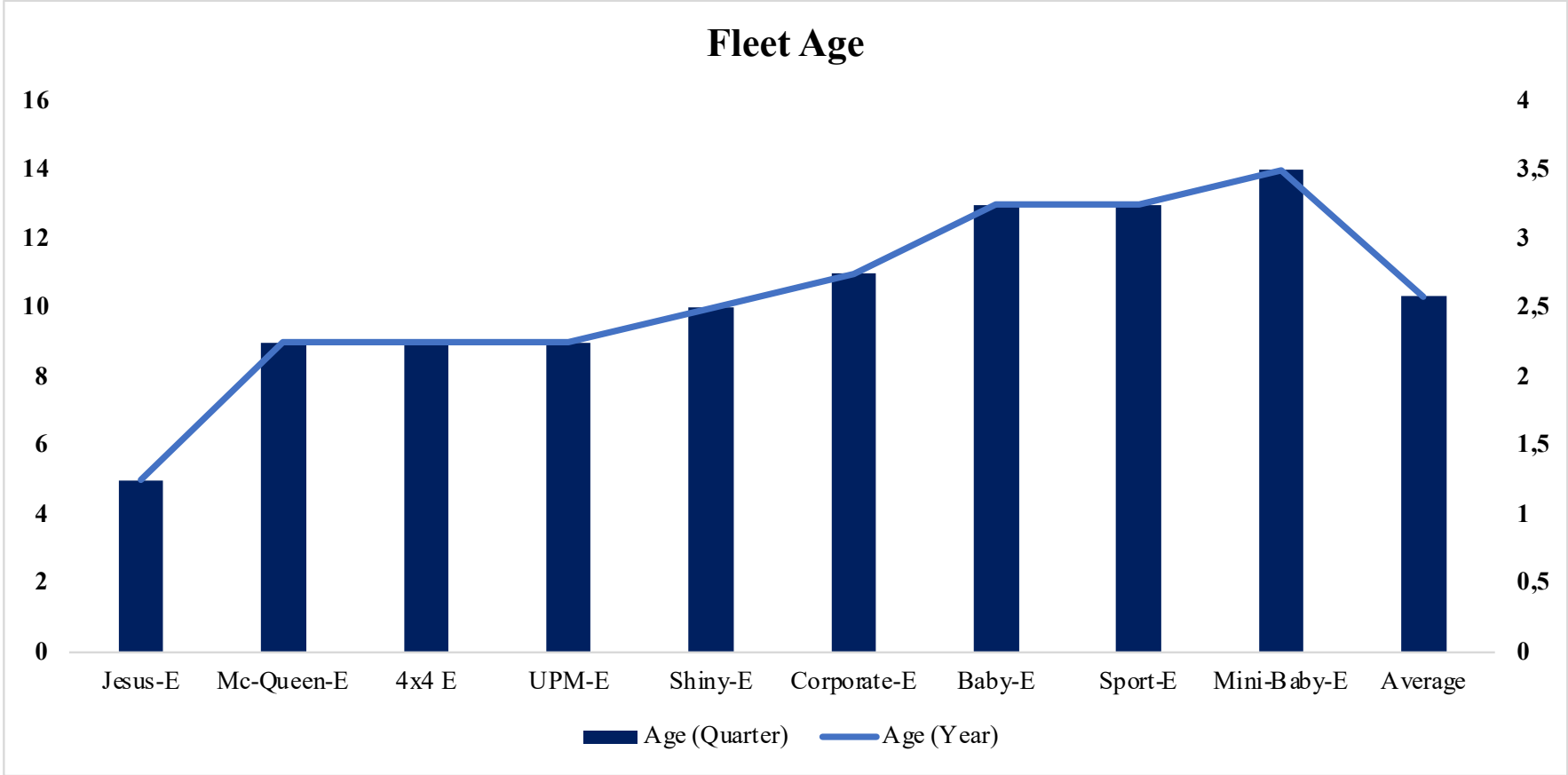


**V.VI Sales and Revenue Growth Between Q18 to Q21vs. Benchmark**



Appendix VI Marketing Department

VI.I Fleet Age



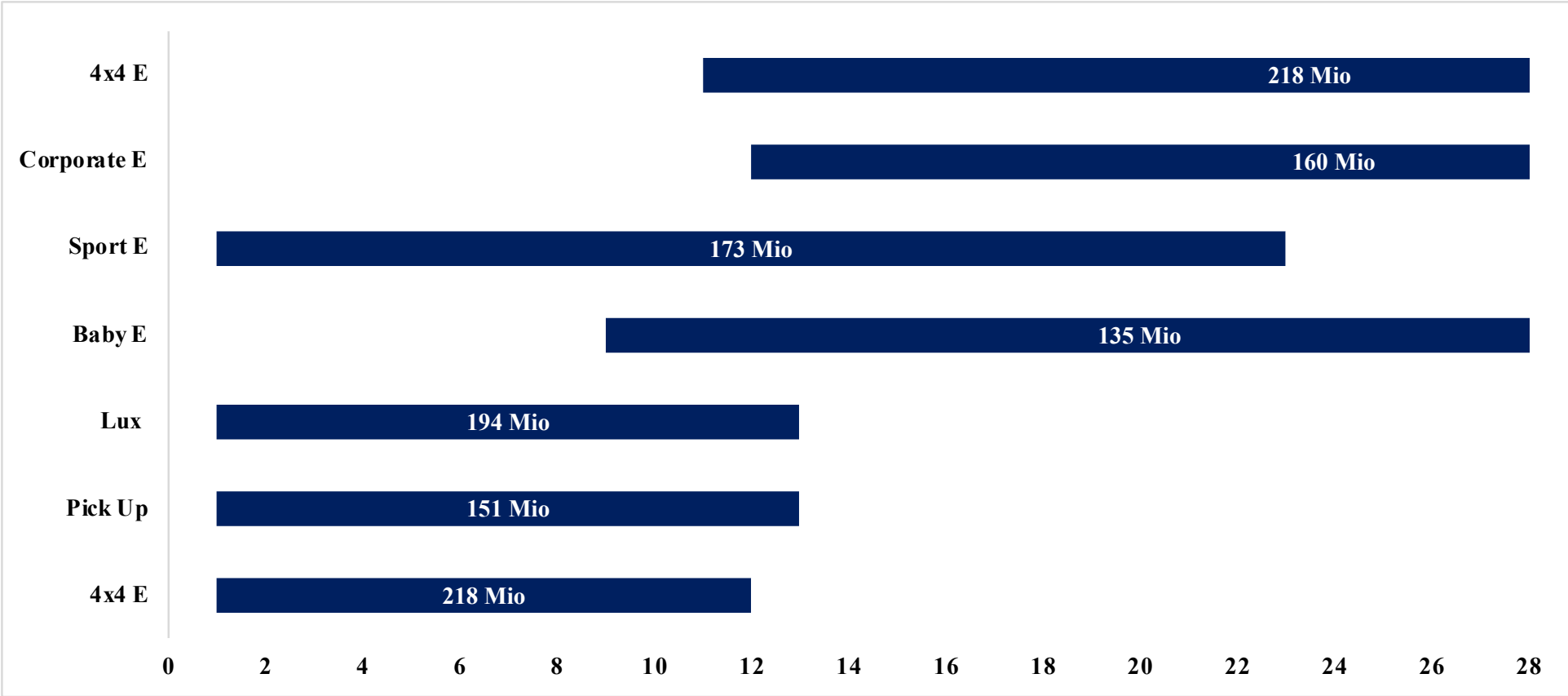
## VI.II Marketing Expenses Q5-Q18

Typ	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	
<b>4x4 E</b>	<b>64,6464</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>59</b>	<b>59</b>
Sales	12,8600	14,2	15,19	12,58	11,9	13,5	11,78	9,99	12,01	11,99	12,01	12	13,78	14,42	
Marketing expenses	10,1400	14,48	14,48	14,99	23,87	35,41	18,1	18,69	11,88	6,79	7,13	6,69	17,55	17,55	
Marketing Expenditure / Revenue	1,21%	1,58%	1,45%	1,85%	3,15%	4,14%	2,52%	3,25%	1,65%	0,94%	0,99%	0,93%	2,18%	2,06%	
Marketing Expenditure per car sold	788,49	1019,72	953,26	1191,57	2005,88	2622,96	1536,50	1870,87	989,18	566,31	593,67	557,50	1273,58	1217,06	
<b>City E</b>	<b>24,71</b>	<b>25,74</b>	<b>25,74</b>	<b>24,24</b>	<b>24,24</b>	<b>24,24</b>	<b>24,24</b>	<b>23,25</b>	<b>23,25</b>	<b>22,59</b>	<b>22,59</b>	<b>22,59</b>	<b>22,59</b>	<b>22,59</b>	
Sales	35,84	32,81	29,16	31,22	39,55	20,6	28,56	29,04	30,93	31,01	28,59	23,65	12,35		
Marketing expenses	14,88	14,88	14,88	19,41	10	25,13	18,93	19,64	20,51	18,97	19,92	18,69	9,35		
Marketing Expenditure/ Revenue	1,62%	1,75%	1,98%	2,57%	1,05%	12,65%	2,71%	2,91%	1,85%	2,71%	3,74%	3,61%	9,57%		
Marketing Expenditure per car sold	415,18	453,52	510,29	621,72	252,84	1219,90	662,82	676,31	663,11	611,74	696,75	790,27	757,09		
<b>Baby E</b>	<b>29,524</b>	<b>29,524</b>	<b>29,524</b>	<b>29,524</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	<b>29,55</b>	
Sales					14,51	26,92	28,43	28,32	32,73	35,8	32,3	37,89	26,7	31,5	
Marketing expenses					19,87	19,87	30,02	28,16	29,41	33,78	35,47	16,64	33,28	21,57	
Marketing Expenditure/ Revenue					3,20%	2,51%	3,59%	3,39%	3,04%	3,38%	3,72%	1,51%	4,52%	2,31%	
Marketing Expenditure per car sold					1369	738	1056	994	899	944	1098	439	1246	685	
<b>Mini Baby-E</b>								<b>28,4592</b>	<b>28,4592</b>	<b>28,4592</b>	<b>28,4592</b>	<b>28,4592</b>	<b>29,003</b>	<b>29,003</b>	
Sales											16,01	26,86	29,38	31,03	
Marketing expenses											36,2	33,96	35,35	35,35	
Marketing Expenditure/ Revenue											5,35%	4,44%	4,15%	3,99%	
Marketing Expenditure per car sold											2261	1264	1203	1139	
<b>UPM-E</b>														<b>65,56</b>	<b>65,56</b>
Sales															
Marketing expenses															
Marketing Expenditure/ Revenue															
Marketing Expenditure per car sold															
<b>Pick Up</b>	<b>53,34</b>	<b>53,34</b>	<b>53,34</b>	<b>53,34</b>	<b>53,34</b>	<b>53,34</b>	<b>53,34</b>	<b>52,5</b>	<b>48,9</b>	<b>48,9</b>	<b>48,9</b>	<b>47,82</b>	<b>47</b>	<b>47</b>	
Sales	12	11,99	11,93	11,38	10,59	10,57	10,12	9,44	12,27	12,06	10,83	9,88	10,65	11,93	
Marketing expenses	6,48	4,13	4,13	4,26	4,39	10,97	11,15	17,2	13,47	20,03	21,03	11,91	14,29	14,29	
Marketing Expenditure/ Revenue	1,010%	0,640%	0,640%	0,700%	0,780%	1,960%	2,090%	3,500%	2,240%	3,396%	3,980%	2,520%	2,850%	2,550%	
Marketing Expenditure per car sold	540	344	346	374	415	1038	1102	1822	1098	1661	1942	1205	1342	1198	

### VI.III Marketing Expenses Q19-Q28 and Average Prices

Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
<b>62,9</b>	<b>62,9</b>	<b>62,9</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65,52</b>	<b>65,52</b>	<b>65,52</b>	<b>63,16</b>	<b>Average price</b>
12,56	13,01	10,37	10,7	10,49	6,69	8,27	9,43	14,68	11,62	286	Total sales
29,24	30,34	30,34	34,67	17,34	17,82	15,15	30,74	9,61	9,61	443	Total marketing expenses
3,73%	3,73%	4,67%	4,98%	2,54%	2,74%	3,01%	5,88%	1,01%	1,28%	2,56%	Marketing Expenditure/ Revenue
2328,03	2332,05	2925,75	3240,19	1653,00	2663,68	1831,92	3259,81	654,63	827,02	1621	Average Marketing Expenditure per car sold
										<b>24</b>	<b>Average price</b>
										373	Total sales
										225	Total marketing expenses
										3,75%	Marketing Expenditure/ Revenue
										641	Average Marketing Expenditure per car sold
<b>29,55</b>	<b>28,67</b>	<b>28,67</b>	<b>27,99</b>	<b>28,56</b>	<b>28,56</b>	<b>28,56</b>	<b>29,9</b>	<b>28,56</b>	<b>28,56</b>	<b>29</b>	<b>Average price</b>
31,14	34,16	32,24	32,77	34,02	36	36,8	28,44	36,8	24,76	622	Total sales
21,57	24,93	24,93	24,93	24,93	25,62	10,51	21,35	21,59	10,79	479	Total marketing expenses
2,35%	2,54%	2,69%	2,72%	2,56%	2,49%	1,04%	2,79%	2,08%	1,72%	2,71%	Marketing Expenditure/ Revenue
693	730	773	761	733	712	286	751	587	436	796	Average Marketing Expenditure per car sold
<b>29,003</b>	<b>31</b>	<b>31</b>	<b>29,003</b>	<b>29,003</b>	<b>29,003</b>	<b>29,003</b>	<b>29,003</b>	<b>29,003</b>	<b>29,003</b>	<b>29,2106</b>	<b>Average price</b>
41,61	26,82	27,83	32,83	33,66	42,42	31,11	36,24	35,54	33,19	444,53	Total sales
24,26	28,75	28,75	28,75	28,75	29,55	25,86	26,26	13,28	26,56	401,63	Total marketing expenses
2,01%	3,45%	3,38%	3,02%	2,94%	2,45%	3,12%	2,55%	1,31%	2,86%	3,22%	Marketing Expenditure/ Revenue
583	1072	1033	876	854	697	831	725	374	800	979	Average Marketing Expenditure per car sold
<b>65,56</b>	<b>70,03</b>	<b>70,03</b>	<b>70,03</b>	<b>70,03</b>	<b>70,03</b>	<b>71,52</b>	<b>71,52</b>	<b>71,52</b>	<b>70,03</b>	<b>71</b>	<b>Average price</b>
	5,46	10,62	11,01	11,65	12,49	12,96	13,37	12,43	12,05	102	Total sales
	15,61	18,92	18,92	18,92	19,45	21,88	22,22	22,47	22,472	181	Total marketing expenses
	2,94%	2,54%	2,45%	2,32%	2,23%	2,42%	2,37%	2,55%	2,69%	2,50%	Marketing Expenditure/ Revenue
	2859	1782	1718	1624	1557	1688	1662	1808	1865	1840	Average Marketing Expenditure per car sold
										<b>51</b>	<b>Average price</b>

**VI.IV Model Relaunch and Costs**



## Appendix VIII Additional Information

### VIII.I Investments and Headcount Overview

Investments	Cost	When	HR (In/decrease workforce)	
AI Implementation+'[Bewerbungen .xlsx]'	500	Q6	Increase Europe	351 Q5
Vehicle Communication	200	Q18	Increase Europe	9797 Q7
Cyber Security	400	Q13	Increase China	9448 Q7
Cloud Connection	300	Q16	Reduces Europe	-2001 Q8
Sodium-ion batteries	250	Q6	Reduces China	-8326 Q8
Next Generation E-Drive	300	Q18	Reduced Europe	-7510 Q9
Personalized services	250	Q21	Increased China	8594 Q9
Total R&D investment	2200		Reduced USA	-5132 Q10
			Increased Europe	4472 Q10
			Increase Europe	4171 Q11
			Increased USA	4608 Q11
			Increase Europe	504 Q12
			Increase China	725 Q12
			Increased USA	379 Q12
			Increased Europe	601 Q13
			Increased China	308 Q13
			Increased USA	2014 Q13
			Increased Europe	805 Q14
			Increase China	5558 Q14
			Reduced Europe	-72 Q15
			Increased China	1003 Q15
			Increased USA	753 Q15
			Reduced USA	-6502 Q16
			Increased Europe	6530 Q16
			Increased Europe	10667 Q17
			Increased USA	2788 Q17
			Reduces China	-4934 Q18
			Increased USA	209 Q18
			Reduces Europe	-3723 Q19
			Increase China	4276 Q19
			Increased USA	12078 Q19
			Increased China	245 Q20
			Increased USA	471 Q20
			Reduced Europe	-7815 Q21
			Reduces Europe	-3239 Q22
			Increased China	387 Q22
			Increased USA	414 Q22
			Reduces China	-6625 Q23
			Increase Europe	16802 Q23
			Increase Europe	1509 Q24
			Increase China	7000 Q24
			Increased USA	588 Q24
			Increased Europe	316 Q26
			Increased China	1503 Q27
			Increased USA	508 Q28
			Reduces China	-700 Q27
			Reduced USA	-365 Q27
			Increased Europe	-2794 Q27
			<b>Total new workforce</b>	<b>60644</b>
Turbo-Hybrid	851	Q5		
Baby-E	673	Q6		
Corporate E	801	Q9		
Mini Baby-E	641	Q12		
Shiny-E	1030	Q15		
UPM-E	832	Q17		
McQueen-E	901	Q17		
Jesus-E	1136	Q20		
Total	6014			
Water Consumption Reduction (Scope 1)	200	Q7		
Waste Reduction (Scope 1)	400	Q9		
Energy Efficiency Investment (Scope 2=	150	Q11		
ISO (Scope 1)	500	Q11		
Solar Panels (Scope 2)	250	Q16		
Sustainable Suppliers (Scope 3)	20	Q16		
External Battery Recycling (Scope 3)	200	Q18		
Energy Management System (Scope 2)	100	Q21		
<b>Total without quarterly payments</b>	<b>1820</b>			
Offset Suppliers CO2 (Scope 3)	18,54	Q14		